WETLAND DETERMINATION DATA	FORM Atlantic and G	ulf Coastal Plain Re	egion .
Project/Site: ACP	city/county: Chesape	ake some	ing Date: 30,544,2015
Applicant/Owner: Oominion		State: VA Samp	ing Baint: WChrogozf-W
nvestigator(s): EST-A, Miller, C. MEACHERA	Section, Township, Range:	/ •	ing toma <u>v tot tot</u> et t
andform (hillslope, terrace, etc.):	Local relief (concave, convex,	· · · · · · · · · · · · · · · · · · ·	Slope (%): 1-2
	2.75695 N Long:		
Soil Map Unit Name: <u>Arapaho mucky fine sand</u>			
Are climatic / hydrologic conditions on the site typical for this time of y			.) ? Yes <u>X</u> No
Are Vegetation, Soil, or Hydrology significantly			
Are Vegetation, Soil, or Hydrology naturally pr		explain any answers in Re	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point location	ons, transects, imp	ortant features, etc.
Hydrophylic Vegetation Present? Yes X No	In the Constant Aven	Λ	;
Hydric Soil Present? Yes No	is the Sampled Area within a Wetland?		ło
Wetland Hydrology Present? , Yes Xes No		res <u> </u>	
Remarks:			
		<u>-</u>	
HYDROLOGY			
Wetland Hydrology Indicators:		· · · · ·	ninimum of two required)
Primary Indicators (minimum of one is required; check all that apply		Surface Soil Cracks	
Surface Water (A1) Aqualic Fauna (B Ligh Water Table (A2) Marl Deposits (B1		Sparsely Vegetated Drainage Patterns	f Concave Surface (B8)
Saturation (A3) Hydrogen Sulfide		Moss Trim Lines (B	· · ·
· · ·	heres along Living Roots (C3)	Dry-Season Water	•
Sediment Deposits (B2) Presence of Redu		Crayfish Burrows (
— · · · · —	ction in Tilled Soils (C6)	Saturation Visible of	on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surfac		Geomorphic Positio	
Iron Deposits (85) Other (Explain in Inundation Visible on Aerial Imagery (87)	Remarks)	Shallow Aquitard (I FAC-Neutral Test (
Water-Stained Leaves (B9)		Sphagnum moss (I	
Field Observations:			
Surface Water Present? Yes X No Depth (inche	es): <u>2</u>		
Water Table Present? Yes <u>X</u> No <u>Depth</u> (inche	es): Mianec		\checkmark
Saturation Present? Yes X No Depth (inche	es): Surface Wetland	Hydrology Present?	/es No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	atos previous inspections) if a	vailable:	
become recorded bata (aream gadge, monitoring weil, aenar pric	nos, previous inspectorie), il a	V6116LAIC.	
Remarks:		<u> </u>	
		:	
•			
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VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WChr # 2 -W

Tree Stratum (Plot size: $30 \times 30 \text{ f.t.}$) Absolute Dominant indicator Dominant indicator 1. $A (Cr r h brum)$ $3 \oplus Cover$ $5 \oplus Cies?$ 5 status Number of Dominant Species 2. $Ligundambar Styraciflua$ $5 \oplus V$ FAC Number of Dominant Species 3. $5 \oplus V$ FAC Total Number of Dominant Species (A) 4. $5 \oplus V$ FAC Species Across All Strata: (B) 9 $6 \oplus Cover$ 6. $7 \oplus Cover$ $6 \oplus Cover$ 8. $100 \oplus Cover$ $100 \oplus Cover$ $100 \oplus Cover$ $6 \oplus Cover$ $7 \oplus Cover$ $6 \oplus Cover$ 50% of total cover: 50% of total cover: 20% of total cover: 20% $7 \oplus Cover$ $6 \oplus Cover$ $7 \oplus Cover$
2. Liguidambar Styra Lif Iu a \overline{SD} \overline{Y} \overline{FAC} 3 Total Number of Dominant Species Across All Strata: $(\underline{C}$ (B) 4 Percent of Dominant Species That Are OBL, FACW, or FAC: $(\underline{CO}^{0})_{\overline{O}}$ (A/B) 6 Prevalence Index worksheet: 7 \overline{CO} = Total Cover \overline{CO} CO
3.
4. Percent of Dominant Species 5. That Are OBL, FACW, or FAC: 6. Prevalence Index worksheet: 7. Total % Cover of: 8. Image: Cover of: 50% of total cover: 20% of total cover: 20% of total cover: 20% of total cover: 20% of total cover: 20% of total cover: Acc species Image: Cover of: Multiply by: FACW species Cover of: X 1 = 110 FACW species ZO Y 2 = 40 FAC species 200 Y 3 = 600
5 Percent of Dominant opecies (\mathcal{OO}/\mathcal{O} (A/B) 6 That Are OBL, FACW, or FAC: (\mathcal{OO}/\mathcal{O} (A/B) 7 Prevalence Index worksheet: 8 Total % Cover of: Multiply by: 9 OBL species OBL species X 1 = (\mathcal{OO}/\mathcal{O} x 1 = \mathcal{OO} Sabling/Shrub Stratum (Plot cize: \mathcal{OO} X 3 = \mathcal{OOO} x 3 = \mathcal{OOO}
5. That Are OBL, FACW, or FAC: $(OO = Total Cover$ 6. Prevalence Index worksheet: 7. Total % Cover of: Multiply by: 8. OBL species 110 50% of total cover: 20% of total cover: 20% Saeling/Shrub Stratum (Plot cize: 20% of total cover: 20%
7. Prevalence Index worksheet: 8. IOD = Total Cover 50% of total cover: 20% of total cover: 20% of total cover: 20% of total cover: Sabling/Shrub Stratum (Plot cize: 20% of total cover: 20% of total cover: 20%
Image: Sealing/Shrub Stratum (Plot cize: DX 3DQ) Image: Color of total cover: DX 3DQ) Total % Cover of: $Multiply by:$ 0BL species $1/0$ $x 1 = 1/0$ FACW species ZO $x 2 = 40$ FAC species 200 $x 3 = 600$
$\frac{100}{50\% \text{ of total cover}} = \text{Total Cover}$ $\frac{100}{20\% \text{ of total cover}} = \text{Total Cover}$ $\frac{100}{FACW \text{ species}} = \frac{100}{X^2} \times 1 = \frac{100}{X^$
$\frac{1}{50\% \text{ of total cover}} = 10 \text{ fotal cover} \qquad FACW \text{ species} \qquad \boxed{20} \text{ x } 2 = \frac{40}{50\%}$ Sapling/Shrub Stratum (Plot size: $\overrightarrow{20} \times \overrightarrow{31} = \underbrace{600} \text{ x } 3 = 6$
Sapling/Shrub Stratum (Did cize: $BD \sqrt{3}DQ^2$) FAC species $200 \times 3 = 600$
1. Taxodium ascendens 50 / OBL FACU species 0 x4= 0
2. Acer NONUM 50 V PAC CLOSE TOP
3. Lighidajabar Styraciflun SD Y FAC Column Totals: 330 (A) 750 (B)
4 Prevalence Index = B/A = / Prevalence Index = B/A = / 2:27
5 Hydrophytic Vegetation Indicators:
6 1 - Rapid Test for Hydrophytic Vegetation
7
8 Prevalence Index is \$3.01
= Total Cover Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 75 20% of total cover; 30
Herb Stratum (Plot size: 30×30FF)
1. <u>OBL</u> be present, unless disturbed or problematic.
2. JUNCUS C-FUBUS 10 N OBL Definitions of Four Vegetation Strata:
3. Arindinaria giagnited ID R FACW Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. <u>Clethra Al Nafolia</u> <u>W</u> <u>P</u> FACW 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.
0, Herb – All herbaceous (non-woody) plants, regardless 9, of size, and woody plants less than 3.28 ft tall.
10
10 Woody vine – All woody vines greater than 3.28 ft in height.
12
SU = Total Cover
50% of total cover: 40 20% of total cover: 20
Woody Vine Stratum (Plot size: 30 X3 0 +)
1. NONE
4
S Hydrophylic
= Total Cover Vegetation Present? Yes No
50% of total cover: 20% of total cover: 11050111 1105 1105
Remarks: (If observed, list morphological adaptations below).
Clethra is growing on a hummuck, claarom appears is
Remarks: (If observed, list morphological adaptations below). Clethra is growing on a hummuck, Cladium appears To have been in a restoration area, None present
within diecent PFO

SOIL

Profile Desc	ription: (Describe	to the depth	needed to docu	iment the l	ndicator	or confirm	the absence of inc	dicators.)
Depth	Matrix		Red	ox Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	10 YR 4/2	50	10YR 5/8	50	<u>(</u>	ΛΛ	SL	
12-20	10YR 2/1	100			<u> </u>	-1-4-1	<u>'</u> \$L_	
12 20	10/2 //	_ 100 _			·	<u> </u>		
	·							
	<u></u>		· ·		•		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
					·			
17								
	oncentration, D=De					ains.		Pore Lining, M=Matrix.
	Indicators: (Applie	Caple to all L						roblematic Hydric Solis ³ :
- Histosol	• •		Polyvalue B) 1 cm Muck ((A9) (LRR O)
	pipedon (A2)		Thin Dark S					(A10) (LRR S)
	stic (A3)		Loamy Muc			₹ O)		rtic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley		(F2)		Piedmont Fl	oodplain Soils (F19) (LRR P, S, T)
	l Layers (A5)		Lepleted M	•••				Bright Loamy Soils (F20)
	Bodies (A6) (LRR I		🚬 Redox Dark				(MLRA 15	
	icky Mineral (A7) (L		Depleted Data				Red Parent	Material (TF2)
	esence (A8) (LRR		Redox Depa	,	8)		Very Shallov	w Dark Surface (TF12)
	ick (A9) (LRR P, T)		Малі (F10) (Other (Expl	ain in Remarks)
	d Below Dark Surfa	ce (A11)	Depleted O					
	ark Surface (A12)		Iron-Manga				T) ³ Indicators	of hydrophytic vegetation and
Coast P	rairie Redox (A16) ((MLRA 150A)) Umbric Sur	face (F13)	(LRR P, 1	r, U)	wetland	hydrology must be present,
Sandy M	/ucky Mineral (S1)	(LRR O, S)	Delta Ochri					isturbed or problematic.
Sandy C	Sleyed Matrix (S4)		Reduced V	ertic (F18)	(MLRA 1	50A, 150B)		
	Redox (S5)		Piedmont F	loodplain S	Soils (F19)) (MLRA 14	9A)	
	I Matrix (S6)		Anomalous	Bright Loa	my Soils i	(F20) (MLR.	A 149A, 153C, 153	D)
Dark Su	rface (S7) (LRR P,	S, T, U)						
Restrictive	Layer (if observed):					1	
Type:								٨
	ches):						Hydric Soll Pres	sent? Yes K No
Remarks:		· · · ·					Thydric Gold Free	
Remarks.								
	•							
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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 c	tity/County: Chesapeake Sampling Date: 1/21/16
Applicant/Owner: DDMINION	State: VA Sampling Point: wchr 002f-w
	Section, Township, Range: MA
Landform (hillslope, terrace, etc.): Flort	ocal relief (concave, convex, none): Mone Slope (%): D-1
Subregion (I BB or MI BA): LERT Lat: 36.7	-6836 Long: -76.43278 Datum: Wass
Soil Map Unit Name: TOMOFICY - Deloss Comple	
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology significantly d	
Are Vegetation, Soil, or Hydrology naturally prob	elematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing s	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes Yes No
Remarks:	
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)	
K High Water Table (A2) Marl Deposits (B15)	
Saturation (A3) Hydrogen Sulfide Od	
The second second states in the second s	res along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduce	d Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction	on in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (0	
Iron Deposits (B5) Other (Explain in Rei	
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 X No Depth (inches):	
Saturation Present? Yes X No Depth (inches):	O V
(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: Wchr002f.w2

25152-	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30×30) 1. Liguidambar Styrocifua	% Cover 40	Species?	FAC	Number of Dominant Species (A)
2. Ruercus nigra 3. Acer rubrum	10	NN	FAC	Total Number of Dominant Species Across All Strata: (B)
4.				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: /DD (A/B)
6				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
0	60	= Total Co	Ver	OBL species x 1 =
50% of total cover: 30	20% 0	total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 20 × 30)	_ 20/0 0	total cover		FAC species x 3 =
1. Liguidanbar Styracifua	20	У	FAC	FACU species x 4 =
2.				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 ≤3.0 ¹
10		= Total Co	11	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:/ C	_ 20% of	total cover	-4	
Herb Stratum (Plot size: 30 X3D) 1. Arundinaria gigantea	50	Y	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2	1.12.1			Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
1.	-	= Total Co	1 -	
50% of total cover:	20% of	total cover	: 10	
Woody Vine Stratum (Plot size: 30 ×30)	2		Fac. 1	
1. Smilax laurifolia	0	N	FACW	
2				
3				
4				
5	7			Hydrophytic
10		= Total Co		Vegetation Present? Yes V No
50% of total cover: 1.5	A DESCRIPTION OF THE	total cover	<u>D</u> , Q	
Remarks: (If observed, list morphological adaptations below	v).			

SOIL

Sampling Point: Wchr002f.w2

Profile Desc	ription: (Describe	to the dept				or confirm	the absence of in	ndicators.)	
Depth	Matrix Color (moist)	0/		ox Features	Type'	Loc ²	Texture	Remarks	
(inches)	Color (moist) 16YR 2/1		Color (moist)	%	Type	LUC		Remarks	-
0-6	IDYK AT	100					SCL		_
620	10412 41	90	104R 5/2	10	C	M	SCL	1.5 Million	_
					-				
									_
									_
									_
									-
	oncentration, D=Dep					ains.		Pore Lining, M=Matrix.	-
Hydric Soil I	ndicators: (Applic	able to all I	RRs, unless othe	rwise note	ed.)		Indicators for I	Problematic Hydric Soils ³ :	
Histosol	(A1)		Polyvalue Be	elow Surfac	ce (S8) (L	RR S, T, U) 1 cm Muck	(A9) (LRR O)	
Histic Ep	ipedon (A2)		Thin Dark Si					(A10) (LRR S)	
Black His			Loamy Muck			0)	the second s	ertic (F18) (outside MLRA 150	
Hydroge	n Sulfide (A4)		Loamy Gley	ed Matrix (I	=2)		the second se	Floodplain Soils (F19) (LRR P, S	i, T)
the second s	Layers (A5)		Depleted Ma	ALL			the second se	Bright Loamy Soils (F20)	
	Bodies (A6) (LRR P		Redox Dark	and the second second second			(MLRA 1		
	cky Mineral (A7) (LF		Depleted Da				the second se	t Material (TF2)	
	esence (A8) (LRR U)	Redox Depr		3)			ow Dark Surface (TF12)	
	ck (A9) (LRR P, T)		Marl (F10) (I				Other (Exp	lain in Remarks)	
77	Below Dark Surfac	e (A11)	Depleted Oc		and the second sec	the second second second second second	31-11-11-1	of hudershulls usedation and	
the second se	rk Surface (A12)		Iron-Mangar				A CONTRACTOR OF A CONTRACTOR O	s of hydrophytic vegetation and	
	airie Redox (A16) (M					(U)		hydrology must be present, listurbed or problematic.	
	lucky Mineral (S1) (I	LRR 0, 5)	Delta Ochric				uniess t	isturbed of problematic.	
	leyed Matrix (S4)		Reduced Ve						
	edox (S5) Matrix (S6)						A 149A, 153C, 153		
and the second se	face (S7) (LRR P, S	TIN	_ Anomalous I	bright Loan	iy cons (i	20) (111214	, 140, 1000, 100		
	ayer (if observed):								
	ayer (in ebserveu).								
Type:	1 1						Hydric Soil Pres	sent? Yes X No	
	ches):						Hydric Soli Pres	sentr fes <u>/ No</u>	-
Remarks:									
1									
									1
2									
2									
1									



Wetland data point wchr002f_w2 facing east.



Wetland data point wchr002f_w2 facing west.

WETLAND DETERMINATION DA	TA FORM – Atlantic and Gulf Coastal Plain Region
AID	City/County: Chesapeake Sampling Date: 1/21/16
Project/Site: ALP	City/County: Chills aplace Sampling Date: 1/21/16
pplicant/Owner: Dominion	State: VA Sampling Point: Wchr002f-w3
nvestigator(s): C.Jacobs, C.McEachern	Section, Township, Range:
andform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): none Slope (%): D-45
Subregion (LRR or MLRA): LRRT Lat:	36.76879 Long: 76,45735 Datum: WGS8
ioil Map Unit Name: Udorthents-Urban L	and complex NWI classification: PFO
we climatic / hydrologic conditions on the site typical for this time	
re Vegetation, Soil, or Hydrology signific	
re Vegetation, Soil, or Hydrology natura	Ily problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	wing 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>V</u> No
Remarks:	
IYDROLOGY	
	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that as	
Surface Water (A1) Aquatic Fauna ∑ High Water Table (A2) Marl Deposits	s (B15) (LRR U) Sparsely Vegetated Concave Surface (B8)
	fide Odor (C1) Moss Trim Lines (B16)
	cospheres along Living Roots (C3) Dry-Season Water Table (C2)
	Reduced Iron (C4) Crayfish Burrows (C8)
	Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Su	
Iron Deposits (B5) Other (Explain	n 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:	1.0
Surface Water Present? Yes No Depth (in	0
Water Table Present? Yes No Depth (in	
Saturation Present? Yes <u>X</u> No <u>Depth</u> (in (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

	ALL LL D. L. H. L. P. A.	D i ser Test verbale hert
Tree Stratum (Plot size: 30×30)	Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet:
Tree Stratum (Plot size:	and the second s	Number of Dominant Species
1. LIQuidambar Styraciflua	30 Y FAC	That Are OBL, FACW, or FAC: (A)
2. Pindis tarda	X N FAC	
3. ALEr rubrum	4 N FAC	Total Number of Dominant
3. ALEI INDINAT	- I IV FAC	Species Across All Strata: (B)
4.		
5		Percent of Dominant Species That Are OBL, FACW, or FAC:) OD/ (A/B)
		That Are OBL, FACW, or FAC: 1007 (A/B)
6		B
7		Prevalence Index worksheet:
		Total % Cover of: Multiply by:
8		OBL species x 1 =
	42 = Total Cover	
50% of total cover: 21	20% of total cover: 8,	FACW species x 2 =
		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30×30)	2- 11 7-	FACU species x 4 =
1. Aler rubrum	SO Y FAC	and the second
2 Aralia SAnosa	8 N FAC	UPL species x 5 =
	manadegetermine and the statement of the	Column Totals: (A) (B)
3. Figuid Ambar Styracifina	5 N FAC	
4.		Developed Index - D/A -
		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		
/		2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.0 ¹
	43 = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% - 54 - 54 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	2 20% of total cover: 8.6	Froblematic Hydrophytic vegetation (Explain)
2 50% of total cover: x 11	20% of total cover.	
Herb Stratum (Plot size: 30 X30)		¹ Indicators of hydric soil and wetland hydrology must
1. None		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		neight.
-		
0.		Sanling/Shrub - Woody plants, excluding vines, less
6		Sapling/Shrub – Woody plants, excluding vines, less than 3 in DBH and greater than 3.28 ft (1 m) tall.
7		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
78		than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
7 8 9		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
78		than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
7 8 9 10		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.
7		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
7 8 9 10		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
7		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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7.		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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7	= Total Cover 20% of total cover: 3NFAC	 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

Profile Desci	iption: (Describe t	o the dept	h needed t	o docume	ent the i	indicator	or confirm	the absence	of indicators.)
Depth	Matrix				Feature			-	
(inches)	Color (moist)		Color (m	oist)	%	Type	_Loc ²	Texture	Remarks
0-6	7. SYRY	100						SCL	
10.20	7.54Rd.%	95 7	F.SYR	5/2	5	C	M	SCL	
	-								
									and the second second
Type: C=Co	ncentration, D=Depl	etion RM=	Reduced M	atrix MS=	Masked	Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
	dicators: (Applica								for Problematic Hydric Soils ³ :
Histosol (.RR S, T, U)	1 cm M	Auck (A9) (LRR O)
and the second s	pedon (A2)			Dark Surf					Auck (A10) (LRR S)
Black His	tic (A3)			ny Mucky					ed Vertic (F18) (outside MLRA 150A,B)
	Sulfide (A4)		and the second se	ny Gleyed		(F2)			ont Floodplain Soils (F19) (LRR P, S, T)
the second s	Layers (A5)			eted Matri					alous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P,			ox Dark Su				and the second se	RA 153B)
	ky Mineral (A7) (LR sence (A8) (LRR U)			eted Dark					arent Material (TF2) hallow Dark Surface (TF12)
	ck (A9) (LRR P, T)			(F10) (LR		0)			(Explain in Remarks)
	Below Dark Surface	(A11)		eted Ochr		(MLRA 1	51)		(
and the second s	k Surface (A12)						LRR O, P, T		ators of hydrophytic vegetation and
Coast Pra	airie Redox (A16) (M	LRA 150A) Umb	ric Surface	e (F13) ((LRR P, T	, U)		land hydrology must be present,
and the second se	ucky Mineral (S1) (L	RR O, S)		a Ochric (F	and the second se			unle	ess disturbed or problematic.
	eyed Matrix (S4)		the second se				0A, 150B)		
the second se	dox (S5)						(MLRA 149	A) 149A, 153C	152D)
the second	Matrix (S6) ace (S7) (LRR P, S	т 10	A	naious bii	gni Luai	iny Sons (-20) (WILKA	1454, 1550	, 1350)
	ayer (if observed):	, , , , ,	and the sector					1	
Type:									
Depth (inc	nes):							Hydric Soil	Present? Yes X No
Remarks:				-	-				
a subscription of									
			-						



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: Dominicion State: V/A Sampling Point: NChV @BBC-W
	Investigator(s): EST-A, Miller, C. M'Eacher Section, Township, Range: NA
	Landform (hillslope, terrace, etc.): $f(\alpha + 1)$ Local relief (concave, convex, none): <u>None</u> Slope (%): $O - 1^{2} P$
	Subregion (LRR or MLRA): \underline{MLRA} 153B Lat: 36.76445°N Long: $\underline{76.42896^{\circ}}$ Datum: W65 24
	Soil Map Unit Name: TO MOHEG-DEIOSS COMPLEX NWI classification: PEM
an Arthur	
¥	
	SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
	Hydrophytic Vegetation Present? Yes No
	Hydrophydic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Ves No
	Wetland Hydrology Present? Yes No
	Remarks:
	Towerting. Maintained corridor, FER. on Both
	Powerline. Maintained corridor PER on both sides. Vegis moved & sprayed To eliminate
	woody wea. Tire ruts Throughout,
	HYDROLOGY
	Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
	Primary Indicators (minimum of one is required; check all that apply)
	Sparsely Vegetated Concave Surface (B8)
	High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10)
	Saturation (A3)
	Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8)
	Prift Deposits (B3)
	Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2)
	Image: International System Image: International System Image: International System Image: International System Image: International System Image: International System Image: International System Image: International System
	Inundation Visible on Aerial Imagery (B7) Imagery (B7) Imagery (B7) Imagery Water-Stained Leaves (B9) Imagery (B7) Imagery (B7)
	Field Observations:
•	Surface Water Present? Yes Ko Depth (inches): 22 1 Surface Water Present?
	Water Table Present? Yes No Depth (inches): aTsufface
•	Saturation Present? Yes No Depth (inches): at SUFFO (Wetland Hydrology Present? Yes X No
	(includes capillary fringe)
	Remarks:
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VEGETATION (Four Strata) –	Use scientific names of plants.
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Stratum (Plot size: 30F+ X30F+		Dominant		Dominance Test worksheet:
1)		Species?	Status	Number of Dominant Species
PONE				That Are OBL, FACW, or FAC: (A)
		-		Total Number of Dominant
· · · · · · · · · · · · · · · · · · ·				Species Across All Strata: (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 100% (A/B)
			. <u> </u>	
		. <u> </u>		Prevalence Index worksheet:
·				Total % Cover of: Multiply by:
	11	= Total Cov	/er	OBL species x 1 =
50% of total cover:	20% of	total cover	:	FACW species x 2 =
oling/Shrub Stratum (Plot size: 308+ X305+		. /	<u> </u>	FAC species x 3 =
Acer rubrum	ZD	У	FAC	FACU species x 4 =
Liquidampar straciflue	70	∇	FAC	UPL species x 5 =
			<u> </u>	Column Totals: (A) (B)
				Prevalence index = $B/A = \frac{7}{1 + C^2}$
· · · · · · · · · · · · · · · · · · ·				Hydrophytic Vegetation Indicators:
			<u>-</u>	Rapid Test for Hydrophytic Vegetation
		·		2 - Dominance Test is >50%
······································				3 - Prevalence Index is ≤3.0 ¹
1	<u>40</u>	= Total Co	ver Q	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 2	<u> </u>	f total cover	:_0	
erb Stratum (Plot size: 30F+ X 30F)+		Υ.,		¹ Indicators of hydric soil and wetland hydrology must
Eleocharis SPP.	100	· <u>}</u>		be present, unless disturbed or problematic.
<u>Khexia</u> marina	_ <u>50</u>	·	FALL	Definitions of Four Vegetation Strata:
Anundinaria alganter	<u>So</u>	<u> </u>	<u>FACU</u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
JUNCUS 2 FFUSUS	50	<u> </u>	OBL	more in diameter at breast height (DBH), regardless of
Scirpus cyperinus	30	()	OBL	height.
/				Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
			•	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				Woody vine – All woody vines greater than 3.28 ft in
l		•	·	, height.
2	200			
50% of total cover: <u>1 4</u>		= Total Co		
50% of total cover: 17	20% (of total cove	er: <u>J@</u>	
(Plot size: 305+X3)5+)				
None present				•
				-
·				-
·				- Hydrophytic
•		_ = Total C	over	Vegetation //
50% of total cover:				Present? Yes No
				<u> </u>
	~ II	0 1		rub plants less Than
Shrub layer cont	rolle	み わ	y 5	praying mowing
Our protect!	<i>p r</i>	11	1 1	aut day Te loss Than
under power lin	cs o	n 1	1 Sh	ruo pianis less inan
2 FT. Tall.				

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<u> </u>	OIL			5 a					Sampling Point: WCh	100
Г	Profile Desc	cription: (Descri	be to the dep	th needed to docum	ent the in	dicator	or confir	m the absence of		7
	Depth (inches)	Matrix Color (moist)	<u>%</u>	Redox	x Features	Tural				
-	D - B	10 YR 7/1	$\overline{001}$	Color (moist)	%	Type'	Loc ²		Remarks	
-	$\frac{0}{Q-2n}$	54R 1	90	10VR 5/8	10	C	$\overline{\mathbf{N}}$	Sandyclay	<u></u>	
-	220	5/10 1		10412 010	<u> </u>		<u> </u>	Survey		
-					· ·		·			
-							·			<u> </u>
-		· · · · · ·								
-	· · · · ·				·		·			
	¹ Type: C=C	oncentration, D=E	Depletion, RM	Reduced Matrix, MS	S=Masked :	Sand G	rains.	² Location: PL	Pore Lining, M=Matrix.	
[]	Hydric Soil	Indicators: (App	licable to all	LRRs, unless other	wise note	d.)		indicators for	r Problematic Hydric Soils ³ :	• • • •
N	Histosol			Polyvalue Be					ck (A9) (LRR O)	
		pipedon (A2) istic (A3)		Thin Dark Su Loamy Mucky					ck (A10) (LRR S) Vertic (F18) (outside MLRA 1	50 A B)
		en Sulfide (A4)							t Floodplain Soils (F19) (LRR F	
.		d Layers (A5)		Depleted Ma	trix (F3)	-		L Anomalou	us Bright Loamy Soils (F20)	
		: Bodies (A6) (LRI ucky Mineral (A7)		Redox Dark	•	-		(MLRA	. 153B) ent Material (TF2)	
		resence (A8) (LR		Redox Depre					illow Dark Surface (TF12)	
	🔲 1 cm Mi	uck (A9) (LRR P,	т)	🔲 Marl (F10) (L	.RR U)				kplain in Remarks)	
		ed Below Dark Sur ark Surface (A12)						3	ave of builds - builds - builds	
		Prairie Redox (A12)		Iron-Mangan 🗌 🗌 A) 🛄 Umbric Surfa					ors of hydrophytic vegetation a nd hydrology must be present,	nd
1	Sandy N	Mucky Mineral (Sr	I) (LRR O, S)	Delta Ochric					s disturbed or problematic.	
		Gleyed Matrix (S4)	Reduced Ver						
		Redox (S5)		Piedmont.Fig	hodolain Sc	nils (F19				
									52D)	
	Stripped	d Matrix (S6)	P, S, T, U)					149A) .RA 149A, 153C, 1	53D)	
	Dark Su								53D)	
-	Stripped Dark St Restrictive	d Matrix (S6) urface (S7) (LRR Layer (if observe						.RA 149A, 153C, 1	k	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observe							k	
	Stripped Dark St Restrictive	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):	Anomalous E	Bright Loan	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loan	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):	Anomalous E	Bright Loan	ny Solls	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loan	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	
	Stripped Dark Su Restrictive Type: Depth (ir	d Matrix (S6) urface (S7) (LRR Layer (if observent nches):	ed):		Bright Loarr	ny Soils	(F20) (ML	RA 149A, 153C, 1 Hydric Soil P	resent? Yes K No	



Wetland data point wchr002e_w facing east



Wetland data point wchr002e_w facing west

Project/Site: ACP	City/County: Cheso	peake	Sampling Date: 1/21/16
Applicant/Owner: UDMINION		State: VA	Sampling Point Wchr OD2e-W
nvestigator(s): C. Jacobs, C. McEachern	Section, Township, Range:	NIA	
andform (hillslope, terrace, etc.): Flat	Local relief (concave, conv		R
Subregion (LRR or MLRA):	at: 30,76859 Long	-76.4331	H Datum: WGS84
Soil Map Unit Name: PUNgo-Belhaven		NWI classif	IT IA
		and the second sec	
Are climatic / hydrologic conditions on the site typical for this			
Are Vegetation, Soil _X, or Hydrology si			present? Yes No
Are Vegetation, Soil, or Hydrology na	aturally problematic? (If neede	d, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing sampling point loca	tions, transect	s, important features, etc.
· · · · · · · · · · · · · · · · · · ·	Is the Sampled Are within a Wetland?		<u>С №</u>
SDil is backfill m	ortenal from u	ndergroun	d utility istallation
HYDROLOGY			
Wetland Hydrology Indicators:	Sector Sector	Secondary India	cators (minimum of two required)
Primary Indicators (minimum of one is required; check all th	nat apply)		il Cracks (B6)
X Surface Water (A1) Aquatic F	The second se		egetated Concave Surface (B8)
The second secon	osits (B15) (LRR U)	the second se	atterns (B10)
The survey of the second se	n Sulfide Odor (C1)		Lines (B16)
	Rhizospheres along Living Roots (C3 of Reduced Iron (C4)	Crayfish Bu	Water Table (C2)
And a start of a second start of a start back of a start back of a	on Reduction in Tilled Soils (C6)		Visible on Aerial Imagery (C9)
	k Surface (C7)	the second se	c Position (D2)
A CONTRACT OF A	plain in Remarks)	Shallow Aq	
Inundation Visible on Aerial Imagery (B7)		K FAC-Neutra	
Water-Stained Leaves (B9)		Sphagnum	moss (D8) (LRR T, U)
Field Observations:	0		
Surface Water Present? Yes X No Dep	and the second se		
Water Table Present? Yes X No Dep			X
Saturation Present? Yes <u>Y</u> No Dep	th (inches): Wetlan	d Hydrology Prese	ent? Yes <u>No</u>
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a	erial photos, previous inspections), if	available:	
Remarks:			
Frozen Surface Woter			
1100 000			

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

Sampling Point: WChr002e_w2

2- 2221	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)
2		Total Number of Dominant (B)
4 5		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 X304)		FAC species x 3 =
10.00		FACU species x 4 =
11		UPL species x 5 =
2		Column Totals: (A) (B)
3		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8		
	O = Total Cover	3 - Prevalence Index is ≤3.0 ¹
50% of total cover	20% of total cover:	Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 30 X30A)		
1. JUNCUS EFUSUS	15 Y OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Andropodino Vurginicus		Definitions of Four Vegetation Strata:
2. Andropogon virginicus	10 - 1 IAC	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		tildi Sin. DDH and greater tildi 5.20 tt (1 m) tail.
8		Herb - All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10		Woody vine - All woody vines greater than 3.28 ft in
11		height.
12		
10	26 = Total Cover	
50% of total cover: 12	5 20% of total cover: 5	
Woody Vine Stratum (Plot size: 30 X304		
1. None		
2		
2		
3		
4		a balance and a second s
5		Hydrophytic
	= Total Cover	Vegetation Present? Yes No
50% of total cover:	20% of total cover:	
Remarks: (If observed, list morphological adaptations bel	ow).	
Mayority of Plants of	ormant for u	linter

SOIL

Sampling Point: Wchr002e.w2

Depth	Matrix		needed to docu Red	ox Feature				
(inches)	Color (moist)	%	Color (moist)	%		Loc ²	Texture	Remarks
0-14	IDYR3/1	100					CL	
14-20	IDYR 4/1	160					CL	han the second
	-							
							21	- David Linkson MacMathia
41	Indicators: (Applic		the second s			ains.		L=Pore Lining, M=Matrix. r Problematic Hydric Soils ³ :
Histosol			Polyvalue B			RR S. T. U		ck (A9) (LRR O)
Construction of the second second	bipedon (A2)		Thin Dark S					ck (A10) (LRR S)
Black Hi			Loamy Much					Vertic (F18) (outside MLRA 150
	n Sulfide (A4)		Loamy Gley		(F2)		the second se	t Floodplain Soils (F19) (LRR P,
	Layers (A5)		Depleted Ma				Anomalo (MLRA	us Bright Loamy Soils (F20)
	Bodies (A6) (LRR F icky Mineral (A7) (L		Redox Dark Depleted Da				And the second se	ent Material (TF2)
	esence (A8) (LRR L		Redox Depr				the second	llow Dark Surface (TF12)
	ick (A9) (LRR P, T)		Marl (F10) (LRR U)			Other (Ex	xplain in Remarks)
the second se	Below Dark Surfac	ce (A11)	Depleted Oc					
Thick Da	ark Surface (A12) rairie Redox (A16) (- Iron-Mangar	nese Mass	es (F12) (LRR O, P,	and the second se	ors of hydrophytic vegetation and
	rairie Redox (A16) (lucky Mineral (S1) (Delta Ochric			, U)		nd hydrology must be present, s disturbed or problematic.
and the second se	leyed Matrix (S4)	LRR 0, 3)	Reduced Ve			0A. 150B)	unes	a distance of problematic.
	edox (S5)		Piedmont FI				9A)	
and the second second second second	Matrix (S6)						A 149A, 153C, 1	53D)
Stripped Dark Sur	Matrix (S6) rface (S7) (LRR P, S							53D)
Stripped Dark Sur Restrictive L	Matrix (S6)							53D)
Stripped Dark Sur Restrictive L Type:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed)						A 149A, 153C, 1	
Stripped Dark Sur Restrictive L Type: Depth (inc	Matrix (S6) rface (S7) (LRR P, S Layer (if observed)						A 149A, 153C, 1	53D) resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) rface (S7) (LRR P, S Layer (if observed)	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
Stripped Dark Sur estrictive L Type: Depth (ind emarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No
_ Stripped _ Dark Sur estrictive L Type: Depth (inc emarks:	Matrix (S6) fface (S7) (LRR P, 1 Layer (if observed) ches):	:	Anomalous	Bright Loa	my Soils (I	F20) (MLR)	A 149A, 153C, 1 Hydric Soil Pi	resent? Yes <u>×</u> No



Wetland data point wchr002e_w2 facing east.



Wetland data point wchr002e_w2 facing west.

Photo Sheet 1 of 4

WETLAND DETERMINATION DATA FO	ORM – Atlantic and Gulf Coastal Plain Region
Ard	ity/County: Chesapeake Sampling Date: 1/21/16
Project/Site: ALF Ci	ity/County: Crusarence Sampling Date:
Applicant/Owner: Dominion	State: VA Sampling Point: Wchr DD2e_w3
	ection, Township, Range:
	ocal relief (concave, convex, none): CONCAVE Slope (%): 0-2
Subregion (LRR or MLRA): LRRT Lat: 36.	76851 Long: -76.45744 Datum: WGS84
Soil Map Unit Name: Indorthents-Urban Lond (+	mplex NWI classification: PEM
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 adjuncation // Are Vegetation, Soil, or Hydrology naturally problem.	
SUMMARY OF FINDINGS – Attach site map showing s	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: POWERLINE Easement	Is the Sampled Area within a Wetland? Yes <u>Yes</u> No
HYDROLOGY Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	
High Water Table (A2) Marl Deposits (B15) (
Saturation (A3) Hydrogen Sulfide Od	
	es along Living Roots (C3) Dry-Season Water Table (C2) d Iron (C4) Crayfish Burrows (C8)
Sediment Deposits (B2) Presence of Reduced Drift Deposits (B3) Recent Iron Reductio	
Algal Mat or Crust (B4) Thin Muck Surface (C	
Iron Deposits (B5) Other (Explain in Rer	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	1
Surface Water Present? Yes <u>No</u> Depth (inches):	0
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Yes No Depth (inches):	Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	, previous inspections), if available:
Description	
Remarks:	

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

Sampling Point: Wchr 002-W3

2-1120 []	Absolute Dominant Indicate	r Dominance Test worksheet:
Tree Stratum (Plot size: 30 ×30 Ft)	<u>% Cover Species?</u> Status	 Number of Dominant Species
1. None		_ That Are OBL, FACW, or FAC: (A)
2		- Total Number of Dominant
3		_ Species Across All Strata: (B)
4		
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		OBL species x 1 =
	= Total Cover	FACW species x 2 =
50% of total cover:	20% of total cover:	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30×30 P+)		FACU species x 4 =
1. None		UPL species x 5 =
2		
3		Column Totals: (A) (B)
4		Prevalence Index = B/A =
5		- Hydrophytic Vegetation Indicators:
6		 1 - Rapid Test for Hydrophytic Vegetation
7		- 2 - Dominance Test is >50%
8		$- 3 - Prevalence Index is $ 3.0^{1}$
0	O = Total Cover	
50% of total cover:	The second s	Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 30 × 30 ++)		-
1. Dichanthelium acuminatum	50 Y FAC	¹ Indicators of hydric soil and wetland hydrology must
		- Be present, uniese distance er presionalion
2. Arundinaria gigantea		Definitions of Four Vegetation Strata:
3. JUNCUS EFFUSUS	10 N BL	- Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Andropogon Virginicus	5 N FAC	more in diameter at breast height (DBH), regardless of
5. Saccharum giganteum	10 N FAC	ん) 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 height.
11		_ height.
12	85 - Tabel Course	-
425	85 = Total Cover	
50% of total cover: 42.5	20% of total cover: 17	
Woody Vine Stratum (Plot size: 3DX3D ++)		
1. None		-
2		-
3		
4		_
5.		- Hydrophytic
	O = Total Cover	Vegetation
50% of total cover:	and the second se	Present? Yes No
Remarks: (If observed, list morphological adaptations belo		-
internatives. (in observed, list morphological adaptations beid		

SOIL

Sampling Point: WchrU02e-w3

Profile Description: (Describe to the depth	n needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture Remarks
0-12 10YK 3/1 100		SCL
12:20 7.5YR4/2100		SCL
		00
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L	RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, U)) 1 cm Muck (A9) (LRR O)
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P,	
Coast Prairie Redox (A16) (MLRA 150A)		wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Туре:	-	\sim
Depth (inches):	-	Hydric Soil Present? Yes <u>No</u> No
Remarks:		



Wetland data point wchr002e_w3 facing northwest



Wetland data point wchr002e_w3 facing southeast

WETLAND	DETERMINATIO	N DATA FOR	/I – Atlantic	and Gul	f Coastal Pla	ain Region	
Project/Site: ACP		City	out che	so Dra	K0	Complian Dates	30 July 20
Applicant/Owner: Dominic	\sim		ounky. <u>07 / .</u>	St. St.	ter VA	Sampling Date: _	Wchrøøz-4
Investigatoria) FST-A MILL	OF I. MEROCK	nero Sectio			NA		
Landform (hillslope, terrace, etc.):	Eller Roa		roliof (concour		- Conve	× class	2-4
Candionn (ninsiope, terrace, etc.); _	<u>111100 NOR</u>		n n n l	, convex, no $\Sigma \mathcal{I}$	пе): <u>1970 -</u> (Л. Црсс		(%): <u>v</u>
Subregion (LRR or MLRA):	<u> 28 0</u>	Lat: <u>30,751</u>			<u>wi 1058</u>	Dati	im: <u>1005 09</u>
Soil Map Unit Name: <u>Hra-pak</u>	o mucky tin	c sonky 1	<u>orm, 0-1</u>	10 21000	NWI classific	ation: 10 01 0	
Are climatic / hydrologic conditions	on the site typical for th	is time of year? Y	es <u>/</u> No	(lf	no, explain in F	emarks.)	
Are VegetationSoil				e "Normal C	ircumstances" p	present? Yes 🗡	<u>No </u>
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If	needed, ex	plain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS -	- Attach site map	showing san	pling poin	t location	s, transects	, important fe	atures, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No	is the Sampi within a Wet		Yes	<u>No_X</u>	-
Remarks:	Field R.	_ ()					
MILCO	rield R	000					
L HYDROLOGY							
Wetland Hydrology Indicators:					Popondany India	ators (minimum of	two conviced)
Primary Indicators (minimum of o	ne is required: check a	ll that annly)		<u>-</u>		I Cracks (B6)	two required)
Surface Water (A1)		ic Fauna (B13)		/		egetated Concave	Surface (B8)
High Water Table (A2)		Deposits (B15) (LR	R U)	f		atterns (B10)	
Saturation (A3)	1 1	gen Sulfide Odor (Moss Trim		1
Water Marks (B1)	U Oxidiz	ed Rhizospheres	along Living Ro	oots (C3)	Dry-Seasor	Water Table (C2)	ł
Sediment Deposits (B2)		nce of Reduced In	• •		Crayfish Bu	•	
	i i i i i i i i i i i i i i i i i i i	nt Iron Reduction i	-	. (6)	—	Visible on Aerial In	
Algal Mat or Crust (B4)		Muck Surface (C7) (Explain in Rema			Shallow Aq	c Position (D2)	3 <u>5</u> 7
Inundation Visible on Aerial I		(Explain in Kenta	10)		_	al Test (D5)	
Water-Stained Leaves (B9)						moss (D8) (LRR ⁻	r, u) ' .
Field Observations:							
Surface Water Present? Y	es No <u></u> ۱	Depth (inches):	<u>NA</u>				
	'es No (~
Saturation Present?) (includes capillary fringe)	′es No I	Depth (inches):	20	Wetland H	ydrology Pres	ent? Yes	<u>NoX</u> _
Describe Recorded Data (stream	i gauge, monitoring we	II, aerial photos, p	revious inspect	lions), if ava	ilable:	<u>=</u>	
Remarks:							· · · · · · · · · · · · · · · · · · ·
r							
				-			
1							
							1

.

Sampling Point: wchr 002-4

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

$ 2$ ∇ 2 Ω (1)	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 X3.0F1</u>)	<u>% Cover Species? Status</u>	Number of Dominant Species
1. None present		That Are OBL, FACW, or FAC: (A)
2		
		Total Number of Dominant 2
3		Species Across All Strata: (B)
4		Derrort of Demission Consist
5		Percent of Dominant Species 33 % (A/B)
		That Are OBL, FACW, or FAC: <u>3270</u> (A/B)
6		Prevalence Index worksheet:
7		
8		Total % Cover of:Multiply by:
	= Total Cover	OBL species $50 \times 1 = 50$
		FACW species \mathcal{O} x 2 = \mathcal{O}
	20% of total cover:	
Sapling/Shrub Stratum (Plot size: 3071)		100 -00
1. None present		FACU species $180 \times 4 = 720$
		UPL species $O_{x5} = O'$
2		-2///2 -760
3		Column Totals: 240 (A) -780 (B)
4		Prevalence index = $B/A = 3.25$
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 Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 3 DX 30(+))		
Held Sitatuan (Flot size. C)	50 V FACU	Indicators of hydric soil and wetland hydrology must
1. Helenium 'amariumin		be present, unless disturbed or problematic.
2. Paspalum notatum	100 V FACI	Definitions of Four Vegetation Strata:
3. Rummerówia striata	30 N FACU	
	ID N FHC	 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
9		of size, and woody plants less than 3.28 ft tall.
10		- Meedu vite All weedu vitees greater then 2.28 ft is
11		 Woody vine – All woody vines greater than 3.28 ft in height.
12		_
	$\underline{Z}\Psi = Total Cover$	······
50% of total covers 1	20 20% of total cover: 48	
		-
Woody Vine Stratum (Plot size: 307 30F+)		
1. None Present		
		-
^{∠.}		-
3		_ 1
4	······································	
4		-
[5		Hydrophytic
· ·	= Total Cover	Vegetation
50% of total cover:		Present? Yes No
		<u>- </u>
Demonstrate (If the second Reference in the locate of a device the		
Remarks: (If observed, list morphological adaptations	below).	
Remarks: (if observed, list morphological adaptations	below).	
Remarks: (If observed, list morphological adaptations	below).	
	below).	
	below).	
Remarks: (If observed, list morphological adaptations	below).	
Remarks: (If observed, list morphological adaptations	below).	
Remarks: (If observed, list morphological adaptations	below).	

SOIL

Sampling Point: wchr 002-u

Profile Des	cription: (Describe	to the depth	needed to docu	ment the i	ndicator	or confirm	the absence	of indicators.)		
Depth	Matrix			ox Feature	s			·		
$\frac{(\text{inches})}{(1-1)}$	Color (moist)	<u>%</u>	<u>Color (moist)</u>	%	<u>Type¹</u>	Loc ²	Texture	F	emarks	a
	10 VR 4/3	100				······	LS	Loamy	SAN	<u>k</u>
$\frac{0}{10}$	104R 3/2	100					<u>LS</u>	Loomy	Sand	
12-14	IDYR 2/1	100					<u> </u>	Clay		
							<u> </u>			<u>-</u>
1		- <u> </u>					2	··		
	Concentration, D=Dep I Indicators: (Applie					ains.		PL=Pore Lining for Problemati		
Histoso			Polyvalue B		•	DD S T I		Muck (A9) (LRR	-	ons.
	pipedon (A2)		Thin Dark S					Muck (A9) (LRI		
	listic (A3)		Loamy Muc					ed Vertic (F18)		LRA 150A,B)
	en Sulfide (A4)		Loamy Gley		(F2)		Piedm	ont Floodplain S	Soils (F19)	(LRR P, S, T)
	ed Layers (A5)		Depleted Ma		-0)			alous Bright Loa	my Soils (F	20)
	c Bodies (A6) (LRR I lucky Mineral (A7) (L		Redox Dark Depleted Dark	•	•			RA 153B) Parent Material ((F2)	
	Presence (A8) (LRR 1		Redox Depr					Shallow Dark Su		2)
1 cm N	luck (A9) (LRR P, T)		Mari (F10) ((LRR U)				(Explain in Rem	•	
	ed Below Dark Surfa	ce (A11)	Depleted O			-	 1.			
	Dark Surface (A12) Prairie Redox (A16) (MI RA 150A)	Iron-Manga 🛄 📋				•	cators of hydrop tland hydrology		
	Mucky Mineral (S1)		Delta Ochri					less disturbed o		
	Gleyed Matrix (S4)		Reduced Ve		-				, probiolita	
	Redox (S5)		Piedmont F	loodplain S	Soils (F19)) (MLRA 1	49A)			
	ed Matrix (S6)	е т III	Anomalous	Bright Loa			RA 149A, 1530	C, 153D)		
🔲 Dark S	Surface (S7) (LRR P,		Anomalous	Bright Loa			RA 149A, 1530	C, 153D)		
Dark S Restrictive			Anomalous	Bright Loa			RA 149A, 1530	C, 153D)		
Dark S Restrictive Type:	Surface (S7) (LRR P, Layer (if observed		Anomalous	Bright Loa					es	NoK
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	No
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	No
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, Layer (if observed):			my Soils	(F20) (MLI	Hydric So		es	No
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	No
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	NO
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	No
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	No
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	NO
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	No
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	No
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	NO
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	NO
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	No
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	NO
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	NO
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	No
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	No
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	NO
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	No
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	No
Dark S Restrictive Type: Depth (i	Surface (S7) (LRR P, 2 Layer (if observed inches):):			my Soils	(F20) (MLI	Hydric So		es	No



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		State: VA	Sampling Date: 3-17-16 Sampling Point: wchr 002_u
Investigator(s): ESI (L. Roper, W. Vaughan	Section Towns	in Range: None	
Landform (hillslope, terrace, etc.): Hillslope	Local relief (con	rave convex none): Conve	Slope (%): 5-7
Subregion (LRR or MLRA): <u>LRF</u>			
Sublegion (LRR DI MLRA). <u>GIERT</u>	Lat. <u>So. No Class</u>	Long NIMI classifi	ALA ALA
Soil Map Unit Name: Tomotley -Deloss Comples			
Are climatic / hydrologic conditions on the site typical for th			
Are Vegetation, Soil, or Hydrology			
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling p	oint locations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes X Hydric Soil Present? Yes	No X Is the Se	mpled Area	
Wetland Hydrology Present? Yes	No within a	Wetland? Yes	NoX
Remarks:			
point in junk yord			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check a	I that apply)		Cracks (B6)
	c Fauna (B13)	Sparsely Ve	getated Concave Surface (B8)
	eposits (B15) (LRR U)	Drainage Pa	atterns (B10)
	gen Sulfide Odor (C1)	Moss Trim I	ines (B16)
Water Marks (B1)	ed Rhizospheres along Livin		Water Table (C2)
	nce of Reduced Iron (C4)	Crayfish Bu	
	t Iron Reduction in Tilled Soi		/isible on Aerial Imagery (C9)
	luck Surface (C7)	Shallow Aq	c Position (D2)
	(Explain in Remarks)	FAC-Neutra	
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)			moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No D	epth (inches): NA		
	epth (inches): > Ginches		
	epth (inches): >6 metes	Wetland Hydrology Prese	nt? Yes No X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well	anial photos, provious inst	ections) if available:	
Describe Recorded Data (stream gauge, monitoring wei	, aenai priotos, previous irisp	ections), il avallable.	
Remarks:		-	
Remarks: augur refusal at Gi	nches		
5	1		

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

Sampling Point: Wchr002-13

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: <u>30ft x 30ft</u>) 1. Liquidanber Styraciflus		Species?	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
2. Acer rubrum 3. Quereus niara	5	yes	FAC	Total Number of Dominant	4	(B)
4				Species Across All Strata: Percent of Dominant Species	75	_ (0)
5				That Are OBL, FACW, or FAC:	10	(A/B)
6				Prevalence Index worksheet:		
7				Total % Cover of:	Multiply by:	
8				OBL species x 1		
	15	= Total Cov	ver _			
50% of total cover: 7.3	5 20% of	total cover	5	FACW species x 2		
Sapling/Shrub Stratum (Plot size: 30Pt x 30Pt)				FAC species x 3		
1. None	-	_		FACU species X4		
2				UPL species x s		
3				Column Totals: (A)		(B)
4				Prevalence Index = B/A =		
5						
6				Hydrophytic Vegetation Indicat		
				1 - Rapid Test for Hydrophyt		
7				2 - Dominance Test is >50%		
B		Tatal Car		3 - Prevalence Index is ≤3.0 ¹		1.1.1
	-0			Problematic Hydrophytic Veg	getation' (Exp	plain)
50% of total cover: Herb Stratum (Plot size: <u>30F+ x 30F+</u>)				¹ Indicators of hydric soil and wetl	and hydrolog	y must
1. hone				be present, unless disturbed or p		_
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	t (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-woo of size, and woody plants less th	dy) plants, re	gardless
9				of size, and woody plants less in	an 0.20 it tai	
10				Woody vine - All woody vines g	reater than 3	.28 ft in
11				height.		
12		-				
Section 1		= Total Co				
50% of total cover:	20% of	total cover				
Woody Vine Stratum (Plot size: 30ft x 30ft)	1		-			
1. Lonicera japonica	10	yes	FACU			
2	_					
3						
4.						
5.				Hydrophytic		
	10	= Total Co	ver	Vegetation		
50% of total cover: 5		f total cove	-	Present? Yes	No	- in the
	100 C 10 C 10	total cove				
50% of total cover: <u>S</u> Remarks: (If observed, list morphological adaptations belo	100 C 10 C 10	I LOTAI COVE	r: <u> </u>			

SOIL

Sampling Point: wchr002.43

	cription: (Describe	to the depth				or confirm	the absence of in	ndicators.)
Depth (inches)	Color (moist)	%	Color (moist)	× Features %	Type'	Loc ²	Texture	Remarks
0-6	10 yr 3/2	100					LS	
0.4								
						-		
	-							
	Concentration, D=De					ains.		Pore Lining, M=Matrix.
	I Indicators: (Applie	cable to all LI						Problematic Hydric Soils ³ :
Histos	the second se		Polyvalue B				the second se	(A9) (LRR O) (A10) (LRR S)
	Epipedon (A2) Histic (A3)		Thin Dark St Loamy Muck					/ertic (F18) (outside MLRA 150A,B)
	gen Sulfide (A4)		Loamy Gley	The second se		. 0,		Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)		Depleted Ma		-,			s Bright Loamy Soils (F20)
	c Bodies (A6) (LRR I		Redox Dark	And the second second second			(MLRA 1	A second s
	lucky Mineral (A7) (L		Depleted Da					t Material (TF2)
	Presence (A8) (LRR		Redox Depr		3)			ow Dark Surface (TF12) blain in Remarks)
	luck (A9) (LRR P, T) ed Below Dark Surfa		Marl (F10) (MIRA 1	51)	Durier (Exp	
	Dark Surface (A12)		Iron-Mangar				T) ³ Indicator	s of hydrophytic vegetation and
	Prairie Redox (A16)	(MLRA 150A)	and the second se					hydrology must be present,
and the second s	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric					disturbed or problematic.
The second se	Gleyed Matrix (S4)		Reduced Ve					
100 1	Redox (S5) ed Matrix (S6)		Piedmont Fl	· · · · · · · · · · · · · · · · · · ·		A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O	19A) RA 149A, 153C, 15	30)
	Surface (S7) (LRR P,	S. T. U)	L Alonalous	bigit Loai	ny Sons (20/ (мен	1404, 1000, 10	52,
the second se	Layer (if observed							
Type: _								
Depth (inches):		_				Hydric Soil Pre	esent? Yes NoX
Remarks:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						10	
	restrictive	grand lo	yer; Can	not	retri	eve	past 6	inches
		2						



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

City/County: City of Chesapeake	Sampling Date: 2/22/2016
State: <u>V</u>	
Section, Township, Range: No PLSS in th	is area
ocal relief (concave, convex, none): <u>concav</u>	_
Long: <u>-76.40725502</u>	Datum: WGS 1984
3 NWI c	lassification: None
ear? Yes 🖌 No (If no, expla	in in Remarks.)
v disturbed? Are "Normal Circumstan	nces" present? Yes No 🔽
oblematic? (If needed, explain any	answers in Remarks.)
	State: V/ Section, Township, Range: No PLSS in the ocal relief (concave, convex, none): concave Long: -76.40725502 MWI c ear? Yes V No (If no, explay y disturbed? Are "Normal Circumstate

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	No
Remarks:					

HYDROLOGY

Wetland Hydrology Indicate	ors:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum	of one is required; c	check all that apply)	Surface Soil Cracks (B6)
 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 Aei Water-Stained Leaves (E Aquatic Fauna (B13) 	rial Imagery (B7)	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) g Roots (C3) Moss Trim Lines (B16) Dry-Season Water Table (C2)
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stree	Yes <u> </u>	✓ Depth (inches): Depth (inches): Depth (inches): ing well, aerial photos, previous inspec	Wetland Hydrology Present? Yes <u>V</u> No ections), if available:
Remarks: Wetland hydrology present			

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

Sampling Point: wchc003s_w

	Absolute	Dominant I	ndicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30)		Species?		Number of Dominant Species	
1				' 0	A)
2				Total Number of Dominant	
3				Species Across All Strata:3 (B)
4					
				Percent of Dominant Species That Are OBL_EACW or EAC 66.66666666 (
5				That Are OBL, FACW, or FAC: 66.6666666666666666666666666666666666	A/B)
6		·	. <u> </u>	Prevalence Index worksheet:	
7					
	0	= Total Cove	r	Total % Cover of: Multiply by:	
50% of total cover: 0		total cover:	0	OBL species 0 x 1 = 0	
15	20 /0 01			FACW species 75 x 2 = 150	
Sapling/Shrub Stratum (Plot size: 15)					
1		<u></u>		FAC species $x_3 = $	
2				FACU species x 4 =100	
			······	UPL species x 5 =0	
3				100 250	
4		. <u> </u>		Column Totals: (A)	(B)
5				Developed by 100 - 25	
				Prevalence Index = B/A =2.5	
6				Hydrophytic Vegetation Indicators:	
7		·		1 - Rapid Test for Hydrophytic Vegetation	
8				✓ 2 - Dominance Test is >50%	
9.				_	
0	0	Tatal Ora		\checkmark 3 - Prevalence Index is ≤3.0 ¹	
0		= Total Cove	r O	4 - Morphological Adaptations ¹ (Provide suppo	orting
50% of total cover:0	20% of	total cover:	0	data in Remarks or on a separate sheet)	Ū
Herb Stratum (Plot size: 5)				, , ,	
_{1.} Juncus effusus	40	Yes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain))
2. Scirpus cyperinus	35	Yes	FACW		
				¹ Indicators of hydric soil and wetland hydrology mu	ist
3. Andropogon virginicus	25	Yes	FACU	be present, unless disturbed or problematic.	
4				Definitions of Four Vegetation Strata:	
				Deminions of Pour Vegetation Strata.	
5		·		Tree – Woody plants, excluding vines, 3 in. (7.6 cm	n) or
6		·		more in diameter at breast height (DBH), regardles	
7				height.	
8					
				Sapling/Shrub – Woody plants, excluding vines, le	
9		·		than 3 in. DBH and greater than or equal to 3.28 ft	(1
10				m) tall.	
11				Herb All berbasseus (non woody) planta regard	
	100	= Total Cove	-	Herb – All herbaceous (non-woody) plants, regardl of size, and woody plants less than 3.28 ft tall.	1622
50% of total cover: 50		total cover:			
	20% 01	total cover:	20	Woody vine - All woody vines greater than 3.28 ft	in
Woody Vine Stratum (Plot size: <u>30</u>)				height.	
1					
2.					
		·			
3		·			
4				Hydrophytic	
5				Vegetation	
	0			Present? Yes <u>V</u> No	
		= Total Cove			
50% of total cover:0	20% of	total cover:	0		
Remarks: (Include photo numbers here or on a separate s	neer.)				

Profile Desc	cription: (Describe t	o the de	oth needed to docur	nent the	indicator of	or confirm	n the absence	e of indicators.)
Depth	Matrix	Redox Features						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	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>		
					·			
<u> </u>			·					
					·			
¹ Type: C=C	oncentration, D=Depl	etion, RM	l=Reduced Matrix, MS	S=Maske	d Sand Gra	ains.	² Location: P	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indic	ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	2 cm Muck (A10) (MLRA 147)
Histic E	pipedon (A2)		Polyvalue Be	low Surfa	ace (S8) (M	ILRA 147,	148) (Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Su		, .	47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)		F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma	. ,				(MLRA 136, 147)
	uck (A10) (LRR N)	(Redox Dark	•	,			/ery Shallow Dark Surface (TF12)
·	d Below Dark Surface	(A11)	Depleted Dat					Other (Explain in Remarks)
	ark Surface (A12) /lucky Mineral (S1) (L		Redox Depre Iron-Mangan		,			
-	A 147, 148)	KK N,	MLRA 13		es (F12) (1	_KK N,		
	Gleyed Matrix (S4)		Umbric Surfa		(MI RA 13	6, 122)	³ Inc	licators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo	. ,	•			etland hydrology must be present,
-	Matrix (S6)		Red Parent M					less disturbed or problematic.
	Layer (if observed):				, (
Type:								
Depth (in	ches):						Hydric Soil	I Present? Yes _ ✔ No
Remarks:							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Hydric soil pro	esent							
i i yano son pr								



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: C	City of Chesapeake	Sampling Date: 2/22/2016
Applicant/Owner: DOMINION		State: VA	Sampling Point: <u>wchc003_u</u>
Investigator(s): Team C	Section, Towr	ship, Range: <u>No PLSS in this a</u>	rea
Landform (hillslope, terrace, etc.): Slight slope		oncave, convex, none): <u>none</u>	•
Subregion (LRR or MLRA): T	Lat: 36.76291632	Long: <u>-76.40711993</u>	Datum: WGS 1984
Soil Map Unit Name: Tomotley-Deloss complex, 0 to 1 per	cent slopes	NWI classi	fication: None
Are climatic / hydrologic conditions on the site typical for th	is 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.)
	- h		

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

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

HYDROLOGY

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

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

Sampling Point: <u>wchc003_u</u>

	30	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size:)		<u>Species?</u>	<u>Status</u>	Number of Dominant Species
1. Quercus falcata		25	Yes	FACU	That Are OBL, FACW, or FAC: 2 (A)
2. Acer rubrum		10	Yes	FAC	Total Number of Dominant
3					Species Across All Strata: 4 (B)
4					· · · · · · · · · · · · · · · · · · ·
5.					Percent of Dominant Species
					That Are OBL, FACW, or FAC: 50 (A/B)
6					Prevalence Index worksheet:
7					Total % Cover of: Multiply by:
8					$\begin{array}{c} \hline \\ OBL \text{ species} \\ \hline \\ \end{array} \begin{array}{c} 0 \\ x \\ 1 \\ \end{array} \begin{array}{c} \hline \\ x \\ 1 \\ \end{array} \begin{array}{c} 0 \\ \end{array}$
	47 5	35	= Total Cove		0
	50% of total cover:17.5	20% of	total cover:	7	FACW species $\begin{array}{c} 0 \\ 40 \end{array}$ x 2 = $\begin{array}{c} 0 \\ 120 \end{array}$
Sapling/Shrub Stratum (Plot siz	e: <u>15</u>)				FAC species $x^3 = $
1					FACU species X 4 =
2.					UPL species x 5 =0
					Column Totals: (A) (B)
3					
4					Prevalence Index = B/A =3.57
5	<u> </u>				Hydrophytic Vegetation Indicators:
6					1 - Rapid Test for Hydrophytic Vegetation
7					2 - Dominance Test is >50%
8					$3 - Prevalence Index is \leq 3.0^{1}$
		0	= Total Cove	r	Problematic Hydrophytic Vegetation ¹ (Explain)
	50% of total cover: 0				
Hart Olastan (Distains	5)	2078.01			
Herb Stratum (Plot size:)	30	Vaa	FAC	¹ Indicators of hydric soil and wetland hydrology must
1. Rubus argutus			Yes		be present, unless disturbed or problematic.
2. Lonicera japonica		30	Yes	FACU	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					Conting (Chrysh Weady plants such diagonians loss
					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			<u> </u>		of size, and woody plants less than 3.28 ft tall.
10					Woody vine – All woody vines greater than 3.28 ft in
11					height.
12.					
		60	= Total Cove	r	
	50% of total cover: 30		total cover:	40	
		2078.01			
Woody Vine Stratum (Plot size:					
1					
2					
3					
4					
5					Hydrophytic
		0	= Total Cove	r	Vegetation
	50% of total cover: 0		total cover:	•	Present? Yes No V
Remarks: (If observed, list morp	onological adaptations below	N).			

SOIL

Profile Desc	cription: (Describe t	o the depth	needed to docur	nent the ir	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>		·			
				. <u></u>					
		<u> </u>				<u> </u>			
	oncentration, D=Depl					ains.		L=Pore Lining, M=Matri	
Hydric Soil	Indicators: (Applica	ble to all LR	Rs, unless other	rwise note	ed.)		Indicators fo	r Problematic Hydric	Soils°:
Histosol	· · /		Polyvalue Be				1 cm Muo	ck (A9) (LRR O)	
	pipedon (A2)		Thin Dark Su					ck (A10) (LRR S)	
	istic (A3)		Loamy Muck	y Mineral ((F1) (LRR	0)		Vertic (F18) (outside I	
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (I	F2)		Piedmont	t Floodplain Soils (F19)	(LRR P, S, T)
Stratified	d Layers (A5)		Depleted Ma	trix (F3)			Anomalo	us Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark	Surface (F	6)		(MLRA	153B)	
5 cm Mu	ucky Mineral (A7) (LR	R P, T, U)	Depleted Date	rk Surface	(F7)		Red Pare	ent Material (TF2)	
Muck Pr	esence (A8) (LRR U)		Redox Depre	essions (F8	3)		Very Sha	llow Dark Surface (TF1	2)
1 cm Mu	uck (A9) (LRR P, T)		Marl (F10) (L	.RR U)	,		·	plain in Remarks)	,
	d Below Dark Surface	e (A11)	Depleted Ocl		(MLRA 1	51)	、	, ,	
	ark Surface (A12)	、 ,	Iron-Mangan	. ,	•	•	³ Indicate	ors of hydrophytic vege	tation and
	rairie Redox (A16) (M	LRA 150A)			· · ·		•	nd hydrology must be p	
	lucky Mineral (S1) (L		Delta Ochric					s disturbed or problema	
	Bleyed Matrix (S4)	- / - /	Reduced Ver	· / ·		0A. 150B)			
	Redox (S5)		Piedmont Flo	· , ·			A)		
	Matrix (S6)			•	. ,	•	, 149A, 153C, 1	53D)	
	rface (S7) (LRR P, S	. T. U)			.,		,,.	,	
	Layer (if observed):	, , - ,							
Type:	, , , , , , , , , , , , , , , , , , ,								
Depth (in	ches):		_				Hydric Soil Pr	resent? 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/Sile:ACP	City/County: <u>Chesapeake</u> Sampling Date: 7/29/15
Applicant/Owner: Dominion	State: VA Sampling Point: WENT ON F-W
Investigator(s): ESI-A.Miller, C.MC Fachern	
	Local relief (concave, convex, none): <u>flat</u> Slope (%): <u>0-1</u> %
	5, 75706°N Long: 76,40516°W Datum: WG586
Soil Map Unit Name: Arapaho= mucky fine so	ndy loan 0-17031 NWI classification: 170
Are climatic / hydrologic conditions on the site typical for this time of ye	rear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes 🗶 No
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answers in Remarks.)
	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> <u>No</u>
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 (B	13) Sparsely Vegetated Concave Surface (B8)
Ligh Water Table (A2) Marl Deposits (B1	15) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide	Odor (C1) Moss Trim Lines (B16)
	oheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Redu	
	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surfac	
Inundation Visible on Aerial Imagery (87)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inche	28): <u>NA</u>
Water Table Present? Yes No K Depth (inche	es): <u>></u> 20
Saturation Present? Yes No K Depth (inche	es): Wetland Hydrology Present? Yes No
(includes capillary fringe)	······································
Describe Recorded Data (stream gauge, monitoring well, aerial pho	Stos, previous inspections), if available:
Remarks:	
have have to a	

 $^{\prime}$

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

Sampling Point: whr-DO/f w

Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 3054 <u>% Cover Species?</u> Status Number of Dominant Species 1. 1901 raciflua 100 FAC That Are OBL, FACW, or FAC: (A)` フク Acer 2. bruin Total Number of Dominant 3. Species Across All Strata: (B) 4. Percent of Dominant Species 5. 0 That Are OBL, FACW, or FAC: (A/B) 6. Prevalence Index worksheet: 7. Total % Cover of: Multiply by: \mathcal{O} OBL species x 1 = = Total Cover FACW species 10 20% of total cover: 50% of total cover: Sapling/Shrub Stratum (Plot size: 3054 X 305 FAC species FACU species ocella Φ × . UPL species 1240 Column Totals: (B)3 4. てい Prevalence index = B/A = 5. Hydrophytic Vegetation Indicators: 6, 1 - Rapid Test for Hydrophytic Vegetation 7. 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0¹ 105 = Total Cover Problematic Hydrophytic Vegetation¹ (Explain) 20% of total cover: 50% of total cover: Stratum (Plot ¹Indicators of hydric soil and wetland hydrology must laauTia be present, unless disturbed or problematic. 1 7 Z 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 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 ମ୍ବଟ = Total Cover 50% of total cover: 42.5 20% of total cover: Woody Vine Stratum (Plot size: 308+X308 1. arthenocissus opinove onic 2. 3. 4. 5 Hydrophytic 50 = Total Cover Vegetation No Present? 25 20% of total cover: 10 50% of total cover: Remarks: (If observed, list morphological adaptations below).

Atlantic and Gulf Coastal Plain Region - Version 2.0

Profile Desc						or comm	m me ause				
Depth (inches)_	<u>Matrix</u> Color (molst)	%	Color (moist)	x Feature: %	s Type'		C Texture	_	Dee		
0-2	10VR2/1			<u>70</u>	<u> </u>	LUC			Ren	narks	
	<u>101141</u>	100	1.10.11	· <u>·</u>			<u>. No</u>	<u>ck</u>			
3-16	JOYKZ/1	<u> </u>	rovry/6	<u>20</u>		\mathbb{N}	Loan	<u> 151/T</u>			
16-20	10 YR3/1	80	INYRG'II								
	+ + P=			·	·			<u> </u>			•
				·	·						
	·										
				·							
						.					
			Reduced Matrix, MS			ains.		ion: PL=Por			
		able to all l	LRRs, unless other					tors for Pro		•	lls*:
Histosol			Polyvalue Be					cm Muck (AS			
	bipedon (A2)		Thin Dark Su					cm Muck (A1			
	istic (A3)	No Warden	Loamy Muck			ιo)		educed Verli			
	n Sulfide (A4)	STATES IN	Loamy Gleye		(F2)			edmont Floo			
	d Layers (A5)		Perieted Ma					iomalous Bri		Soils (F2	0)
	Bodies (A6) (LRR I		Redo., øark					(MLRA 153E			
	ucky Mineral (A7) (L							ed Parent Ma			
	esence (A8) (LRR		Redox Depre		8)			ery Shallow (
	ick (A9) (LRR P, T)		Mari (F10) (L					her (Explain	in Remark	(S)	
		ce (A11)	Depleted Oc	hric (F11)	(MLRA 1	51)		i e Li lui e			
×.	ark Surface (A12)		🦗 🕹 🖓 ộn-Mangan	ese Mass	es (F12)	LRR O, I	P, T) ³	Indicators of			
	rairie Redox (A16)		·					wetland hy			
	Mucky Mineral (S1)	(LRR 0, S)	Delta Ochric	(F17) (M)	LRA 151)			unless distu	rbed or pr	oblematic	•
				1. (TAO)	MIDA 4	500 4500					
			Reduced Ver	THC (1-18)	(11161\^ 13	JUA, 1301	3)				
Sandy	Gleyed Matrix (S4)	10 Jan 10	Piedmont Flo								
Sandy	Sleved Matrix (S4) Redox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A)	(530 1530)			
Sandy Sandy, Strippe	Sleyed Matrix (S4) Redox (S5) Matrix (S6)	S.T. ID		odplain S	Soils (F19)	(MLRA ·	149A)	(53C, 153D)			
Sandy Sandy, F Stripped Dark Su	Gleyed Matrix (S4) Redox (S5) Matrix (S6) Inface (S7) (LRR P,		Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A)				
Sandy Sandy Strippe Dark Su Restrictive	Sleyed Matrix (S4) Redox (S5) Matrix (S6)		Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A)	(53C, 153D)		λ.	
Sandyi Sandyi Stripper Dark SL Restrictive Type:	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1			Ň	
Sandyi Sandyi Stripped Dark Su Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) Matrix (S6) Inface (S7) (LRR P,):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	k	No
Sandyi Sandyi Stripper Dark SL Restrictive Type:	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	k	No
Sandyi Sandyi Stripped Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	k	No
Sandyi Sandyi Strippet Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	k	No
Sandyi Sandyi Stripped Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1			k	No
Sandyi Sandyi Stripped Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1			k	No
Sandyi Sandyi Stripped Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	k	No
Sandyi Sandyi Stripped Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	k	No
Sandyi Sandyi Stripped Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1			k	No
Sandyi Sandyi Stripped Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	k	No
Sandyi Sandyi Strippet Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	k	No
Sandyi Sandyi Stripped Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	k	No
Sandyi Sandyi Strippe Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	k	No
Sandyi Sandyi Stripped Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	Å.	No
Sandyi Sandyi Strippet Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	<u>k</u>	No
Sandyi Sandyi Strippet Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	<u>k</u>	No
Sandyi Sandyi Strippet Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	<u>k</u>	No
Sandyi Sandyi Strippet Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		t? Yes	<u>k</u>	No
Sandyi Sandyi Strippet Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1		- t? Yes	À.	No
Sandyi Sandyi Strippet Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1			À.	No
Sandyi Sandyi Strippet Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1			À.	No
Sandyi Sandyi Stripped Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1			À.	No
Sandyi Sandyi Stripped Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1			Ì.	No
Sandyi Sandyi Strippet Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1			À.	No
Sandyi Sandyi Strippe Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1			Å.	No
Sandyi Sandyi Strippet Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1			N.	No
Sandyi Sandyi Strippet Dark Su Restrictive Type: Depth (in	eleyed Matrix (S4) Redox (S5) Matrix (S6) Irface (S7) (LRR P, Layer (If observed):	Piedmont Flo	odplain S	Soils (F19)	(MLRA ·	149A) .RA 149A, 1			N.	No

US Army Corps of Engineers

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Environmental Field Surveys Wetland Photo Page



Wetland data point wchr001f_w facing north



Wetland data point wchr001f_w facing south

Photo Sheet 1 of 2

Investigator(s): <u>ERSTERALM' NEV, C. M'EACHEYN</u> Section, Township, Range: <u>NA</u> Landform (hillslope, terrace, etc.): <u>Filler Road</u> Local relief (concave, convex, none): <u>CONVEX</u> Slope (%): <u>O</u>	roject/Site: <u>ACP</u>	Cit	y/County: chesap		Date: 7/29/1
andform (hillslope, terrace, etc.):	pplicant/Owner: Dominion			State:A_ Sampling (point: WChr Ø
ubregion (LRR or MLRA): MLRA 153A Let: Zei, 7571740 Long: Tei, 4054820 Datum: Wet oil Map Unit Name: Are polo e Modely fine 5 and 1 for this time of year? Yes No	vestigator(s): EST-AIM Ile		ction, Township, Range:	NA	·····
oil Map Unit Name: Are poloe wocky fine Sanky logan, 0-1654ge-NWI classification: Nove re climatic / hydrologic conditions on the site typical for this time of year? Yes No (if no, explain in Remarks.) re Vegetation	andform (hillslope, terrace, etc.):		cal relief (concave, convex,	none): CONVEX	Slope (%): 0 -2
oil Map Unit Name: Are poloe mocky Einc Sanky Isam, 0-1884e-NWI classification: No/2 re climatic / hydrologic conditions on the site typical for this time of year? Yes No	ubregion (LRR or MLRA):	<u> 4 153 A</u> Let: <u>36,</u>	7.5704°N Long:_	-76.40548°W	_ Datum: <u>WG-58</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, et Hydrophylic Vegetation Present? Yes No Is the Sampled Area Wetland Hydrology Present? Yes No X Wetland Hydrology Indicators: Yes No X Primary Indicators (minimum of one is reguired; check all that apply)	oil Map Unit Name: Arapaho	e mucky fine sar	dy 10 pm, 0-1%5	NWI classification: N	one
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.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, et Hydrophylic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No X Wetland Hydrology Indicators: Yes No X Surface Soil Cracks (B8) Surface Water (A1), Aquelic Feura (B13) Surface Soil Cracks (B8) Surface Soil Cracks (B9)	re climatic / hydrologic conditions on	the site typical for this time of year?	Yes K No	/	0.
re Vegelation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) RUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, et Hydrophytic Vegelation Present? Yes No Hydrophytic Vegelation Present? Yes No Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Remarks: Secondary Indicators (minimum of one is required; check all that apply)			•		es No K
Sufference of Persent? Yes No					
Hydrophylic Vagetation Present? Yes No No No Is the Sampled Area within a Wetland? Yes No Xes Wetland Hydrology Present? Yes No No Xes					·
Hydric Soil Present? Yes No No within a Wetland? Yes No Xes Wetland Hydrology Present? Yes No Xes Xes No Xes Xes No Xes Xes <t< td=""><td>DUMIMART OF FINDINGS - A</td><td>mach site map showing si</td><td>ampling point locatio</td><td>ons, transects, importa</td><td>ant features, etc.</td></t<>	DUMIMART OF FINDINGS - A	mach site map showing si	ampling point locatio	ons, transects, importa	ant features, etc.
Hydric Soil Present? Yes No No Within a Wetland? Yes No X Wetland Hydrology Present? Yes No X No X No X Remarks: No X No X No X No X Remarks: No X Surface Nation No X X X Metland Hydrology Indicators: Remarks: Surface Vater (A1). Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Vater (A1). Surface Vater (A1). Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Surface Vater Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Craylish Burrows (C9) 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) Shellow Aquitard (D3) Irundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Shellow Aquitard (D3) Irundation Visible on Aerial Imagery (B7) Shellow Aquitard (D3) Irundation Visible on Aerial Imagery (B7) Shellow Aquitard (D3)	Hydrophytic Vegetation Present?	Yes No	is the Sampled Area		
Wetland Hydrology Present? YesNo	Hydric Soil Present?	Yes No		Yes No	X
IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)		Yes No		NO	<u> </u>
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply)	Remarks:				
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply)					
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply)					
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply)					
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply)					
Primary Indicators (minimum of one is required; check all that apply)				Secondani Indiantara (minim	of two required
		s required: check all that apply)			
High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water Table Present? Yes No Yes No Depth (inches): Z2U Saturation Present? Yes No Depth (inches): Z2U					-
			LRR U)		
					,
Drifl 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) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No X Depth (inches): 720 Water Table Present? Yes No X Depth (inches): 720 Wetland Hydrology Present? Yes No X Depth (inches): 720 Wetland Hydrology Present? Yes No X Depth (inches): 720 Wetland Hydrology Present? Yes No X Depth (inches): 720		Oxidized Rhizosphere	es along Living Roots (C3)	Dry-Season Water Tabl	e (C2)
		_		Crayfish Burrows (C8)	
				— · ·)2)
			na(KS)		
Field Observations: Surface Water Present? Yes No Depth (inches): NA Water Table Present? Yes No Depth (inches): NA Wetland Hydrology Present? Yes No Saturation Present? Yes No Depth (inches): ZA Wetland Hydrology Present? Yes No Saturation Present? Yes No Depth (inches): ZA Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: A		30 13 (D1)			LRR T. U)
Water Table Present? Yes No X Depth (inches): 720 Saturation Present? Yes No X Depth (inches): 720 (includes capillary fringe) Wetland Hydrology Present? Yes No X Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Field Observations:			(
Water Table Present? Yes No X Depth (inches): 720 Saturation Present? Yes No X Depth (inches): 720 (includes capillary fringe) Wetland Hydrology Present? Yes No X Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Surface Water Present? Yes	No 📈 Depth (inches): .	NA		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water Table Present? Yes	No 🗡 Depth (inches):	720		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Saturation Present? Yes	No X Depth (inches):	Z2 Wetland	Hydrology Present? Yes	<u> № X</u>
		uge monitoring well, aerial photos	previous inspections), if a	vailable:	
Remarks:	-	-0-,	· · · · · · · · · · · · · · · · · · ·		
	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		
3		Total Number of Dominant 2 (B)
4		
		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence index worksheet:
7		
8		
	= Total Cover	OBL species O $x1 = O$
50% of total cover:	20% of total cover:	FACW species $2 \times 2 = 2$
Sapling/Shrub Stratum (Plot size: 30 x 30 Ft)		FAC species $O = x_3 = O$
, Manie Drocont		FACU species $llO = x4 = 440$
2.		UPL species X 5 =
		Column Totals: <u>110</u> (A) <u>440</u> (B)
3		4 00
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
	🕖 = Total Cover	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 30 × 30 Pt)		
1. Digitaria sanguinalis.	BO Y FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Kummerowia striata	20 N FACU	Definitions of Four Vegetation Strata:
3 Rubus trivialis	10 N FAW	Deminions of Four Vegetation Strata.
		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
1 ¹¹	<u> </u>	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.
	110 = Total Cover	
5000 5000 5	5 20% of fotal cover: 22	
	<u>5</u> 20% of total cover: <u>~ ~ ~</u>	
Woody Vine Stratum (Plot size: 30 X 30FF)		
1. None present		
2		
3		
4		
5.		Hydrophytic A
	O = Total Cover	Vegetation
50% of total cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations be		·
Remarks. (il observed, list morphological adaptations be	elow).	
1		

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SOIL

Sampling Point: 6Khrob1-4

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Profile Des	cription: (Describe	to the dept	h needed to docur	nent the ir	ndicator o	or confirm	the absence of	Indicators.)	
Depth (inches)	Color (moist)		Redo Color (moist)	<u> </u>		Loc ²	Texture	Remar	ks
	10/12 12	100			<u> </u>		<u> </u>		
		· · ·			<u> </u>	<u> </u>		·····	
						·		<u> </u>	
								· · · · · · · · · · · · · · · · · · ·	
	·					• ·			
	oncentration, D=Dep Indicators: (Applic					uns.		L=Pore Lining, M=N r Problematic Hyd	
_ Histoso			Polyvalue Be		-	RR S, T, U)		ck (A9) (LRR O)	ne oons .
_	pipedon (A2)		Thin Dark Su					ck (A10) (LRR S)	
-	listic (A3) en Sulfide (A4)		Loamy Muck			0)		Vertic (F18) (outsi t Floodplain Soils (F	
Stratifie	d Layers (A5)		Depleted Ma	-	-,		Anomalo	us Bright Loamy So	
	: Bodies (A6) (LRR F ucky Mineral (A7) (L		Redox Dark Depleted Da	•			(MLRA Bod Dori		
	resence (A8) (LRR i		Redox Depre		- /		-	ent Material (TF2) Illow Dark Surface (TF12)
_ 1 cm M	uck (A9) (LRR P, T)		Mari (F10) (I					xplain in Remarks)	. ,
	d Below Dark Surface ark Surface (A12)	e (A11)	Depleted Oc Iron-Mangar				D ³ Indicat	ors of hydrophytic v	anatolian and
_ Coast F	Prairie Redox (A16) (nd hydrology must t	
	Mucky Mineral (S1) (LRR O, S)	Delta Ochric					s disturbed or probl	
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve				AP)		×
Strippe	d Matrix (S6)						A 149A, 153C, 1	53D)	
	urface (S7) (LRR P, Layer (if observed)						r		
Type:	Layer (it observed)	•							
Depth (ir	nches):						Hydric Soll P	resent? Yes	No
emarks:	Within Past 3	Circl			notu	G on f	acted		 19
العك	WINHIN	ticid	1000 6		" any	Carl			,
CNIA	Past =	11							
CNI		,							
									:
									1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 /
								1. C	
									موجع ال
							en e	Children and a shared	
							1 1 1 1 1	35 ↓ ↓	
			<u> </u>						

Environmental Field Surveys Wetland Photo Page



Upland data point wchr001_u facing north



Upland data point wchr001_u facing south

WETLAND DETERMINATION DA	ATA FORM – Atlantic a	and Gulf Coastal	Plain Region
Project/Site:ACP	City/County Ches	sapeake	Sampling Date: 09/29/19
Applicant/Owner: DOMINION		State: A	Sampling Point: WCho 001f-V
Investigator(s): C Ja CObs, S. IOIRFA	Section, Township, Ra		
Landform (hillslope, terrace, etc.): FIQTWOODS	Local relief (concave, c		1P Slope (%) 2-3
Subregion (LRR or MLRA): LRRT Lat:	36.76146	Long:-710.3749	8 Datum: WGS84
Soil Map Unit Name: Pactolus loamy fine 50	and		ification: PFO
Are climatic / hydrologic conditions on the site typical for this time		X (If no, explain in	
Are Vegetation, Soil, or Hydrology signifi		1	" present? Yes X No
Are Vegetation, Soil, or Hydrology alors		eded, explain any ansi	
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point l	ocations, transec	ts, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: - Abhormally dry conditions (within a Wetlan	nd? Yes	No
- Abhormany dry conditions (usased on set	1. 22 0100	yri manuar).
- Rath within 24 hours.		Hardwo	al Flat
HYDROLOGY			
HYDROLOGY Wetland Hydrology Indicators:		Sacondary Ind	cators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	pply)		bil Cracks (B6)
Surface Water (A1) Aquatic Faun			egetated Concave Surface (B8)
the second s	(B15) (LRR U)	and the second se	Patterns (B10)
Saturation (A3) Hydrogen Su	lfide Odor (C1)	Moss Trim	Lines (B16)
7	cospheres along Living Roots	(C3) Dry-Seaso	n Water Table (C2)
	Reduced Iron (C4)		urrows (C8)
	Reduction in Tilled Soils (C6)		Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck St Iron Deposits (B5) Other (Explai			IC Position (D2) guitard (D3)
Inundation Visible on Aerial Imagery (B7)	n in Remarks)	FAC-Neutr	
Water-Stained Leaves (B9)		and the second sec	moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No X Depth (ir	iches); N/A		
Water Table Present? Yes No X Depth (ir	nches): >20		X
Saturation Present? Yes X No Depth (ir (includes capillary fringe)	iches); We	tland Hydrology Pres	ent? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections;), if available:	
Remarks:			
			1.0

Sampling Point: _____

VEGETATION (Four Strata) - Use scientific na	mes of pl	ants.		Sampli	ng Point:	
		Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30x30ff)		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:	6 (4	A)
2. Acer rubrum	30	1	FAC			
3. FLAXINUS PENNSYIVANICA	5	N	FACW	Total Number of Dominant Species Across All Strata:	6 (B)
4. Taxadium distichum	5	N	OBL			-/
			01712	Percent of Dominant Species	100 1. 11	A/B)
5				That Are OBL, FACW, or FAC:		-VD)
6				Prevalence Index worksheet:		
7				Total % Cover of:	Multiply by:	
8	100	= Total Co		OBL species x	=	
50% of total cover: 30) 20%	f total cover		FACW species x	2 =	
Sapling/Shrub Stratum (Plot size: 30x 30 FL)	20700	rtotal cover		FAC species x:		
1. Acer rubrum	15	Y	FAC	FACU species x		
2. Fraxinus pennsylvanica		Y	FACW	UPL species x :		
			LAU	Column Totals: (A)		(B)
3						
4		+		Prevalence Index = B/A =		
5				Hydrophytic Vegetation Indicat		
6				1 - Rapid Test for Hydrophyt		
7				🔀 2 - Dominance Test is >50%		
8	25			3 - Prevalence Index is ≤3.0		
50% of total cover: 12-	500	= Total Co	G	Problematic Hydrophytic Veg	jetation' (Explain)	1
50% of total cover: 12	20% 0	t total cover				
Herb Stratum (Plot size: 30 × 30 ft)	20	Y	DBL	¹ Indicators of hydric soil and weth be present, unless disturbed or p	and hydrology mus	st
1. Woodwardia areolata				Definitions of Four Vegetation		_
2				the short of the second s		
3				Tree - Woody plants, excluding	vines, 3 in. (7.6 cm	n) or
4				more in diameter at breast height height.	(DBH), regardles	5 01
5						
6				Sapling/Shrub – Woody plants, than 3 in. DBH and greater than	excluding vines, le 3.28 ft (1 m) tall.	ess
7						
8				Herb – All herbaceous (non-woo of size, and woody plants less th	dy) plants, regardi an 3 28 ft tall	less
9						
10				Woody vine - All woody vines g	reater than 3.28 ft	in
11				height.		
12	20				and the second	
10		= Total Co	4	and the second second		
50% of total cover:	20% 0	f total cover	· · · ·			
Woody Vine Stratum (Plot size: <u>30 x 30ff</u>)	10	Y	FAC	and the second s		
1. Smilax rotunditolia	10		11.0			
2						
3						
4				and the second		
5	10			Hydrophytic Vegetation		
0	10	= Total Co	0	Present? Yes	No	
50% of total cover:	20% c	of total cove	r:			
Remarks: (If observed, list morphological adaptations be	low).					
				and the second		

SOIL

rofile Des	cription: (Describe f	to the dep	th needed	to docur	ment the	indicator	or confirm	n the absence of	of Indicator	rs.)	
Depth	Matrix		(x Feature		Loc ²	Texture		Remarks	
nches)	Color (moist)	100	Color (moist)	%	Type	LOC			Rentarks	
1-6	101R -12		N	112		7	101				
0-14	2,513/1	00	2.5	7/2	20	0	PL	SCL			
4-20	2.51 53	100						5			
		_									
ype: C=C	Concentration, D=Depl Indicators: (Applica	letion, RM	-Reduced	Matrix, M	S=Maske	d Sand Gr	ains.			ning. M=Matrix. natic Hydric So	1103.
Black F Hydrog Stratifie Organia 5 cm M Muck F 1 cm M	pipedon (A2) listic (A3) en Sulfide (A4) ed Layers (A5) bodies (A6) (LRR P, ucky Mineral (A7) (LR resence (A8) (LRR U uck (A9) (LRR P, T) ed Below Dark Surface	RR P, T, U)	Loa Loa De Re Re Re Re De De De	amy Muck amy Gleyd pleted Ma dox Dark pleted Da dox Depro rl (F10) (L pleted Oc	ty Mineral ed Matrix trix (F3) Surface (I rk Surface essions (F _RR U) thric (F11)	F6) e (F7) 78) (MLRA 1 ses (F12) (51) (LRR O, P,	Piedmc Anomal (MLR Red Pa Very Si Other (I T) ³ Indica	d Vertic (F int Floodpla lous Bright I A 153B) rent Materia hallow Dark Explain in R ators of hyd	18) (outside ML tin Soils (F19) (L Loamy Soils (F2 al (TF2) : Surface (TF12) Remarks) trophytic vegetat	RR P, S, T; 0) ion and
Coast F Sandy Sandy Sandy Sandy Strippe	Park Surface (A12) Prairie Redox (A16) (N Mucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) d Matrix (S6)	.RR 0, S)	A) Um De Re Pie	Ita Ochric duced Ve edmont Flo	rtic (F18) codplain S	(MLRA 151) (MLRA 15 Soils (F19)	50A, 150B) (MLRA 14	unle	ss disturber	ogy must be pres d or problematic	
Coast F Sandy Sandy Sandy Sandy Strippe	Prairie Redox (A16) (M Mucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR P, S Layer (If observed):	.RR O, S) 5, T, U)	A) Um De Re Pie	Ita Ochric duced Ve edmont Flo	(F17) (M rtic (F18) codplain S	(MLRA 151) (MLRA 15 Soils (F19)	50A, 150B) (MLRA 14	unle 19A)	ss disturber		
Coast F Sandy Sandy Sandy Strippe Dark Si Restrictive Type:	Prairie Redox (A16) (M Mucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR P, S Layer (If observed):	.RR O, S) 5, T, U)	A) Um De Re Pie	Ita Ochric duced Ve edmont Flo	(F17) (M rtic (F18) codplain S	(MLRA 151) (MLRA 15 Soils (F19)	50A, 150B) (MLRA 14	unle 19A)	ss disturber 153D)		
Coast F Sandy Sandy Sandy Strippe Dark Strictive Type: Depth (ii	Prairie Redox (A16) (M Mucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Jurface (S7) (LRR P, S Layer (If observed):	.RR O, S) 5, T, U)	A) Um De Re Pie	Ita Ochric duced Ve edmont Flo	(F17) (M rtic (F18) codplain S	(MLRA 151) (MLRA 15 Soils (F19)	50A, 150B) (MLRA 14	unle 19A) 2A 149A, 153C,	ss disturber 153D)	d or problematic	
Coast F Sandy Sandy Sandy Strippe Dark Stripte strictive Type: Depth (ii	Prairie Redox (A16) (M Mucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Jurface (S7) (LRR P, S Layer (If observed):	.RR O, S) 5, T, U)	A) Um De Re Pie	Ita Ochric duced Ve edmont Flo	(F17) (M rtic (F18) codplain S	(MLRA 151) (MLRA 15 Soils (F19)	50A, 150B) (MLRA 14	unle 19A) 2A 149A, 153C,	ss disturber 153D)	d or problematic	
Coast F Sandy Sandy Sandy Strippe Dark S estrictive Type: Depth (ii	Prairie Redox (A16) (M Mucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Jurface (S7) (LRR P, S Layer (If observed):	.RR O, S) 5, T, U)	A) Um De Re Pie	Ita Ochric duced Ve edmont Flo	(F17) (M rtic (F18) codplain S	(MLRA 151) (MLRA 15 Soils (F19)	50A, 150B) (MLRA 14	unle 19A) 2A 149A, 153C,	ss disturber 153D)	d or problematic	

Environmental Field Surveys Wetland Photo Page



Wetland data point wcho001f_w facing southwest.



Wetland data point wcho001f_w facing west.

Photo Sheet 1 of 2

WETLAND DETERMINATIO	ON DATA FOR	M – Atlantic and G	Gulf Coastal P	lain Region
roject/Site:ACP	Citv/C	ounty: Chesape	ake	Sampling Date: 09/29/1
pplicant/Owner: DOMINION			State: VA	Sampling Point: WCho.001
	FCI Section	on, Township, Range:	N 1 1 A	
vestigator(s).	Occurs	relief (concave, convex		NE Slope (%): 3-5
ndform (hillslope, terrace, etc.): HIIISTOPE	71	al47	-710.31991	
bregion (LRR or MLRA):	Lat	Long:		Datum: Was 8
in the bound in the second sec	ne sand		NWI classifi	cation: NA
e climatic / hydrologic conditions on the site typical for t	this time of year? Y	es No X	(If no, explain in F	Remarks.)
e Vegetation, Soil, or Hydrology	_ significantly distur	bed? Are "Norma	al Circumstances"	present? Yes No
e Vegetation, Soil, or Hydrology	_ naturally problema	tic? (If needed,	explain any answe	ers in Remarks.)
UMMARY OF FINDINGS – Attach site ma	p showing sam	pling point locati	ons, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes		Is the Sampled Area within a Wetland?	Yes	No
- Abnormally Dry conditio	ins (base	ed on sept.	22 Drov	Ight Monitor)
- Rain Within 24 hours				
YDROLOGY				
fetland Hydrology Indicators:			Secondary Indic	ators (minimum of two required)
imary Indicators (minimum of one is required; check a	II that apply)		Surface Soil	Cracks (B6)
-	tic Fauna (B13)		Sparsely Ve	getated Concave Surface (B8)
	Deposits (B15) (LRF			tterns (B10)
and the second	gen Sulfide Odor (C		Moss Trim L	a state of the sta
	and the second	long Living Roots (C3)	the second se	Water Table (C2)
	nce of Reduced Iron		Crayfish Bur	Construction of Construction o
	nt Iron Reduction in	Tilled Soils (C6)		isible on Aerial Imagery (C9)
	Auck Surface (C7)	-1		Position (D2)
Iron Deposits (B5) Other Inundation Visible on Aerial Imagery (B7)	(Explain in Remark	5)	Shallow Aqu FAC-Neutra	
Water-Stained Leaves (B9)			and the second sec	noss (D8) (LRR T, U)
the second se		1.		
urface Water Present? Yes No X D	Depth (inches):	A A		
ater Table Present? Yes No X D	epth (inches):	20		1
aturation Present? Yes No D	Depth (inches):		Hydrology Prese	nt? Yes No
escribe Recorded Data (stream gauge, monitoring well	I, aerial photos, prev	vious inspections), if av	ailable:	
emarks:				
The second secon				
				*

Sampling Point:

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

0044-01	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30X30ft) 1. Pinus tacda	% Cover	Species?	Status FAC	Number of Dominant Species 4 (A)	
2. Acer rubrum	20	V	FAC		
3. Quercus michauxii	6	N	FACW	Total Number of Dominant Species Across All Strata:(B)	
		13	THUN	opedes Across Air Strata.	
4 5				Percent of Dominant Species 67 (AV	B)
6					-/
7				Prevalence Index worksheet:	
				Total % Cover of:Multiply by:	
8	25	= Total Con	Inr	OBL species x 1 =	
50% of total cover: 17. 5				FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30X30F1)	_ 20 % 01	total cover	There	FAC species x 3 =	14
1. ACEC rubrum	10	N	TAC	FACU species x 4 =	
2. Liquidambar styraciflua	2.0	V	FAC	UPL species x 5 =	
2. LIQUIDAM DAI SIGNALITIVA	40	1	TAAL	Column Totals: (A) (B	3)
3. Callicarpa americana	-10-		FAULA		
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	
2.5	10	= Total Co	4	Problematic Hydrophytic Vegetation ¹ (Explain)	
50% of total cover: 35	_ 20% of	total cover	17		
Herb Stratum (Plot size: SUASUTT)	20	Y	TUCU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	£ (
1. Callicarpa americana			THUM		
2		TURNER		Definitions of Four Vegetation Strata:	61
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, les	s
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8.				Herb - All herbaceous (non-woody) plants, regardle	SS
9.				of size, and woody plants less than 3.28 ft tall.	
10.				Woody vine - All woody vines greater than 3.28 ft is	n
11				height.	
12.			1000	A loss of the second	
12.	20	= Total Co	ver		-
50% of total cover: 10		f total cove			
Woody Vine Stratum (Plot size: 30X30 P1)		N		and the second second second second second	
1. Smilax rotundifolia	5	1	FAC		
		-			
2		-			
3		-			
4					
5	6	-		Hydrophytic	
	-	= Total Co		Vegetation Present? Yes No	
50% of total cover: 2	20% 0	f total cove	r:		_
Remarks: (If observed, list morphological adaptations belo	ow).				
				A second s	

SOIL

Sampling Point: WchoDDLa

Depth Matrix	Redox Features	and the second second	
inches) Color (moist) %	Color (moist) % Type Loc ²	Texture Remarks	
0-4 2.51814 100		sand	
4-20 2.51 6/3 100 -		sand	
Type: C=Concentration, D=Depletion, RM=F ydric Soil Indicators: (Applicable to all Li Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Reduced Matrix, MS=Masked Sand Grains. RRs, 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) Redox Dark Surface (F6) Depleted Dark Surface (F6) Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T Umbric Surface (F13) (LRR P, T, U) Delta Ochric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, 150B)	² Location: PL=Pore Lining. M=Matrix. Indicators for Problematic Hydric Solls ³)1 cm Muck (A9) (LRR O) 2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA Piedmont Floodplain Soils (F19) (LRR Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)	150A,E P, S, T and
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)	Piedmont Floodplain Soils (F19) (MLRA 149 Anomalous Bright Loamy Soils (F20) (MLR/		
Sandy Redox (S5) Stripped Matrix (S6)	Piedmont Floodplain Soils (F19) (MLRA 14	A 149A, 153C, 153D)	V
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches):	Piedmont Floodplain Soils (F19) (MLRA 14		X
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type:	Piedmont Floodplain Soils (F19) (MLRA 14	A 149A, 153C, 153D)	X
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Piedmont Floodplain Soils (F19) (MLRA 149 Anomalous Bright Learny Soils (F20) (MLR/	A 149A, 153C, 153D)	X
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (if observed): Type: Depth (inches): emarks:	Piedmont Floodplain Soils (F19) (MLRA 149 Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D)	X
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) lestrictive Layer (if observed): Type: Depth (inches): lemarks:	Piedmont Floodplain Soils (F19) (MLRA 149 Anomalous Bright Learny Soils (F20) (MLR/	A 149A, 153C, 153D)	X

Environmental Field Surveys Wetland Photo Page



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	City of Chesapeake	Sampling Date: <u>1/28/2016</u>
Applicant/Owner: DOMINION		State: VA	Sampling Point: <u>wchc002f_w</u>
Investigator(s): Team C	Section, Towr	ship, Range: <u>No PLSS in this a</u>	area
Landform (hillslope, terrace, etc.): Depression		oncave, convex, none): <u>concave</u>	
Subregion (LRR or MLRA): T L	at: <u>36.76164263</u>	Long: <u>-76.37267927</u>	Datum: WGS 1984
Soil Map Unit Name: Wando loamy fine sand, 0 to 3 percer	nt slopes	NWI class	ification: None
Are climatic / hydrologic conditions on the site typical for this	s time of year? Yes	No (If no, explain ir	n Remarks.)
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed?	Are "Normal Circumstances	s" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology r	naturally problematic?	(If needed, explain any ans	wers in Remarks.)
SUMMARY OF EINDINGS Attach site man	chowing compling	naint logations 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 V No Yes V No Yes V No	Is the Sampled Area within a Wetland? Yes _ ✔ No
Remarks:		

HYDROLOGY

Primary Indicators (minimum of one is required;		Secondary Indicators (minimum of two 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 Yes / No _	Depth (inches): <u>4</u>	
Water Table Present? Yes 🖌 No _	Depth (inches): 0	
Saturation Present? Yes <u>Ves</u> No No	Depth (inches): 0	Wetland Hydrology Present? Yes <u></u> No
Describe Recorded Data (stream gauge, monitor	ring 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		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u>)		<u>Species?</u>	Status	Number of Dominant Species
1. Pinus taeda	25 15	Yes	FAC	That Are OBL, FACW, or FAC:6 (A)
2. Nyssa sylvatica		Yes	FAC	Total Number of Dominant
3. <u>Acer rubrum</u>	10	No	FAC	Species Across All Strata: 6 (B)
4. Liquidambar styraciflua	10	No	FAC	Demont of Dominant Species
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
···	60	= Total Cove	or.	OBL species x 1 =0
50% of total cover: 30		total cover:	12	FACW species x 2 = 110
	20 /0 01			FAC species 65 x 3 = 195
Sapling/Shrub Stratum (Plot size:15) 1. Cyrilla racemiflora	10	Yes	FACW	FACU species x 4 = 0
2. Ilex opaca	5	Yes	FAC	UPL species 0 x 5 = 0
				Column Totals: (A) (B)
3. Persea borbonia	5	Yes	FACW	
4				Prevalence Index = $B/A = 2.54$
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				\checkmark 3 - Prevalence Index is $\leq 3.0^{1}$
	~~	= Total Cove	er	
50% of total cover:10				Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 5)				1
Arundinaria gigantea	40	Yes	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				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.				neight.
12	40			
50% of total covor: 20		= Total Cove	•	
	20% of	total cover:	0	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				Hadaaa kada
0		= Total Cove	or	Hydrophytic Vegetation
50% of total cover: 0				Present? Yes <u>V</u> No
		total cover:		
Remarks: (If observed, list morphological adaptations below	w).			

Depth	Matrix		Pode	x Features	~			
(inches)	Color (moist)	%	Color (moist)	<u>% reature</u>	Type ¹	Loc ²	Texture	Remarks
0-8	10YR 3/1	100					LS	
8-14	10YR 4/1	100					LS	
14-20	2.5Y 6/2	80	10YR 5/6		С	М	S	
			=Reduced Matrix, M			ains.		L=Pore Lining, M=Matrix. or Problematic Hydric Soils ³ :
Black H Hydrog Stratifie Organic 5 cm M Muck P 1 cm M Deplete Coast F Sandy Sandy Sandy Sandy Dark St	pipedon (A2) distic (A3) en Sulfide (A4) ed Layers (A5) c Bodies (A6) (LRR lucky Mineral (A7) (L Presence (A8) (LRR Puck (A9) (LRR P, T) ed Below Dark Surfa Dark Surface (A12) Prairie Redox (A16) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR P, Layer (if observed	.RR P, T, U U) ce (A11) (MLRA 150 (LRR O, S) S, T, U)	 Redox Depr Marl (F10) (I Depleted Oc Iron-Mangar Umbric Surfa Delta Ochric Reduced Ve Piedmont FI 	y Mineral ed Matrix (atrix (F3) Surface (F rk Surface essions (F8 _RR U) thric (F11) nese Massa ace (F13) ((F17) (ML rtic (F18) (podplain S	(F1) (LRF F2) (6) (F7) 8) (MLRA 1 es (F12) ((LRR P, T .RA 151) MLRA 15 oils (F19)	51) LRR O, P, , U) 00A, 150B) (MLRA 14	Reduced Piedmon Anomalo (MLRA Red Pare Very Sha Other (E: T) ³ Indicate wetlar unless	ck (A10) (LRR S) I Vertic (F18) (outside MLRA 150A,I t Floodplain Soils (F19) (LRR P, S, T us Bright Loamy Soils (F20) A 153B) ent Material (TF2) allow Dark Surface (TF12) xplain in Remarks) ors of hydrophytic vegetation and nd hydrology must be present, s disturbed or problematic. 53D)
Type: Depth (ir	nches):						Hydric Soil P	resent? Yes 🖌 No
Remarks: ydric soil pi	resent							



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: (City of Chesapeake	Sampling Date: 1/28/2016
Applicant/Owner: DOMINION		State: VA	Sampling Point: <u>wchc002_u</u>
Investigator(s):	Section, Towr	nship, Range: <u>No PLSS in this</u>	area
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 clas	sification: None
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes 🧹	No (If no, explain	in Remarks.)
Are Vegetation, Soil, or Hydrology sig	nificantly disturbed?	Are "Normal Circumstance	es" present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology na	turally problematic?	(If needed, explain any and	swers in Remarks.)
SUMMARY OF FINDINGS - Attach site man s	howing sampling	noint locations transp	cts important foatures 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 V No Yes No V Yes V 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) (LRR U)	Drainage Patterns (B10)
✓ Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living F	Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils ((C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No 🔽 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes <u>Ves</u> No Depth (inches): <u>o</u> (includes capillary fringe)	Wetland Hydrology Present? Yes Ves 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	
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(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: <u>wchc002_u</u>

20	Absolute		ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:30)		Species?	Status	Number of Dominant Species
1. Fagus grandifolia	60	Yes	FACU	That Are OBL, FACW, or FAC:4 (A)
2. Liquidambar styraciflua	20	Yes	FAC	Total Number of Dominant
3. Pinus taeda	10	No	FAC	Species Across All Strata: 5 (B)
4				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7		<u> </u>		
8				
	90	= Total Cove	r	
50% of total cover:45	20% of	total cover:	18	FACW species $x^2 = 20$
Sapling/Shrub Stratum (Plot size:15)		<u>-</u>		FAC species65 x 3 =195
<u>Quercus nigra</u> (1 lot size)	25	Yes	FAC	FACU species 60 x 4 = 240
			17.0	UPL species $0 \times 5 = 0$
2				Column Totals: 135 (A) 455 (B)
3				Column rotais (A) (B)
4				Prevalence Index = $B/A = 3.37$
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		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) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				
	20	= Total Cove	r	
50% of total cover:10		total cover:		
	20% 0	total cover:		
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cove		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).			

Depth	Matrix		Redo	ox Features	<u> </u>				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remark	S
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=M Problematic Hydr	
Histoso Histic E Black H Hydrog Stratifie Organie 5 cm M Muck F 1 cm M Deplete Thick E Coast I Sandy Sandy Sandy		P, T, U) LRR P, T, U) U) ace (A11) (MLRA 1504	 Polyvalue Ba Thin Dark Sa Loamy Muck Loamy Gleya Depleted Ma Redox Dark Depleted Da Redox Deprediment Marl (F10) (I Depleted Oc Iron-Mangar Umbric Surfa Delta Ochric Reduced Ve Piedmont Flat 	elow Surface urface (S9) cy Mineral (ed Matrix (I trix (F3) Surface (F rk Surface essions (F8 .RR U) hric (F11) (iese Masse ace (F13) (i (F17) (ML tric (F18) (i coodplain So	ce (S8) (L (LRR S, F1) (LRR F2) 6) (F7) 3) (MLRA 15 ces (F12) (I LRR P, T RA 151) MLRA 15 pills (F19)	T, U) O) LRR O, P, , U) 0A, 150B) (MLRA 14	 1 cm Muck 2 cm Muck Reduced Vo Piedmont F Anomalous (MLRA 19 Red Parent Very Shallo Other (Expl T) ³ Indicators wetland unless d	(A9) (LRR O) (A10) (LRR S) ertic (F18) (outsic loodplain Soils (F Bright Loamy Soi 53B) Material (TF2) w Dark Surface (T ain in Remarks) s of hydrophytic ve hydrology must be listurbed or proble	le MLRA 150A,E 19) (LRR P, S, T Is (F20) TF12) egetation and e present,
Dark S	urface (S7) (LRR P,	-		3	,	-7 (1	,	
	Layer (if observed	ı):							
Type:	nahaa);						Hydria Call Dra	anto Vac	
	nches):						Hydric Soil Pres	sent? Yes	No
Remarks:									



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	ity of Chesapeake	Sampling Date: 1/28/2016
Applicant/Owner: DOMINION		State: VA	_ Sampling Point: <u>wchc001f_w</u>
Investigator(s):	Section, Town	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 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 percer	nt slopes	NWI classi	fication: None
Are climatic / hydrologic conditions on the site typical for this	s time of year? Yes	No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrologys	significantly disturbed?	Are "Normal Circumstances"	" present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology n	naturally problematic?	(If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS Attach site man	chowing compling	naint locationa transco	important factures ato

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>
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)
	 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 <u>V</u> No Depth (inches): <u>0</u>	
Saturation Present? Yes <u>Ves</u> No Depth (inches): 0	Wetland Hydrology Present? Yes 🖌 No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions) if available:

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

Sampling Point: wchc001f_w

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u>)		Species?		Number of Dominant Species
1. Pinus taeda	50	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
2. Acer rubrum	10	No	FAC	Total Number of Dominant
3. Quercus nigra	10	No	FAC	Species Across All Strata:4 (B)
4				
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	70	Tatal Car		OBL species x 1 =0
35		= Total Cov	14	FACW species 40 x 2 = 80
50% of total cover:	20% of	total cover:	·	FAC species $80 \times 3 = 240$
Sapling/Shrub Stratum (Plot size: 15)	20	Vee		FACU species $0 x 4 = 0$
1. Persea borbonia	30	Yes	FACW	$\begin{array}{c} 1 \text{ Act species} \\ 1 \text{ UPL species} \\ 0 \\ x 5 = \\ 0 \\ \end{array}$
2. Vaccinium corymbosum	10	Yes	FACW	120 320
3. Pinus taeda	5	No	FAC	Column Totals: (A) (B)
4				Prevalence Index = $B/A = 2.66$
5				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
0	4 -	= Total Cov		\checkmark 3 - Prevalence Index is ≤3.0 ¹
500 (Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 22.5	20% of	total cover:		
Herb Stratum (Plot size: <u>5</u>)	-	.,	540	¹ Indicators of hydric soil and wetland hydrology must
1. Pinus taeda	5	Yes	FAC	be present, unless disturbed or problematic.
2			<u> </u>	Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				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			<u> </u>	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			<u> </u>	
		= Total Cov		
50% of total cover:2.5	20% of	total cover:	1	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4			. <u> </u>	
5			<u> </u>	Hydrophytic
		= Total Cov		Vegetation Present? Yes <u>Ves</u> No
50% of total cover:0	20% of	total cover:		
Remarks: (If observed, list morphological adaptations below	w).			

Depth	Matrix		Rede	x Feature	c			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8	10YR 3/1	100	· · · ·				LS	
8-14	10YR 4/1	100					LS	
14-20	2.5Y 6/2	80	10YR 5/6		С	М	S	
	- <u>-</u>			· <u> </u>				
	Concentration, D=De					ains.		.=Pore Lining, M=Matrix. r Problematic Hydric Soils ³ :
Histoso			Polyvalue Be			PPSTI		k (A9) (LRR O)
	Epipedon (A2)		Thin Dark S					k (A10) (LRR S)
	Histic (A3)		Loamy Muck					Vertic (F18) (outside MLRA 150A,E
	jen Sulfide (A4)		Loamy Gley	-		,		Floodplain Soils (F19) (LRR P, S, T
	ed Layers (A5)		✓ Depleted Ma	,)			us Bright Loamy Soils (F20)
	c Bodies (A6) (LRR I	P. T. U)	Redox Dark	. ,	6)		(MLRA	o , (,
_ `	lucky Mineral (A7) (L			•	,		•	nt Material (TF2)
	Presence (A8) (LRR I		Redox Depr					llow Dark Surface (TF12)
	luck (A9) (LRR P, T)	-,	Marl (F10) (I		-			plain in Remarks)
	ed Below Dark Surface	e (A11)	Depleted Oc		(MI RA 1	51)		plain in romano,
	Dark Surface (A12)		Iron-Mangar	· · ·	•		T) ³ Indicate	ors of hydrophytic vegetation and
	Prairie Redox (A16) (MI RA 150	-					d hydrology must be present,
	Mucky Mineral (S1)					, 0)		disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ve	· / ·		0A 150B)		
	Redox (S5)		Piedmont Fl	. , .				
	d Matrix (S6)			•	• •	•	A 149A, 153C, 1	53D)
	urface (S7) (LRR P,	S. T. U)				1 20) (IIIE I	A 140A, 1000, N	
	Layer (if observed)	-						
Type:								
	nches):						Hydric Soil Pr	esent? Yes 🖌 No
Remarks:							1	
lydric soil p	resent							
y and oon p								



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: C	City of Chesapeake	Sampling Date: <u>1/28/2016</u>
Applicant/Owner: DOMINION		State: VA	Sampling Point: wchc001_u
Investigator(s): Team C	Section, Town	ship, Range: <u>No PLSS in this</u>	
Landform (hillslope, terrace, etc.): Slight rise		oncave, convex, none): <u>convex</u>	
Subregion (LRR or MLRA): T L	at: <u>36.76183837</u>	Long: <u>-76.3710385</u>	Datum: WGS 1984
Soil Map Unit Name: Wando loamy fine sand, 0 to 3 percen	t slopes	NWI clas	sification: None
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes	No (If no, explain i	n Remarks.)
Are Vegetation, Soil, or Hydrologys	gnificantly disturbed?	Are "Normal Circumstance	s" present? Yes 🚩 No
Are Vegetation, Soil, or Hydrology n	aturally problematic?	(If needed, explain any ans	swers in Remarks.)
SUMMARY OF FINDINGS - Attach site man	showing sampling	noint locations transe	ets important features etc

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

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

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
✓ Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living F	Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils	(C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes <u>/</u> No Depth (inches): <u>8</u>	
Saturation Present? Yes <u>Ves</u> No <u>Depth</u> (inches): <u>O</u>	Wetland Hydrology Present? Yes Ves No
(includes capillary fringe)	
(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	
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(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: <u>wchc001_u</u>

Trop Stratum (Plat aize: 30)	Absolute			Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size:) 1. <i>Fagus grandifolia</i>	<u>% Cover</u> 30	<u>Species?</u> Yes	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)	
2. Liquidambar styraciflua	20	Yes	FAC		
3. Quercus alba	10	No	FACU	Total Number of Dominant Species Across All Strata: (B)	
4				Bereast of Deminent Species	
5				Percent of Dominant Species That Are OBL, FACW, or FAC:75 (A/E	B)
6				Prevalence Index worksheet:	
7			·	Total % Cover of: Multiply by:	
8	60		. <u> </u>	$\begin{array}{c} \hline \hline \\ $	
500/ of total account 30		= Total Cov	12		
50% of total cover:	20% of	total cover:		FACW species $x 2 = -\frac{1}{180}$ FAC species 60 $x 3 = -\frac{180}{180}$	
Sapling/Shrub Stratum (Plot size: 15)	05	Ma a	540	FACU species 40 $x 4 = 160$	
1. Quercus nigra		Yes	FAC	UPL species $0 \times 5 = 0$	
2. <u>Ilex opaca</u>	5	No	FAC	Column Totals: 100 (A) 340 (B)	2)
3. Pinus taeda	5	No	FAC		ッ
4			<u> </u>	Prevalence Index = B/A =3.4	
5			. <u> </u>	Hydrophytic Vegetation Indicators:	
6			·	1 - Rapid Test for Hydrophytic Vegetation	
7			. <u> </u>	✓ 2 - Dominance Test is >50%	
8	05		. <u> </u>	3 - Prevalence Index is ≤3.0 ¹	
17 5		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)	
50% of total cover:	20% of	total cover:			
Herb Stratum (Plot size: 5) 1. Smilax glauca	5	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2			. <u> </u>	Definitions of Four Vegetation Strata:	
3.					
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of	
5				height.	,
6				Senling/Shrub Weedy plants evaluating vince loss	
7				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.	,
8 9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	iS
10					
11				Woody vine – All woody vines greater than 3.28 ft in height.	
12					
	5	= Total Cov	er		
50% of total cover:2.5	20% of	total cover:	1		
Woody Vine Stratum (Plot size: 30)					
1					
2					
3					
4					
5				Hydrophytic	
	0	= Total Cov	er	Vegetation	
50% of total cover:0	20% of	total cover:	0	Present? Yes Vo No	
Remarks: (If observed, list morphological adaptations below	w).				
	,				

SOIL

Profile Desc	cription: (Describe	to the depth	needed to docur	nent the in	dicator of	or confirm	the absence of indicators.)
Depth	Matrix		Redo	x Features			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-8	10YR 3/1	100					FSL
8-20	10YR 3/2	100		· ·			SL
				· ·			
				· ·		·	
				· ·		·	
	oncentration, D=Dep					ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all LF	Rs, unless other	wise note	d.)		Indicators for Problematic Hydric Soils ³ :
Histosol	· ,		Polyvalue Be				
	pipedon (A2) istic (A3)		Thin Dark Su Loamy Muck	. ,	•		2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A,B
					, .	0)	
	en Sulfide (A4)		Loamy Gleye		2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	T 10	Depleted Mar				Anomalous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P		Redox Dark S				(MLRA 153B)
	ucky Mineral (A7) (LF		Depleted Dar		· ·		Red Parent Material (TF2)
	resence (A8) (LRR U)	Redox Depre)		Very Shallow Dark Surface (TF12)
	uck (A9) (LRR P, T)	() , ()	Marl (F10) (L	•			Other (Explain in Remarks)
-	d Below Dark Surface	e (A11)	Depleted Oct	· , ·			
	ark Surface (A12)		Iron-Mangan				
	rairie Redox (A16) (N			· / ·		U)	wetland hydrology must be present,
	Mucky Mineral (S1) (L	.RR O, S)	Delta Ochric				unless disturbed or problematic.
-	Gleyed Matrix (S4)		Reduced Ver				
	Redox (S5)		Piedmont Flo	•	. ,	•	•
	d Matrix (S6)		Anomalous E	right Loam	y Soils (F	F20) (MLR A	A 149A, 153C, 153D)
	Irface (S7) (LRR P, S						
Restrictive	Layer (if observed):						
Туре:							
Depth (in	ches):						Hydric Soil Present? Yes No
Remarks:							
No hydric soi	l 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

Project/Site: ACP	City/County: Chesapeake Sampling Date: 09/30/15
Applicant/Owner: Dominion	State: VA Sampling Point: WLh#0D24_0
Investigator(s): C-JACOBS, S-IOSEF9	Section Township Range: N/A
	Local relief (concave, convex, none): CONCAVE Slope (%): 0-3
	.76236 Long: _76.36614 Datum: 10658
Soil Map Unit Name: Wando loamy fine sance	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantl	
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.) g sampling point locations, transects, important features, etc.
	g sampling point locations, transcots, important leathes, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks: -Abnormally Dry Conditions (B Riverine Swamp Forest	ased 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 Water (A1) Aquatic Fauna (B* High Water Table (A2) Marl Deposits (B1 Saturation (A3) Hydrogen Sulfide Water Marks (B1) Oxidized Rhizosph Sediment Deposits (B2) Presence of Redu	13)
Surface Water Present? Yes No X Depth (inches	a: N/A
Water Table Present? Yes X No Depth (inchess Saturation Present? Saturation Present? Yes X No Depth (inchess (includes capillary fringe)	s): <u>6</u> s): <u>2</u> Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial phot	tos, previous inspections), if available:
Remarks:	

wcho002FW

VEGETATION (Four Strata) - Use scientific na	mes of pl	ants.		Sampling Point:
		Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30×30++) 1. Nyssa sylvatica	% Cover 80	Species?	FAC	Number of Dominant Species (A)
2. Aler rubrum 3. OULTCUS michauxii	12	2	FAC	Total Number of Dominant Species Across All Strata:(B)
4			THED	
5				Percent of Dominant Species 100 1. (A/B)
6				Prevalence Index worksheet:
8				Total % Cover of: Multiply by: OBL species x 1 =
4.0	94	= Total Cov	ver 101.4	FACW species x 2 =
50% of total cover: 40.	10 20% of	total cover	:	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30/30 ft)	10	N	FACIL	FACU species x 4 =
1. Carya glabra	6	N	FACW	UPL species x 5 =
2. Persea palastris		N	FACW	Column Totals: (A) (B)
3. Gordonia lasianthus 4. Arundinaria gigantea	46	Y	FACW	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
2.6	100	= Total Cov	10	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 30	20% of	total cover	: 12	
Herb Stratum (Plot size: 60X SUTT)		V	FACW	¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	30		FAUN	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 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	2.0			
10		= Total Co		
50% of total cover:	20% 0	f total cover		the second se
Woody Vine Stratum (Plot size: 30×30ft)	5	N	FAC	And the second second second second second
1. Vitis Votundifolia			1110	
2				
3				
4				10 Augusto
5	-			Hydrophytic Vegetation
50% of total cover: 2		= Total Co f total cover		Present? Yes No
Remarks: (If observed, list morphological adaptations belo		-		
······································	2012			

Sampling Point: _____

Profile Description: (Describe to the dep				or confirm	the absence of In	dicators.)
Depth <u>Matrix</u> (inches) Color (moist) %	Color (moist)	ox Features %	s Type'	Loc ²	Texture	Remarks
0-9 2-6132 90	2.674/1	20	1	NA	SOL	Homany
\$ 70 IDVID 2/1 100		- 41	-	- 101	COL	
0-20 10 1R 2/1 101)					SUL	
and a survey of the second			-			
	and the second					
	1					
	De dues d Making M	C-Marked	Cand Ca		21 anations Di -1	Dara Lining MeMotrix
¹ Type: C=Concentration, D=Depletion, RM: Hydric Soil Indicators: (Applicable to all				ans.		Pore Lining. M=Matrix. Problematic Hydric Solis ^a :
Histosol (A1)	Polyvalue B			RRSTU		
Histic Epipedon (A2)	Thin Dark S					(A10) (LRR S)
Black Histic (A3)	Loamy Muc				the second se	ertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gley	and the second sec	F2)			loodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Ma				the second	Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark				(MLRA 15	
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Da					Material (TF2) w Dark Surface (TF12)
Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T)	Marl (F10) (and the second second second)			ain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Or		MLRA 1	51)		
Thick Dark Surface (A12)	Iron-Mangar				T) ³ Indicators	of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150/				; U)		hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric			and the states	unless di	isturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Ve					
Sandy Redox (S5)	Piedmont FI					R)
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)	Anomalous	Digit Loan	ity Solis (P20) (MLRA	A 149A, 153C, 153	5)
Restrictive Layer (if observed):						
Туре:						A
Depth (inches):	_				Hydric Soil Pres	ent? Yes No
Remarks:						
					1	



Wetland data point wcho002f_w facing east.



Wetland data point wcho002f_w facing north.

Photo Sheet 1 of 2

WETL Project/Site: ACP Applicant/Owner: DOMIN Investigator(s): C- Jaco	AND DETERMINAT	City/0	M - Atlantic and County: Chesap	cake state: VA	_ Sampling D	n ate: <u>09 30 15</u> pint: <u>WCh0002 -</u>
Landform (hillslope, terrace, e Subregion (LRR or MLRA): Soil Map Unit Name: Are climatic / hydrologic condi Are Vegetation, Soil Are Vegetation, Soil SUMMARY OF FINDING	tc.): FlatWo od S UR RT do loamy f tions on the site typical fo , or Hydrology	Lat: <u>36.76</u> Tine <u>Sance</u> or this time of year? 1 significantly distur naturally problem	relief (concave, conve) 232 Long: Yes No X bed? Are "Norm atic? (If needed,	(, none): <u>NO1</u> - 76.366 NWI classif (If no, explain in al Circumstances" explain any answ	D8 ication: Remarks.) present? Yes ers in Remarks	5.)
Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present?	ent? Yes X Yes Yes		Is the Sampled Area within a Wetland?	Yes	No	<u>x</u>
Remarks: - Abnor Mally	Dry Conditio	ns (Based	I on sept. 2	2 Drongt	nt mon	tor).
HYDROLOGY						
	ore:			Sacondary Indi-	atore (minimum	n of huo required)
Wetland Hydrology Indicate Primary Indicators (minimum		all that apply			ators (minimur I Cracks (B6)	m of two 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 Aei Water-Stained Leaves (E 	— Mar — Hyc — Cxi — Pre — Rec — Thir — Oth rial Imagery (B7) 39)	sence of Reduced Iro ent Iron Reduction in Muck Surface (C7) er (Explain in Remark	C1) long Living Roots (C3) n (C4) Tilled Soils (C6) IS)	Drainage Pa Moss Trim I Dry-Season Crayfish Bu Saturation N Geomorphic Shallow Aqu FAC-Neutra	alterns (B10) Lines (B16) Water Table (rrows (C8) /isible on Aeria Position (D2) Jitard (D3)	il Imagery (C9)
Surface Water Present? Water Table Present? Saturation Present?	Yes No _X Yes No _X Yes No _X	Depth (inches):	ZD Wetland	Hydrology Prese	nt? Yes	NoX
(includes capillary fringe) Describe Recorded Data (stre			And the second second second			
Remarks:					-	

Sampling Point: _____

10112054	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 × 30ft) 1. Fraxinus pennsylvanica	% Cover 20	Species?	Status FACW	Number of Dominant Species (A)
2. Liquidambar styraciflua	10	Y	FAC	T & I Must be of Deminant
3. ACEY MUDRUM	10	Y	FAC	Total Number of Dominant Species Across All Strata:(B)
		1000		
5.				Percent of Dominant Species 5 ((A/B)
6				
7.				Prevalence Index worksheet:
	-			Total % Cover of: Multiply by:
8	40	= Total Con		OBL species x 1 =
50% of total cover: 20		total cover	Ch	FACW species x 2 =
50% of total cover.	_ 20% 0	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30,30ft)	20	V	FACU	FACU species x 4 =
1. Cornus florida	-20			UPL species x 5 =
2. Carya glabra	40	4	FACU	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				3 - Prevalence Index is ≤3.0 ¹
	70	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 35				
Herb Stratum (Plot size: 30X30Ft)	_ 20 /0 0	total cover		1. It is the state of the state
1 Carva glabra	20	Y	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Arundanania gigantea	30	V	FADIN	Definitions of Four Vegetation Strata:
V M	-10	-	THUN	
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				neight.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		100		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 Co	ver	
50% of total cover: 45				
Woody Vine Stratum (Plot size: 30 x 30 ft)				
1. hone				a second s
			-	
2				
3				
4				
5	-			Hydrophytic
	0	= Total Co	ver	Vegetation Present? Yes X No
50% of total cover:	20% 0	f total cove	r:	
Remarks: (If observed, list morphological adaptations belo	w).			

US Army Corps of Engineers

Sampling Point: WChoDD2-~

Death	h needed to document the indicator or confirm	
(inches) Color (moist) %	Redox Features Color (moist) % Type Loc ²	Texture Remarks
0-4 IDYR 4/2 100		sand
4-20 10YR 671 100		sand
9-20 10 1K 11 100		2010
		Zi sashiani Di sDara Lining MeMatriy
¹ Type: C=Concentration, D=Depletion, RM= Hydric Soil Indicators: (Applicable to all I	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Solis ³ :
	Polyvalue Below Surface (S8) (LRR S, T, U	
Histosol (A1) Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	T) ³ Indicators of hydrophytic vegetation and
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P, Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
Coast Prairie Redox (A16) (MLRA 150A Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Mecky Millerar (S1) (Erric C, C) Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14	9A)
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLR	
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Tipe:		
Туре:		X
Depth (inches):	-	Hydric Soll Present? Yes No X
Although the second sec	<u>-</u>	Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No X
Depth (inches):		Hydric Soll Present? Yes <u>No</u>
Depth (inches):		Hydric Soll Present? Yes No X
Depth (inches):	<u>-</u>	Hydric Soll Present? Yes No X
Depth (inches):	<u></u>	Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No
Depth (inches):		Hydric Soll Present? Yes No



Upland data point wcho002_u facing east.



Upland data point wcho002_u facing south.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region city/County: Chesapecko ACP Sampling Date: 0-1 Project/Site: Applicant/Owner: Dominioh Sampling Point: WCho 003 State Investigator(s): C. Ja (Obs, S-Iosefa Section, Township, Range: N/A Landform (hillslope, terrace, etc.): DOUTOSSION Local relief (concave, convex, none): LONCAVE Slope (%) Subregion (LRR or MLRA): LRR Lat: 36.76181 Long: -76.36513 Soil Map Unit Name: Nowney Sitt Joan 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 V No (If needed, explain any answers in Remarks.) Are Vegetation _____, Soil _____, or Hydrology ______ naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No Is the Sampled Area Hydric Soil Present? No X No within a Wetland? No Wetland Hydrology Present? (Based on sept. 22 Drought monitor Remarks: - Abnormally Dry Conditions Riverine Swamp Forest 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) ____ Aquatic Fauna (B13) Y High Water Table (A2) ____ Marl Deposits (B15) (LRR U) ___ Drainage Patterns (B10) Saturation (A3) ____ Hydrogen Sulfide Odor (C1) ____ Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) Sediment Deposits (B2) Presence of Reduced Iron (C4) Drift Deposits (B3) ____ Recent Iron Reduction in 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 Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) X FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: No X Depth (inches): Surface Water Present? No____ Depth (inches): Surface Water Table Present? Saturation Present? Depth (inches): SUCTALE Wetland Hydrology Present? Yes X No Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Sampling Point. Wcho 003f-w

VEGETATION (Four Strata) - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30×30+++ % Cover Species? Status_ Number of Dominant Species 1. Taxodium 15 OBL distichum That Are OBL, FACW, or FAC: (A) 25 2 Acer rubrum FAC Total Number of Dominant N 3. Liciodendron tulipitera B FAC Species Across All Strata: (B) 4 Percent of Dominant Species (A/B) 5. That Are OBL, FACW, or FAC: 6. Prevalence Index worksheet: 7. Total % Cover of: Multiply by: 8. OBL species _____ x 1 = _____ 4 0 = Total Cover FACW species _____ x 2 = ___ 9 50% of total cover: 20% of total cover: FAC species _____ x 3 = _____ Sapling/Shrub Stratum (Plot size: 30x3077) FACU species _____ x 4 = _____ 1. ALER FUBRUM UPL species _____ x 5 = _____ 2. Persea palustris Column Totals: _____ (A) _____ (B) 3. Δ Prevalence Index = B/A = ____ 5 Hydrophytic Vegetation Indicators: 6 1 - Rapid Test for Hydrophytic Vegetation × 2 - Dominance Test is >50% ____ 3 - Prevalence Index is ≤3.01 8 20 = Total Cover Problematic Hydrophytic Vegetation¹ (Explain) 50% of total cover: 10 2 20% of total cover: Herb Stratum (Plot size: 30 x 30 F+) Indicators of hydric soil and welland hydrology must CN 1. Arundinaria gigantea be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: 2. SAURURUS CERNUUS 3. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 4 height. 5. Sapling/Shrub - Woody plants, excluding vines, less 6. than 3 in, DBH and greater than 3.28 ft (1 m) tall. 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 height. 11.___ 12. = Total Cover 50% of total cover: 13,5 20% of total cover: 5 Woody Vine Stratum (Plot size: 2019 20-04 5 1. Smilax rotundifolia 2. 4 5. Hydrophytic = Total Cover Vegetation Yes X No 50% of total cover: 2 9 20% of total cover: _ Present? Remarks: (If observed, list morphological adaptations below).

Atlantic and Gulf Coastal Plain Region - Version 2.0

Depth	Matrix		Red	ox Feature				1.000
inches)	Color (moist)	%	Color (moist)		Type	Loc		Remarks
2-8	2.57311	98	10 YR 6/6	2	C	PL	SOL	
5-20	101R2/2	100					SCL_	
				=			=	
Type: C=C	concentration, D=Dep	pletion, RM=R	educed Matrix, M	IS=Masked	Sand Gr	ains.		Pore Lining, M=Matrix.
ydric Soil	Indicators: (Applic	able to all LF	Rs, unless othe	erwise not	ed.)	100	Indicators for	Problematic Hydric Solis ^a :
Black H Hydrog Stratifie Organic 5 cm M Muck P 1 cm M Deplete Thick D Coast F Sandy I Sandy I	I (A1) pipedon (A2) listic (A3) en Sulfide (A4) d Layers (A5) Bodies (A5) (LRR F ucky Mineral (A7) (LI resence (A8) (LRR L uck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) Prairie Redox (A16) (I Mucky Mineral (S1) (Gleyed Matrix (S4) Redox (S5) d Matrix (S6)	RR P, T, U) J) :e (A11) MLRA 150A)	 Polyvalue E Thin Dark S Loamy Muc Loamy Gley Depleted M Redox Dark Depleted D Redox Depleted O Iron-Manga Umbric Sur Delta Ochri Reduced Vo Piedmont F Anomalous 	surface (S9) ky Mineral (ved Matrix (atrix (F3) : Surface (F ark Surface (F LRR U) chric (F11) nese Mass face (F13) (c (F17) (ML ertic (F18) (loodplain S	(LRR S, (F1) (LRF F2) (6) (F7) 8) (MLRA 1 es (F12) (LRR P, T .RA 151) MLRA 15 oils (F19)	T, U) 3 O) 1 LRR O, P, 7 U) 10A, 150B) (MLRA 14	 2 cm Muck Reduced V Piedmont F Anomalous (MLRA 1 Red Paren Very Shallo Other (Exp T) ³Indicator wetland unless in 	(A10) (LRR S) Yertic (F18) (outside MLRA 150A,B Floodplain Soils (F19) (LRR P, S, T) a Bright Loarny Soils (F20) 53B) t Material (TF2) tow Dark Surface (TF12) lain In Remarks) s of hydrophytic vegetation and hydrology must be present, disturbed or problematic.
Туре:	Layer (if observed)		-				Hydric Soli Pre	sent? Yes X No
emarks:								



Wetland data point wcho003f_w facing north.



Wetland data point wcho003f_w facing southeast.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Applicant/Owner: Dominion State: VH		_ City/County: Chebapeake Sampling Date: 2/10/16
Investigator(s): L.B.D.P.C., M.Smith Section, Township, Range:	Applicant/Owner: POMUNION	State: VA Sampling Point: WLho 003 f-10
Landform (hillslope, terrace, etc.): A CALING QP_Local relief (concave, convex, none): CONCAVE_Slope (%): D=: Subregion (LRR or MLRA): LEFT_Lat: 36.76.7209_Long: 76., 36.581_Datum;With 51 Soil Map Unit Name: Naconcey_Site 1 Datum; Utc. 51 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no. explain in Remarks.) Are Vegetation Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation Soil, or Hydrology inplicantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation Soil, or Hydrology inplicantly disturbed? Are "Normal Circumstances" present? Yes No Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Watland? Yes No Ves No Hydrology Indicators: Primary Indicators Iminimum of one is required; check all that apply] Sufrace Water (A1) Aquatic Fauna (813) Barrely Vegetated Concave Surface (86) Hydropessit (82) Presence of Reduced fron (C4) Saturation (A3) Hydropessit (82) Presence of Reduced fron (C4) Saturation (A3) Hydrogene Sulfde Cor(C1) Genorophic Position (02) Saturation (X3) Hydrogene Sulfde Cor(C1) Genorophic Position (02) Saturation (X3) Hydrogene Sulfde Cor(C4)	nyestigator(s): LIRODEC. M.Smith	
Are Vegetation Soil or Hydrology eignificantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, e Hydrophylic Vegetation Present? Yes No is the Sampled Area Hydrology Present? Yes No within a Wetland? Yes No Remarks: NO Wetland Hydrology Indicators: No No No No Wetland Hydrology Indicators: Secondary Indicators (minimum of one is required: check all that apply) Surface Soil Cracks (86) Sparsely Vegetated Concave Surface (88) Saturation (A3) Hydrogen Sulfde Odor (C1) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Dray Season Water Table (C2) Carafish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) <th>andform (hillslope, terrace, etc.): <u>drainage</u> Subregion (LRR or MLRA): <u>LRR T</u> Lat: <u>3</u></th> <th>Local relief (concave, convex, none): <u>CONCAVE</u> Slope (%): <u>0-31.</u> <u>6.76209</u> Long: <u>-76,36581</u> Datum: W1584</th>	andform (hillslope, terrace, etc.): <u>drainage</u> Subregion (LRR or MLRA): <u>LRR T</u> Lat: <u>3</u>	Local relief (concave, convex, none): <u>CONCAVE</u> Slope (%): <u>0-31.</u> <u>6.76209</u> Long: <u>-76,36581</u> Datum: W1584
Are Vegetation Soil or Hydrology eignificantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, e Hydrophylic Vegetation Present? Yes No is the Sampled Area Hydrology Present? Yes No within a Wetland? Yes No Remarks: NO Wetland Hydrology Indicators: No No No No Wetland Hydrology Indicators: Secondary Indicators (minimum of one is required: check all that apply) Surface Soil Cracks (86) Sparsely Vegetated Concave Surface (88) Saturation (A3) Hydrogen Sulfde Odor (C1) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Dray Season Water Table (C2) Carafish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) <th>Are climatic / hydrologic conditions on the site typical for this time of</th> <th>f year? Yes No (If no, explain in Remarks.)</th>	Are climatic / hydrologic conditions on the site typical for this time of	f year? Yes No (If no, explain in Remarks.)
Are Vegetation, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, e Hydrology Present? Yes X No		
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, end the sample of the sa		
Hydrophylic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Hydric Soil Present? Yes No within a Wetland? Yes No Remarks: No No within a Wetland? Yes No Remarks: No No Surface Soil Cracks (B6) No Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Saturation (A3) Hydrogen Sulfade Odor (C1) Mos Strim Lines (B16) Drainage Patterns (B10) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Sediment Deposits (B2) Presence of Reduced fron (C4) Geomorphic Position (D2) Crayfish Burrows (C8) Algal Mat or Crust (B4) Thin Muck Surface (C7) Staltava Aquitard (D3) Shaltaw Aquitard (D3) Inucation Visible on Aerial Imagery (B7) Vater Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Yes No Depth (inches): D Surface Water Present? Yes No Depth (inches): <		
Metand 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) (LRR U) Drainage Patterns (B10) Water Table (A2) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Carylish Burrows (C8) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Mater (Explain in Remarks) Shallow Aquitard (D3) Water Table Present? Yes No Depth (inches): D Surface Water Present? Yes No Depth (inches): D Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (D5) Sphagnum moss (D8) (LRR T, U) Field Observations: Depth (inches): D Sphagnum moss (D8) (LRR T, U) Field Observations: No Depth (inches): D No No No	Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No	- Is the Sampled Area
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Drainage Patterns (B10) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) I Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) I Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3) Water Table Present? Yes No Surface Water Present? Yes No Saturation Present? Yes No Saturation Present? Yes No Depth (inches): Surface Yes No Depth (inches): Depth (inches): No No Depth Recorded Data (stream gauge,	HYDROLOGY	Secondary Indicators (minimum of two required)
High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3) FAC-Neutral Test (D5) Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Output Saturation Present? Yes No Depth (inches): No No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No No	Primary Indicators (minimum of one is required; check all that app	ly) Surface Soil Cracks (B6)
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) Shallow Aquitard (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Depth (inches): Depth (inches): Surface Water Present? Yes No Saturation Present? Yes No Depth (inches): Depth (inches): Depth (inches): Operation Complexition Present? Yes No Saturation Present? Yes No Depth (inches): Depth (inches): No Depth (inches): District No Cincludes capillary fringe) Depth (inches): No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No	High Water Table (A2) Arl Deposits (E Saturation (A3) Hydrogen Sulfid	B15) (LRR U) Drainage Patterns (B10) Je Odor (C1) Moss Trim Lines (B16)
Iron Deposits (B5) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Obeth (inches): Saturation Present? Yes No Depth (inches): Obeth (inches): <td>Sediment Deposits (B2) Presence of Red Drift Deposits (B3) Recent Iron Red</td> <td>duced Iron (C4) Crayfish Burrows (C8) duction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)</td>	Sediment Deposits (B2) Presence of Red Drift Deposits (B3) Recent Iron Red	duced Iron (C4) Crayfish Burrows (C8) duction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Fac-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Yes X No Depth (inches): Yes X No Depth (inches): Output (inches): Saturation Present? Yes X No Depth (inches):		
Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Yes X No Depth (inches): Surface Water Present? Yes X No Depth (inches): Depth (inches): Depth (inches): No Saturation Present? Yes X No Depth (inches): Depth (inches): Vestand Hydrology Present? Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Vestand Bata (stream gauge, monitoring well, aerial photos, previous inspections), if available: No		
Field Observations: Surface Water Present? Yes X No Depth (inches): 12 Water Table Present? Yes X No Depth (inches): Do Saturation Present? Yes X No Depth (inches): Do Saturation Present? Yes X No Depth (inches): Do Uncludes capillary fringe) Yes X No Depth (inches): Sinchara Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No		
Water Table Present? Yes X No Depth (inches): Do Saturation Present? Yes X No Depth (inches): Do (includes capillary fringe) Wetland Hydrology Present? Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water Table Present? Yes X No Depth (inch Saturation Present? Yes X No Depth (inch	nes):
Remarks:		notos, previous inspections), if available:
Nemarka.	Remarks	
	Remains.	

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

Sampling Point: WLho003 Fus2

2061 3061	Absolute			Dominance Test worksheet:	-
Tree Stratum (Plot size: 30ft x 30ft)		Species?		Number of Dominant Species 7	
1. Nyssa biflora	25	<u> </u>	OBL	That Are OBL, FACW, or FAC:	(A)
2. Aler rubrom	10	<u> </u>	FAC	Total Number of Dominant	30
3. Carpinus curoliniana	10	1	FAC		(B)
4	-			Percent of Dominant Species Q S 1	2
5		_		Percent of Dominant Species <u>88%</u>	(A/B)
6					
7				Prevalence Index worksheet:	
8.				Total % Cover of: Multiply by:	
	45	= Total Cov	ver	OBL species x 1 =	
50% of total cover: 22				FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30 ft x30 ft)		total oorei		FAC species x 3 =	
1. Aler rubrum	20	Y	FAC	FACU species x 4 =	
2. Carpinus caroliniana	20	Y	FAC	UPL species x 5 =	
	70		FAC	Column Totals: (A)	(B)
3. Quercus nigro-					
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	
		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain	1)
50% of total cover: 30	20% of	total cover	12		
Herb Stratum (Plot size: 30 ft x 30 ft)				¹ Indicators of hydric soil and wetland hydrology m	ust
1. Arundinaria gigantea	50	Y	FACW	be present, unless disturbed or problematic.	
2	1.1	1		Definitions of Four Vegetation Strata:	- 1
3.					
4				Tree – Woody plants, excluding vines, 3 in. (7.6 c more in diameter at breast height (DBH), regardle	
				height.	.55 01
5					
6				Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall.	less
7				than 5 m. Dorrand greater than 5.25 m (1 m) tan	
8				Herb - All herbaceous (non-woody) plants, regard	dless
9				of size, and woody plants less than 3.28 ft tall.	
10				Woody vine - All woody vines greater than 3.28	ft in
11				height.	
12	_				
	50	= Total Cov	ver		-
50% of total cover: 25	20% of	total cover	ID		
Woody Vine Stratum (Plot size: 30ft x 30ft)					
1. Lonicero- il-Donica	50	Y	FACU		
2.					
3					
S					
4				the state of the s	
5	Ch			Hydrophytic	
75		= Total Cov		Vegetation Present? Yes X No	
50% of total cover: _25		total cover	10		-
Remarks: (If observed, list morphological adaptations below	w).				
			_		

Sampling Point: wchoDO3f -- 2

Profile Desc	ription: (Describe	to the depth	needed to docu	nent the l	ndicator	or confirm	n the absence of i	ndicators.)
Depth	Matrix	%	Redo Color (moist)	x Features	Type'	Loc ²	Texture	Remarks
(inches)	Color (moist)		Color (moist)	%	Type	LOC	finesL	Reillaiks
0-14	10 11 11	100					TINESL	
14-20	104R-8/1	100					5	
					-			
					12.00			
	-				-	_		
1							21	-Dese Lieles MeMetrix
	ncentration, D=Dep ndicators: (Applic					ains.		=Pore Lining, M=Matrix. Problematic Hydric Soils ³ :
Histosol			Polyvalue Be			RRSTI		(A9) (LRR O)
	ipedon (A2)		Thin Dark Su					(A10) (LRR S)
Black Hi			Loamy Muck					/ertic (F18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye		F2)			Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)	and the second se	Depleted Ma				and the second s	s Bright Loamy Soils (F20)
	Bodies (A6) (LRR F		Redox Dark	- Internet and the second second			(MLRA 1	153B) nt Material (TF2)
	cky Mineral (A7) (L esence (A8) (LRR L		Depleted Da					ow Dark Surface (TF12)
	ck (A9) (LRR P, T)		Marl (F10) (L		5)			blain in Remarks)
	Below Dark Surfac		Depleted Oc		(MLRA 1	51)		
	rk Surface (A12)		Iron-Mangan					rs of hydrophytic vegetation and
	airie Redox (A16) (, U)		hydrology must be present,
	lucky Mineral (S1) (LRR O, S)	Delta Ochric Reduced Ve			04 1508		disturbed or problematic.
	leyed Matrix (S4) edox (S5)		Piedmont Flo					
	Matrix (S6)						RA 149A, 153C, 15	3D)
Dark Sur	face (S7) (LRR P,		and the same		0.000			10
Restrictive L	ayer (if observed)	:		-				1
Type:		-					Section of the	V
Depth (inc	ches):						Hydric Soil Pre	esent? Yes X No
Remarks:								



Wetland data point wcho003f_w2 facing east.



Wetland data point wcho003f_w2 facing south.

Photo Sheet 1 of 2

Subregion (LRR or MLRA): 1 RRT Lat: 36.76171 Lor Soil Map Unit Name: Nawney SiH Joan Are climatic / hydrologic conditions on the site typical for this time of year? Yes No No Are vegetation , Soil or Hydrology significantly disturbed? Are "No Are Vegetation , Soil or Hydrology naturally problematic? (If need SUMMARY OF FINDINGS - Attach site map showing sampling point loc If need Hydrophytic Vegetation Present? Yes No Is the Sampled A Hydrology Present? Yes No X Remarks: - Abb 6 TMAILY DRY Conditions (Based	State: VA Sampling Point: Wchol03-u a: MA vex, none): <u>NONC</u> Slope (%): 0-3 ig: -76.36577 Datum: V6384 MVI classification: <u>NA</u> (If no, explain in Remarks.) rmal Circumstances" present? Yes <u>No</u> ed, explain any answers in Remarks.) ations, transects, important features, etc.
Investigator(s): <u>C-JACOBC</u> <u>S-DOSEFA</u> <u>Section</u> , Township, Rang Landform (hillslope, terrace, etc.): <u>HILLSOPE</u> <u>Local relief</u> (concave, con Subregion (LRR or MLRA): <u>IRRT</u> <u>Lat: 36.7671</u> <u>Loc</u> Soil Map Unit Name: <u>Nawney SiH Joann</u> Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>No</u> <u>X</u> Are Vegetation <u>Soil</u> , or Hydrology <u>significantly disturbed</u> ? <u>Are "No</u> <u>X</u> Are Vegetation <u>Soil</u> , or Hydrology <u>naturally problematic</u> ? (If need SUMMARY OF FINDINGS – Attach site map showing sampling point loc Hydrophytic Vegetation Present? <u>Yes</u> <u>No</u> <u>X</u> Hydric Soil Present? <u>Yes</u> <u>No</u> <u>X</u> Wetland Hydrology Present? <u>Yes</u> <u>No</u> <u>X</u> Remarks: <u>-Abhs TMAILY</u> DY Conditions (Based	a: <u>MA</u> vex, none): <u>NONE</u> Slope (%): <u>0-3</u> ng: <u>-76.36577</u> Datum: <u>V6384</u>
Landform (hillslope, terrace, etc.): <u>HILGOPE</u> Local relief (concave, con Subregion (LRR or MLRA): <u>IRRT</u> Lat: <u>36.7671</u> Lor Soil Map Unit Name: <u>Nawney SiH</u> <u>Joann</u> Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>No</u> Are Vegetation <u>Soil</u> , or Hydrology <u>significantly disturbed</u> ? Are "No Are Vegetation <u>Soil</u> , or Hydrology <u>naturally problematic</u> ? (If need SUMMARY OF FINDINGS - Attach site map showing sampling point loc Hydrophytic Vegetation Present? <u>Yes</u> <u>No</u> Hydrophytic Negetation Present? <u>Yes</u> <u>No</u> Model A within a Wetland? Remarks: -Abbs TMAILY DIY Conditions (Based	a: <u>MA</u> vex, none): <u>NONE</u> Slope (%): <u>0-3</u> ng: <u>-76.36577</u> Datum: <u>V6384</u>
Landform (hillslope, terrace, etc.): <u>HILGLOPE</u> Local relief (concave, consubregion (LRR or MLRA): <u>IRRT</u> Lat: <u>36.7671</u> Lor Soil Map Unit Name: <u>Nawney SiH Joan</u> Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>No X</u> Are Vegetation <u>, Soil</u> , or Hydrology <u>significantly disturbed</u> ? Are "No Are Vegetation <u>, Soil</u> , or Hydrology <u>naturally problematic</u> ? (If need SUMMARY OF FINDINGS - Attach site map showing sampling point loc Hydrophytic Vegetation Present? <u>Yes</u> <u>No X</u> Hydric Soil Present? <u>Yes</u> <u>No X</u> Wetland Hydrology Present? <u>Yes</u> <u>No X</u> Remarks: <u>ABMB TMAILY</u> DIY CONDITIONS (BASEd	vex, none): <u>NONE</u> Slope (%): <u>0-3</u> by: <u>-76.36577</u> Datum: <u>V6384</u> NVI classification: <u>NA</u> (If no, explain in Remarks.) rmal Circumstances" present? Yes <u>V</u> No ed, explain any answers in Remarks.) ations, transects, important features, etc. rea <u>Yes</u> <u>No</u> <u>X</u> The Sept. 22 Drow ght
Subregion (LRR or MLRA): <u>IRRT</u> Lat: <u>36.7671</u> Lor Soil Map Unit Name: <u>Nawney siH Joam</u> Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>No X</u> Are Vegetation <u>Soil</u> , or Hydrology <u>significantly disturbed?</u> Are "No Are Vegetation <u>Soil</u> , or Hydrology <u>naturally problematic?</u> (If need SUMMARY OF FINDINGS - Attach site map showing sampling point loc Hydrophytic Vegetation Present? <u>Yes</u> <u>No X</u> Hydric Soil Present? <u>Yes</u> <u>No X</u> Wetland Hydrology Present? <u>Yes</u> <u>No X</u> Remarks: -Abbs FMAILY DRY CONDITIONS (BASEd	ng: <u>-76.36577</u> Datum: <u>W6384</u> NWI classification: <u>NA</u> (If no, explain in Remarks.) rmal Circumstances" present? Yes <u>V</u> No ed, explain any answers in Remarks.) ations, transects, important features, etc. rea Yes <u>No</u> <u>X</u> Oh Sept. 22 Drought
Soil Map Unit Name: <u>Nawney SiH Joan</u> Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>No</u> Are Vegetation <u>Soil</u> , or Hydrology <u>significantly disturbed</u> ? Are "No Are Vegetation <u>No</u> , Soil <u>or Hydrology</u> naturally problematic? (If need SUMMARY OF FINDINGS - Attach site map showing sampling point loc Hydrophytic Vegetation Present? Yes <u>No</u> Hydric Soil Present? Yes <u>No</u> Wetland Hydrology Present? Yes <u>No</u> Remarks: -Abbs FMAILY DRY Conditions (Based	NWI classification: <u>NP</u> (If no, explain in Remarks.) rmal Circumstances" present? Yes <u>No</u> ed, explain any answers in Remarks.) ations, transects, important features, etc. rea Yes <u>No</u> <u>X</u> oh Sept. 22 thought
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _X Are Vegetation, Soil, or Hydrology significantly disturbed? Are "No Are Vegetation, Soil, or Hydrology naturally problematic? (If need SUMMARY OF FINDINGS - Attach site map showing sampling point loc Hydrophytic Vegetation Present? Yes No Is the Sampled A Hydrophytic Vegetation Present? Yes No Is the Sampled A Wetland Hydrology Present? Yes No Is the Sample A Wetland Hydrology Present? Yes No Is the Sample A Hydrology Present? Yes No Is the Sample A Hydrology Present? Yes No Is the Sample A Hyd	(If no, explain in Remarks.) rmal Circumstances" present? Yes <u>V</u> No ed, explain any answers in Remarks.) ations, transects, important features, etc. rea Yes <u>No</u> Ch Sept. 22 tranght
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "No Are Vegetation, Soil, or Hydrologynaturally problematic? (If need SUMMARY OF FINDINGS - Attach site map showing sampling point loc Hydrophytic Vegetation Present? Yes No Hydroc Soil Present? Yes No Is the Sampled A Wetland Hydrology Present? Yes No Is the Sample A Wetland Hydrology Present? Yes No	rmal Circumstances" present? Yes <u>V</u> No <u>ves</u> ed, explain any answers in Remarks.) ations, transects, important features, etc. rea Yes <u>No X</u> oh Sept. 22 thought
Are Vegetation, Soil, or Hydrology naturally problematic? (If need SUMMARY OF FINDINGS - Attach site map showing sampling point loc Hydrophytic Vegetation Present? Yes No Is the Sampled A Hydric Soil Present? Yes No Is the Sampled A Wetland Hydrology Present? Yes No Within a Wetland? Remarks: -Abno FMAILY DRY Conditions (Based	ed, explain any answers in Remarks.) ations, transects, important features, etc. rea Yes No Xept. 22 Drought
BUMMARY OF FINDINGS - Attach site map showing sampling point loc Hydrophytic Vegetation Present? Yes No Is the Sampled A Hydric Soil Present? Yes No Wetland Hydrology Present? Is the Sampled A Wetland Hydrology Present? Yes No Wetland? Remarks: -Abhs FMAlly Dry Conditions (Based)	ations, transects, important features, etc. rea Yes No X on Sept. 22 Drought
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: -Abno FMally Dry Conditions (Based	on Sept. 22 tronght
Hydric Soil Present? Yes No K within a Wetland Wetland Hydrology Present? Yes No K within a Wetland Remarks: -Abho FMally Dry Conditions (Based	on Sept. 22 tronght
-Abnormally Dry conditions (based	
	montitor).
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living Roots (C	
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) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No X Depth (inches): NA	
Water Table Present? Yes No V Depth (inches): >20	
	nd Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), il	available:

2-11/2051		Dominant		Dominance Test worksheet:
e Stratum (Plot size: 20 X 30 ff)	<u>% Cover</u>	Species?	FACU	Number of Dominant Species 5 (A)
Liriddenorun Tulipitera	15	-		That Are OBL, FACW, or FAC: (A)
ALEr rubrum			FAC	Total Number of Dominant Species Across All Strata: (B)
	_			Percent of Dominant Species
				That Are OBL, FACW, or FAC: 8311 (A/B)
				Prevalence Index worksheet:
		_		
		= Total Co		OBL species x1 =
50% of total cover:	9 20% of	total cover	. 10	FACW species x 2 =
oling/Shrub Stratum (Plot size: 26) 1/26 (4))		10		FAC species x 3 =
Acer rubrum	10	La	FAC	FACU species x 4 =
Liriodendron tulipitera	16	64	FACU	UPL species x 5 =
Arundinaria gigantea	45	V	#ACW	Column Totals: (A) (B)
				Prevalence index = B/A =
			1	Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0 ¹
	105	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 3	1 5 20% 0	f total cove	13	
erb Stratum (Plot size: 30x3044_)				¹ Indicators of hydric soil and wetland hydrology must
Arundinaria gigantea	20	Y	FACW	be present, unless disturbed or problematic.
RUBUS AVAUTUS	10	V	FAC	Definitions of Four Vegetation Strata:
0				
				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
			\equiv	
				Woody vine - All woody vines greater than 3.28 ft in
0 	30	= Total Co	ver ,	Woody vine - All woody vines greater than 3.28 ft in
0 2 50% of total cover:	30		ver ,	Woody vine - All woody vines greater than 3.28 ft in
50% of total cover:	30	= Total Co	ver ,	Woody vine - All woody vines greater than 3.28 ft in
50% of total cover:	30	= Total Co	ver ,	Woody vine - All woody vines greater than 3.28 ft in
50% of total cover:	30	= Total Co	ver ,	Woody vine - All woody vines greater than 3.28 ft in
50% of total cover: <u>loody Vine Stratum</u> (Plot size: <u>204 - 06 - 1</u>) <u>Vitis rotundifolia</u>	30	= Total Co	ver ,	Woody vine - All woody vines greater than 3.28 ft in
50% of total cover:	30	= Total Co	ver ,	Woody vine - All woody vines greater than 3.28 ft in
50% of total cover: loody Vine Stratum (Plot size: 201307-1) Vitis rotundifolia	<u>30</u> 15 20% o 20	= Total Co f total cove	r b FAC	Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover: loody Vine Stratum (Plot size: 201307-1) Vitis rotundifolia	<u>30</u> 15 20% o 20	= Total Co f total cove	FAC	Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
50% of total cover:	<u>30</u> 15 20% o 20	= Total Co f total cove	FAC	Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover:	30 15 20% o 20 20	= Total Co f total cove	FAC	Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
Voody Vine Stratum (Plot size: 2013074) Vitis rotundifolia	30 15 20% o 20 20	= Total Co f total cove	FAC	Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
50% of total cover:	30 15 20% o 20 20	= Total Co f total cove	FAC	Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
50% of total cover:	30 15 20% o 20 20	= Total Co f total cove	FAC	Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
50% of total cover:	30 15 20% o 20 20	= Total Co f total cove	FAC	Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
50% of total cover:	30 15 20% o 20 20	= Total Co f total cove	FAC	Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

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Atlantic and Gulf Coastal Plain Region - Version 2.0

	- A.	in la	0.00	A
Sampling	Point:	sa	X SV	

Profile Description: (Describe to the depth			or confirm	the absence of in	ndicators.)
Depth <u>Matrix</u> (inches) Color (moist) %	Color (moist)	% Type	Loc	Texture	Remarks
0-10 1018 514 100				Sand	
10-20 1048 112 100				rand	
1					
······································					
Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=	Masked Sand Gra	ains		Pore Lining, M=Matrix,
Hydric Soil Indicators: (Applicable to all L					Problematic Hydric Solis ^a :
Histosol (A1)	the second	w Surface (S8) (L ace (S9) (LRR S, 1			(A10) (LRR S)
 Histic Epipedon (A2) Black Histic (A3) 		Mineral (F1) (LRR			ertic (F18) (outside MLRA 150A,B
Hydrogen Sulfide (A4)	Loamy Gleyed		-/		loodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix			Anomalous	Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Su	rface (F6)		(MLRA 1	
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark				Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depress				w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LR	RU) c (F11) (MLRA 15	41	Other (Exp	lain in Remarks)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)		e Masses (F12) (I		T) ³ Indicator	s of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)		(F13) (LRR P, T,			hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)		17) (MLRA 151)		unless	disturbed or problematic.
Sandy Gleyed Matrix (S4)		(F18) (MLRA 15			
Sandy Redox (S5)		dplain Soils (F19)			
Stripped Matrix (S6)	Anomalous Brig	ght Loamy Soils (F	-20) (MLRA	A 149A, 153C, 153	10)
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):					
Type:					1
Depth (inches):				Hydric Soll Pre	sent? Yes No
Remarks					



Upland data point wcho003_u facing north.



Upland data point wcho003_u facing southeast.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Chesapeake Sampling Date: 2/10/16
Applicant/Owner: Dominion	State: VH Sampling Point: wcho DD3-w
Investigator(s): L. Roper, M.Smith	Section, Township, Range: VIONC
Landform (hillslope, terrace, etc.): Oromage	Local relief (concave, convex, none): CONCAVC Slope (%): D-3'/. 76211 Long: -76.36585 Datum: DS84
Subregion (LRR or MLRA): L R R T Lat: 36-	16211 Long: - 16,36585 Datum: W (589
Soil Map Unit Name: Nawney silt loam	NWI classification:NA
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X Remarks: Yes No X	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B1	
Saturation (A3)	
	heres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	cced Iron (C4) Crayfish Burrows (C8) ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Recent Iron Reduction Redu	
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:	114
Surface Water Present? Yes No X Depth (inches	
Water Table Present? Yes No X Depth (inches	
Saturation Present? Yes <u>> No</u> Depth (inchest (includes capillary fringe)	s): 9 Wetland Hydrology Present? Yes No X
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	

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

Sampling Point: wcho DD3-42

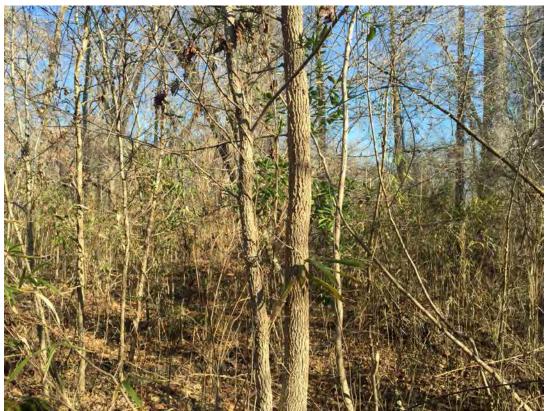
	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30++ x30+)	% Cover ZD	Species?	<u>Status</u> FAC	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
1. GOOLGUS MIGTA	15		FACU	
2. Liriodendroth tolipifera		N	FAC	Total Number of Dominant
3. Symplocos tinctoria			FAC	Species Across All Strata: (B)
4. Hur rubrum	15			Percent of Dominant Species
5. Liquidambar styraciflua	15	_Y	FAC	That Are OBL, FACW, or FAC:(A/B)
6 7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
8	75	= Total Cov		OBL species x 1 =
50% of total cover: 37.				FACW species x 2 =
	<u> </u>	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 304 x304)	10	N	ENA	FACU species x 4 =
1. Ilex opara	15	-1	FAC	UPL species x 5 =
2. Symploios tinctoria	15	1	FAC	Column Totals: (A) (B)
3. Aralia spinosa	30	<u> </u>	FAC	
4. Fagus grandifolia	15	<u> </u>	FACU	Prevalence Index = B/A =
5. Ligitdambar styraciflua		N	FAC	Hydrophytic Vegetation Indicators:
6. Leulothoe axillaris	5	N	FACW	1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	1		-	3 - Prevalence Index is $\leq 3.0^{1}$
	90	= Total Cov	/er	
50% of total cover: 45	20% of	total cover	.18	Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 30ft x 30ft)	_ 20 % 01	total cover		a second second second second second second
	-	N	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Brundinaria gigantea	20	-1		
2. Rubus aryutus		<u> </u>	FAC	Definitions of Four Vegetation Strata:
3. Tipularia discolor	_5_	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
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	110	to start		
22		= Total Cov		
50% of total cover: 22	⊇ 20% of	total cover	:_1_	
Woody Vine Stratum (Plot size: 30ft x 30ft)				
1. Lonicera japonica	40	Y	FACU	
2				
3				
4.				
5.				Hydrophytic
	40	= Total Cov	/er	Vegetation V
50% of total cover: 20	Present? Yes <u>No</u>			
		total cover		
Remarks: (If observed, list morphological adaptations belo	w).			

Sampling Point: Wcho003-42

Depth Matrix Concentration Sector (moisit)	and the second second	ription: (Describe	to the dept				or confirm	n the absence of in	ndicators.)
Q-3 Ioyle ¹ / ₂ IoD fine 5L 3-8 Ioyle ⁵ / ₄ IOD fine 5L B-20 Ioyle ⁴ / ₄ IoD fine 5L B-20 Ioyle ⁴ / ₄ IoD fine 5L "Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls ³ : Histosol (A1) Polyvalue Below Surface (S9) (LRR S, T, U) I cm Muck (A0) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O, LRR S, T, U) I cm Muck (A10) (LRR P, S, T) Stratified Layers (A5) Depleted Matrix (F2) Piedmont Floodplain Solis (F19) (LRR P, S, T) Muck Presence (A6) (LRR P, T, U) Red x0 Capressions (F6) MIRA 150A) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Tinck Mack (A150 (MLRA 150A) Depleted Below Dark Surface (A12) Iont Muck (A160, ILRR O, S) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present. Sandy Redx (S5) Detato Ochric (F13) (MLRA 150A, 150B) Sandy Redx (S5) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present. Sandy Redx (S5) Anomalous Bright			0/-				L oc ²	Texture	Remarks
3-8 Io YL 5/4 Io D B-20 Io YL 4/4 Io D Fine SL	States and a			00101 (110101)					
B-20 10 Y K 4/4 10 D Fixe St 'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) I cm Muck (A9) (LRR C) Histosol (A1) Domy Gleyed Matrix (F2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR C) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Peledmont Floodplain Soils (F19) (LRR P, S, T) Reduced Vertic (F18) (outside MLRA 150A, B Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Muck Presence (A8) (LRR P, T) Depleted Ochric (F1) Matri (F10) (LRR U) 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) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (A7) (LRR P, S) Piedmont Floodplain Soils (F10) (MLRA 149A) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Belta Ochric (F13) (MLRA 150A, 150B) <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
*Type: C=Concentration. D=Depletion. RM=Reduced Matrix. MS=Masked Sand Grains. ?Location: PL=Pore Lining. M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils?: Histosol (A1) Polyzalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Black Histic (A3) Loarny Mucky Mineral (F1) (LRR O) 2 cm Muck (A10) (LRR P, S, T) Black Histic (A3) Loarny Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Learny Soils (F20) Organic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F6) (MLRA 153B) Corganic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F7) Red v Dark Surface (TF12) Muck Presence (A8) (LRR U) Mari (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Cortic (F11) (MLRA 151) other (Explain in Remarks) Thick Dark Surface (A12) Inm-Manganese Masses (F12) (LRR 0, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR 0, S) Belta Ochric (F13) (MLRA 150A, 150B) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Redox (S									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A,B Stratified Layers (A5) Depleted 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) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A11) 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 Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) Singped Matrix (S6) Anormalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)	B-20	107K 14	100					tine st	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Polevalue Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Muck Y Presence (A8) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR P, T) Mari (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) 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) Deta Ochric (F17) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D) Sandy Gleyed Matrix (S5) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) MLRA 149A, 153C, 153D) Depth (inches): Dert Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)									
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) 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) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: No Type:	Hydric Soil Histosol Histic Ep Black Hi Hydroge Stratified	Indicators: (Applic (A1) bipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5)	cable to all L	RRs, unless other Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Mat	wise not low Surfa rface (S9) y Mineral ed Matrix (trix (F3)	ed.) ce (S8) (L) (LRR S, (F1) (LRR (F2)	RR S, T, U T, U)	J) 1 cm Muck 2 cm Muck Reduced V Piedmont F	Problematic Hydric Solls ³ : (A9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A,B) Floodplain Soils (F19) (LRR P, S, T) s Bright Loamy Soils (F20)
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:	5 cm Mu Muck Pr 1 cm Mu Depleted Thick Da Coast P Sandy M	acky Mineral (A7) (L esence (A8) (LRR L ick (A9) (LRR P, T) d Below Dark Surfac ark Surface (A12) rairie Redox (A16) (lucky Mineral (S1) (RR P, T, U) J) ce (A11) MLRA 150A)	Depleted Dar Redox Depre Marl (F10) (L Depleted Oct Iron-Mangan Umbric Surfa Delta Ochric	rk Surface essions (F .RR U) hric (F11) ese Mass ice (F13) (F17) (ML	(F7) 8) (MLRA 1! es (F12) (I (LRR P, T _RA 151)	LRR O, P, , U)	T) Red Paren Very Shallo Other (Exp ³ Indicator wetland unless o	it Material (TF2) ow Dark Surface (TF12) Ilain in Remarks) is of hydrophytic vegetation and I hydrology must be present,
Depth (inches): No X	Stripped Dark Su Restrictive	Matrix (S6) rface (S7) (LRR P, S							3D)
		ches):		-				Hydric Soil Pre	sent? Yes NoX
	Remarks:								



Upland data point wcho003_u2 facing east.



Upland data point wcho003_u2 facing north.

Photo Sheet 2 of 2

Project/Site: <u>ACP</u> Applicant/Owner: <u>DOMINION</u> Investigator(s): <u>C. TACOBS</u> , <u>S. TOSEFA</u> Landform (hillslope, terrace, etc.): <u>HILCOPE/FIOCA Plain</u> Subregion (LRR or MLRA): <u>LRRT</u> Lat: <u>3b</u> Soil Map Unit Name: <u>Dragston-Tomotley</u> cor Are climatic / hydrologic conditions on the site typical for this time of y Are Vegetation <u>, Soil</u> , or Hydrology <u>significant</u> Are Vegetation <u>, Soil</u> , or Hydrology <u>naturally p</u>	year? Yes No X (If no, explain in Remarks.) Jy disturbed? Are "Normal Circumstances" present? Yes X No
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	
Sediment Deposits (B2) Presence of Redu	113) Sparsely Vegetated Concave Surface (B8) 15) (LRR U) Drainage Patterns (B10) 0 dor (C1) Moss Trim Lines (B16) 0 oberes along Living Roots (C3) Dry-Season Water Table (C2) uced Iron (C4) Crayfish Burrows (C8) uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) re (C7) Geomorphic Position (D2)
Field Observations: Surface Water Present? Yes No Depth (inche Water Table Present? Yes No Depth (inche Saturation Present? Yes No Depth (inche (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho Remarks: Remarks:	s): <u>>ZO</u> s): <u>>ZO</u> Wetland Hydrology Present? Yes <u>No</u>

	0D4	£w
Sampling Point:	00 1	1_10.5

			1 11 1 - 1			
Free Stratum (Plot size: 30x30-ft_)		Dominant Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:	9	(A)
Liridendron tulipifera	- 18	Y	FACU		~	- 0.0
Nyssa sylvatica	10	N	FAC	Total Number of Dominant Species Across All Strata:	9	(B)
 				Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B
						_ (//0
			-	Prevalence Index worksheet:		
				Total % Cover of: OBL species x 1		
2.	1 107	= Total Cov	ver la la	A DECK STORE AND A DECK ST		
50% of total cover: 3	1_ 20% of	total cover	13,6	FAC species x 3		
Sapling/Shrub Stratum (Plot size: 20 x 30+ +)	5	V	FACH	FACU species x 4		
Vaccinium corymbosum	12		FAL	UPL species x 5		
Acer rubrum '				Column Totals: (A)		(B
-				Prevalence Index = B/A = _	_	
				Hydrophytic Vegetation Indicate		
5				1 - Rapid Test for Hydrophytic	: Vegetation	
				2 - Dominance Test is >50%		
	17	= Total Cov		3 - Prevalence Index is ≤3.0 ¹	1.0.71.0413	
50% of total cover: 8.	5 20% of	total cover	3.4	- Problematic Hydrophytic Veg	etation' (Expl	ain)
Herb Stratum (Plot size: SUX3011)				Indicators of hydric soil and wetla	nd hydrology	must
. Wood wardia aroolata	20	X	OBL	be present, unless disturbed or pr	oblematic.	_
Osmundastrum cinnamomeum			FACW	Definitions of Four Vegetation S	Strata:	
saururus cemuus	-10		OBL	Tree - Woody plants, excluding v	ines, 3 in. (7.6	6 cm) c
Arundinaria gigantea	10	1.	FACW	more in diameter at breast height height.	(DBH), regard	dless c
i				Sapling/Shrub – Woody plants, e than 3 in. DBH and greater than 3	xcluding vine .28 ft (1 m) ta	es, less
 				Herb - All herbaceous (non-wood	y) plants, reg	
				of size, and woody plants less that	n 3.28 ft tall.	
0				Woody vine - All woody vines gr	eater than 3.2	28 ft in
2.				height.		
2.		= Total Co	and the second			
50% of total cover: 24	5 20% 0	f total cover	rID			
Noody Vine Stratum (Plot size: 30 X20 ++_)	2	V	FAC			
1. Smilax rotundifolia			FAC			
Vitis rotundifolia	2		THE			
3						
4						
D	95	= Total Co	ver	Hydrophytic Vegetation		
50% of total cover:		f total cover	1 0	Present? Yes	No	
Remarks: (If observed, list morphological adaptations be		Co. 14 . 11. 1				
remarks: (if observed, list morphological adaptations be						

ches)	Matrix		Rede	x Features		-	n the absence of li	1. Sec. 2. Sec
	Color (moist)	- %	Color (moist)		Type	Loc2		Remarks
V	2.5431	90	IDIR WILD		1	TL	<u> </u>	
-20	1078 11	~10	TOARGIA	10	_C_	PL	<u></u>	
drle Soil Ir Histosol (Histic Epi Black His Hydrogen Stratified Organic E 5 cm Muc Muck Pre 1 cm Muc	ndicators: (Appli A1) pedon (A2)	cable to all P, T, U) .RR P, T, U U)	I=Reduced Matrix. M LRRs, unless othe Polyvalue B Thin Dark S Loamy Muci Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) (Depleted Oc	rwise note alow Surface (S9) cy Mineral (ed Matrix (atrix (F3) Surface (F rk Surface essions (F LRR U)	ad.) ce (S8) (I (LRR S, F1) (LRF F2) 6) (F7) 3)	LRR S, T, L T, U) ₹ O)	Indicators for U)1 cm Muck 2 cm Muck Reduced V Piedmont F Anomalous (MLRA 1 Red Paren Very Shallo	(A10) (LRR S) /ertic (F18) (outside MLRA 150A Floodplain Soils (F19) (LRR P, S, s Bright Loamy Soils (F20)
Coast Pra Sandy Mo Sandy Gl Sandy Re Stripped I Dark Surf	rk Surface (A12) airie Redox (A16) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR P, ayer (if observed	(LRR O, S) S, T, U)	Delta Ochrid Reduced Ve Piedmont Fl	ace (F13) ((F17) (ML rtic (F18) (codplain S	LRR P, 7 RA 151) MLRA 1 oils (F19)	r, U) 50A, 150B) (MLRA 14	wetland unless (s of hydrophytic vegetation and hydrology must be present, disturbed or problematic. 3D)
Туре:			_				Hydric Soli Pre	sent? Yes X No
Depth (incl marks:	hes):			_			Hydric Son Fie	Seller Tes // No

1.14



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: ACP	City/County: Chesapeake Sampling Date: 2/10/16
	State: VA Sampling Point: witho D04F.wi
Investigator(s): L. Roper, M.Smith	Section, Township, Range: NONE
Landform (hillslope, terrace, etc.): drainage	Local relief (concave, convex, none): <u>flat</u> Slope (%): <u>0-31</u>
Subregion (LRR or MLRA):	DOI 10 217 Long: DI JOJ 01 Datum: DATUM:DATUM:DATUM:DATUM:
Soil Map Unit Name: Pactolus loamy fir	ne sound NWI classification: PFD
Are climatic / hydrologic conditions on the site typical for this time	
Are Vegetation, Soil, or Hydrology signific	
Are Vegetation, Soil, or Hydrology natural	
	ving sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	
Hydric Soil Present? Yes X No	
Wetland Hydrology Present? Yes X No	within a wetland r res No
Remarks:	
NCWAM: Headwater Form	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that an	
Surface Water (A1)	
	(B15) (LRR U) Fide Odor (C1) Drainage Patterns (B10) Moss Trim Lines (B16)
	ospheres along Living Roots (C3)
	Leduced Iron (C4) Crayfish Burrows (C8)
	eduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
Iron Deposits (B5) Unundation Visible on Aerial Imagery (B7)	n in Remarks) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (in	ches):
Water Table Present? Yes X No Depth (in	ches):
Saturation Present? Yes X No Depth (in	ches): State Wetland Hydrology Present? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Remarks:	
portions of wetland inunc	4. +0 1
Portions of wertand friend	aloc .

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

Sampling Point: witho0046.02

01 70 01	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30f+ x 30f+)		Species?		Number of Dominant Species 7
1. Liquidambar styracitlua	40	Y	FAC	That Are OBL, FACW, or FAC: (A)
2. Aver rubrum	20	Y	FAC	Total Number of Dominant
3. Platanus occidentalis	10	N	FACW	Species Across All Strata: (B)
4. Overcus nigra	10	N	FAL	
				Percent of Dominant Species That Are OBL, FACW, or FAC: 881. (A/B)
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
		= Total Cov		FACW species x 2 =
50% of total cover: 40	_ 20% of	total cover	16	Construction of the second
Sapling/Shrub Stratum (Plot size: 30F1 x 30F1)				FAC species x 3 =
· Plat cubring	30	Y	FAC	FACU species x 4 =
2. Liqustrum Sinense	30	Y	FAC	UPL species x 5 =
3. Carpinus caroliniana	.5	N	FAC	Column Totals: (A) (B)
4				
				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				☐ 3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 32.	5 20% of	total cover	13	
Herb Stratum (Plot size: Soft x 30 ft				¹ Indicators of hydric soil and wetland hydrology must
1. Phraymites australis	50	Y	FACW	be present, unless disturbed or problematic.
2. Arundinaria gigantea	ID	N	FACW	Definitions of Four Vegetation Strata:
2				
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
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				We double Allowed when creates then 2.29 B is
11.				Woody vine – All woody vines greater than 3.28 ft in height.
				in sign.
12	1.D	= Total Cov		
30				
50% of total cover: 30	20% of	total cover	1.01	
Woody Vine Stratum (Plot size: 30ff x 30ff)		N.	Pinnis	
1. Lonicera japonila	20	<u> </u>	FACU	
2. Berchemia scandens	30	<u> </u>	FAC	
3. Gelsemium sempervirens	30	У	FHC	
4.				
5			1	Mudaaabutla
	80	= Total Cov		Hydrophytic Vegetation
50% of total cover: 40	Present? Yes X No			
	- 10 BACK 84	total cover	10	
Remarks: (If observed, list morphological adaptations belo	w).			

Sampling Point: weboD04fw 2

Depth	Matrix	to the dept	h needed to docur Redo	x Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	Texture	Remarks
0-6	104R2/1	100					mucky L	
6-10	10YR2/1	98	10YR56	2	_C	PL	muckyL	
10-20	10 YR 4/1	90	IDYR 5/8	10	C	PL	SCL	
					_		_	
lydric Soil Ir	dicators: (Applic		Reduced Matrix, MS	rwise not	ed.)		Indicators f	PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Black His Hydroger Stratified Organic E 5 cm Muc Muck Pre 1 cm Muc Depleted Thick Dar Coast Pra Sandy Mi Sandy Gi Sandy Re Stripped Dark Suri	pedon (A2) tic (A3) Sulfide (A4) Layers (A5) Bodies (A6) (LRR F kky Mineral (A7) (L sence (A8) (LRR P, T) Below Dark Surface k Surface (A12) airie Redox (A16) (ucky Mineral (S1) (eyed Matrix (S4) edox (S5) Matrix (S6) ace (S7) (LRR P, 1	RR P, T, U) J) Ce (A11) MLRA 150A LRR O, S) S, T, U)	Delta Ochric Reduced Ver Piedmont Flo	rface (S9 y Mineral ed Matrix trix (F3) Surface (I rk Surface essions (F .RR U) hric (F11) ese Mass ace (F13) (F17) (Min rtic (F18) bodplain S) (LRR S, (F1) (LRR (F2) ====================================	T, U) O) LRR O, F , U) 0A, 150E (MLRA 1	2 cm Mi Reduce Piedmo Anomal (MLR Red Pa Very Sh Other (E P, T) ³ Indica wetta unle: 3)	uck (A9) (LRR O) uck (A10) (LRR S) ed Vertic (F18) (outside MLRA 150A,B) int Floodplain Soils (F19) (LRR P, S, T) lous Bright Loamy Soils (F20) A 153B) rent Material (TF2) nallow Dark Surface (TF12) Explain in Remarks) ators of hydrophytic vegetation and and hydrology must be present, ss disturbed or problematic. 153D)
Restrictive L Type: Depth (incl	ayer (if observed) nes):):	_				Hydric Soil I	Present? Yes X No



Wetland data point wcho004f_w2 facing northeast.



Wetland data point wcho004f_w2 facing southwest.

Photo Sheet 1 of 2

ACP	Choras	DAKO	Plain Region
Project/Site:	_ City/County: Chesap	CONE	_ Sampling Date: 09/30/15
Applicant/Owner:		_ State: VA	_ Sampling Point: wcho004_
Investigator(s): C. JACObs S. Tosefa	Section, Township, Range:	NA	
Landform (hillslope, terrace, etc.): <u>HIISIOP-R</u>	_ Local relief (concave, conve	ex, none): _CON	
Subregion (LRR or MLRA): LRRT Lat: 36	176178 Long	-76.364	198 Datum: <u>MGS8</u> 4
Soil Map Unit Name: Dragston-Tomotley LC	omplex	NWI classif	ication: NA
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes No X	_ (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology significan		mal Circumstances"	present? Yes V No
Are Vegetation, Soil, or Hydrology naturally		d, explain any answ	
SUMMARY OF FINDINGS – Attach site map showing			
~			
Hydrophytic Vegetation Present? Yes No No No Yes No Yes No Yes No Yes	- Is the Sampled Are		V
Wetland Hydrology Present? Yes No X	within a Wetland?	Yes	No
	(based on se	1 00 0	SUG dial a feat a feat a land
HYDROLOGY			Indexes of the second
Wetland Hydrology Indicators:			cators (minimum of two required)
Primary Indicators (minimum of one is required; check all that appl	101-0		il Cracks (B6)
Surface Water (A1) Aquatic Fauna (i	and the second		egetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B Saturation (A3) Hydrogen Sulfide		the second s	atterns (B10) Lines (B16)
	pheres along Living Roots (C3		Water Table (C2)
Vider Marks (B1) Oxidated (Mi205) Sediment Deposits (B2) Presence of Red		Crayfish Bu	
	uction in Tilled Soils (C6)		Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surfa			c Position (D2)
Iron Deposits (B5) Other (Explain in	Remarks)	Shallow Aq	uitard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neutra	al Test (D5)
Water-Stained Leaves (B9)		Sphagnum	moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No Depth (inche	NIA		
Surface Water Present? Yes No Depth (inche	es):		
Water Table Present? Yes No X Depth (Inche	es): _/		
Saturation Present? Yes No Depth (inche (includes capillary fringe)	es): <u>>20</u> Wetland	d Hydrology Prese	nt? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if a	available:	
Remarks:			

US Army Corps of Engineers

Sampling Point: wcho004-w

5 Cover 30 2.0 5 10			Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species	4 (A 7 (E
5	2	FAC	Total Number of Dominant Species Across All Strata: Percent of Dominant Species	67
5	2		Species Across All Strata: Percent of Dominant Species	67
_		FAC	Percent of Dominant Species	67
_				67
_			That Are OBL, FACW, or FAC:	57 U
			Prevalence Index worksheet:	
			Total % Cover of:	
105:	= Total Cov	ver _	OBL species x 1 :	
20% of	total cover	13	FACW species x 2 :	
	territ service.		FAC species x 3	
0	N	FAC		
5	N	FACU	a first set and set of the set of	
20	Y	FACU	Column Totals: (A)	
67	N		Designed and the designed of the	
10	11	Concession of the local division of the loca		
	-1-2-	LICIO		
				vegetation
50	Tatal Car			
2001 -	= Total Cov		Problematic Hydrophytic Vege	station' (Explain)
20% 01	total cover	10		
15	V ·	FACU	Indicators of hydric soil and wetlan	nd hydrology mus
5				
2	-1	MEYY	and the second second second second	
			Tree - Woody plants, excluding vi	nes, 3 in. (7.6 cm
				(DBH), regardles:
				and the second second
		A CONTRACTOR OF A	Sapling/Shrub - Woody plants, ex	xcluding vines, le
			Herb - All herbaceous (non-wood)	y) plants, regardl
		() · · · · · · · · · · · · · · · · · ·	of size, and woody plants less than	1 3.20 ft tail.
			Woody vine - All woody vines gre	ater than 3.28 ft
-			height.	
		-		
20% of	total cover	:		
2	1	tar		
0	1	PAC		
5	Y	FAC		
			Hydrophytic	
0	= Total Con	ver A	Vegetation	
20% of	total cover	1.7	Present? Yes	No
		1		
	0 50 50 50 20% of 5 5 20% of 5 20% of 3 5 20% of	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Image: Particle of the sector of the sec

US Army Corps of Engineers

Atlantic and Gulf Coastal Plain Region - Version 2.0

10/	ha	004
Sampling Point:	10	Du - M.

Depth Matrix	needed to document the Indicator or confirm	II the absence of indicators.
	Redox Features Color (moist) % Type Loc ²	Texture Remarks
(inches) Color (moist) %	Color (moist) % Type Loc ²	Cand
D-7 2.07 6/1 100 -		SUND
1-20 11/R 23 100 -		sand
		2
Type: C=Concentration, D=Depletion, RM=F Hydric Soil Indicators: (Applicable to all L	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix, Indicators for Problematic Hydric Soils ³ ;
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, I	
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)	
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P	
Coast Prairie Redox (A16) (MLRA 150A)		wetland hydrology must be present, unless disturbed or problematic.
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B Piedmont Floodplain Soils (F19) (MLRA 1.	
Sandy Redox (S5)	Anomalous Bright Loamy Soils (F20) (MLRA	
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)	_ Alomaious Digit Loany Cons (1 20) (in El	
Restrictive Layer (if observed):		
Туре:		
Depth (inches):		Hydric Soli Present? Yes No X
 S. Annuk and A. M. Annuk and A. M. Market and A. Ma Annual and A. Market and		
Bamarke		
Remarks:		
Remarks		
Remarks		
Remarks		
Remarks:		



Upland data point wcho004_u facing east.



Upland data point wcho004_u facing southeast.

10

WETLAN	D DETERMIN	ATION DATA F	FORM – Atlanti	c and Gulf Coasta	I Plain Region
--------	------------	--------------	----------------	-------------------	----------------

Project/Site: <u>ACP</u> Applicant/Owner: <u>Dominio</u> Investigator(s): <u>LIROPER</u>	n		State: VA Sampling Date: 2/10/16 State: VA Sampling Point: wchol09-w2
Landform (hillslope, terrace, etc.):	T. Lat: 36.7	al relief (concave, convex, 76218 Long:	none): <u>(ONVEX</u> Slope (%): <u>D-37</u> , 76, 36495 Datum: <u>WG589</u>
Are climatic / hydrologic conditions on I Are Vegetation, Soil, or Are Vegetation, Soil, or	Hydrology significantly dist Hydrology naturally problem	urbed? Are "Normal matic? (If needed, e	If no, explain in Remarks.) Circumstances" present? Yes X No xplain any answers in Remarks.)
SUMMARY OF FINDINGS – A Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No Yes No Yes No	In the Sampled Area within a Wetland?	ns, transects, important features, etc. Yes No
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is 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 Imag Water-Stained Leaves (B9) Field Observations:	Aquatic Fauna (B13) Marl Deposits (B15) (L Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced I Recent Iron Reduction Thin Muck Surface (C7 Other (Explain in Rema	(C1) along Living Roots (C3) ron (C4) in Tilled Soils (C6))	 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 Present? Yes _ Water Table Present? Yes _ Saturation Present? Yes _ (includes capillary fringe) Yes _	No X Depth (inches): No X Depth (inches): X No Depth (inches):		ydrology Present? Yes No X
Describe Recorded Data (stream gau	ge, monitoring weil, aerial photos, p	revious inspections), ir ava	ladie:
Remarks:			

Sampling Point: wehaD04-42

2-61 2-61		Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size: 30F1x 30F1)	% Cover	Species?		Number of Dominant Species	
1. Platanus occidentalis	15	7	FACW	That Are OBL, FACW, or FAC: ((A)
2. Liriodendron tolipitera	15	4	FACU	Total Number of Dominant	
3. Quereus falcata	15	Y	FACU		(B)
4. Ater rubrum	15	Y	FAC	Description of Description	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>671</u>	(A/B)
6					0.00
7				Prevalence Index worksheet:	
8.				Total % Cover of:Multiply by:	
		= Total Cov	/er	OBL species x 1 =	
50% of total cover: 30				FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30F+ 30F+)	_ 20/0 01	total cover		FAC species x 3 =	
1. LAUSTUM SIGENER	25	Y	FAC	FACU species x 4 =	
	ID	N	FAC	UPL species x 5 =	
2. Aralia spinosa	25	V	FAC	Column Totals: (A)	
3. Aler Norum	6.0		Thu		
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	
	60	= Total Cov	ver	Problematic Hydrophytic Vegetation ¹ (Explain)	
50% of total cover: 3D	20% of	total cover	: 12		,
Herb Stratum (Plot size: 30f4 x 30ft)				Undirectory of hudric coll and watland hudralogy mu	
1. Rubus acautus	40	Y	FAC	¹ Indicators of hydric soil and wetland hydrology mube present, unless disturbed or problematic.	ISt
2. Asplenium platyneuron	10	N	FACU	Definitions of Four Vegetation Strata:	
3. Arundinaria giantea		N	FACW	Demittoris of Pour Vegetation Strata.	
1/11				Tree - Woody plants, excluding vines, 3 in. (7.6 cm	
4	_			more in diameter at breast height (DBH), regardles	ss of
5				height.	
6	_			Sapling/Shrub - Woody plants, excluding vines, la	ess
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8				Herb - All herbaceous (non-woody) plants, regard	less
9				of size, and woody plants less than 3.28 ft tall.	
10					
11.				Woody vine – All woody vines greater than 3.28 ft height.	tin
				neight.	
12	55				
27		= Total Cov			
50% of total cover: <u>27.5</u>	20% of	total cover	<u> </u>		
Woody Vine Stratum (Plot size: 30ft x 30ft)	11.00		-00		
1. Smilax rotunditolia	40	<u>_y</u> _	FAC		
2. Lonilera japonila	40	1	FACH		
3. Gelsemium sempervirens	ID	N	FAC		
4.					
5.				Hydrophytic	
	9D	= Total Co	ver	Vegetation	
50% of total cover:5		total cover		Present? Yes X No	
		total cover			
Remarks: (If observed, list morphological adaptations below	w).				

SOIL

Sampling Point: wcho004-42

Profile Desc	ription: (Describe	to the depth				or confirm	n the absence o	f Indicator	s.)	
Depth	Matrix	%		ox Features	Type'	Loc ²	Texture		Remarks	
(inches)	Color (moist)		Color (moist)	%		LOC			Rendiks	
0-20	10912 12	100					fine SL .			
					-					
1										
					-					
								_	_	
						_				
	oncentration, D=Dep					ains.	² Location: F			
Hydric Soil I	ndicators: (Applic	able to all LI	RRs, unless othe	rwise note	ed.)		Indicators for	or Problem	natic Hydrid	: Soils ³ :
Histosol	(A1)		Polyvalue B					uck (A9) (LI		
	ipedon (A2)		Thin Dark S					uck (A10) (I		
Black Hi			Loamy Mucl			0)				MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley		F2)				oamy Soils	(LRR P, S, T)
	Layers (A5) Bodies (A6) (LRR P	T 10	Depleted Ma Redox Dark		(6)			A 153B)	Joanny Sons	(F20)
	cky Mineral (A7) (LRK P		Depleted Da					ent Materia	(TE2)	
	esence (A8) (LRR U		Redox Depr						Surface (TF	12)
	ck (A9) (LRR P, T)	'	Marl (F10) (Company and the second	-,			xplain in R		
	Below Dark Surface	e (A11)	Depleted Od		(MLRA 1	51)				
Thick Da	rk Surface (A12)		Iron-Mangar							etation and
	airie Redox (A16) (M					, U)			gy must be	
	ucky Mineral (S1) (L	RR O, S)	Delta Ochric					ss disturbed	f or problem	latic.
	leyed Matrix (S4)		Reduced Ve							
	edox (S5) Matrix (S6)		Piedmont Fl				49A) RA 149A, 153C, 1	1530)		
	face (S7) (LRR P, S	TU	LI Anomaious	Dirgin Luai	ity Sons (20) (ME	(A 143A, 1330,	1330)		
	ayer (if observed):						1		-	
Type:							1000			
Depth (ind	hes):		-				Hydric Soil P	resent?	Yes	No X
Remarks:			_				injune com			
Remarks.										

Environmental Field Surveys Wetland Photo Page



Upland data point wcho004_u2 facing east.



Upland data point wcho004_u2 facing south.

Photo Sheet 2 of 2

Project/Site: ACP City	County: Chesapeake Sampling Date: 12/14/15
Applicant/Owner: Dominion	State: VA Sampling Point: WCho DILE-W
	ction, Township, Range: <u>none</u>
Landform (hillslope, terrace, etc.):Loc	al relief (concave, convex, none): <u>NONE</u> Slope (%): <u>D-21</u> <u>64322</u> Long: <u>-76,34590</u> Datum: <u>W(589</u>
Are climatic / hydrologie conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly dist	
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 <u>No</u>
powerline easment	
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)
	(C1) Moss Trim Lines (B16) along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced In Drift Deposits (B3) Recent Iron Reduction in Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remain	in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	- 110
Surface Water Present? Yes No Depth (inches):	NA
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Yes No Depth (inches):	>20 >20 Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:
Remarks:	

Sampling Point: WchoOllew

- 01 - Di	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 Ft x 30 Ft)	% Cover Species? Status	Number of Deminent Species
1. none		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4		Description of Description
5		Percent of Dominant Species That Are OBL, FACW, or FAC: 661. (A/B)
6		
7		Prevalence Index worksheet:
8.		Total % Cover of: Multiply by:
	0 = Total Cover	OBL species x 1 =
50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ft x30ft)		FAC species x 3 =
		FACU species x 4 =
		UPL species x 5 =
2		Column Totals: (A) (B)
3		
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		X 2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.0 ¹
	D = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 3DFF x 30FF)		¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	30 Y FACW	be present, unless disturbed or problematic.
2. Rubus argutus	10 N FAL	Definitions of Four Vegetation Strata:
3. Dicharthelium acuminatum	30 Y FAL	
4. Andropogon glomeratus	5 N FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Saccharum giganteum	TO N FACW	more in diameter at breast height (DBH), regardless of height.
	5 N FAC	noight.
6. Pinus taeda	<u> </u>	Sapling/Shrub - Woody plants, excluding vines, less
7. Eupatorium capillifolium	20 Y FACU	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8. Juncus ettusus	15 N DBL	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.		
	125 = Total Cover	
50% of total cover: 1.2	.5 20% of total cover: 2.5	
Woody Vine Stratum (Plot size: 3014 × 3014)		
1. NONE		
2		
3	<u></u>	
4		
5		Hydrophytic
	= Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes V No
Remarks: (If observed, list morphological adaptations belo	w).	

SOIL

Sampling Point: wchollew

Profile Desc	ription: (Describe	to the dept	h needed to docu	ment the l	ndicator	or confirm	the absence	of Indicators.)
Depth	Matrix			x Features		1 2	-	
<u>(inches)</u> D= 8	LOYR2/1	100	Color (moist)		Type	Loc ²	Texture	Remarks
	IVIE II		1. 1041		-		SL	
8-20	101Rº11	98	104R4/6	L	0	PL	SL	
	oncentration, D=Dep					ains.		PL=Pore Lining, M=Matrix.
	Indicators: (Applic	able to all L						for Problematic Hydric Soils ³ :
- Histosol	(A1) bipedon (A2)		Polyvalue Be					Nuck (A9) (LRR O) Nuck (A10) (LRR S)
	stic (A3)		Loamy Muck					ed Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye			-,		ont Floodplain Soils (F19) (LRR P, S, T)
Stratified	Layers (A5)		Depleted Ma	trix (F3)			Anoma	lous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P,		X Redox Dark	No. of Concession, Name				RA 153B)
and the second se	cky Mineral (A7) (LF		Depleted Da					arent Material (TF2)
	esence (A8) (LRR U)	Redox Depre		3)			hallow Dark Surface (TF12)
the second se	ck (A9) (LRR P, T) Below Dark Surface	P (A11)	Marl (F10) (L Depleted Oc		MIRA 1	51)	Other ((Explain in Remarks)
the second se	rk Surface (A12)		Iron-Mangan				T) ³ Indic	ators of hydrophytic vegetation and
the second se	airie Redox (A16) (N	ILRA 150A)						land hydrology must be present,
	lucky Mineral (S1) (L	RR O, S)	Delta Ochric				unle	ess disturbed or problematic.
	leyed Matrix (S4)		Reduced Ver			the second s		
	edox (S5)		Piedmont Flo					
	Matrix (S6) face (S7) (LRR P, S	T 10	Anomalous E	sright Loan	ny Solis (I	-20) (MLRA	A 149A, 153C,	, 153D)
	ayer (If observed):							
Type:			-					
Depth (ind	ches):						Hydric Soll	Present? Yes No
Remarks:								
V								
			and the second second	2				

Environmental Field Surveys Wetland Photo Page



Wetland data point wcho011e_w facing southwest



Wetland data point wcho011e_w facing southeast

Photo Sheet 1 of 2

Project/Site: ACP	City/County: Chesapeake Sampling Date: 2/11/16
Applicant/Owner: Dominion	State: VA Sampling Point: WChpOlle_v
	Section, Township, Range: None
Landform (hillslope, terrace, etc.): <u>Flat</u>	Local relief (concave, convex, none): none Slope (%): 0-37
	36.76341 Long: -76.34697 Datum: W6584
Soil Map Unit Name: Tomotley - Deloss LO	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time	
Are Vegetation, Soil, or Hydrology signific	
Are Vegetation, Soil, or Hydrology natura	
방송에는 아이들을 만들었다. 방송 전에 걸 물질했다.	wing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Yes Yos No Yes Yos Yos No Yes Yes Yes Yes Yes Yes Yos Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye	
Wetland Hydrology Present? Yes X No	within a wetland f fes A NO
Remarks:	
Powerline ROW	
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that a	
Surface Water (A1)	
	s (B15) (LRR U)
	Ifide Odor (C1) Moss Trim Lines (B16)
	zospheres along Living Roots (C3)
	Reduced Iron (C4)
	Reduction in Tilled Soils (C6)
Algal Mat or Crust (B4) Thin Muck Su Iron Deposits (B5) Other (Explain	n in Remarks)
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 (in	
Water Table Present? Yes X No Depth (in	
Saturation Present? Yes X No Depth (in (includes capillary fringe)	nches): <u>JUTFA(</u> Wetland Hydrology Present? Yes <u>No</u> <u>No</u>
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Remarks:	1. 1. 1
portions of wetland i	nundated
Terrore en energies e	

Sampling Point:

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

Tree Stratum (Plot size: $30ft \times 30ft$) % Cover Spectrum 1. none	al Cover cover:	Number of Dominant Species (A) That Are OBL, FACW, or FAC: (A) Total Number of Dominant Species (B) Percent of Dominant Species (B) Percent of Dominant Species (A/B) Prevalence Index worksheet: (A/B) Total % Cover of: Multiply by: OBL species $x 1 =$ FACW species $x 2 =$ FAC species $x 3 =$ FACU species $x 4 =$ UPL species $x 5 =$ Column Totals: (A) Prevalence Index = $B/A =$ (B) Prevalence Index = $B/A =$ (B) Prevalence Index = $B/A =$ (B) Prevalence Index is $\leq 3.0^1$ $1 -$ Rapid Test for Hydrophytic Vegetation $A = 0$ $A = $
3	al Cover cover: / EA	Species Across All Strata:
5	al Cover U P EA A Cover A EA A	Prevelence Index worksheet: 67% (A/B) Prevalence Index worksheet: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = (B) Prevalence Index = B/A = (B) Prevalence Index = solv (B) Prevalence Index = b/A = (B) Prevalence Index = b/A = (B) Prevalence Index = b/A = (B) Prevalence Index is >50% 3 - Prevalence Index is >3.01 Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7.	al Cover cover: / PA /_ /	Total % Cover of:Multiply by:OBL species $x 1 =$ FACW species $x 2 =$ FAC species $x 3 =$ FACU species $x 4 =$ UPL species $x 5 =$ Column Totals:(A)Prevalence Index = B/A =Hydrophytic Vegetation Indicators:1 - Rapid Test for Hydrophytic Vegetation2 - Dominance Test is >50%3 - Prevalence Index is $\leq 3.0^1$ Problematic Hydrophytic Vegetation ¹ (Explain)Problematic Hydrophytic Vegetation ¹ (Explain)Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.Definitions of Four Vegetation Strata:Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8	al Cover cover: /EA	Total % Cover of:Multiply by:OBL species $x 1 =$ FACW species $x 2 =$ FAC species $x 3 =$ FACU species $x 4 =$ UPL species $x 5 =$ Column Totals:(A)Prevalence Index = B/A =Hydrophytic Vegetation Indicators:1 - Rapid Test for Hydrophytic Vegetation2 - Dominance Test is >50%3 - Prevalence Index is $\leq 3.0^1$ Problematic Hydrophytic Vegetation ¹ (Explain)Problematic Hydrophytic Vegetation ¹ (Explain)Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.Definitions of Four Vegetation Strata:Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
D = Tota 50% of total cover: 20% of total of <u>Sapling/Shrub Stratum</u> (Plot size: <u>30ft x 30ft</u>) <u>1. Rhv5 capallinum</u> <u>5</u> <u>y</u> <u>2. Liqui dambar styractiflua</u> <u>5</u> <u>y</u> <u>3</u> <u>4</u> <u>5</u> <u>6</u> <u>7</u> <u>8</u> <u>8</u> <u>9</u> <u>9</u> <u>9</u> <u>50% of total cover: 5 20% of total of y</u> <u>2. Rubus acquitus</u> <u>30 y</u> <u>3. Juncus effusus</u> <u>30 y</u> <u>4</u> <u>50% of total cover: 5 20% of total of y</u> <u>5. Soliduago gigantea</u> <u>30 y</u> <u>6. Ludus gia sp. 5 N</u> <u>8</u> <u>9</u>	Cover:	OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is <3.01
50% of total cover: 20% of total of Sapling/Shrub Stratum (Plot size: 30ft x 30ft) 5 1. Rhvs capallinum 5 2. Liqui dambar styratiflua 5 3.	Cover:	FACW species x 2 = FAC species x 3 = FAC species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 Problematic Hydrophytic Vegetation1 (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/Shrub Stratum (Plot size: <u>30ft x 30ft</u>) 1. <u>Rhv5 Lopallinum</u> 2. <u>Liquidambar styraliflua</u> 3. 4. 5. 6. 7. 8. 10 = Tota 50% of total cover: <u>5</u> 20% of total 6. 10 = Tota 50% of total cover: <u>5</u> 20% of total 10 + etc Stratum (Plot size: <u>30ft x 30ft</u>) 1. <u>Afundinaria gigantea</u> 2. <u>Rubus acquitus</u> 30 <u>Y</u> 2. <u>Rubus acquitus</u> 30 <u>Y</u> 3. <u>Juncus effusus</u> 30 <u>Y</u> 4. 5. <u>Soliduago gigantea</u> 20 <u>N</u> 6. <u>Ludusigia</u> 20 <u>N</u> 8. 9.	Al Cover cover: _ 2 	FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 Problematic Hydrophytic Vegetation1 (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
1. Rhvs copallinum 5 Y 2. Liquidambar styraliflua 5 Y 3	Al Cover cover: /FA	PL FACU species x 4 =
1. Rhvs copallinum 5 Y 2. Liquidambar styraliflua 5 Y 3	Al Cover cover: /FA	UPL species x 5 =
2. <u>Liquidambar ofyraliflua</u> <u>5</u> 3	al Cover cover: _ 2 	Column Totals: (A) (B) Prevalence Index = B/A = (B) Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is \$3.0' Problematic Hydrophytic Vegetation' (Explain) 'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. AC BL Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
3. 0 4	al Cover cover: _ 2 	Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is <3.01
4	al Cover cover: _ 2 	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is <3.01
5 6 7 8 8 1. Arundinaria gigantea 30 Y 2. Rubus argutus 30 Y 3. Juncus effusus 50 Y 4. Dichanthelium auminatum 1D M 5. Solidago gigantea 20 M 6. Ludwigia 50. 5 M 8 9	al Cover cover: /FA /FA /FA /FA /FA	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is <3.01
6	al Cover cover: /FA /FA /FA /FA /FA	I - Rapid Test for Hydrophytic Vegetation I - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0' Problematic Hydrophytic Vegetation' (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7	al Cover cover: _ 7 FH FH FH FH FH FH FH	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8	Al Cover cover: 2 FR FR FR FR FR FR FR	Image: Solution of the solutio
ID = Tota 50% of total cover: 5 20% of total cover: 5 1. Arundinaria gigantea 30 Y 2. Rubus acoutus 30 Y 2. Rubus acoutus 30 Y 5 N 5 N 30 Y 30 Y 30 Y 5 N 5 N 30 Y 30 Y 3		Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
50% of total cover: <u>5</u> 20% of total of <u>Herb Stratum</u> (Plot size: <u>30ft × 30ft</u>) <u>1. Arundinaria gigantea</u> <u>30</u> Y <u>2. Rubus argutus</u> <u>30</u> Y <u>3. Juncus argutus</u> <u>50</u> Y <u>4. Dichanthelium auminatum</u> <u>10</u> M <u>5. Solidugo gigantea</u> <u>20</u> M <u>6. Ludwigia sp.</u> <u>5</u> M <u>8.</u> <u>9.</u>		 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.
Herb Stratum (Plot size: 30++ x 30++) 1. Arundinaria gigantea 30 Y 2. Rubus argutus 30 Y 3. Juncus effusus 50 Y 4. Dichanthelium auminatum 1D N 5. Solidugo gigantea 20 N 6. Ludwigia sp. 5 N 7		ACL be present, unless disturbed or problematic. AC Definitions of Four Vegetation Strata: BL Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
1. <u>Arundinaria gigantea</u> <u>30</u> Y 2. <u>Rubus arguitus</u> <u>30</u> Y 3. <u>Juncus effusus</u> <u>50</u> Y 4. <u>Dichanthelium auminatum</u> <u>10</u> <u>N</u> 5. <u>Soliduad gigantea</u> <u>20</u> <u>N</u> 6. <u>Ludwigia</u> <u>50</u> Y 7	I FR	ACL be present, unless disturbed or problematic. AC Definitions of Four Vegetation Strata: BL Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
2. <u>Rubus aroutus</u> 30 3. <u>Juncus effusus</u> 50 4. <u>Dichanthelium auminatum</u> 1D <u>N</u> 5. <u>Soliduad gigantea</u> 20 <u>N</u> 6. <u>Ludwigia sp.</u> 5 <u>N</u> 7	I FR	AC Definitions of Four Vegetation Strata: BL Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
3. Juneus ettosus <u>50</u> 4. Dichanthelium acuminatum <u>1D</u> <u>N</u> 5. Solidugo gigantea <u>20</u> <u>N</u> 6. Ludwigia <u>50</u> 7 8	J FI	BL Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
3. Juneus ettosus <u>50</u> 4. Dichanthelium acuminatum <u>1D</u> <u>N</u> 5. Solidugo gigantea <u>20</u> <u>N</u> 6. Ludwigia <u>50</u> 7 8	J FI	ACW height.
4. Dichanthelium acuminatum 10 N 5. Soliduço gigantea 20 N 6. Ludwigia sp. 5 N 7	I FK	HC more in diameter at breast height (DBH), regardless of height.
5. Soliduad gigantea 20 N 6. Ludwillia Sp. 5 N 7		HCW height.
6. Ludwillie sp. 5 N 75		1 2 1 3
8		The set of the local state overlading vinor local
9		
		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11		Woody vine – All woody vines greater than 3.28 ft in height.
		Height
12	1.0	
50% of total cover: 72.520% of total		9
	cover:	
Woody Vine Stratum (Plot size:)	J EN	1011
1. Lonilera japonira 5	I FH	FLU
2		
3		
4		
5		Hydrophytic
5_ = Tota	al Cover	Vegetation
50% of total cover: 215 20% of total		Present? Yes No
Remarks: (If observed, list morphological adaptations below).		

SOIL

2 هدSampling Point:

		to the net	th needed				or connr	m the absence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color ((moist)	x Feature %	s Type ¹	Loc ²	Texture	Remarks
0-4	2.5/2.5/1	100						MULKYL	
4-20	TOYR 2/1	90	IDYR	5/4	D	C	PL	CL'	
1	10 11 11	10	1011	10					
	-								
									A local of the local sector of the
	incentration, D=Dep						ains.		PL=Pore Lining, M=Matrix.
	ndicators: (Applic	able to all	and the second se						for Problematic Hydric Soils ³ :
Histosol Histic En	(A1) ipedon (A2)					ce (S8) (L) (LRR S,			/luck (A9) (LRR O) /luck (A10) (LRR S)
Black His						(F1) (LRR			ed Vertic (F18) (outside MLRA 150A,B
	n Sulfide (A4)			amy Gleye					ont Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)	and a	and a second sec	pleted Ma					alous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P		and the second se	dox Dark					RA 153B) arent Material (TF2)
	cky Mineral (A7) (LI esence (A8) (LRR U			pleted Da					hallow Dark Surface (TF12)
	ck (A9) (LRR P, T)	1		arl (F10) (L		0)			(Explain in Remarks)
	Below Dark Surfac	e (A11)				(MLRA 1	51)		
	rk Surface (A12)					es (F12) (ators of hydrophytic vegetation and
	airie Redox (A16) (I		the second se			LRR P, T	, U)		land hydrology must be present,
	ucky Mineral (S1) (I leyed Matrix (S4)	LRR 0, 5)		Ita Ochric		(MLRA 151)	0A 150F		ess disturbed or problematic.
			present of						
Sandy R	edox (S5)			eamont Fig		0015 (F19)	(MLKA 1	43M)	
	edox (S5) Matrix (S6)			edmont Flo iomalous E				RA 149A, 153C	, 153D)
Stripped Dark Sur	Matrix (S6) face (S7) (LRR P, S								, 153D)
Stripped Dark Sur Restrictive L	Matrix (S6)								, 153D)
Stripped Dark Sur Restrictive L	Matrix (S6) face (S7) (LRR P, S ayer (if observed)							RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed)							RA 149A, 153C	, 153D) Present? Yes <u>X</u> No
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed)			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur estrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur estrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur testrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur estrictive L Type: Depth (inc emarks:	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur testrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc Remarks:	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur Restrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur estrictive L Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	
Stripped Dark Sur estrictive L Type: Depth (inc emarks:	Matrix (S6) face (S7) (LRR P, S ayer (if observed) thes):			iomalous E	Bright Loa	my Soils (I	F20) (ML	RA 149A, 153C	

Environmental Field Surveys Wetland Photo Page



Wetland data point wcho011e_w2 facing east.



Wetland data point wcho011e_w2 facing north.

Photo Sheet 1 of 3

Project/Site: Atlantic Coast Pipeline	City/County: City of Chesapeake			Sampling Date: 2/18/2016			
Applicant/Owner: DOMINION					pling Point: wc		
Investigator(s): Team C		Section, Townsh	hip, Range: <u>No</u>	PLSS in this	s area		
Landform (hillslope, terrace, etc.): drainage		Local relief (con	cave, convex,	none): <u>conca</u>	ive	Slope	(%): <u>1</u>
Subregion (LRR or MLRA): T	Lat: <u>36.761</u>	130352	Long:	76.35570385		Datur	m: WGS 1984
Soil Map Unit Name: Tomotley-Urban land-Nimmo comple							
Are climatic / hydrologic conditions on the site typical for th Are Vegetation, Soil, or Hydrology Are Vegetation, Soil, or Hydrology SUMMARY OF FINDINGS – Attach site map	significantly naturally pro	v disturbed? oblematic?	Are "Normal (If needed, e	Circumstance Explain any ar	es" presen nswers in F	nt? Yes <u></u>	No tures, etc.
Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N Wetland Hydrology Present? Yes N	No	within a	ampled Area Wetland?	Yes	~	No	
Remarks: Within powerline ROW. Extended by Team C. Areas were	e former ditc	thes that are high	ly vegetated a	nd now meet	qualificatio	ons as a PEM	wetland.

HYDROLOGY

Wetland Hydrology Indicato	ors:			Secondary Indicators (minimum of two required)
Primary Indicators (minimum	<u>of one is required;</u>	check all that apply)		Surface Soil Cracks (B6)
 Surface Water (A1) 	_		Sparsely Vegetated Concave Surface (B8)	
 High Water Table (A2) 	_	_ Marl Deposits (B15) (LRR U)		 Drainage Patterns (B10)
 Saturation (A3) 	_	_ Hydrogen Sulfide Odor (C1)		Moss Trim Lines (B16)
Water Marks (B1)	<u>~</u>	Oxidized Rhizospheres along Living I	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 Aer	ial Imagery (B7)			 FAC-Neutral Test (D5)
Water-Stained Leaves (B	9)			Sphagnum moss (D8) (LRR T, U)
Field Observations:				
Surface Water Present?		Depth (inches): 2		
Water Table Present?	Yes 🖌 No	Depth (inches): 0		
Saturation Present? (includes capillary fringe)		Depth (inches):	Wetland I	Hydrology Present? Yes 🖌 No
Describe Recorded Data (stre	am gauge, monito	ring well, aerial photos, previous inspec	ctions), if ava	ailable:
Remarks:				
1				

Sampling Point: wcho011e_w3

Trop Stratum (Plot cizo: 30)		Dominant I		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4				Percent of Dominant Species
5	. <u> </u>			That Are OBL, FACW, or FAC:(A/B)
6	. <u> </u>			Prevalence Index worksheet:
7				
8				$\frac{\text{Total \% Cover of:}}{\text{OBL species}} \frac{75}{x 1 = $
0	0	= Total Cove	r O	FACW species $\begin{array}{c} 0 \\ \hline 0 \\ \hline x 2 = \end{array}$
50% of total cover:0	20% of	total cover:	0	40 120
Sapling/Shrub Stratum (Plot size: 15)				FAC species $\begin{array}{c} 10 \\ \hline x 3 = \end{array}$ $\begin{array}{c} 120 \\ \hline x 4 = \end{array}$
1				UPL species $0 \times 5 = 0$
2				115 105
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =1.69
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				\checkmark 3 - Prevalence Index is ≤3.0 ¹
		= Total Cove		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. Panicum virgatum	40	Yes	FAC	be present, unless disturbed or problematic.
2. Carex lupulina	40	Yes	OBL	Definitions of Four Vegetation Strata:
3. Juncus effusus	25	Yes	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Ludwigia alternifolia	10	No	OBL	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				
	115	= Total Cove	r	
50% of total cover: 57.5	5 20% of	total cover:	23	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cove	r	Vegetation
50% of total cover:0				Present? Yes No No
Remarks: (If observed, list morphological adaptations belo	w).			

Donth	Matrix		Podo	v Eastura	•				
Depth (inches)	Color (moist)	%	Color (moist)	<u>x Feature</u> %	s Type ¹	Loc ²	Texture	Remarks	
0-6	10YR 2/2	97	10YR 3/6	3	<u>с (</u>	PL	SL		
6-18	10YR 4/1	97	10YR 4/6	3	С	PL	SC		
21	Concentration, D=Dep	,	,			ains.		L=Pore Lining, M=Ma r Problematic Hydrid	
Histoso			Polyvalue Be			RR S. T. U		ck (A9) (LRR O)	
	Epipedon (A2)		Thin Dark Su		• • •		·	ck (A10) (LRR S)	
	listic (A3)		Loamy Muck					Vertic (F18) (outside	MLRA 150A.E
	en Sulfide (A4)		Loamy Gleye	ed Matrix ((F2)			t Floodplain Soils (F19	
	ed Layers (A5)		 Depleted Ma 		. ,			us Bright Loamy Soils	
	Bodies (A6) (LRR P	T, U)	Redox Dark	. ,	-6)		(MLRA		· · ·
	ucky Mineral (A7) (LF				,		•	ent Material (TF2)	
	Presence (A8) (LRR U		Redox Depre		()			llow Dark Surface (TF	-12)
	luck (A9) (LRR P, T)	,	Marl (F10) (L	```	- /			plain in Remarks)	,
	ed Below Dark Surface	e (A11)	Depleted Oc		(MLRA 1	51)			
	Dark Surface (A12)		Iron-Mangan				T) ³ Indicate	ors of hydrophytic veg	etation and
	Prairie Redox (A16) (N	II RA 150			· / ·		•	nd hydrology must be	
	Mucky Mineral (S1) (L					, 0)		s disturbed or problem	
	Gleyed Matrix (S4)		Reduced Ver	. , .		04 1508)	unesa	s disturbed of problem	
	Redox (S5)		Piedmont Flo	. , ,	•		٥٨)		
	d Matrix (S6)						A 149A, 153C, 1	52D)	
	urface (S7) (LRR P, S	T 11		Signi Luai			A 149A, 133C, 1	550)	
	Layer (if observed):								
	,								
Type:									
Depth (ir	nches):						Hydric Soil Pr	resent? Yes	No
Remarks:									



Photo 1 Wetland data point WCHO011e_w3 facing west



Photo 2 Wetland data point WCHO011e_w3 facing east

Project/Site: ACP	City/County: Chesapeake Sampling Date: 12/14/15
Applicant/Owner: <u>Pominion</u>	State: VA Sampling Point: WChoDYIF-W
Investigator(s): L. Roper, R. Turnbull	Section, Township, Range: NDNC
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): <u>CONCAVE</u> Slope (%): <u>0-2'1.</u> 76398 Long: <u>-76.34903</u> Datum: <u>W6584</u>
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	y disturbed? Are "Normal Circumstances" present? Yes K. No
Are Vegetation, Soil, or Hydrology naturally pr	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No Remarks: No No	is the Sampled Area
PFD Classification: Hardw HYDROLOGY Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Aquatic Fauna (B1	
High Water Table (A2) Marl Deposits (B1)	
X Saturation (A3) Hydrogen Sulfide (
Water Marks (B1) Oxidized Rhizosph	neres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduc	ced Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduc	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) 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:	NA
Surface Water Present? Yes No X Depth (inches	
Water Table Present? Yes <u>No</u> Depth (inches	
Saturation Present? Yes X No Depth (inches (includes capillary fringe)	a): Wetland Hydrology Present? Yes _X No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
incinaina.	

Sampling Point: wchoDILf.w

1001 0001	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30f+x 30f+)		Species	Status	Number of Dominant Species 7
1. Pinus tacda	20	Y	FAC	That Are OBL, FACW, or FAC: (A)
2. Platanus occidentalis	10	Y	FACW	
3. Liquidambar styraliflua	10	Y	FAC	Total Number of Dominant 7 (B)
			110	Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6		-		Beerry I and a strand and a state
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	40	= Total Co	ver	OBL species x 1 =
50% of total cover: 20		total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 F1 × 30 F1)	_ 20 70 01	total cover		FAC species x 3 =
	10	N	FAC	FACU species x 4 =
1. Liquidamber styraciflua			FAC	UPL species x 5 =
2. Morella cerifera	10	1	FAC	
3		_		Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	20:	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 10	20% of	total cover	. 4	
Herb Stratum (Plot size: 30f+ x 30 f+)	-			The discount of hereign and send continued hereigness encode
1. Arundinaria gigantea	15	Y	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Juncus ethosus	6	V	FACW	
	0		THUM	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.
			and the second se	
8				Herb All herbaceous (non-woody) plants, regardless
9			and the second se	of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12	_	_		
	20 :	= Total Cov	/er	
50% of total cover: 10		total cover		
Woody Vine Stratum (Plot size: 30 ft x 30 ft)	_ 2070 01	total cover		
1. none				
2		-		
3.				
4.				
5.			_	Hudens hulls
	0.	= Total Cov		Hydrophytic Vegetation
	and the second s			Present? Yes X No
50% of total cover:	and the second second	total cover		
Remarks: (If observed, list morphological adaptations below	N).			

SOIL

Sampling Point: wchollfus

Profile Description: (Describe to the depth	needed to docu	ment the Ir	dicator	or confirm	the absence of Ind	licators.)
Depth Matrix		x Features				
(inches) Color (moist) % D-ZD Z.5Y Z.1/1 100	Color (moist)	%	Type	Loc ²	Texture	Remarks
0-20 2.542.11 100					mucky loar	n
	and the second					
	*					
¹ Type: C=Concentration, D=Depletion, RM=F				ains.		ore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L						oblematic Hydric Solls ³ :
Histosol (A1)	Polyvalue Be					(respectively) and an and a second
Histic Epipedon (A2) Black Histic (A3)	Thin Dark Su Loamy Muck				2 cm Muck (/	tic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleye			0,		podplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Ma	and a second	-,			Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark		5)		(MLRA 15:	3B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Da				the second s	Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depre	per an a state of the state of the)		the second se	Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (L				Other (Explai	in 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)					 * 	ydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric				unless dis	turbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Ve			the second s		
Sandy Redox (S5)	Piedmont Flo					
Stripped Matrix (S6)	Anomalous B	Bright Loam	y Soils (F	20) (MLRA	A 149A, 153C, 153D))
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):					1	
Type:						
Depth (inches):					Hydric Soll Prese	nt? Yes X No
Remarks:	-					

Environmental Field Surveys Wetland Photo Page



Wetland data point wcho011f_w facing south



Wetland data point wcho011f_w facing east

Project/Site: ACP	City/County: Chesapeake Sampling Date: 2/11/16 State: VA Sampling Point: WCho OIIF. w2
Applicant/Owner: Dominion	State: VIT Sampling Point-WCHO DITTE V
Investigator(s): L. Roper, M.Smith	
Landform (hillslope, terrace, etc.): +lat	Local relief (concave, convex, none): none Slope (%): 0-3
	0.76278 Long: -76.34967 Datum: W6584
Soil Map Unit Name: Tomotley - Deloss com	plex NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of y	
이는 것 같은 것 같	y disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally p	
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	- Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes <u>V</u> No
Wetland Hydrology Present? Yes X No	
NCWAM: Hardwood flat	
	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Aquatic Fauna (B) High Water Table (A2) Marl Deposits (B1)	
High Water Table (A2) Marl Deposits (B1	
	heres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
	action in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	e (C7) Geomorphic Position (D2)
Iron Deposits (B5)	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
X Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No Depth (inches	NA
Water Table Present? Yes X No Depth (inchesting) Saturation Present? Yes X No Depth (inchesting)	
Saturation Present? Yes X No Depth (incher (includes capillary fringe)	wetland Hydrology Present? Tes No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:
-	
Remarks:	

Sampling Point: wehall f-w2

Asolub Comman Indicator Comman Indicator Comman Indicator Accur Sector Colspan="2">Colspan="2" Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" <th co<="" th=""><th></th><th>Absoluto</th><th>Dominant</th><th>Indicator</th><th>Dominance Test worksheet:</th></th>	<th></th> <th>Absoluto</th> <th>Dominant</th> <th>Indicator</th> <th>Dominance Test worksheet:</th>		Absoluto	Dominant	Indicator	Dominance Test worksheet:
1. Liguide-moles Styrac.iffue. Styrac.iffu	Tree Stratum (Plot size: 30ft x 30ft)					
1 Providence in the second secon						
3. Nysse sylvefice 15 N FPC Species Across Al Strats: 5 (B) 4.	1. LIGUIDAMDAI STYLACITION	_				
3. Nysse sylvefice 15 N FPC Species Across Al Strats: 5 (B) 4.	2. Acer rubrum		1		Total Number of Dominant	
4	3 Nyssa sulvatica	15	N	FAC		
5. Image: Constraint of the set of the se						
5	4				Percent of Dominant Species	
7. Providence index worksheet: 8. 90 = Total Cover 50% of total cover 90 50% of total cover 90 7. 10 2. 10 2. 10 3. 10 4. 10 5. 10 6. 10 7. 10 8. 10 9. 10 9. 10 10 N 11 10 12 10 12 10 13 200 (10 at cover) 14 10 15 10 16 10 17 10 18 10 19 Problematic Hydrophytic Vegetation Indicators: 11 11 11 Arcunic order 20 10 21 10 22 10 23 10 11 10 12 20 20 </td <td>5</td> <td></td> <td></td> <td></td> <td>That Are OBL, FACW, or FAC: (A/B)</td>	5				That Are OBL, FACW, or FAC: (A/B)	
7. Providence index worksheet: 8. 90 = Total Cover 50% of total cover 90 50% of total cover 90 7. 10 2. 10 2. 10 3. 10 4. 10 5. 10 6. 10 7. 10 8. 10 9. 10 9. 10 10 N 11 10 12 10 12 10 13 200 (10 at cover) 14 10 15 10 16 10 17 10 18 10 19 Problematic Hydrophytic Vegetation Indicators: 11 11 11 Arcunic order 20 10 21 10 22 10 23 10 11 10 12 20 20 </td <td>6.</td> <td></td> <td></td> <td></td> <td></td>	6.					
8.					Prevalence Index worksheet:	
8.					Total % Cover of: Multiply by:	
Solva of total cover: 4 S Sabina/Shub Stratum (Plot size: 30 F × 30 ft) 1 Ligui darm bar istraturi (Flua 2.0 Y FHC 2 Aux control 2.0 Y FHC 3 Quercus nigra 10 N FHC 4 Mag notifa Y (rainians 10 N FHC 5 0 0 N FHC FHC 6 10 N FHC FHC FHC 6 10 N FHC FHC 6 10 N FHC FHC 7 3 Courne Totals: (A) (B) 7 1 N FHC FHC 8 0 10 N FHC 10 10 Total cover: 30 20% of total cover: 14 Indicators of hydrophytic Vegetation (Explain) 1 1 Arrandinantic a is an team 10 Indicators of hydrophytic Vegetation (Explain) 1 1 Arrandinantic a is an team 1 Indicators of hydrophyticol Vegetation (Explain)	8	0.0			OPI species x1=	
SapinorShrub Stratum (Potosize: 30 fF x 30 ff) 1. Liquidacm bar Styractiflue 2.0 Y FAC species x 4 =		10	= Total Cov	ver		
Sapinoschub Statum (Plot size: $5d+f \times 3d+f$) 2.0 Y FHC 1 Liquidacmbar $f+rac_i flua 2.0 Y FHC 3 Quercus nigra 10 N FHC Prevalues x = _ 4 Magnalia virainane 10 N FHC Prevalues x = _ Column totals: (A) (B) 5 0 0 N FHC Prevalues index B/A Eduation indicators: (A) (B) 6 10 N FHC Prevalues index B/A (B) 7 10 N FHC Prevalues index B/A (B) 6 10 N FHC Prevalues index B/A (B) 7 10 10 N FHC Prevalues index B/A (B) 10 $	50% of total cover: 45	20% of	total cover	18	FACW species x 2 =	
1. Liquidambar $styratiflva_2$ 20 Y FAC process	Soft 30ft 30ft				FAC species x 3 =	
1 20 Y FAC 3 $\overline{Qvercus}$ $nigra 10 N FAC 4 Magnalia 10 N FAC Column Tatls: (A) (B) 5 10 N FAC Prevalence Index = BA = (B) 6 10 N FAC Prevalence Index = BA = (B) 7 10 N FAC Prevalence Index = BA = (B) 6 1 Ragin Tatls to thydrophylic Vegetation (B) Prevalence Index = BA = (C) 8 (a) = Total Cover 1 1 Ragin Tatls to thydrophylic Vegetation (Explain) 1 Atuact cover 30 20% of total cover 10 Problematic Hydrophylic Vegetation (Explain) 1 Atuact cover 30 20% of total cover 10 Problematic Bydrophylic Vegetation (Explain) 1 Atuact cover 30 20% of total cover 10 Problematic Hydrophylic Vegetation (Explain) 1 Atuact cover 30 20 FACU Definitions of Four Vegetation Strata: 1 Atuact cover$		20	V	-100	FACU species x 4 =	
2 Moder Cubs nigra 10 N FHC Column Totals:(A)(B) 4 Magnolia Virginiana 10 N FHC Column Totals:(A)(B) 5	1. Liquidambar Styracitlua	60	- 1			
3. Quercus nigra 10 N FIAC Column Totals: (A) (B) 4. Magnobia Virginiaria 10 N FIAC Prevalence Index = B/A =	2 Aur nibrum	20	Y	FAC		
Aggnobia Prevalence Index = B/A =			N	FAC	Column Totals: (A) (B)	
5	S. GOOLOGS HIGHA	10	-			
6	4. Magnolia Virginiana	10	-14	FHCW	Prevalence Index = B/A =	
6	5. 0 0	_			Hydrophytic Vegetation Indicators:	
7.						
8.						
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	7				2 - Dominance Test is >50%	
50% of total cover: 10 Herb Stratum (Plot size: 30 + x 30 + total 1. Arrund inaria gig an tea 2. 0 3.	8	_			3 - Prevalence Index is ≤3.0 ¹	
50% of total cover: 10 Herb Stratum (Plot size: 30 + x 30 + total 1. Arrund inaria gig an tea 2. 0 3.		60	= Total Cov	ver	Problematic Hydrophytic Vegetation ¹ (Explain)	
Herb Stratum (Plot size: 30ft x 30 ft) 1. <u>Arrund inaria gigantea</u> 80 Y FHUD Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 2	50% of total cover: 30					
1. Arundinaria_gigantea		20% 0	total cover	-101	and a second	
2.	Herb Stratum (Plot size: DP++ X DU +T)				¹ Indicators of hydric soil and wetland hydrology must	
2.	1. Arundinaria aigantea	60	Y	FACM	be present, unless disturbed or problematic.	
3.					Definitions of Four Vegetation Strata:	
4.						
5.	3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or	
5.	4		-		more in diameter at breast height (DBH), regardless of	
6.	5				height.	
7.						
8.	6				Sapling/Shrub – Woody plants, excluding vines, less	
9.	7				than 3 in. DBH and greater than 3.26 it (1 iii) tall.	
9.	8			-	Horb - All berbaceous (non-woody) plants regardless	
10.					of size and woody plants less than 3.28 ft tall.	
11.						
12	10				Woody vine - All woody vines greater than 3.28 ft in	
$ \begin{array}{r} 80 = \text{Total Cover} \\ 50\% \text{ of total cover: } 40 20\% \text{ of total cover: } 16 \\ \hline 20\% \text{ of total cover: } 16 \\ 20\% \text{ of total cover: } 16 \\ 20\% \text{ of total cover: } 16 \\ 20\% \text{ of total cover: } 20\% \text{ of total cover: } 16 \\ 20\% \text{ of total cover: } 20\% \text{ of total cover: } 40 \\ 20\% \text{ of total cover: } 20\% \text{ of total cover: } 40 \\ 4. \\ 50\% \text{ of total cover: } 10 \\ 20\% \text{ of total cover: } 40 \\ Yes \chi No Yes \chi No $	11				height.	
$ \begin{array}{r} 80 = \text{Total Cover} \\ 50\% \text{ of total cover: } 40 20\% \text{ of total cover: } 16 \\ \hline 20\% \text{ of total cover: } 16 \\ 20\% \text{ of total cover: } 16 \\ 20\% \text{ of total cover: } 16 \\ 20\% \text{ of total cover: } 20\% \text{ of total cover: } 16 \\ 20\% \text{ of total cover: } 20\% \text{ of total cover: } 40 \\ 20\% \text{ of total cover: } 20\% \text{ of total cover: } 40 \\ 4. \\ 50\% \text{ of total cover: } 10 \\ 20\% \text{ of total cover: } 40 \\ Yes \chi No Yes \chi No $	12					
$50\% \text{ of total cover: } \underline{40} 20\% \text{ of total cover: } \underline{16}$ $\underline{Woody Vine Stratum (Plot size: 30ft x 30ft)}$ 1. <u>Smilax hispida</u> 2D <u>Y</u> <u>FAC</u> 2	12.	90	Tabal Ca			
$\frac{\text{Woody Vine Stratum (Plot size: 30f4 x 30f4)}{1. \underline{\text{Smilax hispida}}} \underbrace{2D} \underline{Y} \underline{\text{FAC}}$ $2. \underline{\qquad}$ $3. \underline{\qquad}$ $4. \underline{\qquad}$ $5. \underline{\qquad}$ $50\% \text{ of total cover: } \underline{10} \underbrace{20\% \text{ of total cover: } \underline{4}} Hydrophytic Vegetation Present? Yes \underline{X} No \underline{\qquad}$	110					
$1. \underline{Smilax hispida} 20 \underline{Y} \underline{FAC}$ $2. \underline{\qquad}$ $3. \underline{\qquad}$ $4. \underline{\qquad}$ $5. \underline{\qquad}$ $50\% \text{ of total cover: } 10 \underline{20\% \text{ of total cover: } 4} Hydrophytic Vegetation Present? Yes \underline{X} No \underline{\qquad}$	50% of total cover: 90	20% of	f total cover	16		
$1. \underline{Smilax hispida} 20 \underline{Y} \underline{FAC}$ $2. \underline{\qquad}$ $3. \underline{\qquad}$ $4. \underline{\qquad}$ $5. \underline{\qquad}$ $50\% \text{ of total cover: } 10 \underline{20\% \text{ of total cover: } 4} Hydrophytic Vegetation Present? Yes \underline{X} No \underline{\qquad}$	Woody Vine Stratum (Plot size: 30F1 x 30F1)					
2 3 4 5 5 50% of total cover: 10 20% of total cover: $\underline{4}$ Hydrophytic Vegetation Present? Yes X No		20	V	EAC.		
3				The		
4	2					
20 = Total Cover Vegetation 50% of total cover: 10 20% of total cover: 4 Vegetation Yes X No	3.	-				
20 = Total Cover Vegetation 50% of total cover: 10 20% of total cover: 4 Vegetation Yes X No						
20 = Total Cover Vegetation 50% of total cover: 10 20% of total cover: 4 Vegetation Yes X No					Alexandra and a second s	
50% of total cover: 10 20% of total cover: 4 Present? Yes No	5					
50% of total cover: 20% of total cover:		20	= Total Cor	ver		
	50% of total cover: 10	20% 0	f total cover	4	Present? Yes No	
Remarks: (If observed, list morphological adaptations below).						
	Remarks: (If observed, list morphological adaptations beid	w).				

SOIL

Sampling Point: wchoDII F-w2

Profile Description: (Describe to the depth	needed to docum	nent the ind	licator	or confirm	m the absence	of indicators.)
Depth <u>Matrix</u> (inches) Color (moist) %	Redo: Color (moist)	K Features	Type ¹	Loc ²	Texture	Remarks
$\frac{\text{(inches)}}{D-D} \frac{\text{Color (moist)}}{2.5 \text{ y}} \frac{\%}{2/1} 10^{\text{D}}$	Color (moist)		Type		mucky L	
	10YR 5/8		0	PI	SCL	
10-20 104R4/1 45	10/K -18		5	16	366	
						(
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS	=Masked S	and Gra	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L	RRs, unless other	wise noted	.)	Sec.		for Problematic Hydric Soils ³ :
Histosol (A1)	Polyvalue Be					Auck (A9) (LRR O)
Histic Epipedon (A2)	Thin Dark Su					Muck (A10) (LRR S) ed Vertic (F18) (outside MLRA 150A,B)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Gleye			.0)		ont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Mat		'			alous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark S	and the second				RA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dar		-7)			arent Material (TF2)
Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T)	Marl (F10) (L					Shallow Dark Surface (TF12) (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Oct		LRA 1	51)	L outer	(Explain in residune)
Thick Dark Surface (A12)	Iron-Mangan	ese Masses	(F12) (I	LRR O, P		cators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)		And a second second second second		, U)		land hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric Reduced Ver			04 1508		ess disturbed or problematic.
Sandy Redox (S5)	Piedmont Flo					
Stripped Matrix (S6)					RA 149A, 153C	, 153D)
Dark Surface (S7) (LRR P, S, T, U)		-			-	
Restrictive Layer (if observed):						
Туре:	-				Hydric Soil	Present? Yes X No
Depth (inches):	-				Hydric Soli	Present? Tes No
Remarks:						

Environmental Field Surveys Wetland Photo Page



Wetland data point wcho011f_w2 facing northeast.



Wetland data point wcho011f_w2 facing southwest.

Photo Sheet 2 of 3

Project/Site: Atlantic Coast Pipeline	City/County	City of Chesapeake	Sampling Date: 2/18/2016
Applicant/Owner: DOMINION		State: VA	Sampling Point: wcho011f_w3
Investigator(s):	Section, To	wnship, Range: <u>No PLSS in this a</u>	area
Landform (hillslope, terrace, etc.): flat	Local relief	(concave, convex, none): <u>none</u>	Slope (%): <u>1</u>
Subregion (LRR or MLRA): T Lat: _	36.76137361	Long: <u>-76.35307613</u>	Datum: WGS 1984
Soil Map Unit Name: Tomotley-Deloss complex, 0 to 1 percent	slopes	NWI class	ification: None
Are climatic / hydrologic conditions on the site typical for this tim	e of year? Yes	No (If no, explain in	n Remarks.)
Are Vegetation, Soil, or Hydrology signi	ficantly disturbed?	Are "Normal Circumstances	s" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology nature	ally problematic?	(If needed, explain any ans	wers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	owing samplin	g point locations, transed	ts, important features, etc.
Hydrophytic Vegetation Present? Yes <u>V</u> No	Is th	e Sampled Area	
Hydric Soil Present? Yes 🖌 No		in a Wetland? Yes	✓ No
Wetland Hydrology Present? Yes <u>Yes</u> No			

Remarks:

Extended by Team C.

HYDROLOGY

Wetland Hydrology Indicato	ors:			Secondary Indicators (minimum of two required)
Primary Indicators (minimum	of one is require	ed; 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 Aer	ial Imagery (B7)			 FAC-Neutral Test (D5)
Water-Stained Leaves (B	,9)			Sphagnum moss (D8) (LRR T, U)
Field Observations:				
Surface Water Present?		o Depth (inches): 2		
Water Table Present?	Yes 🖌 N	o Depth (inches): 0		
Saturation Present? (includes capillary fringe)		o Depth (inches):	Wetland	Hydrology Present? Yes 🖌 No
Describe Recorded Data (stre	am gauge, mon	itoring well, aerial photos, previous inspec	tions), if av	ailable:
Remarks:				

Sampling Point: wcho011f_w3

20	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: <u>30</u>)		Species?	Status	Number of Dominant Species	
1. Acer rubrum	35	Yes	FAC	That Are OBL, FACW, or FAC: 5 ((A)
2. Liquidambar styraciflua	30	Yes	FAC	Total Number of Dominant	
3. Pinus taeda	25	Yes	FAC		(B)
4				·	、
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 ((A/B)
6					(A/D)
7				Prevalence Index worksheet:	
				Total % Cover of: Multiply by:	
8	90			OBL species x 1 =	
50% of total accurate 45		= Total Cov	10	FACW species 60 x 2 = 120	
50% of total cover:	20% of	total cover:		FAC species 105 x 3 = 315	
Sapling/Shrub Stratum (Plot size: 15)	10		540	FACU species $0 \times 4 = 0$	
1. Acer rubrum	10	Yes	FAC	0	
2				165 /35	
3				Column Totals: (A)	(B)
4				Prevalence Index = $B/A = 2.63$	
5					
6				Hydrophytic Vegetation Indicators:	
				1 - Rapid Test for Hydrophytic Vegetation	
7				∠ 2 - Dominance Test is >50%	
8	10			\checkmark 3 - Prevalence Index is ≤3.0 ¹	
_		= Total Cov	0	Problematic Hydrophytic Vegetation ¹ (Explain))
50% of total cover: 5	20% of	total cover:	2		
Herb Stratum (Plot size: 5)				¹ Indicators of hydric soil and wetland hydrology mu	ust
_{1.} Arundinaria gigantea	60	Yes	FACW	be present, unless disturbed or problematic.	
2. Smilax rotundifolia	5	No	FAC	Definitions of Four Vegetation Strata:	
3				_	
				Tree – Woody plants, excluding vines, 3 in. (7.6 cr	
4				more in diameter at breast height (DBH), regardles height.	SS OF
5				lioigitti	
6				Sapling/Shrub – Woody plants, excluding vines, le	ess
7			. <u> </u>	than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8				Herb – All herbaceous (non-woody) plants, regard	less
9				of size, and woody plants less than 3.28 ft tall.	
10				Woody vine All woody vince greater than 2.29 ft	t in
11				Woody vine – All woody vines greater than 3.28 ft height.	
12.					
12.	65	= Total Cov			
50% of total cover: ^{32.5}					
	20% 01	total cover:			
Woody Vine Stratum (Plot size: 30)					
1					
2					
3					
4					
5				Hudronby tio	
·		= Total Cov	or	Hydrophytic Vegetation	
50% of total cover:0				Present? Yes <u>No</u> No	
		total cover:			
Remarks: (If observed, list morphological adaptations belo	w).				

Depth	Matrix		Redo	x Feature	s					
(inches)	Color (moist)	%	Color (moist)				Texture	Remarks		
0-6	10YR 2/1	98	10YR 3/4	2	С	PL	SCL			
6-18	10YR 4/1	98	10YR 4/6	2	С	PL/M	SL			
				·	·					
 ¹ Type: C=C	Concentration, D=Depl	 etion, RM=	Reduced Matrix, M	- G=Masked	d Sand Gra	ains.	² Location: F	PL=Pore Linin	g, M=Matrix	
	Indicators: (Applica							or Problemat		
Black ⊢ Hydrog Stratifie 5 cm M Muck P 1 cm M V Deplete Thick D Coast F Sandy Sandy Sandy Sandy Dark Strippe Dark St	Epipedon (A2) distic (A3) en Sulfide (A4) ed Layers (A5) c Bodies (A6) (LRR P, lucky Mineral (A7) (LR Presence (A8) (LRR U) luck (A9) (LRR P, T) ed Below Dark Surface Dark Surface (A12) Prairie Redox (A16) (N Mucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR P, S	R P, T, U))) ILRA 1504 RR O, S) , T, U)	 Redox Depres Marl (F10) (L Depleted Oci Iron-Mangan Umbric Surfa Delta Ochric Reduced Ven Piedmont Flo 	rface (S9 y Mineral ed Matrix (trix (F3) Surface (F k Surface essions (F RR U) nric (F11) ese Mass ce (F13) (F17) (MI tic (F18) bodplain S) (LRR S, (F1) (LRR (F2) =6) € (F7) 8) (MLRA 15 (LRR P, T _RA 151) (MLRA 15 Goils (F19)	T, U) O) LRR O, P, ⁻ , U) 0A, 150B) (MLRA 149	 2 cm Mu Reduced Piedmor Anomald (MLRA Red Pare Very Sha Other (E 	ack (A10) (LR d Vertic (F18) ht Floodplain s bus Bright Loa A 153B) ent Material (allow Dark Su explain in Rem tors of hydrop nd hydrology as disturbed o	R S) (outside M Soils (F19) (amy Soils (F TF2) urface (TF12 narks) ohytic vegeta must be pre	LRR P, S, T) 20)) ition and esent,
Restrictive Type:	Layer (if observed):									
Depth (ir	nches):						Hydric Soil P	resent? Y	es 🖌	No
Remarks:										



Photo 1 Wetland data point WCHO011f_w3 facing south



Photo 2 Wetland data point WCHO011f_w3 facing north

Project/Site: ACP	City/County: Chesapeake Sampling Date: 12/14/15
Applicant/Owner: Dominion	State: VA Sampling Point: Wha Dil -a
Investigator(s): L. Roper, R. Turnbull	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): <u>NONE</u> Slope (%): <u>0-21</u>
	36,76438 Long: -76,34593 Datum: W (589
	mplex, D-Z'/ Slopes NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time	
Are Vegetation, Soil, or Hydrology signifi	cantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology natura	ally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks:	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	
Surface Water (A1) Aquatic Faur	
	s (B15) (LRR U) Drainage Patterns (B10)
	zospheres along Living Roots (C3) Dry-Season Water Table (C2)
	Reduced Iron (C4) Crayfish Burrows (C8)
	Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Si	urface (C7) Geomorphic Position (D2)
	in in Remarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No X Depth (i	nches): NA
Water Table Present? Yes No X Depth (i Water Table Present? Yes No X Depth (i	
Saturation Present? Yes No Depth (i	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aeria	
Remarks:	
A CONTRACT OF	

Sampling Point: WCholl-u

304 304	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft x 30ft) 1. Pinus tacda	<u>% Cover</u> <u>Species?</u> <u>Status</u> <u>25</u> <u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Liguidambar styraciflua 3.		Total Number of Dominant Species Across All Strata: (B)
4 5		Percent of Dominant Species 831/. (A/B)
6		Developed and a second schools
7		Prevalence Index worksheet:
8		Total % Cover of: Multiply by:
	35 = Total Cover	OBL species x 1 =
50% of total cover: 17	5 20% of total cover: 7	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ff x.30ff)		FAC species x 3 =
· Tuninerus victuriana	5 Y FACN	FACU species x 4 =
2. Liguidambar Styraciflux	ID Y FAC	UPL species x 5 =
2. Ligordambar Styracition		Column Totals: (A) (B)
3. Pinus talda	5 Y FAC	
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		× 2 - Dominance Test is >50%
8.		
	2D = Total Cover	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:		- Problematic Hydrophytic Vegetation ¹ (Explain)
	20% of total cover:	
Herb Stratum (Plot size: 30 Ft x 30 Ft)	O- N ENCLO	¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea		be present, unless disturbed or problematic.
2. Robus argutus	10 N FAC	Definitions of Four Vegetation Strata:
3. Eupatorium capillifolium	5 N FACO	Tree Meadurements evoluting vince 2 in (7.6 cm) or
4. Dichanthelium auminatum	20 Y FAC	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		Woody vine - All woody vines greater than 3.28 ft in
11		height.
12		
	55 = Total Cover	
50% of total anyon: 27	5 20% of total cover:	
Woody Vine Stratum (Plot size: 30 ft × 30 ft)		
1. NORE		
2		
3		
4		
5		Hydrophytic
	0 = Total Cover	N
50% of total cover:	Contraction of the second s	Present? Yes X No
	and the second sec	
Remarks: (If observed, list morphological adaptations belo	wy.	
		and the state of the

Sampling Point: WLhoOll_u

and the second second second	ription: (Describe i	to the depth r				or confirm	the absence of In	dicators.)	
Depth (inches)	Color (moist)	%	Redo Color (moist)	x Feature %	s Type'	Loc ²	Texture	Remar	ks
D-10	LOVP 2/1	100		70	TAPE	100	SL	Nemai	
10-20	1010312	100					61	P	
10-20	IUTK-12	100					36		
	2								
	oncentration, D=Depl	ation DM-De	dueed Metrix M	C-Mackar	Gand Ca		² l contion: DI -	Pore Lining, M=N	latrix
	ndicators: (Applica					anis.		roblematic Hyd	
Histosol		abio to un ait	Polyvalue Be			RRS.T.U		Contraction of the second second	
the second second second second	ipedon (A2)		Thin Dark Su		and the second			(A10) (LRR S)	
Black Hi			Loamy Muck						de MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye	and the second second	F2)				19) (LRR P, S, T)
	Layers (A5)		Depleted Ma				the second	Bright Loamy So	ils (F20)
	Bodies (A6) (LRR P, cky Mineral (A7) (LR		Redox Dark Depleted Da				(MLRA 1: Red Parent	Material (TF2)	
	esence (A8) (LRR U)		Redox Depre					w Dark Surface (TF12)
	ck (A9) (LRR P, T)		Marl (F10) (L		-,		and the second se	ain in Remarks)	
	Below Dark Surface	e (A11)	Depleted Oc		(MLRA 1	51)			
the second se	rk Surface (A12)		Iron-Mangan		Contraction of the second			of hydrophytic v	
the second	airie Redox (A16) (M	Construction of the second	Umbric Surfa			, U)		hydrology must b	
and the second state of the second	ucky Mineral (S1) (L leyed Matrix (S4)	.RR 0, 5) -	Delta Ochric Reduced Ver			0A 150B)	uniess d	isturbed or proble	imatic.
	edox (S5)		Piedmont Flo				(A)		
a second in the second s	Matrix (S6)					1	4 149A, 153C, 153	D)	
	face (S7) (LRR P, S			_					
	ayer (If observed):								
Type:			-						Y
Depth (inc	hes):	-	-				Hydric Soll Pres	sent? Yes	No
Remarks:									

Environmental Field Surveys Wetland Photo Page



Upland data point wcho011_u facing northwest



Upland data point wcho011_u facing northeast

Project/Site: Atlantic Coast Pipeline	City/County:	City of Chesapeake	Sampling Date: 2/18/2016
Applicant/Owner: DOMINION		State: VA	Sampling Point: wcho011_u3
Investigator(s): Team C	Section, Towr	nship, Range: <u>No PLSS in this a</u>	rea
Landform (hillslope, terrace, etc.): flat		oncave, convex, none): <u>none</u>	_
Subregion (LRR or MLRA): T	Lat: <u>36.76107734</u>	Long: <u>-76.35414695</u>	Datum: WGS 1984
Soil Map Unit Name: Tomotley-Deloss complex, 0 to 1 per	cent slopes	NWI classi	fication: None
Are climatic / hydrologic conditions on the site typical for th	is time of year? Yes	No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances	" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling	point locations, transec	ts, important features, etc.

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

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):	
Saturation Present? Yes <u>No</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	

Sampling Point: <u>wcho011_u3</u>

Trop Stratum (Plot oizo: 30)	Absolute			Dominance Test worksheet:	
	<u>% Cover</u> 30	<u>Species?</u> Yes		Number of Dominant Species	
1. Liquidambar styraciflua	25	Yes	FAC FACU	That Are OBL, FACW, or FAC:5 (A)	
2. Quercus rubra				Total Number of Dominant	
3. Pinus taeda	20	Yes	FAC	Species Across All Strata: 8 (B)	
4. Acer rubrum	15	No	FAC	Percent of Dominant Species	
5			<u> </u>	That Are OBL, FACW, or FAC: 62.5 (A/E	3)
6				Prevalence Index worksheet:	
7					
8				Total % Cover of: Multiply by:	
	90	= Total Cov		OBL species $0 \times 1 = 0$	
50% of total cover:45	20% of	total cover	18	FACW species $\begin{array}{c} 0 \\ 115 \\ x 3 \end{array}$ x 2 = $\begin{array}{c} 0 \\ 345 \\ 345 \end{array}$	
Sapling/Shrub Stratum (Plot size: 15)					
1. Acer rubrum	20	Yes	FAC	FACU Species X 4 =	
2. Liquidambar styraciflua	20	Yes	FAC	$\begin{array}{c} \text{UPL species} \\ 165 \end{array} \times 5 = \underline{545} \\ 545 \end{array}$	
_{З.} Morella cerifera	10	Yes	FAC	Column Totals: (A) (B))
4				Prevalence Index = B/A =3.3	
5				Hydrophytic Vegetation Indicators:	
6					
7				1 - Rapid Test for Hydrophytic Vegetation	
8				✓ 2 - Dominance Test is >50%	
··	50	= Total Cov	or	$_$ 3 - Prevalence Index is ≤3.0 ¹	
50% of total cover: 25		total cover:	40	Problematic Hydrophytic Vegetation ¹ (Explain)	
E E	2078.01				
Herb Stratum (Plot size:5) 1. Lonicera japonica	15	Yes	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. Allium cernuum	10	Yes	FACU		
				Definitions of Four Vegetation Strata:	
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) c	
4				more in diameter at breast height (DBH), regardless o	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	s
9				of size, and woody plants less than 3.28 ft tall.	
10				Woody vine – All woody vines greater than 3.28 ft in	
11				height.	
12					
	25	= Total Cov	er		
50% of total cover:12.5	20% of	total cover	5		
Woody Vine Stratum (Plot size: 30)					
1					
2					
3					
4					
5.					
5		= Total Cov		Hydrophytic Vegetation	
50% of total cover:0				Present? Yes <u>V</u> No	
		total cover:			
Remarks: (If observed, list morphological adaptations below	w).				

SOIL

Profile Desc	ription: (Describe t	o the depth	needed to docun	nent the ir	dicator of	or confirm	the absence	of indicators.)	
Depth	Matrix		Redo	x Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-3	10YR 3/3	100					LS		
3-18	10YR 3/2	100					SL		
				<u> </u>		<u> </u>			
¹ Type: C=Co	oncentration, D=Depl	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ains.	² Location:	PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Applica	ble to all LR	Rs, unless other	wise note	d.)			for Problematic Hydric Soils	3
Histosol	(A1)		Polyvalue Be	low Surfac	e (S8) (L	RR S, T, U)	1 cm I	Muck (A9) (LRR O)	
	pipedon (A2)		Thin Dark Su	rface (S9)	(LRR S,	T, U)		Muck (A10) (LRR S)	
Black Hi	stic (A3)		Loamy Mucky	/ Mineral (F1) (LRR	0)	Reduc	ced Vertic (F18) (outside MLRA	A 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (F	-2)		Piedm	ont Floodplain Soils (F19) (LR	R P, S, T)
Stratified	d Layers (A5)		Depleted Mat	rix (F3)			Anom	alous Bright Loamy Soils (F20)	
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark S	Surface (F	6)		(ML	RA 153B)	
5 cm Mu	icky Mineral (A7) (LR	R P, T, U)	Depleted Dar	k Surface	(F7)		Red P	arent Material (TF2)	
Muck Pr	esence (A8) (LRR U))	Redox Depre	ssions (F8	5)		Very S	Shallow Dark Surface (TF12)	
1 cm Mu	ick (A9) (LRR P, T)		Marl (F10) (L	RR U)			Other	(Explain in Remarks)	
Depleted	d Below Dark Surface	e (A11)	Depleted Och	nric (F11) (MLRA 15	51)			
Thick Da	ark Surface (A12)		Iron-Mangan	ese Masse	s (F12) (LRR O, P, T	³ Indio	cators of hydrophytic vegetatior	n and
Coast P	rairie Redox (A16) (M	ILRA 150A)	Umbric Surfa	ce (F13) (I	RR P, T	, U)	we	tland hydrology must be preser	nt,
Sandy M	lucky Mineral (S1) (L	RR O, S)	Delta Ochric	(F17) (ML I	RA 151)		unl	ess disturbed or problematic.	
	Bleyed Matrix (S4)	. ,	Reduced Ver	tic (F18) (MLRA 15	0A, 150B)		·	
-	edox (S5)		Piedmont Flo				A)		
	Matrix (S6)		Anomalous B	•	. ,	•		C. 153D)	
	rface (S7) (LRR P, S	, T, U)		5) (-7 (- ,	,,	
	_ayer (if observed):								
Туре:									
Depth (ind	ches):						Hydric Soil	Present? Yes No	<u> </u>
Remarks:									



Photo 1 Upland data point WCHO011_u3 facing south



Photo 2 Upland data point WCHO011_u3 facing north

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Ches	apeake	Sampling Date: 2/11/16
Applicant/Owner: Dominion			Sampling Point: wcholl - 2
Investigator(s): L. Roper, M. Smith	Section, Township, Ra		
Landform (hillslope, terrace, etc.):			
Subregion (LRR or MLRA): LRR T Lat: 36			
Soil Map Unit Name: Tomotley - Deloss comple			
Soli Map Unit Name: 18 Mp 11 EY DE1035 COMPTE			Callon:
Are climatic / hydrologic conditions on the site typical for this time of y			
Are Vegetation, Soil, or Hydrology significant			present? Yes X No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If no	eeded, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point l	ocations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes No _X	In the Complex	Area	
Hydric Soil Present? Yes No X	- Is the Sampled within a Wetla		No 🖌
Wetland Hydrology Present? Yes No	- Within a Wetta	nur res	
Remarks:			
Edge of powerline ROW; k			
HYDROLOGY		Casadani India	ators (minimum of two required)
Wetland Hydrology Indicators:	A	-	I Cracks (B6)
Primary Indicators (minimum of one is required; check all that apply Surface Water (A1) Aquatic Fauna (B			egetated Concave Surface (B8)
High Water Table (A2)			atterns (B10)
Saturation (A3)		Moss Trim	and and an and an
	heres along Living Root	the second se	Water Table (C2)
Sediment Deposits (B2) Presence of Redu	uced Iron (C4)	Crayfish Bu	rrows (C8)
	uction in Tilled Soils (C6)		/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			c Position (D2)
Iron Deposits (B5) U Other (Explain in Inundation Visible on Aerial Imagery (B7)	Remarks)	Shallow Aq	
Water-Stained Leaves (B9)			moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No X Depth (inche	s): NA		
Water Table Present? Yes No X Depth (inche	s): <u>>20</u>		
Saturation Present? Yes No X_ Depth (inche	s): 120 W	etland Hydrology Prese	nt? Yes No X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspection	s), if available:	
		Consider and	
Remarks:			

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

Sampling Point: wchoDII-u2

· · · · · ·	Absoluto	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 F+ x 3 0 F+)		Species?		
1. Juniperus Virginiana	30	Y	FACU	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2. ALER RUBRUM	20	Y	FAL	
	20		FACU	Total Number of Dominant
	20		PALU	Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 25/1 (A/B)
6				
7				Prevalence Index worksheet:
			-	Total % Cover of: Multiply by:
8	70	= Total Co		OBL species x 1 =O
75	10			FACW species 10 x2= 20
50% of total cover: 35	_ 20% of	total cover	17	FAC species 40 x3 = 120
Sapling/Shrub Stratum (Plot size: 30ff x 30ff)				FACU species 140 x4= 560
1. Phus copallinum	5	Y	UPL	
2	-			UPL species $5 \times 5 = 25$
3.			_	Column Totals: 195 (A) 725 (B)
				4 70
4				Prevalence Index = $B/A = 3.72$
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.	1 million			3 - Prevalence Index is ≤3.0 ¹
	5	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 2.5	20% of	total cover		
Herb Stratum (Plot size: 30FF x 30FF)	_ 20 % 0	total cover		and the second se
	20	Y	CIAC	¹ Indicators of hydric soil and wetland hydrology must
1. Viola sororia	20		FAC	be present, unless disturbed or problematic.
2. Achillea millefolium	5	N	FACU	Definitions of Four Vegetation Strata:
3. Lolium perene	30	Y	FACU	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Arundinaria aigantea	10	N	FACW	more in diameter at breast height (DBH), regardless of
5. Festuca rubra	30	Y	FACU	height.
6. Allium canadense	5	N	FACU	
			11100	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.
10	-			
12	100	= Total Co		
6.n				
	20% of	total cover	_ 20	
Woody Vine Stratum (Plot size: 30f4 x 30f4)				
1. Lonilera juponila	20	Y	FACU	
2.				
3.		-		
		-	-	
4				
5	12	-		Hydrophytic
in the second		= Total Co		Vegetation Present? Yes No
50% of total cover:	_ 20% of	total cover	- 4_	Presentr res No
Remarks: (If observed, list morphological adaptations below	w).			
mowed lawn edges				
inter a company	•			
0				

Sampling Point: whobli-w2

	ription: (Describe	to the depth				onfirm	the absence of in	ndicators.)
Depth (inches)	Color (moist)	%	Color (moist)	× Feature %		DC ²	Texture	Remarks
0-20	104R 2/1	100					L	
0.00	1-11-11	100						
						-		
	-							
						-		
	oncentration, D=De							Pore Lining, M=Matrix.
	Indicators: (Appli	cable to all L					-	Problematic Hydric Soils ³ :
Histosol					ce (S8) (LRR :			(A9) (LRR O)
here	bipedon (A2)				(LRR S, T, U))		: (A10) (LRR S) /ertic (F18) (outside MLRA 150A, B
Black Hi	n Sulfide (A4)		Loamy Gleye		(F1) (LRR O)			Floodplain Soils (F19) (LRR P, S, T
	Layers (A5)		Depleted Ma		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)
and the second s	esence (A8) (LRR		Redox Depre				Very Shall	ow Dark Surface (TF12)
1 cm Mu	ick (A9) (LRR P, T)		Marl (F10) (L				Other (Exp	lain in Remarks)
	Below Dark Surfa	ce (A11)			(MLRA 151)			
	ark Surface (A12)				es (F12) (LRR	O, P, 1		s of hydrophytic vegetation and
	airie Redox (A16) (and the second se			(LRR P, T, U)			hydrology must be present,
	lucky Mineral (S1) (sleyed Matrix (S4)	LRR 0, 5)	Delta Ochric		MLRA 151)	15081	uniess	disturbed or problematic.
	edox (S5)				oils (F19) (ML			
	Matrix (S6)						A 149A, 153C, 15:	3D)
	face (S7) (LRR P,	S, T, U)		ingin Loui				
	ayer (if observed)							
Type:								
Depth (ind	ches):		5				Hydric Soil Pre	sent? Yes No X
Remarks:			_			-	1 4 - A 1 -	



Upland data point wcho011_u2 facing east.



Upland data point wcho011_u2 facing north.

Photo Sheet 3 of 3

Project/Site: ACP	
	city/county: Chesapeake Sampling Date: 10/16/16
Applicant/Owner: Dominioh	State: VA Sampling Point: Wcho 008e-1
Investigator(s): K-Markham, S. Jo	NOTO Section, Township, Range: N/A
0 111 10	
Landform (hillslope, terrace, etc.): POWORING F	
Subregion (LRR or MLRA): LRRT	Long building.
Soil Map Unit Name: TO MOTLEY - Urban -1	land - Nimmo Complex NWI classification: PEM
Are climatic / hydrologic conditions on the site typical f	for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site r	map showing sampling point locations, transects, important features, etc.
	/
Hydrophytic Vegetation Present? Yes	No Is the Sampled Area
Hydric Soil Present? Yes	No within a Wetland? Yes V No
Wetland Hydrology Present? Yes X	residential sum unelings
	U
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check	
	quatic Fauna (B13) Sparsely Vegetated Concave Surface (B8)
	arl Deposits (B15) (LRR U) Drainage Patterns (B10) ydrogen Sulfide Odor (C1) Moss Trim Lines (B16)
	xidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2)
	resence of Reduced Iron (C4) Crayfish Burrows (C8)
	ecent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Th	nin Muck Surface (C7) Geomorphic Position (D2)
Iron Deposits (B5) Oti	ther (Explain in Remarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	K FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	NIA
Surface Water Present? Yes No	_ Depth (inches):
Water Table Present? Yes No	_ Depth (inches):
Saturation Present? Yes <u>Ves</u> No <u>(includes capillary fringe</u>)	_ Depth (inches): Wetland Hydrology Present? Yes No
	well, aerial photos, previous inspections), if available:
Barradar	
Remarks:	

Sampling Point: WchoOD8e-W

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

DAVIDIES	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 20×30)FF)	% Cover Species? Status	Number of Dominant Species (A)
2		Total Number of Dominant (B)
4 5		Percent of Dominant Species 100 % (A/B)
6.		
7		Prevalence Index worksheet:
8.		Total % Cover of: Multiply by:
u	0 = Total Cover	OBL species x 1 =
50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 20130Ff)		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: -0 KOUT)		FACU species x 4 =
1. none	the second se	UPL species x 5 =
2		Column Totals: (A) (B)
3		
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		X2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.0 ¹
and the second sec	0 = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 20×30)		¹ Indicators of hydric soil and wetland hydrology must
1. Phragmites australis	75 Y FACW	be present, unless disturbed or problematic.
2 Bochmeria cyclindrica	5 N PACW	Definitions of Four Vegetation Strata:
3. Apocynum cannabinum	5 N FACU	A second s
		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Unidentied herb.		more in diameter at breast height (DBH), regardless of height.
6		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
B		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.
	010 = Total Cover	
50% of total cover: 40	20% of total cover: 10	1
Woody Vine Stratum (Plot size:)		
1. NDAR		
2		
3		
4		Read Lands
5		Hydrophytic
	= Total Cover	Vegetation Present? Yes No
50% of total cover:	20% of total cover:	Present? Yes K No
Remarks: (If observed, list morphological adaptations be		
Remarks. (Il observed, list morphological adaptations be		
	1	
-		

C	0	1	ι.
9	Q	I	-

Sampling Point: Wcho 008 e-w

epth Matrix	Red	ox Features					
nches) Color (moist) %	Color (moist)	% Typ	e Loc ²	Texture	-	Remarks	
-4 10YR2/1				GL	SIT	1-Loa	n
4=7 2-6×5/2 60	12.544/1	40 D	M	20	4		
-11 IOVE 4/1 80	10 YR 2/1		M.	SO			
-10 2.514/1 100	10 113 11			55	CILIN	san	d
20 - 20 110 100							4.0
	-				-		
			_				
				2			
ype: C=Concentration, D=Depletion, Ri ydric Soil Indicators: (Applicable to a	M=Reduced Matrix, N	IS=Masked Sand	Grains.	the second se	and the second se	ning, M=Matrix natic Hydric S	
		elow Surface (St	URRSTI				
Histosol (A1) Histic Epipedon (A2)	the second se	Surface (S9) (LRF			uck (A10) (1	a second design of the second s	
Black Histic (A3)		ky Mineral (F1) (8) (outside N	LRA 150A,B
Hydrogen Sulfide (A4)		ed Matrix (F2)		the second se	Contraction of the second	n Soils (F19)	
_ Stratified Layers (A5)	Z Depleted M				A.C. 1. 10	oamy Soils (F	20)
Organic Bodies (A6) (LRR P, T, U)		Surface (F6)			A 153B) rent Materia	1/752)	
5 cm Mucky Mineral (A7) (LRR P, T, Muck Presence (A8) (LRR U)		ark Surface (F7) ressions (F8)				Surface (TF1:	2)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (and the second se			Explain in R		-,
Depleted Below Dark Surface (A11)	Depleted O	chric (F11) (MLR					
_ Thick Dark Surface (A12)		nese Masses (F1				cphytic veget	
_ Coast Prairie Redox (A16) (MLRA 15		face (F13) (LRR			and the second	gy must be pr f or problemat	
Sandy Mucky Mineral (S1) (LRR O, S Sandy Gleyed Matrix (S4)		c (F17) (MLRA 1 ertic (F18) (MLRA	Contract Contract States of	une	ss distuibet	i or problemat	16.
Sandy Redox (S5)	the second se	and the second					
		loodplain Solis (F	-19) (MLRA 14)	9A)			
_ Stripped Matrix (S6)		Bright Leamy So	19) (MLRA 14) ils (F20) (MLR/		153D)		
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)					153D)		
Stripped Matrix (S6)					153D)		
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (if observed): Type:				A 149A, 153C,		X	
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (If observed): Type: Depth (inches):						Yes_X	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (if observed): Type:				A 149A, 153C,		Yes_X_	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (If observed): Type: Depth (inches):				A 149A, 153C,		Yes X	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (If observed): Type: Depth (inches):				A 149A, 153C,		Yes_X	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (If observed): Type: Depth (inches):				A 149A, 153C,		Yes_X	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) astrictive Layer (If observed): Type: Depth (inches): emarks:				A 149A, 153C, Hydric Soll		Yes X	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) astrictive Layer (If observed): Type: Depth (inches): emarks:				A 149A, 153C,		Yes_X	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) astrictive Layer (If observed): Type: Depth (inches): emarks:				A 149A, 153C, Hydric Soll		Yes	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) astrictive Layer (If observed): Type: Depth (inches): emarks:				A 149A, 153C, Hydric Soll		Yes	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Strictive Layer (If observed): Type: Depth (inches): Emarks:				A 149A, 153C, Hydric Soll		Yes X	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Strictive Layer (If observed): Type: Depth (inches): Emarks:				A 149A, 153C, Hydric Soll		Yes	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Strictive Layer (If observed): Type: Depth (inches): Emarks:				A 149A, 153C, Hydric Soll		Yes	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Strictive Layer (If observed): Type: Depth (inches): Emarks:				A 149A, 153C, Hydric Soll		Yes	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) astrictive Layer (If observed): Type: Depth (inches): emarks:				A 149A, 153C, Hydric Soll		Yes	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) astrictive Layer (If observed): Type: Depth (inches): emarks:				A 149A, 153C, Hydric Soll		Yes	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) astrictive Layer (If observed): Type: Depth (inches): emarks:				A 149A, 153C, Hydric Soll		Yes	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) astrictive Layer (If observed): Type: Depth (inches): emarks:				A 149A, 153C, Hydric Soll		Yes	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) astrictive Layer (If observed): Type: Depth (inches): emarks:				A 149A, 153C, Hydric Soll		Yes	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) astrictive Layer (If observed): Type: Depth (inches): emarks:				A 149A, 153C, Hydric Soll		Yes	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) astrictive Layer (If observed): Type: Depth (inches): emarks:				A 149A, 153C, Hydric Soll		Yes	No
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) astrictive Layer (If observed): Type: Depth (inches): emarks:				A 149A, 153C, Hydric Soll		Yes	No



Wetland data point wcho008e_w facing northeast.



Wetland data point wcho008e_w facing northwest.

WETLAND DETERMINATION	DATA FORM -	- Atlantic and Gul	f Coastal P	lain Region
Project/Site: A CP	City/Cour	ity: Chesapea	KP.	_ Sampling Date: 10/16/15
	City/Cour		AIN	Sampling Point wcho 008.
Applicant/Owner: DOMINION		the second s	4.4	_ Sampling Point:
Investigator(s): K-Markhum, J. IOSOFA		Township, Range:		r a
Landform (hillslope, terrace, etc.): PUW UNINE EUS ET	nen Local reli	ef (concave, convex, no	one): NON4	Slope (%) 0-1
Subregion (LRR or MLRA): LRRT Lat	: 36.7659	07 Long: _7	6.3349	Datum: WGSP
	and - Nir	now complex	NWI classif	
Are climatic / hydrologic conditions on the site typical for this ti		/		
Are Vegetation, Soil, or Hydrology sig				present? Yes <u>V</u> No
Are Vegetation, Soil, or Hydrology and				ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sh				
	lowing sample	ing point location	s, nansect	s, important reatures, etc.
Hydrophytic Vegetation Present? Yes No	/ 15	the Sampled Area		X
Hydric Soil Present? Yes No	X	thin a Wetland?	Yes	No
Wetland Hydrology Present? Yes No Remarks:	X			
Powerline edsement, r	esiden	tial sur	rouna	IT US.
HYDROLOGY				
Wetland Hydrology Indicators:		S	econdary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	it apply)		_ Surface Soi	Cracks (B6)
Surface Water (A1) Aquatic Fa	iuna (B13)	_	_ Sparsely Ve	egetated Concave Surface (B8)
High Water Table (A2) Marl Depo	sits (B15) (LRR U)	_	_ Drainage Pa	atterns (B10)
Saturation (A3) Hydrogen	Sulfide Odor (C1)		_ Moss Trim I	lines (B16)
		Living Roots (C3)	_ Dry-Season	Water Table (C2)
	of Reduced Iron (C		_ Crayfish Bu	
	n Reduction in Tille	ed Soils (C6)		/isible on Aerial Imagery (C9)
	Surface (C7)			Position (D2)
Iron Deposits (B5) Other (Exp Inundation Visible on Aerial Imagery (B7)	lain in Remarks)		_ Shallow Aqu	
Water-Stained Leaves (B9)			_ FAC-Neutra	moss (D8) (LRR T, U)
Field Observations:			_ Sphagnum	moss (D8) (LKK 1, D)
Surface Water Present? Yes No X Depth	(inches): N/	+		
	(inches): >2(A DESCRIPTION OF A DESC		
	(inches): 2		irology Prese	nt? Yes No 🗡
Describe Recorded Data (stream gauge, monitoring well, aer	ial photos, previou	s inspections), if availa	ble:	200 C
Remarks:				

1

Sampling Point: wcho 008-4

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

2042-6	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 X 30 F4</u>) 1. NONR	% Cover Species? Status	Number of Dominant Species O (A)
2		Total Number of Dominant (B)
4		Percent of Dominant Species
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		OBL species x1 =
	= Total Cover	FACW species x1 = FACW species x2 =
	20% of total cover:	FAC species $(5 \times 3 = 45)$
Sapling/Shrub Stratum (Plot size: 20x301+)		FACU species x 4 =
		UPL species $85 \times 5 = 425$
2		Column Totals: (00) (A) (470) (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
0	() = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% oftotal cover	20% of total cover:	Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 30 X 30)		to an an an an an an an at the dark second
1. Zoysia sp.	75 Y UPL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Digitaria sp.	10 N FAC/UPL	
3. Potentilla canadensis	IN N UPL	
4 Unidentified herb	6 N UNE	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Unidentified nerg		more in diameter at breast height (DBH), regardless of height.
6		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8	States in contra	Herb - All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10		Woody vine – All woody vines greater than 3.28 ft in height.
12.		
	100 = Total Cover 20	-
50% of total cover:	20% of total cover: 20	
Woody Vine Stratum (Plot size: 30x 30F1-)		
1. NORE		
2		
2		
5		
4		
5	()	Hydrophytic Vegetation
Service Se	() = Total Cover	Present? Yes No
	20% of total cover:	
Remarks: (If observed, list morphological adaptations be	ow).	mide there was conservatively
Prevalence Index not met even assumed to be FAC ro	ther then FACK or	upl.

Sampling Point: wcho 008-u

Depth <u>Matrix</u> (inches) Color (moist) %	Redo	x Features	_			
	Color (moist)		Type	Loc ²	Texture	Remarks
0-12 104R212 100			-	A 1	SL	
12-18 IDYR312 80	10VR 8/10	20	C	M	SC	
8-20 IOVR 4/2 100					CS	
			_			
Type: C=Concentration, D=Depletion, RM Hydrlc Soil Indicators: (Applicable to al Histosol (A1) Histic Epipedon (A2)	I=Reduced Matrix, MS I LRRs, unless other Polyvalue Be Thin Dark Su	wise noted low Surface	l.) (S8) (L	RR S, T, U	Indicators for P1 cm Muck (Pore Lining, M=Matrix, roblematic Hydric Soils ^a ; A9) (LRR O) A10) (LRR S)
Black Histic (A3)	Loamy Muck			0)		rtic (F18) (outside MLRA 150A, B
Hydrogen Sulfide (A4)	Loamy Gleye		2)			codplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20)
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)	Depleted Mai Redox Dark)		(MLRA 15	
5 cm Mucky Mineral (A7) (LRR P, T, U						Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depre					v Dark Surface (TF12) In in Remarks)
1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11)	Marl (F10) (L Depleted Oct		ILRA 1	51)	Other (Expla	in in Remarks)
Thick Dark Surface (A12)	Iron-Mangan					of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150	Contraction of the second s			, U)		ydrology must be present, sturbed or problematic.
Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4)	Delta Ochric Reduced Ver			0A. 150B)	uniess di	sturbed of problematic.
Sandy Redox (S5)	Piedmont Flo	odplain Soil	ls (F19)	(MLRA 14		
Stripped Matrix (S6)	Anomalous E	Bright Loamy	Soils (F20) (MLR.	A 149A, 153C, 153I	(כ
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed):						
Type:						12
Depth (inches):					Hydric Soll Pres	ent? Yes No
Remarks:						
					4	
					8	
					1	
					4	
					1	
					*	
					*	
					*	



Upland data point wcho008_u facing west.



Upland data point wcho008_u facing east.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region city/County: Chesapeake _ Sampling Date: 10/110/15 ACP Project/Site: Sampling Point: Wcho 005e-W Applicant/Owner: Section, Township, Range: NIP Investigator(s): Landform (hillslope, terrace, etc.): POWOY Slope (%) Lat: 36.76632 LRR Long: -710, 32910 Subregion (LRR or MLRA): Datum Soil Map Unit Name: TOMOTLEY - DELOSS - Urban () to 1%. land cumpl NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes_ (If no, explain in Remarks.) No Are Vegetation _____, Soil _____, or Hydrology ______ significantly disturbed? Are "Normal Circumstances" present? Yes/ Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area Hydric Soil Present? Yes No Yes No_ within a Wetland? Wetland Hydrology Present? Yes No Remarks: HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) ____ Surface Soil Cracks (B6) ____ Sparsely Vegetated Concave Surface (B8) Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) ____ Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) ____ Thin Muck Surface (C7) Algal Mat or Crust (B4) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) 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: 1 Surface Water Present? Depth (inches): Water Table Present? Depth (inches): Yes No Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? (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: wcho005e-W

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Absolute Dominant Indicator	Dominance Test worksheet:
% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
	Total Number of Dominant (B)
	Percent of Dominant Species (00) (A/B) That Are OBL, FACW, or FAC:
	Prevalence Index worksheet:
= Total Cover	A CONTRACT OF A
20% of total cover:	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 ≤3.0 ¹
O = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
	Problematic Hydrophytic Vegetation (Explain)
	1
40 Y OBL	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) of
	more in diameter at breast height (DBH), regardless of height.
the second secon	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
and an other statements and statements and statements	and the second se
	Her Daleous (non-woody) plants, regulates
A meeter	of size, and users, there is a size of the
5 N FACW	Woody vine - All woody vines greater than 3.28 ft in
	height.
120 = Total Cover	
20% of total cover:	
	Hydrophytic
0	Vegetation
= Total Cover	
= Total Cover 20% of total cover:	Present? Yes No
	% Cover Species? Status \bigcirc

Sampling Point: wcho005e-w

Profile Desc	cription: (Describe	to the dept	h needed to docur	nent the l	ndicator	or confirm	n the absence	of indicators.)	
Depth	Matrix			x Features				Description	
(inches)	LOVE 312	100	Color (moist)	%	Туре	Loc ²	Texture	Remarks Silty-Loam	
0-0	1048 312	100	Install.			1.1	00	STIM-LOUM	
9-W	1011412	00	DAKALIO	20	C	M	SC		
					-				
Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.	
Hydric Soll	Indicators: (Applic	able to all I	RRs, unless othe	wise note	ed.)			for Problematic Hydric Soils	s ^a :
Histosol			Polyvalue Be	low Surfac	ce (S8) (L			luck (A9) (LRR O)	
	pipedon (A2)		Thin Dark Su					luck (A10) (LRR S)	
	istic (A3)		Loamy Muck			(0)		ed Vertic (F18) (outside MLR. ont Floodplain Soils (F19) (LR	
	en Sulfide (A4) d Layers (A5)		Depleted Ma		F2)			lous Bright Loamy Soils (F20)	
the second se	Bodies (A6) (LRR F	, T, U)	Redox Dark		6)			RA 153B)	
	ucky Mineral (A7) (LI		Depleted Da					arent Material (TF2)	
	resence (A8) (LRR L	1)	Redox Depre		B)			hallow Dark Surface (TF12)	
	uck (A9) (LRR P, T)	- / 4 4 4 4	Marl (F10) (L Depleted Oc			541	Other	(Explain in Remarks)	
the second se	d Below Dark Surfac ark Surface (A12)	e (ATT)	Iron-Mangan				T) ³ India	ators of hydrophytic vegetation	n and
	rairie Redox (A16) (I	MLRA 150A) Umbric Surfa	ce (F13) (LRR P, T	States and the second sec		land hydrology must be prese	
Sandy M	Mucky Mineral (S1) (LRR O, S)	Delta Ochric	(F17) (ML	RA 151)			ess disturbed or problematic.	
	Gleyed Matrix (S4)		Reduced Ver						
	Redox (S5)		Piedmont Flo				19A) RA 149A, 153C	1530)	
and the second sec	d Matrix (S6) Irface (S7) (LRR P, S	S. T. U)	Anomalous L	angin Loai	ny cons (20) (11121	1400, 1000	, 1000/	
	Layer (if observed)								
Type:			_					V	
Depth (in	ches):						Hydric Soll	Present? Yes X N	00
Remarks:					-				-
							4		



Wetland data point wcho005e_w facing west.



Wetland data point wcho005e_w facing east.

WETLAND DETERMINAT	ION DATA FORM - Atla	intic and Gulf Coastal P	lain Region
Project/Site: ACP	City/County:		_ Sampling Date: 10/16/15
Applicant/Owner: <u>DOM/WHOM</u> nvestigator(s): <u>K - MAYKNAM, C. T. O.C.</u> Pathoching, C.C.	ound had Section, Towns		Sampling Point: wch0005_L
andform (hillslope, terrace, etc.): POWORINP Edd	Lat: 36 70625	Long: 19.329	6 Datum: WGS 8
Soil Map Unit Name: $\underline{TDMDTVey} - \underline{VelOSS}$	-UNDAN WAA	NWI classifi	cation: <u>VPLAND</u>
re Vegetation <u>X</u> , Soil <u>V</u> , or Hydrology		Are "Normal Circumstances" (If needed, explain any answ	present? Yes X No
SUMMARY OF FINDINGS – Attach site m			
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No	ampled Area Wetland? Yes	No X
powenine easement, n	esidential	supportent	ngs
IYDROLOGY			
Wetland Hydrology Indicators:	all in the		ators (minimum of two required)
High Water Table (A2) Mar	atic Fauna (B13) Deposits (B15) (LRR U)	Sparsely Ve Drainage Pa	I Cracks (B6) egetated Concave Surface (B8) atterns (B10)
Water Marks (B1) Oxic	rogen Sulfide Odor (C1) lized Rhizospheres along Living		Water Table (C2)
	sence of Reduced Iron (C4) ent Iron Reduction in Tilled Soil	s (C6) Crayfish But Saturation V	rrows (C8) /isible on Aerial Imagery (C9)
	Muck Surface (C7)	Contraction of the second seco	Position (D2)
Iron Deposits (B5) Othe Inundation Visible on Aerial Imagery (B7)	er (Explain in Remarks)	Shallow Aqu	
Water-Stained Leaves (B9)		FAC-Neutra Sohagnum r	moss (D8) (LRR T, U)
Field Observations:	Depth (inches): N/A		
Water Table Present? Yes No X Saturation Present? Yes No No	Depth (inches): 20 Depth (inches): 20 Depth (inches): 0	- - - Wetland Hydrology Prese	nt? Yes No_X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring wo	ell, aerial photos, previous insp	ections), if available:	4
Remarks:			
4			

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

Sampling Point: Wcho005_4

262051	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30×30F+)	% Cover Species? Status	Number of Dominant Species (A)
23.		Total Number of Dominant (B)
4		Percent of Dominant Species That Are OBL, FACW, or FAC: \pm 50 (A/B)
· 6.		
7.		Prevalence Index worksheet:
8	and the second	Total % Cover of: Multiply by:
	= Total Cover	OBL species x1 =
50% of total cover:	20% of total cover:	FACW species X2
Sapling/Shrub Stratum (Plot size: 30x 20 Ft)		FAC species <u>50</u> x3 = <u>150</u>
1. NONC		FACU species x 4 =
2.		UPL species $40 \times 5 = 200$
3.		Column Totals: 95 (A) 260 (B)
4		Prevalence Index = $B/A = 2.73$
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
	0 = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 30x30 ft)		¹ Indicators of hydric soil and wetland hydrology must
1. DIgitana sp.	50 Y FAC/UPL	be present, unless disturbed or problematic.
2. Zoysia sp.	40 Y UPL	Definitions of Four Vegetation Strata:
3. Centella erecta	6 N FACW	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4 unidentified herb	10 N unk.	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.
89		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9		
		Woody vine – All woody vines greater than 3.28 ft in height.
11		noight.
12	96 = Total Cover 9 20% of total cover: 19	
for 41.	6 20% of total agents 19	
Woody Vine Stratum (Plot size: 30 X30 Ft.)		
Woody Vine Stratum (Plot size: <u>SU APTITI</u>)		
1. None		
2		
3		
4		
5		Hydrophytic
	= Total Cover	Vegetation Present? Yes No
50% of total cover:	20% of total cover:	
Remarks: (If observed, list morphological adaptations be Hydrophytic regetation would n species. Based on mowed o be one of the FAC species	ow). of be met if Dia ondition, not identii to be conservative.	itaria spa is one of the FAC or UPL fied to specify, so assumed to

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Sampling Point: Wcho DO5-4 SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) **Redox Features** Depth Matrix % Color (moist) Loc Texture Remarks % Type (inches) Color (moist) 2/2 3 CC 50 9 NIXO G ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils³: ____ 1 cm Muck (A9) (LRR O) Polyvalue Below Surface (S8) (LRR S, T, U) Histosol (A1) 2 cm Muck (A10) (LRR S) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) Reduced Vertic (F18) (outside MLRA 150A, B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Piedmont Floodplain Soils (F19) (LRR P, S, T) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Anomalous Bright Loamy Soils (F20) Depleted Matrix (F3) Stratified Layers (A5) (MLRA 153B) Redox Dark Surface (F6) Organic Bodies (A6) (LRR P, T, U) Red Parent Material (TF2) Depleted Dark Surface (F7) 5 cm Mucky Mineral (A7) (LRR P, T, U) Very Shallow Dark Surface (TF12) Muck Presence (A8) (LRR U) Redox Depressions (F8) Other (Explain in Remarks) Marl (F10) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Ochric (F11) (MLRA 151) Depleted Below Dark Surface (A11) ³Indicators of hydrophytic vegetation and _ Iron-Manganese Masses (F12) (LRR O, P, T) _ Thick Dark Surface (A12) ____ Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, Coast Prairie Redox (A16) (MLRA 150A) 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) Piedmont Floodplain Soils (F19) (MLRA 149A) Sandy Redox (S5) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: No Hydric Soll Present? Depth (inches): Yes Remarks:



Upland data point wcho005_u facing west.



Upland data point wcho005_u facing east.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site:ACP	City/County: Chesapeate Sampling Date: 10/20/19
Applicant/Owner: Dominion	State: VA Sampling Point: wcho009f-
Investigator(s): L. Roper, S. Iosefa	
Landform (hillslope, terrace, etc.): dramage, Co	Local relief (concave, convex, none): NOND Slope (%) O - 5
Subregion (LRR or MLRA): L P P T 0 Lz	at: 36.76466 Long: -76.32339 Datum: WESE
	- Tomotley complex NWI classification: PFD
V V	
Are climatic / hydrologic conditions on the site typical for this	
Are Vegetation, Soil, or Hydrology si	
Are Vegetation, Soil, or Hydrology na	
SUMMARY OF FINDINGS – Attach site map s	showing sampling point locations, transects, important features, etc.
	Is the Sampled Area within a Wetland? Yes No
Remarks:	
The C	and
NOWAM : Riverine Swamp Fo	IF (3) 7
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required, check all th	at apply) Surface Soil Cracks (B6)
	Fauna (B13) Sparsely Vegetated Concave Surface (B8)
	osits (B15) (LRR U) Drainage Patterns (B10)
	n Sulfide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized	Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence	e of Reduced Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3) Recent Ir	on Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muc	k Surface (C7) Geomorphic Position (D2)
Iron Deposits (B5) Other (Ex	cplain in Remarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	K FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	N/A
Surface Water Present? Yes No X Dept	th (inches);
Water Table Present? Yes X No Dept	
Saturation Present? Yes X No Dept (includes capillary fringe)	th (inches): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, ac	erial photos, previous inspections), if available:
Remarks:	
partially inundated (c)	(hal)
Turing an one of the	NY 104 /-

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Sampling Point: wcho 1096-00

1

mes of pl	-	Indicator	Dominance Test worksheet:		
% Cover	Species?	Status	All - Los of Developent Canalan		
10	Y	FAC	That Are OBL, FACW, or FAC:	3	(A)
			Total Number of Dominant	2	
			Species Across All Strata:	2	(B)
			D		
				100	(A/B
			Prevalence Index worksheet:	11.0	
	1				
ID	= Total Co	/er	OBL species x 1	=	-
20%	total cover	2	FACW species x 2	! =	_
	I LOLAT COVCI				
			FACU species x 4	=	_
			and the second		
					-
		. <u></u>			
			Problematic Hydrophytic Veg	getation ¹ (Exp	lain)
20% 0	f total cove				
6			¹ Indicators of hydric soil and weth	and hydrology	must
2	_Y_		be present, unless disturbed or p	roblematic.	_
5	Y	DBL	Definitions of Four Vegetation	Strata:	
			Trae - Woody plants excluding y	ines 3 in (7	6 cm) c
			more in diameter at breast height	(DBH), regai	dless o
			height.		
			Sanling/Shub - Woody plants	excluding vin	es. less
			than 3 in. DBH and greater than 3	3.28 ft (1 m) t	all.
				du) plante rei	ardles
			of size, and woody plants less the	an 3.28 ft tall.	Januius
	-			reater than 3.	28 ft in
			neight.		
10	Table				_
20%0	f total cove				
-					
_			Hydrophytic		
_	-				
0	= Total Co	ver	Vegetation		
0	= Total Co			No	
		$\frac{10}{20\% \text{ of total cover}} = \text{Total Cov}$	20% of total cover: Y FACW PBL 	110 Y FIAC That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: 20% of total cover: 3 9 9 9 9 9 9 9 9 9 9 9 9 9 9	III) Y FAC That Are OBL, FACW, or FAC: S Total Number of Dominant 3 Species Across All Strata: 3 Percent of Dominant Species IDD Total Number of Dominant Species IDD Prevalence Index worksheet: IDD Total % Cover of: Multiply by: OBL species x1 = 20% of total cover: FACW species ZOW of total cover: FACU species X = UPL species X = UPL species X = Column Totals: UPL species x5 = Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X = Dominance Test is >50% 3 - Prevalence Index is \$3.0' Problematic Hydrophytic Vegetation' (Exp Y PBL Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in, 07. more in diameter at breast height (DBH), regar Height. Sapling/Shrub – Woody plants, excluding vine than 3.28 ft 1all. Woody vine – All merbaceous (non-woody) plants, reg of size, and woody

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Sampling Point wich 0009 f

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicat Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 of Histosol (A1) Thin Dark Surface (S9) (LRR S, T, U) 2 of Black Histic (A3) Learny Mucky Mineral (F1) (LRR O) Re Hydrogen Sulfide (A4) Loarny Gleyed Matrix (F2) Pid Stratified Layers (A5) Depleted Matrix (F3) An Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (f 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) (f Muck Presence (A8) (LRR U) Redox Depressions (F8) Ve 1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U) Ot Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Ot Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) The Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (LRR P, T, U) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loarny Soils (F20) (MLRA 149A, 1 Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Type:	Remarks Sulfidic odor Sulfidic odo
Image: Second	on: PL=Pore Lining, M=Matrix. ors for Problematic Hydric Solls ⁹ : m Muck (A9) (LRR O) m Muck (A10) (LRR S) duced Vertic (F18) (outside MLRA 150A,B) dmont Floodplain Soils (F19) (LRR P, S, T) omalous Bright Loamy Soils (F20) WLRA 153B) d Parent Material (TF2) ry Shallow Dark Surface (TF12) her (Explain in Remarks) indicators of hydrophylic vegetation and wetland hydrology must be present,
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Locat Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicat — Histosol (A1) — Polyvalue Below Surface (S3) (LRR S, T, U) 1 of — Histosol (A2) — Thin Dark Surface (S9) (LRR S, T, U) 1 of — Histic Epipedon (A2) — Thin Dark Surface (S9) (LRR S, T, U) 2 of — Black Histic (A3) — Loamy Mucky Mineral (F1) (LRR O) — Rei — Stratified Layers (A5) — Depleted Matrix (F2) — Frie — Organic Bodies (A6) (LRR P, T, U) — Redox Dark Surface (F6) (n — 1 or Mucky Mineral (A7) (LRR P, T, U) — Depleted Dark Surface (F6) (n — 1 or Muck (A9) (LRR P, T) — Mark (F10) (LRR U) — Or — Depleted Below Dark Surface (A11) — Depleted Ochric (F11) (MLRA 151) — Or — Depleted Below Dark Surface (A11) — Depleted Ochric (F13) (LRR O, P, T) — And — Coast Prairie Redox (A16) (MLRA 150A) — Umbric Surface (F13) (LRR O, P, T) — And — Sandy Redox (S5) — Piedmont Ficodplain Solis (F19) (MLRA 149A) — Sandy Redox (S5) — Friedmont Ficodplain Solis (F19) (MLRA 149A) — Sandy Redox (S5) — Freduced Veritic (F18) (MLRA 150A), 150B) <td< td=""><td>ors for Problematic Hydric Solls^a: m Muck (A9) (LRR O) m Muck (A10) (LRR S) duced Vertic (F18) (outside MLRA 150A,B) dmont Floodplain Soils (F19) (LRR P, S, T) omalous Bright Loarny Soils (F20) MLRA 153B) d Parent Material (TF2) ry Shallow Dark Surface (TF12) her (Explain in Remarks) indicators of hydrophytic vegetation and wetland hydrology must be present,</td></td<>	ors for Problematic Hydric Solls ^a : m Muck (A9) (LRR O) m Muck (A10) (LRR S) duced Vertic (F18) (outside MLRA 150A,B) dmont Floodplain Soils (F19) (LRR P, S, T) omalous Bright Loarny Soils (F20) MLRA 153B) d Parent Material (TF2) ry Shallow Dark Surface (TF12) her (Explain in Remarks) indicators of hydrophytic vegetation and wetland hydrology must be present,
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 of all controls of all LRRs, unless otherwise noted.) Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 of all controls of all LRRs, unless otherwise noted.) Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 2 of all controls of all LRRs, unless otherwise noted.) Histosol (A1) Loamy Mucky Mineral (S1) (LRR O) Re Hydrogen Sulfide (A3) Loamy Mucky Mineral (F1) (LRR O) Re Stratified Layers (A5) Depleted Matrix (F2) Pike Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (f) Muck Presence (A8) (LRR U) Redox Depressions (F8) Ve 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Ot Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Ot Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) If Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A)	ors for Problematic Hydric Solls ^a : m Muck (A9) (LRR O) m Muck (A10) (LRR S) duced Vertic (F18) (outside MLRA 150A,B) dmont Floodplain Soils (F19) (LRR P, S, T) omalous Bright Loarny Soils (F20) MLRA 153B) d Parent Material (TF2) ry Shallow Dark Surface (TF12) her (Explain in Remarks) indicators of hydrophytic vegetation and wetland hydrology must be present,
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric	53C. 153D)
Depth (inches): Hydric	
	Soll Present? Yes 🗡 No
Remarks:	Soll Present? Tes No



Wetland data point wcho009f_w facing southeast.



Wetland data point wcho009f_w facing northeast.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: A CP	City/County: Chesapeake Sampling Date: 10/20/15 State: VA Sampling Point: WCho009e_u
Applicant/Owner: DOMINION	State: VA Sampling Point: WCho DO92_4
	Section, Township, Range:NONE
Subregion (LRR or MLRA): LRR T Lat: 3 Soil Map Unit Name: Drayston - Urban land -	Local relief (concave, convex, none): <u>Concave</u> Slope (%) <u>0-5</u> 16.76459 Long: <u>-76.32342</u> Datum: <u>WGS84</u> Tomotley complex NWI classification: <u>FFM</u>
Are climatic / hydrologic conditions on the site typical for this time	
Are Vegetation X_, Soil, or Hydrology significa	
Are Vegetation, Soil, or Hydrology naturall	
SUMMARY OF FINDINGS – Attach site map show	ving sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No Remarks:	Is the Sampled Area within a Wetland? Yes X No
powerline easement	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Sediment Deposits (B2) Presence of Re Drift Deposits (B3) Recent Iron Re Algal Mat or Crust (B4) Thin Muck Surf Iron Deposits (B5) Other (Explain Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	(B13)
Surface Water Present? Yes No Depth (inc Water Table Present? Yes No Depth (inc Saturation Present? Yes No Depth (inc (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial p	hes): Wetland Hydrology Present? Yes No
Remarks:	

1

ree Stratum (Plot size: 30 X 30FF)	Absolute Dominant Indicator	Dominance Test worksheet:
	% Cover Species? Status	Number of Dominant Species (A)
none		
		Total Number of Dominant 2 (P)
		Species Across All Strata: (B)
		Percent of Dominant Species
		That Are OBL, FACW, or FAC: (A/B
		Prevalence Index worksheet:
		Total % Cover of: Multiply by:
		OBL species x1 =
	= Total Cover	FACW species x 2 =
50% of total cover:	20% of total cover:	
pling/Shrub Stratum (Plot size: 3013011)		FAC species x 3 =
none		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
		X 2 - Dominance Test is >50%
		3 - Prevalence index is ≤3.0 ¹
	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	
erb Stratum (Plot size: 30)(30(1))	AD V -	¹ Indicators of hydric soil and wetland hydrology must
The second that a second state	40 Y FACW	be present, unless disturbed or problematic.
Juncus effusus	- TOD - OBL	Definitions of Four Vegetation Strata:
		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o
		more in diameter at breast height (DBH), regardless of
		height.
		a the stand when the avaluation vision lass
		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, regardles
		of size, and woody plants less than 3.28 ft tall.
0		Woody vine - All woody vines greater than 3.28 ft in
1		height.
2.		
	= Total Cover	
50% of total cover:	() 20% of total cover: 20	
Voody Vine Stratum (Plot size: 31) X3077)		
none		
none		
· · · · · · · · · · · · · · · · · · ·		AL COUNTY
		Hydrophytic
	= Total Cover	Present? Yes X No
50% of total cover:	20% of total cover:	
emarks: (If observed, list morphological adaptations b	elow).	

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Sampling Point: wcho 009e-w

Depth <u>Matrix</u> inches) Color (moist) %	Redox Features Color (moist) % Type	Loc ² Texture	Remarks
1-19 104R3/1 100		L	sulfidic odor
5-20 10 YR3/2 1012 _		LS	
ype: C=Concentration, D=Depletion, RM=R	educed Matrix, MS=Masked Sand Grain	s. ⁷ Location:	PL=Pore Lining. M=Matrix.
ydric Soll Indicators: (Applicable to all LF Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5)	Polyvalue Below Surface (S8) (LRR Thin Dark Surface (S9) (LRR S, T, Loamy Mucky Mineral (F1) (LRR O Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LR	R S, T, U) 1 cm M U) 2 cm M) Reduc Piedmu Anoma (MLF Red Pi Very S Other (R O, P, T) SIndic N wet unle unle v, 150B) Very S	for Problematic Hydric Soils ³ : Auck (A9) (LRR O) Auck (A10) (LRR S) ed Vertic (F18) (outside MLRA 150A,B cont Floodplain Soils (F19) (LRR P, S, T) alous Bright Loamy Soils (F20) RA 153B) arent Material (TF2) challow Dark Surface (TF12) (Explain in Remarks) staters of hydrophytic vegetation and land hydrology must be present, ess disturbed or problematic.
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) strictive Layer (If observed): Type:	Anomalous Bright Leamy Soils (F20	U) (MERA 149A, 153C	, 153D)
Depth (inches):		Hydric Soll	Present? Yes X No
		1	



Wetland data point wcho009e_w facing south.



Wetland data point wcho009e_w facing west.

Photo Sheet 2 of 3

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: A UP	City/County: Chesapeake Sampling Date: 10/20/15
Applicant/Owner: DUMINION	State: VA Sampling Point: Vicho 002
Investigator(s): LRoper, S Ioseta	
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none): NONE Slope (%) 0-2
Subregion (LRR or MLRA): L P. T Lat:	
	Iomothey complex NWI classification NA
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 signific	cantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology natural	Ily problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	wing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes No 2 Wetland Hydrology Present? Yes No 2	I IS the Sampled Area
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that an	pply) Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna	a (B13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits	(B15) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sull	fide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhiz	ospheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of R	Reduced Iron (C4) Crayfish Burrows (C8)
	eduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Su	rface (C7) Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain	n 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:	110-
Surface Water Present? Yes No X Depth (ind	
Water Table Present? Yes No X Depth (ind	
Saturation Present? Yes No Depth (includes capillary fringe)	ches): Vetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial p	photos, previous inspections), if available:
Remarks:	
could not auger past 15 inch	80 -
could not auger prist	

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

			S	
	22.00.00	la a	nn	4
Sampling	Point:	WOND	vu	1-0

reserving (Four Guada) - See Selenand F	Absolute Domina	at Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 X 30	Absolute Domina % Cover Specie		
1. Lia Wilambay Ayrauttua	26 Y	FAC	Number of Dominant Species 7 (A)
Pennie coortine	ID N	FACU	
2. Prunus serotina	the second se	and the second s	Total Number of Dominant
3. Quercus phellos	-30 1	FACW	Species Across All Strata: (B)
4	_		Percent of Dominant Species
5.			That Are OBL, FACW, or FAC: <u>881.</u> (A/B)
6			
			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
8			OBL species x 1 =
	7D = Total C	over	
50% of total cover: 3	5 20% of total cov	rer: 14	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 2013011)	1.5		FAC species x 3 =
1. Quercus phellos	20 Y	FACW	FACU species x 4 =
	6 N	FAC	UPL species x 5 =
2. Quercus nigra		and the second s	Column Totals: (A) (B)
3. BUERCUS alba	16 Y	FACU	
4.	Sec. 12	-	Prevalence index = B/A =
5			
			Hydrophytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
7			X 2 - Dominance Test is >50%
8			3 - Prevalence Index is ≤3.0 ¹
	40 = Total C	Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 2	D 20% of total cov	ver 8	
Herb Stratum (Pict size: 30 x 30 ++)	2010 01 10121 001		the first contraction of the second state of the second state
Herb Stratum (Pict size:)	5 V	FACU	¹ Indicators of hydric soil and wetland hydrology must
1. Quercus phellos	<u>5 Y</u>		be present, unless disturbed or problematic.
2. Quercus niera	10 4	FAC	Definitions of Four Vegetation Strata:
3			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4.			more in diameter at breast height (DBH), regardless of
			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
			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.			
	15 = Total C	Cover	
50% of total cover:			
50% official cover.	20% OF LOLAT CO		
Woody Vine Stratum (Plot size: 30 x 30 PF)	÷ 11	E IO A	
1. Smilax rotundifolia	<u>9</u> Y	FAC	
2. Vitis votundifalia	3 Y	FAL	
3			
4			
5			Hydrophytic
	B = Total (Cover	Vegetation
50% of total cover:	4 20% of total co	ver lik	Present? Yes No
		110	
Remarks: (If observed, list morphological adaptations t	pelow).		

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Sampling Point WChoDO9-4

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
0-15 104R +14 100		18
a construction of the second sec		
		2
¹ Type: C=Concentration, D=Depletion, RM=F	reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L		Indicators for Problematic Hydric Soils ⁹ :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, U)	a transfer of the second
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	An an an of the provide provide and
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P, 7	
Coast Prairie Redox (A16) (MLRA 150A)	· 프로그램, 'A. M. MARCHAR, 'M. M. M. M. MARCHAR, 'A MARCHAR, MARCHAR, AND	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149	
Stripped Matrix (S6)	Anomalous Bright Leamy Soils (F20) (MLRA	A 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (If observed):		
Type: () MPU(A) (A)	-	
Depth (inches):9		Hydric Soli Present? Yes No 🔨
Remarks:		



Upland data point wcho009_u facing southwest.



Upland data point wcho009_u facing northeast.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site:ACP	City/County: Chesapeate Sampling Date: 10/20/19
Applicant/Owner: Dominion	State: VA Sampling Point: wchp009f_
Investigator(s): L. Roper, S. Iosefa	
Landform (hillslope, terrace, etc.): dramage, Co	un al Local relief (concave, convex, none): NUM Slope (%) 0 - 5
Subregion (LRR or MLRA): L P P T 0 La	at: 36.76466 Long: -76.32339 Datum: WESE
	L-Tomotley complex NWI classification: PFD
y	
Are climatic / hydrologic conditions on the site typical for this	
Are Vegetation, Soil, or Hydrology si	
Are Vegetation, Soil, or Hydrology na	
SUMMARY OF FINDINGS – Attach site map s	showing sampling point locations, transects, important features, etc.
	Is the Sampled Area within a Wetland? Yes X No
Remarks:	
The C	and
NOWAM : Riverine Swamp Fo	DrGs7
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required, check all the	nat apply) Surface Soil Cracks (B6)
	Fauna (B13) Sparsely Vegetated Concave Surface (B8)
	osits (B15) (LRR U) Drainage Patterns (B10)
	n Sulfide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized	Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence	e of Reduced Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3) Recent Ir	ron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muc	ck Surface (C7) Geomorphic Position (D2)
Iron Deposits (B5) Other (Ex	xplain in Remarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	K FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	NIA
Surface Water Present? Yes No X Dept	th (inches):
Water Table Present? Yes X No Dept	
Saturation Present? Yes X No Dept (includes capillary fringe)	th (inches): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, ad	erial photos, previous inspections), if available:
Remarks:	
partially inundated (c)	(1)(1)
Turning monorality	NY 04 /-

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Sampling Point: wcho 1096-00

1

mes of pl	-	Indicator	Dominance Test worksheet:		
% Cover	Species?	Status	At the of Developed Develop		
10	Y	FAC	That Are OBL, FACW, or FAC:	3	_ (A)
			Total Number of Dominant	2	
			Species Across All Strata:	2	(B)
			D		
				100	(A/B
			mar Ac obe, men, o me		- 11-5
			Prevalence Index worksheet:	100.00	
	1				
ID	= Total Con	er	OBL species x 1	=	_
20%	total cover	2	FACW species x 2	=	_
2070 0	LOIGI COVCI				
			FACU species x 4	=	
			a second second second		
					-
			Problematic Hydrophytic Veg	jetation ¹ (Exp	lain)
20% of	f total cover		The second second second second second		
0			¹ Indicators of hydric soil and wetla	and hydrology	must
2	_Y_		be present, unless disturbed or p	roblematic.	_
5	Y	DBL	Definitions of Four Vegetation	Strata:	
			Tree - Woody plants, excluding)	ines 3 in (7	6 cm) c
			more in diameter at breast height	(DBH), regai	dless c
			height.		
			Sanling/Shub - Woody plants	excluding vin	es. less
			than 3 in. DBH and greater than 3	3.28 ft (1 m) t	all.
				du) plante rei	ardles
			of size, and woody plants less the	an 3.28 ft tall.	garaics
				reater than 3.	28 ft in
			neight.		
10	Talal Ca				
20% 0	r total cove				
S			1		
-			4		
_					
			Hydrophytic		
0	= Total Co	ver	Vegetation		
	= Total Co		Present? Yes	No	
		$\frac{10}{20\% \text{ of total cover}} = \text{Total Cov}$ $\frac{10}{20\% \text{ of total cover}} = \text{Total Cov}$ $\frac{0}{20\% \text{ of total cover}} = \text{Total Cov}$ $\frac{5}{5} = \frac{\gamma}{5}$ $\frac{10}{5} = \text{Total Cov}$	20% of total cover: Y FACW DBL 	110 Y F4C That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: 1D = Total Cover 20% of total cover: 2 FACU species x2 Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicat 1 - Rapid Test for Hydrophytic Veg 20% of total cover 20% of total cover 'Indicators of hydric soil and well: be present, unless disturbed or p Definitions of Four Vegetation Tree – Woody plants, excluding More in diameter at breast height height. Sapiling/Shrub – Woody plants, excluding More in diameter at breast height height. ID = Total Cover	ID Y FAC That Are OBL, FACW, or FAC: S Total Number of Dominant 3 Species Across All Strata: 3 Percent of Dominant Species IDD Total Cover Prevalence Index worksheet: Total Cover Multiply by: D = Total Cover 20% of total cover: Prevalence Index worksheet: Total Cover FACW species X = VDL species Y = Total Cover Prevalence Index = B/A = VD BL Prevalence Index is \$3.01 Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X = Dominance Test is >50% 3 - Prevalence Index is \$3.01 Problematic Hydrophytic Vegetation 1' (Exp 20% of total cover: 'Indicators of hydric soil and wetland hydrology be present, unless disturbed or problematic. D Y DBL Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in (7, more in diameter

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Sampling Point wich 0009 f

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 of the construction of the	Con: PL=Pore Lining, M=Matrix. Con: PL=Pore Lining, M=Matrix. Cons for Problematic Hydric Soils ⁹ : m Muck (A9) (LRR O) m Muck (A10) (LRR S) duced Vertic (F18) (outside MLRA 150A,B) edmont Floodplain Soils (F19) (LRR P, S, T) comalous Bright Loamy Soils (F20) MLRA 153B) d Parent Material (TF2) ry Shallow Dark Surface (TF12) her (Explain in Remarks) Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Image: Second	cn: PL=Pore Lining, M=Matrix. ors for Problematic Hydric Solls ⁹ : m Muck (A9) (LRR O) m Muck (A10) (LRR S) duced Vertic (F18) (outside MLRA 150A,B) edmont Floodplain Soils (F19) (LRR P, S, T) omalous Bright Loamy Soils (F20) MLRA 153B) d Parent Material (TF2) ry Shallow Dark Surface (TF12) her (Explain in Remarks) indicators of hydrophylic vegetation and wetland hydrology must be present,
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Local Hydrlc Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: Histosol (A1) Polyvalue Below Surface (S3) (LRR S, T, U) 1 of Histosol (A1) Polyvalue Below Surface (S3) (LRR S, T, U) 1 of Histosol (A2) Thin Dark Surface (S3) (LRR S, T, U) 2 of Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Ref Stratified Layers (A5) Depleted Matrix (F3) Arr Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) 0 of Muck Presence (A8) (LRR P, T, U) Depleted Dark Surface (F7) Ref Muck Presence (A8) (LRR P, T) Mart (F10) (LRR U) Of Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Of Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) 0 of Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delate Ochric (F13) (MLRA 150A), 150B) Sandy Redox (S5) Piedmont Fioodplain Soils (F19) (MLRA 149A) Stripped Matrix (S5) Anomalous Bright Loamy Soils (F20) (MLRA 149A), 1 Sandy Redox (S5) Piedmont Fioodplain Soils (ors for Problematic Hydric Solls ^a : m Muck (A9) (LRR O) m Muck (A10) (LRR S) duced Vertic (F18) (outside MLRA 150A,B) edmont Floodplain Soils (F19) (LRR P, S, T) omalous Bright Loarny Soils (F20) MLRA 153B) d Parent Material (TF2) ry Shallow Dark Surface (TF12) her (Explain in Remarks) ndicators of hydrophylic vegetation and wetland hydrology must be present,
Hydric Soli 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 of all calls Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 of all calls Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Ref Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Pii Stratified Layers (A5) Depleted Matrix (F3) Arr Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) Arr Muck Presence (A8) (LRR P, T, U) Depleted Dark Surface (F7) Redox Depressions (F8) Vei 1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U) Ot Ot Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Imdical calls Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) 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, 1 Dark Surface (S7) (LRR P, S, T, U)	ors for Problematic Hydric Solls ^a : m Muck (A9) (LRR O) m Muck (A10) (LRR S) duced Vertic (F18) (outside MLRA 150A,B) edmont Floodplain Soils (F19) (LRR P, S, T) omalous Bright Loarny Soils (F20) MLRA 153B) d Parent Material (TF2) ry Shallow Dark Surface (TF12) her (Explain in Remarks) ndicators of hydrophylic vegetation and wetland hydrology must be present,
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric	53C. 153D)
Depth (inches): Hydric	
	Soll Present? Yes X No
Remarks:	Soll Present? Tes No



Wetland data point wcho009f_w facing southeast.



Wetland data point wcho009f_w facing northeast.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: A CP	City/County: Chesapeake Sampling Date: 10/20/15 State: VA Sampling Point: WCho009e_u
Applicant/Owner: DOMINION	State: VA Sampling Point: WCho DO92_4
	Section, Township, Range:NONE
Subregion (LRR or MLRA): LRR T Lat: 3 Soil Map Unit Name: Drayston - Urban land -	Local relief (concave, convex, none): <u>Concave</u> Slope (%) <u>0-5</u> 16.76459 Long: <u>-76.32342</u> Datum: <u>WGS84</u> Tomotley complex NWI classification: <u>FFM</u>
Are climatic / hydrologic conditions on the site typical for this time	
Are Vegetation X_, Soil, or Hydrology significa	
Are Vegetation, Soil, or Hydrology naturall	
SUMMARY OF FINDINGS – Attach site map show	ving sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No Remarks:	Is the Sampled Area within a Wetland? Yes <u>Ves</u> No
powerline easement	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Sediment Deposits (B2) Presence of Re Drift Deposits (B3) Recent Iron Re Algal Mat or Crust (B4) Thin Muck Surf Iron Deposits (B5) Other (Explain Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	(B13) Sparsely Vegetated Concave Surface (B8) (B15) (LRR U) Drainage Patterns (B10) ide Odor (C1) Moss Trim Lines (B16) ospheres along Living Roots (C3) Dry-Season Water Table (C2) educed Iron (C4) Crayfish Burrows (C8) eduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) face (C7) Geomorphic Position (D2) in Remarks) Shallow Aquitard (D3) X FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inc Water Table Present? Yes No Depth (inc Saturation Present? Yes No Depth (inc (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial p	hes): Wetland Hydrology Present? Yes No
Remarks:	

1

ree Stratum (Plot size: 30 X 30FF)	Absolute Dominant Indicator	Dominance Test worksheet:
	% Cover Species? Status	Number of Dominant Species (A)
none		
		Total Number of Dominant 2 (P)
		Species Across All Strata: (B)
		Percent of Dominant Species
		That Are OBL, FACW, or FAC: (A/B
		Prevalence Index worksheet:
		Total % Cover of: Multiply by:
		OBL species x1 =
	= Total Cover	FACW species x 2 =
50% of total cover:	20% of total cover:	
pling/Shrub Stratum (Plot size: 3013011)		FAC species x 3 =
none		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
		X 2 - Dominance Test is >50%
		3 - Prevalence index is ≤3.0 ¹
	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	
erb Stratum (Plot size: 30)(30(1))	AD V -	¹ Indicators of hydric soil and wetland hydrology must
The second that a second state	40 Y FACW	be present, unless disturbed or problematic.
Juncus effusus	- TOD - OBL	Definitions of Four Vegetation Strata:
		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o
		more in diameter at breast height (DBH), regardless of
		height.
		a the stand wheeler and discussions lass
		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, regardles
		of size, and woody plants less than 3.28 ft tall.
0		Woody vine - All woody vines greater than 3.28 ft in
1		height.
2.		
	= Total Cover	
50% of total cover:	() 20% of total cover: 20	
Voody Vine Stratum (Plot size: 31) X3077)		
none		
none		
· · · · · · · · · · · · · · · · · · ·		AL COUNTY
		Hydrophytic
	= Total Cover	Present? Yes X No
50% of total cover:	20% of total cover:	
emarks: (If observed, list morphological adaptations b	elow).	

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Sampling Point: wcho 009e-w

Depth <u>Matrix</u> inches) Color (moist) %	Redox Features Color (moist) % Type	Loc ² Texture	Remarks
1-19 104R3/1 100		L	sulfidic odor
5-20 10 YR3/2 1012 _		LS	
ype: C=Concentration, D=Depletion, RM=R	educed Matrix, MS=Masked Sand Grain	s. ⁷ Location:	PL=Pore Lining. M=Matrix.
ydric Soll Indicators: (Applicable to all LF Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5)	Polyvalue Below Surface (S8) (LRR Thin Dark Surface (S9) (LRR S, T, Loamy Mucky Mineral (F1) (LRR O Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LR	R S, T, U) 1 cm M U) 2 cm M) Reduc Piedmu Anoma (MLF Red Pi Very S Other (R O, P, T) SIndic N wet unle unle v, 150B) Very S	for Problematic Hydric Soils ³ : Auck (A9) (LRR O) Auck (A10) (LRR S) ed Vertic (F18) (outside MLRA 150A,B cont Floodplain Soils (F19) (LRR P, S, T) alous Bright Loamy Soils (F20) RA 153B) arent Material (TF2) challow Dark Surface (TF12) (Explain in Remarks) staters of hydrophytic vegetation and land hydrology must be present, ess disturbed or problematic.
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) strictive Layer (If observed): Type:	Anomalous Bright Leamy Soils (F20	U) (MERA 149A, 153C	, 153D)
Depth (inches):		Hydric Soll	Present? Yes X No
		1	



Wetland data point wcho009e_w facing south.



Wetland data point wcho009e_w facing west.

Photo Sheet 2 of 3

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: A UP	City/County: Chesapeake Sampling Date: 10/20/15
Applicant/Owner: DUMINION	State: VA Sampling Point: Vicho 002
Investigator(s): LRoper, S Ioseta	
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none): NONE Slope (%) 0-2
Subregion (LRR or MLRA): L P. T Lat:	
	Iomothey complex NWI classification NA
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 signific	cantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology natural	Ily problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	wing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes No 2 Wetland Hydrology Present? Yes No 2	I IS the Sampled Area
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that an	pply) Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna	a (B13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits	(B15) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sull	fide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhiz	ospheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of R	Reduced Iron (C4) Crayfish Burrows (C8)
	eduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Su	rface (C7) Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain	n 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:	110-
Surface Water Present? Yes No X Depth (ind	
Water Table Present? Yes No X Depth (ind	
Saturation Present? Yes No Depth (includes capillary fringe)	ches): Vetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial p	photos, previous inspections), if available:
Remarks:	
could not auger past 15 inch	80 -
could not auger prist	

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

			S	
	22.00.00	la a	nn	4
Sampling	Point:	WOND	vu	1-0

reserving (Four Guada) - See Selenand F	Absolute Domina	at Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 X 30	Absolute Domina % Cover Specie		
1. Lia Wilambay Ayrauttua	26 Y	FAC	Number of Dominant Species 7 (A)
Pennie coortine	ID N	FACU	
2. Prunus serotina	the second se	and the second s	Total Number of Dominant
3. Quercus phellos	-30 1	FACW	Species Across All Strata: (B)
4	_		Percent of Dominant Species
5.			That Are OBL, FACW, or FAC: <u>881.</u> (A/B)
6			
			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
8			OBL species x 1 =
	7D = Total C	over	
50% of total cover: 3	5 20% of total cov	rer: 14	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 2013011)	1.5		FAC species x 3 =
1. Quercus phellos	20 Y	FACW	FACU species x 4 =
	6 N	FAC	UPL species x 5 =
2. Quercus nigra		and the second s	Column Totals: (A) (B)
3. BUERCUS alba	16 Y	FACU	
4.	Sec. 19.	-	Prevalence index = B/A =
5			
			Hydrophytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
7			X 2 - Dominance Test is >50%
8			3 - Prevalence Index is ≤3.0 ¹
	40 = Total C	Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 2	D 20% of total cov	ver 8	
Herb Stratum (Pict size: 30 x 30 ++)	2010 01 10121 001		the first contraction of the second state of the second state
Herb Stratum (Pict size:)	5 V	FACU	¹ Indicators of hydric soil and wetland hydrology must
1. Quercus phellos	<u>5 Y</u>		be present, unless disturbed or problematic.
2. Quercus niera	10 4	FAC	Definitions of Four Vegetation Strata:
3			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4.			more in diameter at breast height (DBH), regardless of
			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
			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.			
	15 = Total C	Cover	
50% of total cover:			
50% official cover.	20% OF LOLAT CO		
Woody Vine Stratum (Plot size: 30 x 30 PF)	÷ 11	E IO A	
1. Smilax rotundifolia	<u>9</u> Y	FAC	
2. Vitis votundifalia	3 Y	FAL	
3			
4			
5			Hydrophytic
	B = Total (Cover	Vegetation
50% of total cover:	4 20% of total co	ver lik	Present? Yes No
		110	
Remarks: (If observed, list morphological adaptations t	pelow).		

US Army Corps of Engineers

Sampling Point WChoDO9-4

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
0-15 104R +14 100		18
		2
¹ Type: C=Concentration, D=Depletion, RM=F	reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L		Indicators for Problematic Hydric Soils ⁹ :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, U)	a transfer of the second
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	An an an of the provide provide and
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P, 7	
Coast Prairie Redox (A16) (MLRA 150A)	· 프로그램, 'A. M. MARCHAR, 'M. M. M. M. MARCHAR, 'A MARCHAR, MARCHAR, AND	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149	
Stripped Matrix (S6)	Anomalous Bright Leamy Soils (F20) (MLRA	A 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (If observed):		
Type: () MPU(A) (A)	-	
Depth (inches):9		Hydric Soli Present? Yes No 🔨
Remarks:		



Upland data point wcho009_u facing southwest.



Upland data point wcho009_u facing northeast.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County	hesapeake	Sampling Date: 12/3/14		
Applicant/Owner: DOMINION		State: J A			
nvestigator(s): ESI-M, Smith, K, MURPhre	Section, Township	NIA			
	Decilin, rownship	, range	Slope (%) 0- 6		
andform (hillslope, terrace, etc.): Flat	at: 36,76531	Long: -76.31464	t Datum: [165]		
			DECO		
oil Map Unit Name: Tomotley-Nimmo Con	/	OPES NWI classifi			
re climatic / hydrologic conditions on the site typical for this		No (If no, explain in F			
re Vegetation, Soil, or Hydrology s	ignificantly disturbed?	Are "Normal Circumstances"	present? Yes No		
re Vegetation, Scil, or Hydrology n	aturally problematic?	(If needed, explain any answe	ers in Remarks.)		
UMMARY OF FINDINGS – Attach site map	showing sampling po	int locations, transects	s, important features, etc		
Hydric Soil Present? Yes N	o Is the Sam o within a W		No		
	N	WAM; Pine Flat			
YDROLOGY					
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)		
Primary Indicators (minimum of one is required: check all t	hat apoly)		Cracks (B6)		
	Fauna (B13)		getated Concave Surface (B8)		
	posits (B15) (LRR U)		Drainage Patterns (B10) Moss Trim Lines (B16)		
	en Sulfide Odor (C1)				
	d Rhizospheres along Living F	Roots (C3) Dry-Season			
	e of Reduced Iron (C4)	Crayfish Bu	rows (C8)		
Drift Deposits (B3) Recent	Iron Reduction in Tilled Soils	(C6) Saturation V	Saturation Visible on Aerial Imagery (C9)		
	ck Surface (C7)		Position (D2)		
Iron Deposits (B5) Other (E	Explain in Remarks)		Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)		FAC-Neutra			
Water-Stained Leaves (B9)		Sphagnum i	moss (D8) (LRR T, U)		
Field Observations:	NA				
	pth (inches):		~		
	pth (inches): >20				
Saturation Present? Yes Ver No De; (includes capillary fringe)	oth (inches):	Wetland Hydrology Prese	nt? Yes No		
Describe Recorded Data (stream gauge, monitoring well, a	aerial photos, previous inspec	tions), if available:			
Remarks:					

-

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

Sampling Point: WchoOlOf-w

2061 12061	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30F+X 30F+) 1. PINUS FARED ON	% Cover 30	Species?	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2. Liquidambar Styracifica	10	4	FRC	Total Number of Dominant Species Across All Strata: (B)
4.			1.57.76	Percent of Dominant Species
5	1212	alane h		That Are OBL, FACW, or FAC: 100% (A/B)
6	and the second		100 Co. 19	Prevalence Index worksheet:
7	all in		A State of	Total % Cover of: Multiply by:
8	1.12			OBL species x1 =
2.0	40	= Total Co	/er	FACW species x 2 =
50% of total cover: _20	20% of	total cover	:_0	FAC species x3 =
Sapling/Shrub Stratum (Plot size: 3084 X 3084)	15	V	FAC	FACU species x 4 =
1. Pinus tarda	15			UPL species x 5 =
2. Liquidambar Stylacislua	10	<u> </u>	FAC	Column Totals: (A) (B)
3. Quercus nigra	2	-12-	FAC	
4. Prunus serofina			FACU	Prevalence Index = B/A =
5. Movella cerifera		_/V	FAC	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7			-	✓ 2 - Dominance Test is >50%
8	-24			3 - Prevalence Index is ≤3.0 ¹
		= Total Co		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 17	20% of	total cover	6.0	
Herb Stratum (Plot size: 3054 X 305-5)	90	V	FACIL	¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria sigentea	10		FACW	be present, unless disturbed or problematic.
2	12.4 B.A.C.			Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4	<u></u>			more in diameter at breast height (DBH), regardless of height.
5				neight.
6	Call States			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	00	The franch from the		and the second se
116	And the second s	= Total Co	. 01	
50% of total cover	20% of	total cover	10	
Woody Vine Stratum (Plot size: 20+ X 508)	20	V	GAR	the second of the second day in provide the second s
1. Smilax rutandisolia	<u>a</u> 0		FAC	
2				
3		-		
4				the second se
5	20		100 10 10 10 10 10 10 10 10 10 10 10 10	Hydrophytic
10	THE PARTY NEW YORK, NY	= Total Co	H	Vegetation Present? Yes No
50% of total cover: 10	20% of	total cover		
Remarks: (If observed, list morphological adaptations belo	₩).	12413		
	in the second		and the second	
US Army Corps of Engineers				Atlantic and Gulf Coastal Plain Region - Version 2.0

Sampling Point: WchoOlofw

Depth (inches)	1 de tales						the absence o	
	Color (moist)	%	Color (moist)	K Features	Туре	Loc ²	Texture	Remarks
0-6	2.592.5/1	100					FSL	
4-12	-104R'5/1	90	104R6/6	10	C	M	SL	
12-20	IOLRS/1	90	104R6/6	10	C	M	SCL	
i be no	<u>(0 - 11 - 1 - 1</u>		10011-10-0				1	
			Contraction of the				The Way of the Party	State of the second
	the second second second		Contraction (Party)					
	State Last State		and the second s		-			
	- Carlo Carlo Carlo Carlo			-		HAR A SH		
Type: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ins.		PL=Pore Lining, M=Matrix. or Problematic Hydric Soils ³ :
	Indicators: (Applica	to all	Polyvalue Be			PPSTI		ick (A9) (LRR O)
Histoso Histic E	pipedon (A2)		Thin Dark Su				the second se	ick (A10) (LRR S)
Contract of the second second	istic (A3)		Loamy Muck	and the second se	and the second second			d Vertic (F18) (outside MLRA 150A,B
and the state of the second	en Sulfide (A4)		Loamy Gleye		F2)		Contraction and Contraction of Contr	nt Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Mat					ous Bright Loamy Soils (F20)
and the second sec	Bodies (A6) (LRR P,		Redox Dark S	12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	and the second sec			A 153B) ent Material (TF2)
and the state of t	ucky Mineral (A7) (LR resence (A8) (LRR U)		Redox Depre					allow Dark Surface (TF12)
	uck (A9) (LRR P, T)	3	Marl (F10) (L	the state of the s			the second se	Explain in Remarks)
and the second se	d Below Dark Surface	(A11)	Depleted Oct					
the state of the second second second second	ark Surface (A12)	1	Iron-Mangan				and the second se	tors of hydrophytic vegetation and ind hydrology must be present,
and the second second	Prairie Redox (A16) (M		A) Umbric Surfa Delta Ochric	and the second se		U)		ss disturbed or problematic.
and the second second second second	Mucky Mineral (S1) (L Gleyed Matrix (S4)	RR 0, 5)	Reduced Ver			A. 150B)		
THE REPORT OF TH	Redox (S5)		Piedmont Flo					
the second se	d Matrix (S6)						A 149A, 153C,	153D)
	urface (S7) (LRR P, S		In the second	14		- they ind		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Layer (if observed):							
Type:		11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					Hydric Soil F	Present? Yes No
Depth (ir	iches):			-			Hydric Soll P	
Remarks:								



Wetland data point wcho010f_w facing northeast.



Wetland data point wcho010f_w facing southwest.

Photo Sheet 1 of 1

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

ACD	ATION DATA FORM - Adamic an	inadka inlanlu
Project/Site:	City/County: Mercu	Sampling Date: 1720/
Applicant/Owner: Dan In 10 N	1	State Sampling Point WCho0106
nvestigator(s): L- Roper, S-Inset	occubit, romanp, run	ge: <u>P4/7\</u>
andform (hillslope, terrace, etc.): TErrace		nivex, none): <u>none</u> Slope (%) <u>0-2</u>
Subregion (LRR or MLRA): LKR	Lat: 36,764039 Lo	ong: -76.32019 Datum: WGS1
Soil Map Unit Name: Tomotley - Nimy	no complex	NWI classification PEM
we climatic / hydrologic conditions on the site typica	I for this time of year? Yes X No	(If no, explain in Remarks.)
re Vegetation, Soil, or Hydrology		Normal Circumstances" present? Yes X No
re Vegetation, Soil, or Hydrology _		eded, explain any answers in Remarks.)
		cations, transects, important features, etc
L. L		
Hydrophytic Vegetation Present? Yes X Hydric Soil Present? Yes X	is the Sampled A	
Hydric Soil Present? Yes X Wetland Hydrology Present? Yes X	No within a Wetland	17 Yes X No
Remarks:		
IYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; chi	eck all that apply)	Surface Soil Cracks (B6)
	Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
	Marl Deposits (B15) (LRR U)	Drainage Pallerns (B10)
	lydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) C	Oxidized Rhizospheres along Living Rools (
	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
	Recent Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)
	Thin Muck Surface (C7)	Geomorphic Position (D2)
	Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)		FAC-Neutral Test (D5)
Field Observations:		Sphagnum moss (D8) (LRR T, U)
, the second s	Depth (inches):	
A CARL PROPERTY AND A CARL AND A	Depth (inches): > 12	V.
		and Hydrology Present? Yes No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring	y well, aerial photos, previous inspections),	if available:
Remarks:	1A - 1	
Remarks: could not auger past	ld inches	
1- H		

US Army Corps of Engineers

Sampling Point WchoUlDe-w VEGETATION (Four Strata) - Use scientific names of plants. Dominance Test worksheet: Absolute Dominant Indicator Tree Stratum (Plot size: 20 X30Ff) % Cover Species? Status Number of Dominant Species 1 none (A) That Are OBL, FACW, or FAC: 2 Total Number of Dominant (B) Species Across All Strata: 3. 4. Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 5 6. Prevalence Index worksheet: 7. Total % Cover of: Multiply by: 8. OBL species _____ x 1 = _____ ()= Total Cover FACW species _____ x 2 = _____ 50% of total cover;_ 20% of total cover: Sapling/Shrub Stratum (Plot size: 30 x 30 ft) FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ 1. MONP, UPL species _____ x 5 = _____ 2. Column Totals: _____ (A) _____ (B) 3. 4. Prevalence Index = B/A = ___ 5 Hydrophytic Vegetation Indicators: ____ 1 - Rapid Test for Hydrophytic Vegetation 6. ____ 2 - Dominance Test is >50% 7. ____ 3 - Prevalence Index is ≤3.0¹ 8 U = Total Cover Problematic Hydrophytic Vegetation¹ (Explain) 20% of total cover: 50% of total cover: Herb Stratum (Plot size: 20X30 A) ¹Indicators of hydric soil and wetland hydrology must 60 FAC be present, unless disturbed or problematic. 1. Panicum Virgatum 200 N FACH 2. Arundinaria gigantea Definitions of Four Vegetation Strata: 15 N FACU 3. Solidago altissima Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or K N UPL solidago bicolor more in diameter at breast height (DBH), regardless of 4. 5. Dichanthelium acuminatum Y height. FHC 6. Rubus argums N FA1 10 Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. 7. Sauharum yiganteram N FAL 0 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. 8. 9. 10 Woody vine - All woody vines greater than 3.28 ft in height. 11. 12. 155 = Total Cover 50% of total cover: 77.5 20% of total cover: 31 Woody Vine Stratum (Plot size: 20(2004)) 1. none 2. _____ 3. Hydrophytic 5. No____ () = Total Cover Vegetation Yes V Present? _ 20% of total cover: 50% of total cover: Remarks: (If observed, list morphological adaptations below).

Sampling Point. WchoolOe.w

Profile Description: (Describe to the depth Depth Matrix		ment the li x Features		or confirm	the absence	e of Indicators.)
$\frac{\text{Depth}}{(\text{inches})} = \frac{\frac{\text{Matrix}}{\text{Color}(\text{moist})}}{10 \sqrt{R} \frac{9}{11}} = \frac{9}{10}$	Color (moist) 0 YR 310		Type	Loc ²	Texture	Brover procent
<u><u><u></u> <u></u> <u></u></u></u>	o licolur			100		Morea preservi
		_			<u> </u>	
Type: C=Concentration, D=Depletion, RM=R Hydric Soil Indicators: (Applicable to all Li	Reduced Matrix, Ma	S=Masked	Sand Gr	ains.		PL=Pore Lining. M=Matrix. s for Problematic Hydric Solls ³ :
	Polyvalue Be			RR S, T, U		Muck (A9) (LRR O)
Histic Epipedon (A2) Black Histic (A3)	Thin Dark Su					Muck (A10) (LRR S) ced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleye	ed Matrix (i			Piedn	nont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Organic Bodies (A5) (LRR P, T, U)	Depleted Ma Redox Dark		6)		the second se	nalous Bright Loamy Soils (F20) .RA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Da Redox Depre					Parent Material (TF2) Shallow Dark Surface (TF12)
Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T)	Marl (F10) (L	RR U)				(Explain in Remarks)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Oc Iron-Mangan				T) ² Indi	icators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surfa Delta Ochric			, U)		etland hydrology must be present, less disturbed or problematic
Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4)	Reduced Ver	rtic (F18) (MLRA 15			less distribed of problematic
Sandy Redox (S5) Stripped Matrix (S6)	Piedmont Flo					C, 153D)
Dark Surface (S7) (LRR P, S, T, U)	-					
Restrictive Layer (if observed): Type: COMPULT 100					1.00	
Depth (inches): 2	_				Hydric Sol	Il Present? Yes 🗶 No
remarks: Could not auger pa	1 12 ini	cWS,	duu	10 (to mpl	uction



Wetland data point wcho010e_w facing south.



Wetland data point wcho010e_w facing east.

Project/Site: <u>AOP</u> Applicant/Owner: <u>DOMMMON</u> Investigator(s): <u>L. ROPEV</u> , S Landform (hillslope, terrace, etc.): Terr Subregion (LRR or MLRA): <u>LRRT</u> Soil Map Unit Name: <u>Tomo Fley</u> -	TO GREGO Sec	County: CMSQA	State: VA Sampling Point. WchoDID-
Applicant/Owner: <u>DOMMMON</u> Investigator(s): <u>L. Roper</u> Landform (hillslope, terrace, etc.): <u>Terr</u> Subregion (LRR or MLRA): <u>L. R. T</u>	TOCRED Sector	tion, Township, Range: _	State: VA Sampling Point. WCho010_
nvestigator(s): <u>L. Rober</u> , S andform (hillslope, terrace, etc.): <u>Terr</u> Subregion (LRR or MLRA): <u>LRR</u> T	All Loca		N/A
andform (hillslope, terrace, etc.): Terr Subregion (LRR or MLRA): URRT	all Loca		halis D
Subregion (LRR or MLRA):	Lat: 36.76	al relief (concave, convex	
	Lat: 20, 10	and the second	
Soil Map Unit Name: Tomotley ~			-76.32039 Datum: 116-91
	Nimmo comples	6	NWI classification: NP
Are climatic / hydrologic conditions on the	site typical for this time of year?	Yes X No	(If no, explain in Remarks.)
re Vegetation X, Soil X, or Hy	drology significantly distu	irbed? Are "Norma	al Circumstances" present? Yes No
ve Vegetation, Soil, or Hy	drology naturally problem	natic? (If needed,	explain any answers in Remarks.)
Contraction of the second second second			ions, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes No Yes No Yes No	Is the Sampled Area within a Wetland?	Yes No
powerline easem	lent		
HYDROLOGY			
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is rea	quired 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	RU)	Drainage Patterns (B10)
Saturation (A3)	Hydrogen Sulfide Odor	(C1)	Moss Trim Lines (B16)
Water Marks (B1)	Oxidized Rhizospheres	along Living Roots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced In	and the second se	Crayfish Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction in		Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		Geomorphic Position (D2)
Iron Deposits (B5)	Other (Explain in Remar	'KS)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery Water Stained Leaver (89)	(87)		FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:		1. 1	Sphagnum moss (D8) (LRR T, U)
	No K. Depth (inches):	A/M	
Surface Water Present? Yes Water Table Present? Yes	No X Depth (inches):		
		117	X
	No Depth (inches):	Wetland	Hydrology Present? Yes No
	monitoring well, aerial photos, pro	evious inspections), if av	ailable:
Remarks: could not auger	past 12 inches		
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, Remarks: Could not euger	_ No Depth (inches): monitoring well, aerial photos, pro	12 Wetland	Hydrology Present? Yes

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Sampling Point Wcho 010_4

/EGETATION (Four Strata) - Use scientific n	ames of pl	ants.		Sampli	ng Point.WCV	10010
Tree Stratum (Plot size: 30), 30Ft)		Dominant		Dominance Test worksheet:		
1. none		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
2				Total Number of Dominant	3	
3				Species Across All Strata:	0	(B)
4				Percent of Dominant Species	17	
5				That Are OBL, FACW, or FAC:	6+	(A/B)
6				Prevalence Index worksheet:		
7				Total % Cover of:	Multiply by:	
8				OBL species x 1		
		= Total Cov	ver	FACW species x 2		
50% of total cover:	20% of	total cover		FAC species x 3		
Sapling/Shrub Stratum (Plot size: 30X30FF)	1.6		- 10-	FACU species x 4		
1. Liquidambar styraliflua	10	Y	FAC	UPL species x 5		
2/						
3				Column Totals: (A)	-	_ (D)
4				Prevalence Index = E/A =		_
5.				Hydrophytic Vegetation Indicat		-
6.				1 - Rapid Test for Hydrophyti		
7.				2 - Dominance Test is >50%		
8.				3 - Prevalence Index is ≤3.01		
	10	= Total Co	ver	Problematic Hydrophytic Veg		ain)
50% of total cover:	20% 0	f total cover			The second second	0.00
Herb Stratum (Plot size: 30x30ft)		1.1		¹ Indicators of hydric soil and wetla	and hydrology	must
1. Senna obtusifolia	30	Y	FACU	be present, unless disturbed or pr	roblematic.	
2 Rhus copillinum	TU	N	UPL	Definitions of Four Vegetation	Strata:	
3. Panicum vigation	30	Y	FAC	- ter state to the state of the	ines 2 in 17	
4. Setaria pumila	25	N	FAC.	Tree – Woody plants, excluding v more in diameter at breast height		
5 Arundinaria gigantea	20	N	FACW	height.	1	
6. Solidago altissimo	TD	N	FACU	Sapling/Shrub - Woody plants,	evoluting vine	e less
	- 10-	-		than 3 in. DBH and greater than 3	3.28 ft (1 m) te	all
8.				THE AT REAL PROPERTY AND A DESCRIPTION OF A		
				Herb – All herbaceous (non-wood of size, and woody plants less that	an 3.28 ft tall.	Jaiuless
9						
10				Woody vine – All woody vines gr height.	reater than 3.2	28 ft in
11				neight.		
12	130	= Total Co				_
···· ··· · · ·	5 0000	f total cove				
50% of total pover:	20%0	r total cove	·			
Woody Vine Stratum (Plot size: 20)(3017)						
1. NONE				3		
2						
3						
4	-					
5				Hydrophytic		
	0	= Total Co	wer	Vegetation Present? Yes	Na	
50% of total cover:	20% c	f total cove	r:	Present? (US		
Remarks: (If observed, list morphological adaptations b	elow).					

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wicho OID_u 57

OIL						Sampling Point:
Profile Desc Depth (inches) ()-[]2	Color (moist)		Redox Fe	t the Indicator or confirm atures %Type ¹ Loc ²		Remarks
Type: C=C ydrlc Soll Histosol Histosol Histic Ep Black Hi Hydroge Stratified Organic 5 cm Mu Depletar Thick Da Coast P Sandy M Sandy C Sandy F Stripped	concentration, D=Dep Indicators: (Application) istic (A3) en Sulfide (A4) d Layers (A5) Bodies (A5) (LRR P, Jicky Mineral (A7) (LF resence (A8) (LRR U Jicky Mineral (A7) (LF resence (A8) (LRR U Jick (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rairie Redox (A16) (M Mucky Mineral (S1) (L Sleyed Matrix (S4) Redox (S5) I Matrix (S6)	Itetion, RM=Re able to all LRI RR P, T, U) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	Thin Dark Surfac Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Surfi Depleted Dark Surfi Redox Depressic Marl (F10) (LRR Depleted Ochric Iron-Manganese Umbric Surface (Delta Ochric (F17 Reduced Vertic (Piedmont Floodp	e noted.) Surface (S8) (LRR S, T, U e (S9) (LRR S, T, U) neral (F1) (LRR O) latrix (F2) F3) ace (F6) urface (F7) ons (F8) U) (F11) (MLRA 151) Masses (F12) (LRR O, P, F13) (LRR P, T, U)	Indicators for J)1 cm Muck 2 cm Muck Reduced V Piedmont F Anomalous (MLRA 1 Red Paren Very Shalle Other (Exp T) ³ Indicator wetland unless of 19A)	t Material (TF2) ow Dark Surface (TF12) Iain in Remarks) s of hydrophytic vegetation and hydrology must be present, disturbed or problematic.
_ Dark Su	rface (S7) (LRR P, S Layer (If observed):			L LUARLY SOUS (F20) (MER	A 143A, 133C, 13.	
Depth (in Remarks:					A second se	sent? Yes <u>X</u> No
CINIC	l not au	gær po	15t 12 in	cher due t	D Compa	rtion, no gravel.



Upland data point wcho010_u facing west.



Upland data point wcho010_u facing southeast.

WETLAND DETERMINATION DAT	A FORM – Atlantic and Gulf Coastal Plain Region
Project/Site ACP	_ City/County Chesapeake Sampling Date 1/14/16 State VA Sampling Point Wchr 003e
Applicant/Owner: DDMINIDN	State VA Sameling Point Wchr 003e.
nvestigator(s): C, Jacobs, C. McEachern	Section, Township, Range: Onl
nvestigator(s): <u>C</u> , Sacors, <u>C</u> , L, Ile 1, 08	Local relief (concave, convex, none): Con (ave
andform (hillslope, terrace etc.): Hillslope	Local relief (concave, convex, none). 000 dt - Stops (n) 000 dt - Stop
Subregion (LRR or MLRA): <u>LRR</u> Lat: <u>D</u>	6.76576 Long: -76.30957 Datum: NGS &
soil Map Unit Name: TOMOHEY- Nimme	Complex NWI classification: PEM
are climatic / hydrologic conditions on the site typical for this time of	of year? Yes X No (If no. explain in Remarks.)
are Vegetation, Soil, or Hydrology significa	ntly disturbed? Are "Normal Circumstances" present? Yes No
ve Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
	ing sampling point locations, transects, important features, etc.
SUMMART OF FINDINGS - Attach site map show	
Hydrophytic Vegetation Present? Yes X No	
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes <u>X</u> No	
Remarks	
-	
Powerline easement	
i on a more casement	
IYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required, check all that app % Surface Water (A1) Aquatic Fauna	
	spheres along Living Roots (C3) Dry-Season Water Table (C2)
	educed Iron (C4) Crayfish Burrows (C8)
	duction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surf	
Iron Deposits (B5) Other (Explain	in Remarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
X Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inc	hes):
Water Table Present? Yes X No Depth (inc	hes): SIN
Saturation Present? Yes X No Depth (inc	hes): 210 Wetland Hydrology Present? Yes No No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos, previous inspections), if available:
Remarks:	

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Sampling Point Wchr 003ew

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

VEGETATION (Four Strata) – Use scientific r	lames of pi	dins.		
Tree Stratum (Plot size: 30 X 30)	Absolute % Cover	1	Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant 3 (B)
4				Percent of Dominant Species (OD (A/B)
6				Prevalence Index worksheet: Total % Cover of: Multiply by:
8				OBL species x1 =
	0			FACW species x 2 =
50% of total cover:	20% of	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30×30)	2	11	Fac	FACU species x 4 =
1. Liquidamber Styraciflua	and the second se	11		UPL species x 5 =
2				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	= Total Cov		3 - Prevalence Index is ≤3.01
50% of total cover:	5 2001 -	total cours	0.6	- Problematic Hydrophytic Vegetation' (Explain)
	20% 01	total cover	. Vice	the second s
Herb Stratum (Plot size: 30 X30)	19	Yes	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. JUNCUS Effusus 2 Carex stricta	- 16		OBL	Definitions of Four Vegetation Strata:
	10	No	OBL	
	- 10	NO	TRU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) cr
4. Hydrocotyle umbellata		And in case of the local division of the loc	FACW	more in diameter at breast height (DBH), regardless of height.
5. Saccharom signiteum		- YED	FACUS	
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				
2		= Total Cov	124	
50% of total cover: 3	1.5 20% of	total cover	1.2/1	
Woody Vine Stratum (Plot size: 30×30)	0	NIO	FACU	
1. Lonicera japonica	d	IVU	FACE	
2				
3				
4				
5				Hydrophytic
	2	= Total Co	ver , /	Present? Yes X No
50% of total cover:	20% of	total cover	: 0.4	
Remarks: (If observed, list morphological adaptations b	elow).			
and the second				

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OIL								Samping Pu	
rofile Desc	ription: (Describe to	o the dept	th needed to docum	ent the li	ndicator	or confirm	n the absence of	Indicators.)	
Depth	Matrix	0/	Redox Color (moist)	Features %	Type	Loc	Texture	Remark	5
inches)	2.5Y3/2	80	7.54R5/4	20	r	M	SCL	The second	
0-11			VA 51	10		4.4	SUL	11	
1-20	2.54 4/1	90	101K 76		0	M			
					-				
-									
					-				
			Deduced Matrix MS	Mackad	Sand G	aine	² Location: F	L=Pore Lining. M=M	latrix.
ype: C=Co	oncentration, D=Deple Indicators: (Applica	ble to all	LRRs. unless other	wise note	ed.)	ants.	Indicators fo	or Problematic Hydr	ric Solls ⁹ :
Histosol		Die to un	Polyvalue Be			LRR S. T. I		ck (A9) (LRR O)	
	bipedon (A2)		Thin Dark Su				2 cm Mu	ick (A10) (LRR S)	the second second
and the second se	stic (A3)		Loamy Mucky				Reduced	d Vertic (F18) (outsid	de MLRA 150A,E
Hydroge	n Sulfide (A4)		Loamy Gleye		F2)		Piedmor	nt Floodplain Soils (F ous Bright Loamy So	19) (LRR P, S, I)
	Layers (A5)		Depleted Mat		~			A 153B)	15 (120)
	Bodies (A6) (LRR P,		Redox Dark S					ent Material (TF2)	
and the second sec	icky Mineral (A7) (LR esence (A8) (LRR U)		Redox Depre				Very Sh	allow Dark Surface (TF12)
the state of the s	ick (A9) (LRR P, T)		Marl (F10) (L		·		Other (E	Explain in Remarks)	
	d Below Dark Surface	(A11)	Depleted Oct						with the send
Thick Da	ark Surface (A12)		Iron-Mangan				T) Indica	ters of hydrophytic vi and hydrology must b	egetation and
_ Coast P	rairie Redox (A16) (M	LRA 1504	A) Umbric Surfa	ce (F13) (LRR P,	T, U)	wetta	as disturbed or proble	ematic.
_ Sandy M	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric					s distance of proof	Sinding.
and the second se	Gleyed Matrix (S4)		Reduced Ver	uc (F18) (als (F19	MLRA 1	(A9A)		
	tedox (S5) Matrix (S6)		Anomalous E	right Loar	ny Soils	(F20) (MLF	RA 149A, 153C,	153D)	
	rface (S7) (LRR P, S	T. U)							
	Layer (if observed):						The second se		
Type:		1					1	X	
Depth (in	ches):						Hydric Soll F	Present? Yes	No
emarks:									
Dic	sturbed	Do	NOCION				+		
410	placisca	TUV	vernne	ea	en	nen	1		
			-						



Wetland data point wchr003e_w facing northeast.



Wetland data point wchr003e_w facing southwest.

Photo Sheet 1 of 2

WETLAND DETERMINATION	DATA FORM - Atl	antic and Gulf Coa	stal Plain Region	
Project/Site: <u>ACP</u>	City/County:	Mesapeake	Sampling Dat	te: 1/14/16
Applicant/Owner: DDMINION		State:	VA Sampling Poi	int: Wchr 003.u
Investigator(a): C.Jacobs, C.McEachern	Section, Town	thin Range NDV	Q	
Landform (hillslope terrace etc.): Road	Local relief (co	ncave, convex, none): /	vore s	Slope (%): 0-1
Subregion (LRR or MLRA): LRRT La	36.765	71 Long: -76.	30944	Datum: W (2584
Soil Map Unit Name: TOMOTLey-Nimm	o Complex	NWI	classification: NO	ne
Are climatic / hydrologic conditions on the site typical for this I				
Are Vegetation $\underline{\times}$, Soil $\underline{\times}$, or Hydrology $\underline{\times}$ sig				No V
Are Vegetation, Soil, or Hydrology na			y answers in Remarks	
SUMMARY OF FINDINGS – Attach site map s				
SUMMARY OF FINDINGS – Attach site map s	nowing sampling	boint locations, trai	nsects, important	t leatures, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Yes No	× within	ampled Area a Wetland? Y	/es No	-
Paved Road				
HYDROLOGY				
Wetland Hydrology Indicators:	1.11.1		ary Indicators (minimum	n of two required)
Primary Indicators (minimum of one is required; check all the	the second s		ace Soil Cracks (B6)	
	auna (B13) osits (B15) (LRR U)		rsely Vegetated Conca nage Patterns (B10)	ive Surface (B8)
	Sulfide Odor (C1)		is Trim Lines (B16)	
	Rhizospheres along Livin	ng Roots (C3) 🔲 Dry-	Season Water Table (0	C2)
E I I I I I I I I I I I I I I I I I I I	of Reduced Iron (C4)		yfish Burrows (C8)	
	on Reduction in Tilled So Surface (C7)		uration Visible on Aeria morphic Position (D2)	Timagery (C9)
	plain in Remarks)		llow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)		FAC	C-Neutral Test (D5)	
Water-Stained Leaves (B9)		Sph.	agnum moss (D8) (LR	R T, U)
Field Observations:	>0			
Surface Water Present? Yes No Dept Water Table Present? Yes No Dept	(inches):	-		
Saturation Present? Yes No Ko Dept	(inches): > 6	Wetland Hydrology	y Present? Yes	NoX
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, as	nai photos, previous ins	pections), il available.		
Remarks:		-	and the second	
Concrete Road - could	ant check	- subsurfac	e hydrolog	Y
Concrete Road - cours	MOT CALCO			-1
			an and the second	

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

Sampling Point: Wchr003_4

1. N D N 2.	Total Number of Dominant Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A) Prevalence Index worksheet: Total % Cover of: Multiply by: Total Cover OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = Image: Species Image: Species <t< th=""></t<>
3.	Species Across All Strata: (B) Percent of Dominant Species (All That Are OBL, FACW, or FAC: (All Prevalence Index worksheet: (All Total Cover OBL species x1 = otal cover: FACW species x2 = FACU species x3 = FACU species FACU species x5 = (B) UPL species x5 = (Column Totals: UPL species x6 = (A) Prevalence Index = B/A = (Dominance Test is >50%) (Column Totals: Total Cover 1 - Rapid Test for Hydrophytic Vegetation 1 (Explain) otal cover: 'Indicators of hydric soil and wetland hydrology must be present, unless dis
5	Percent of Dominant Species
7	Prevalence Index worksheet: Total Cover otal cover: FACW species FACU species Yate VPL species Yate Column Totals: (A) Prevalence Index = B/A = Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 Problematic Hydrophytic Vegetation1' (Explain) otal cover otal cover: 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) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
7	Total Cover Total % Cover of: Multiply by: OBL species x 1 =
B 20% of total cover: 20% of to Sapling/Shrub Stratum (Plot size: 30×36 .) 1. $N \times 12$ 2 3 4 7	Total Cover Total % Cover of: Multiply by: OBL species × 1 =
$ \begin{array}{c} $	FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 Problematic Hydrophytic Vegetation1 (Explain) ''Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height.
$50\% \text{ of total cover:} 20\% \text{ of total}$ $20\% \text{ of total cover:} 20\% \text{ of total}$ $1 \ N \ M \ M \ M \ M \ M \ M \ M \ M \ M$	otal cover: FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 Problematic Hydrophytic Vegetation1 (Explain) 1 - Rapid Test for Hydrophytic Vegetation1 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 Problematic Hydrophytic Vegetation1 (Explain) 1 - Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
Sapling/Shrub Stratum (Plot size: 30×36 .) 1. $N \neq nl$ 2. 3. 4. 5. 3. $0 = 1$ 50% of total cover:20% of total cover:	FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 Problematic Hydrophytic Vegetation ¹ (Explain) 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 Problematic Hydrophytic Vegetation ¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	UPL species x 5 = Column Totals: (A) Prevalence Index = B/A =
2	UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = (A) Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 Total Cover Problematic Hydrophytic Vegetation1 (Explain) otal cover: 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) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Column Totals: (A) (E Prevalence Index = B/A = (A) (B) Hydrophytic Vegetation Indicators: (A) (B) Total Cover (B) (B) (B) Total Cover (B) (B) (B) Image: Total Cover (B) (B) (B) (B) Image: Total Cover (B) (B) (B) (B) (B) Image: Total Cover (B) (B) </td
	Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 Total Cover otal cover: '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) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
$ \begin{array}{c} $	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is <3.01
$ \begin{array}{c} $	Image: style sty
$ \begin{array}{c} $	Image: style="text-align: center;">Image: style="text-align: center;"/> Image: style="tex
$ \begin{array}{c} $	
$ \begin{array}{c} $	Total Cover □ 3 - Prevalence Index is ≤3.01 otal Cover □ Problematic Hydrophytic Vegetation1 (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 1 Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
0 = 1 50% of total cover: 20% of total None	Total Cover Problematic Hydrophytic Vegetation ¹ (Explain) otal cover: 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) more in diameter at breast height (DBH), regardless theight. Sapling/Shrub – Woody plants, excluding vines, less
50% of total cover: 20% of total cover: None	otal cover:
Ierb Stratum (Plot size: 30×36) Nonl	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) more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless theight. Sapling/Shrub – Woody plants, excluding vines, less
2	Definitions of Four Vegetation Strata:
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless height. Sapling/Shrub – Woody plants, excluding vines, less
4.	more in diameter at breast height (DBH), regardless in height. Sapling/Shrub – Woody plants, excluding vines, less
5	more in diameter at breast height (DBH), regardless in height. Sapling/Shrub – Woody plants, excluding vines, less
5	height. Sapling/Shrub – Woody plants, excluding vines, less
3	Sapling/Shrub - Woody plants, excluding vines, less
7	
$\frac{3.}{0.}$ $\frac{10.}{10.}$ $\frac{11.}{12.}$ $\frac{50\% \text{ of total cover:}}{12.}$ $\frac{50\% \text{ of total cover:}}{20\% \text{ of total cover:}}$ $\frac{50\% \text{ of total cover:}}{20\% \text{ of total cover:}}$ $\frac{50\% \text{ of total cover:}}{1.}$	
$\frac{0}{10.}$ $\frac{10.}{11.}$ $\frac{11.}{12.}$ $\frac{12.}{12.}$ $\frac{10.}{12.}$ $\frac{10.}{12.}$ $\frac{10.}{10.}$ $$	
10	
1	
2	
	height.
50% of total cover: 20% of to <u>Noody Vine Stratum</u> (Plot size: <u>ろつズろき</u>) 1. <u>パベル</u>	
Noody Vine Stratum (Plot size: 30×31)	Total Cover
	otal cover:
3	
·	
	Hydrophytic
=1	Total Cover Vegetation Present? Yes No
50% of total cover: 20% of to	otal cover: Present r res No
Remarks: (If observed, list morphological adaptations below).	
concrete road - no vegetation	5-4
	DV1
	01
	01
	01
	2~1
	2~1

Sampling Point: wchrD03_4

Depth (inches)	Matrix Color (moist)	<u>%</u>	Redo: Color (moist)	x Features %	3 ype ¹		Texture	Remarks Consveres	surface
Hydric Soll Histosol Histic E Black H Hydroge Stratifie Organic 5 cm Mi Muck Pi 1 cm Mi Deplete Thick D Coast P Sandy N Sandy C Sandy F Stripped Dark Su	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Bodies (A6) (LRR P, ucky Mineral (A7) (LR resence (A8) (LRR U) uck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rairie Redox (A16) (N Aucky Mineral (S1) (L Sleyed Matrix (S4) Redox (S5) I Matrix (S6) rface (S7) (LRR P, S Layer (if observed):	t, U) T, U) R P, T, U) ⇒ (A11) ILRA 150A) RR O, S) , T, U)	Rs, unless other Polyvalue Be Thin Dark Su Loamy Mucky Loamy Mucky Depleted Math Redox Dark S Depleted Dar Redox Depre Marl (F10) (L Depleted Oct Iron-Manganu Umbric Surfa Delta Ochric Reduced Ver Piedmont Flo	wise not low Surfac Inface (S9) y Mineral I ed Matrix (trix (F3) Surface (F k Surface essions (F1 RR U) hric (F11) ese Masse ace (F13) ((F17) (ML tic (F18) (bodplain S Bright Loar	ed.) ce (S8) (L (LRR S, (F1) (LRR F2) 6) (F7) 3) (MLRA 11 es (F12) (LRR P, T RA 151) MLRA 15 oils (F19) ny Soils (i	RR S, T, U) T, U) O) LRR O, P, T , U) 0A, 150B) (MLRA 149 F20) (MLRA	Indicators 1 cm M 2 cm M Reduce Piedmo Anoma (MLF Red Pa Very S Other (T) ³ Indic weth unle PA) A 149A, 153C, Hydric Soll	Present? Yes	Soils ³ : MLRA 150A,B)) (LRR P, S, T) (F20) 12) etation and present,
Ang	er refus	ial (the f		Gon	creft	e Par	ement	



Upland data point wchr003 u facing north



Upland data point wchr003 u facing west

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP City/C	County: Chesapeake Sampling Date: 12/15/15
Applicant/Owner: Dominion	State: VA Sampling Point: WLhoDIZe_w
	on, Township, Range: NDNC
	relief (concave, convex, none): <u>none</u> Slope (%): <u>0-21</u>
a second s	A 1
Subregion (LRR or MLRA): LPPT Lat: 36.77	DEM
Soil Map Unit Name: Udorthents-Urban land La	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Y	(es No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distur	rbed? Are "Normal Circumstances" present? Yes V No
Are Vegetation, Soil, or Hydrology naturally problem	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes V No	/
	Is the Sampled Area
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	within a Wetland? Yes Vo No
Remarks:	
could not evaluate soils nea	vlat power plant
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRI	
Saturation (A3) Hydrogen Sulfide Odor (0	
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)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remark	
Inundation Visible on Aerial Imagery (B7)	X FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No _X_ Depth (inches):	NH
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	
portions of wetland inun	dated
1.40	
the first second s	

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

Sampling Point: ______

Absolute Dominant Indicator	Dominance Test worksheet:
% Cover Species? Status	Number of Dominant Species 2 (A)
	Total Number of Dominant Species Across All Strata: (B)
	Percent of Dominant Species (A/B)
	Prevalence Index worksheet:
	Total % Cover of: Multiply by:
0 = Total Cover	OBL species x 1 =
the second s	FACW species x 2 =
	FAC species x 3 =
	FACU species x 4 =
and the second sec	UPL species x 5 =
	Column Totals: (A) (B)
	Prevalence Index = B/A =
	Hydrophytic Vegetation Indicators:
	1 - Rapid Test for Hydrophytic Vegetation
	\times 2 - Dominance Test is >50%
	3 - Prevalence Index is ≤3.0 ¹
	Problematic Hydrophytic Vegetation ¹ (Explain)
_ 20% bi total cover	and the second se
2) V ENAL	¹ Indicators of hydric soil and wetland hydrology must
and the second s	be present, unless disturbed or problematic.
second se	Definitions of Four Vegetation Strata:
10 N FACW	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
10 N FACT	more in diameter at breast height (DBH), regardless of
	height.
10 10 110	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
	tilan 3 hi. DBH and greater tilan 3.26 h (1 hi) tan.
	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.
9D = Total Cover	
_ 20% of total cover: 8	
	Hydrophytic
T-t-t-C-	Vegetation
U = Total Cover	Present? Yes X No
	% Cover Species? Status 0 = Total Cover

Sampling Point: wcholl2eus

Depth (inches) Matrix Redox Features Color (moist) % Color (moist) % Type ¹ Loc ² Texture Remarks	
Indexes) Load (mode) % % Mode) Mode) % Mode) Mode) %	and t,



Wetland data point wcho012e_w facing southwest



Wetland data point wcho012e_w facing northwest

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

	City/County: Chesapeake Sampling Date: 12/15/15
Applicant/Owner: Dominion	State: VH Sampling Point: WChoD/2-4
Investigator(s): L. Poper, R. Turnbull	
	Local relief (concave, convex, none): <u>none</u> Slope (%): <u>D-21.</u>
Subregion (LRR or MLRA): LFFT Lat: 36.	770193 Long: -76. 30809 Datum: W6584
Soil Map Unit Name: Udorthents - Urban land	complex NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes X 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 pr	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	In the Denvelod Anna
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No X	within a wetland? YesNo
Remarks:	
Could not evaluate soils o	n/near power plant
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Aquatic Fauna (B1	
High Water Table (A2) Marl Deposits (B15	
Saturation (A3) Hydrogen Sulfide (Odor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosph	neres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduc	ced Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduc	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in R	
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 X Depth (inches	
Water Table Present? Yes No Depth (inches	V
Saturation Present? Yes No Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	
Remarks:	0
could not evaluate subs	urface hydrology near/at
DAMPER DIANT	
Power France	in the second seco
11 Crowner indicator	s present
No surface water indicator	

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

Sampling Point: wchoDlZ-w

7.51 7.51	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ff x 30ff)	% Cover Species? Status	Number of Dominant Species
1. none,		That Are OBL, FACW, or FAC: (A)
2		1
		Total Number of Dominant Species Across All Strata: (B)
3		Species Across All Strata: (A)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: 501 (A/B)
6		Prevalence Index worksheet:
7		
8		Total % Cover of:Multiply by:
	= Total Cover	OBL species x 1 =
50% of total cover	20% of total cover:	FACW species 25 x 2 = $5D$
Sapling/Shrub Stratum (Plot size: 30f+ x 30f+		FAC species 15 x 3 = 45
		FACU species 55 x4= 220
1. hone		UPL species O x 5 = O
2		Column Totals: 95 (A) 315 (B)
3		Column rotars. 15 (A) 515 (B)
4		Prevalence Index = $B/A = 3.32$
5		Hydrophytic Vegetation Indicators:
6		
7		1 - Rapid Test for Hydrophytic Vegetation
8.		2 - Dominance Test is >50%
o		3 - Prevalence Index is ≤3.0 ¹
and the second se	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
	20% of total cover:	
Herb Stratum (Plot size: 307-1 x 3054)		¹ Indicators of hydric soil and wetland hydrology must
1. Andropogon glomeratus	5 N FACW	be present, unless disturbed or problematic.
2. Eupatorium capillifolium	5 N FACU	Definitions of Four Vegetation Strata:
3. Symphyotrichum pilosum	20 Y FACW	
4. Setaria pumila	15 N FAL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Elevine indica	50 Y FACH	more in diameter at breast height (DBH), regardless of height.
		inorgin.
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.
		neight.
12	96	
47	95 = Total Cover	
50% of total cover:	5 20% of total cover: 19	
Woody Vine Stratum (Plot size: 30ff X 30ff)		
1. None		
2.		
3.		
4		
5		Hydrophytic
	O = Total Cover	Vegetation Present? Yes No
50% of total cover:	20% of total cover:	
Remarks: (If observed, list morphological adaptations belo	w).	
and the second se		

Sampling Point: WchoD12-4

Depth (inches)	Color (moist)			lox Features	s Type ¹	Loc ²	Texture	Remarks
Type: C=C Hydric Soll Histic Ep Black Hi Hydroge Stratifier Organic 5 cm Mu Muck Pr 1 cm Mu Depleter Thick Da Coast P Sandy M Sandy G Sandy F Stripped Dark Su Restrictive Type: Depth (in Remarks:	oncentration. D=Depi Indicators: (Applica (A1) bipedon (A2) stic (A3) an Sulfide (A4) d Layers (A5) Bodies (A6) (LRR P, ucky Mineral (A7) (LR esence (A8) (LRR U, tek (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rairie Redox (A16) (M fucky Mineral (S1) (L Bleyed Matrix (S4) tedox (S5) Matrix (S6) rface (S7) (LRR P, S Layer (If observed):	T, U) eletion, RM=R able to all Li (A11) (Peduced Matrix, M RRs, unless othe Polyvalue B Thin Dark S Loamy Muc Loamy Gley Depleted M Redox Dark Depleted Dark Redox Depr Marl (F10) (Depleted Ou Iron-Manga Umbric Surf Delta Ochrid Reduced Ve Piedmont Fl Anomalous	AS=Masked arwise note Below Surface Surface (S9) ky Mineral (ved Matrix (f atrix (F3) s Surface (F ark Surface ressions (F6 LRR U) chric (F11) (nese Masse face (F13) (c (F17) (ML ertic (F18) (loodplain Se Bright Loan	(MLRA 15) (MLRA 15) (F1) (LRR 5, (F1) (LRR 5, (F1) (LRR 5, (F1) (LRR 5, (F1) (LRR 5, (F1) (LRR 7, (F1) (LR 7, (F1) (LR 7, (ains. RR S, T, U) T, U) O) 61) LRR O, P, T U) 00, 150B) (MLRA 149 20) (MLRA	² Location: PL= Indicators for I 	Pore Lining, M=Matrix. Problematic Hydric Solls ³ : (A9) (LRR O) (A10) (LRR S) ertic (F18) (outside MLRA 150A,B floodplain Soils (F19) (LRR P, S, T) Bright Loarny Soils (F20) 53B) : Material (TF2) ww Dark Surface (TF12) ain in Remarks) s of hydrophytic vegetation and hydrology must be present, listurbed or problematic. (D)



Upland data point wcho012_u facing southeast



Upland data point wcho012_u facing northeast

Photo Sheet 2 of 2

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: A CP	City/County: Chesapeake Sampling Date: 12/1.5/15
Applicant/Owner: Dominion	State: VA Sampling Point: WCho DISF_W
Investigator(s): L. Roper, R. Turnbull	Section, Township, Range: NDNC
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): <u>none</u> Slope (%): <u>0-2'/</u>
Subregion (LRR or MLRA): LRR T Lat: 36.	772.81 Long: -76,30531 Datum: W6584
Soil Map Unit Name: Urban Land	NWI classification: PFD
Are climatic / hydrologic conditions on the site typical for this time of yo	ear? Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pr	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes X No	within a wetland?
Remarks:	
ditch beside old railroad	at power plant,
could not evaluate soil on!	near power plant
	Hardwood Flat
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Aquatic Fauna (B1	
High Water Table (A2) Marl Deposits (B1	5) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide (Odor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosph	neres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduc	
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface Iron Deposits (B5) Other (Explain in F	
Inundation Visible on Aerial Imagery (B7)	Enality Addition (05)
X Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No X_ Depth (inches	NA
Water Table Present? Yes No Depth (inches	
Saturation Present? Yes No Depth (inches (includes capillary fringe)): Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
portions of wethind in	ind to t
portions of wetland inu	noated
a 11 hauto cal	rupping hydrology on hear
Could not evaluate suc	surface hydrology on near
12 = plant	
power plant	

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

Sampling Point: wchoDIST-w

Number of Dominant Species That Are OBL, FACW, or FAC: (A)
Total Number of Dominant 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B
Prevalence Index worksheet:
Total % Cover of: Multiply by:
and the second
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 ≤3.0 ¹
Problematic Hydrophytic Vegetation ¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Definitions of Four Vegetation Strata:
Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of
more in diameter at breast height (DBH), regardless of height.
in sign.
Sapling/Shrub - Woody plants, excluding vines, less
than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
or size, and woody plants less than 5.20 it tail.
Woody vine - All woody vines greater than 3.28 ft in
height.
10
11. des builts
Hydrophytic Vegetation
Present? Yes X No

Sampling Point: wchousfw



Wetland data point wcho015f_w facing west



Wetland data point wcho015f_w facing east

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Chesapeake Sampling Date: 12/15/15
Applicant/Owner: Dominion	State: VA Sampling Point: wchoD15_4
Investigator(s): LIROper, R. Turnbull	Section, Township, Range: DDNC
	Local relief (concave, convex, none): <u>NDNE</u> Slope (%): <u>D-2²/</u>
	.77285 Long: -76.30532 Datum: W6584
Subregion (LRR or MLRA): LR RT Lat: 36	
Soil Map Unit Name: Urban Land	
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation X, Soil , or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes NoX
Wetland Hydrology Present? Yes No X	within a Wetland? Yes No
Remarks:	
Old railroad bed	
could not evaluate soils	on/near power plant
HYDROLOGY	, , , ,
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B1	
High Water Table (A2) Marl Deposits (B1	5) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide (
Water Marks (B1) Oxidized Rhizosph	neres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduc	
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in F	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No X Depth (inches	NA NA
Water Table Present? Yes No Depth (inclusion)	
Saturation Present? Yes No Depth (inches	V
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	os previous inspections), if available:
Remarks: Could not evaluate subsu No surface water indicators	Prin hidrology
Could not evaluate subsu	intace ny chordy
	orecent
No surface water indicators	preserve
100 Sout laces and	

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

Sampling Point: wcholl 5.

1701 2011	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ff × 30ff)	% Cover	Species	Status	Number of Dominant Species
1. hone				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)
6				That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8	0			OBL species O x1= O
	_0			FACW species 2 x 2 = 4
50% of total cover:	20% of	total cover		FAC species x3 =
Sapling/Shrub Stratum (Plot size: 30ff x.30ff)				FACU species $5 \times 4 = 20$
1. none				UPL species O $x = O$
2	_			
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
8.				2 - Dominance Test is >50%
8	0			3 - Prevalence Index is ≤3.01
		= Total Co	1.20	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover		
Herb Stratum (Plot size: 3077 x 3077)	~	~	C.0. 10	¹ Indicators of hydric soil and wetland hydrology must
1. Eupatorium capillifolium	5	Y	FACU	be present, unless disturbed or problematic.
2. Andropogon glomeratus	2	Y	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				Continue (Charles Minada alasta avaludian Jaco Jaco
				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				
	1	= Total Co	/er (
50% of total cover: 3.5	_ 20% of	total cover	. 1.4	
Woody Vine Stratum (Plot size: 30f4 x 30ff)				
1. NONE				
2.				
1			-	
3				
4				
5		-		Hydrophytic
		= Total Cov		Vegetation Present? Yes No X
50% of total cover:	_ 20% of	total cover	:	
Remarks: (If observed, list morphological adaptations below	N).			

Sampling Point: wcho015_c

Depth (inches)	Matrix Color (moist)	% Colo	Redox Fea or (moist)		Loc ²	Texture	Remarks
Type: C=Cor ydric Soll Ir Histosol (Histic Epi Black His Stratified Organic E 5 cm Muc Depleted Thick Dar Coast Pra Sandy Mu Sandy Gla Sandy Re Stripped I Dark Surf	ncentration, D=Deple adicators: (Applicat A1) pedon (A2) tic (A3) Sulfide (A4) Layers (A5) Sodies (A6) (LRR P, T) ky Mineral (A7) (LRR sence (A8) (LRR U) k (A9) (LRR P, T) Below Dark Surface (A k Surface (A12) tirle Redox (A16) (ML ucky Mineral (S1) (LR eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR P, S, a ayer (If observed):	tion, RM=Reduce ble to all LRRs, u 	ed Matrix, MS=Ma unless otherwise Polyvalue Below S Thin Dark Surface Loamy Mucky Min Loamy Gleyed Ma Depleted Matrix (F Redox Dark Surfa Depleted Dark Surfa Depleted Dark Surfa Depleted Dark Surfa (F10) (LRR L Depleted Ochric (I ron-Manganese M Umbric Surface (F Delta Ochric (F17) Reduced Vertic (F Piedmont Floodpla	sked Sand Gra noted.) Surface (S8) (L (S9) (LRR S, eral (F1) (LRR trix (F2) :3) ce (F6) rface (F7) is (F8) J) F11) (MLRA 15 Masses (F12) (I (13) (LRR P, T) 0 (MLRA 151) 18) (MLRA 15	ains. RR S, T, U) T, U) O) i1) LRR O, P, T U) OA, 150B) (MLRA 149	² Location: PL=F Indicators for P 1 cm Muck (2 cm Muck (3 cm malous (3 cm malo	Pore Lining, M=Matrix. roblematic Hydric Solls ³ : A9) (LRR O) A10) (LRR S) rtic (F18) (outside MLRA 150A, B codplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20) 3B) Material (TF2) v Dark Surface (TF12) tin in Remarks) of hydrophytic vegetation and hydrology must be present, sturbed or problematic.
Could	not eve	rluate	SOIR	on/neo	ur p	ower p	lant .



Upland data point wcho015_u facing southwest



Upland data point wcho015_u facing southeast

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Chesapeake Sampling Date: 12/15/15
Applicant/Owner: Dominion	State: VA Sampling Point: Wcho 014 Fun
	Section, Township, Range: NONE
	Local relief (concave, convex, none): <u>NDNC</u> Slope (%): <u>D-Z'/</u>
	8FD
Soil Map Unit Name: Urband Land	
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances" present? Yes X 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 K No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes K No	within a wetland r res <u>r</u> No
Remarks:	
ditch beside old railroad	hed
could not evaluate soils o	ninear power plant
NCULAN CLUEFFULTER'	columnal Tight
NCWAM Classification: H	arawood Flut
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B1)	
High Water Table (A2) Marl Deposits (B15 Saturation (A3) Hydrogen Sulfide C	
	Ddor (C1) Moss Trim Lines (B16) eres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduc	
	tion in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in R	
Inundation Visible on Aerial Imagery (B7)	K FAC-Neutral Test (D5)
X Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	1.0
Surface Water Present? Yes X No Depth (inches)	
Water Table Present? Yes No Depth (inches)	
Saturation Present? Yes No Depth (inches) (includes capillary fringe)): Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
portions of wetland inur	ndata l
- Inor	hydrology on/near power plant.
could not evaluate subsurface	hydrology on new posses

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

Sampling Point: wchod14fw

30EL 30Et		Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size: 30Ft x 30 ft) 1. Liguidambar styraciflua	40 40	Species?	FAC	Number of Dominant Species 5 (A)	
2				Total Number of Dominant Species Across All Strata:(B)	
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/R	B)
6					
7				Prevalence Index worksheet:	
8				Total % Cover of: Multiply by:	
	10	= Total Cov	rer	OBL species x 1 =	
50% of total cover: 5		total cover		FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30ft x 30ft)				FAC species x 3 =	
1. Morella cerifera	20	V	FALW	FACU species x 4 =	
			FAC	UPL species x 5 =	
2. Acer rubrum	-5-		FAC	Column Totals: (A) (B	1
3					"
4				Prevalence index = B/A =	
5		_		Hydrophytic Vegetation Indicators:	-
6					
7				1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50%	
8					
0	15	= Total Cov		3 - Prevalence Index is ≤3.0 ¹	
17				Problematic Hydrophytic Vegetation ¹ (Explain)	
50% of total cover: 121	<u> </u>	total cover			
Herb Stratum (Plot size: 30ft x 30ft) 1. Arundinaria gigantea	5	Y	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
				Definitions of Four Vegetation Strata:	-
3			and the second s		
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of	
4				more in diameter at breast height (DBH), regardless of height.	of
5				neight.	
6				Sapling/Shrub - Woody plants, excluding vines, less	5
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8	_			Herb - All herbaceous (non-woody) plants, regardles	
9				of size, and woody plants less than 3.28 ft tall.	2
10					
				Woody vine - All woody vines greater than 3.28 ft in	
11				height.	
12					
	:	= Total Cov			-
50% of total cover: 2.5	20% of	total cover	1		
Woody Vine Stratum (Plot size: 30ff x 30ff)					
1. Smilax rotundifolia	5	Y	FAC		
2					
2					
3					
4					
5				Hydrophytic	
	5 :	= Total Cov	er	Vegetation	
50% of total cover: 215	20% of	total cover:		Present? Yes X No	
Remarks: (If observed, list morphological adaptations belo					-
Remarks. (in observed, its morphological adaptations belo	wy).				

Sampling Point: WCho014f-w



Wetland data point wcho014f_w facing northwest



Wetland data point wcho014f_w facing northeast

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Chesapeake Sampling Date: 12/15/15
Applicant/Owner: Dominion	State: VA Sampling Point: wchaD14-us
Investigator(s): LIROper, R. Turnbull	Section, Township, Range: <u>NDNE</u>
	Local relief (concave, convex, none): <u>None</u> Slope (%): <u>0-2'/</u>
	A 11/1
Soil Map Unit Name: Urban Land	
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	v disturbed? Are "Normal Circumstances" present? Yes X No
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 X	
Hydric Soil Present? Yes No	Is the Sampled Area
Wetland Hydrology Present? Yes No X	within a Wetland? Yes No
Remarks:	
old railroad bed	
could not evaluate soils	on/near powerplant
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Aquatic Fauna (B1	
High Water Table (A2) Marl Deposits (B15	
Saturation (A3) Hydrogen Sulfide (Odor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosph	neres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduc	
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in F Inundation Visible on Aerial Imagery (B7)	Remarks) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No X_ Depth (inches	NA I
Water Table Present? Yes No Depth (inches	
Saturation Present? Yes No Depth (inches	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
Could not evaluate subsu	rface hydrology on near
power plant	and the second
No surface water indicators pr	cscul.

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

Sampling Point: Wichooly-a

30ft, 30ft	Absolute Dominant Indicator	Dominance Test worksheet:
Iree Stratum (Plot size: 30ffx 30ff) 1. NONC	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
23		Total Number of Dominant Z (B)
4		Percent of Dominant Species
6		
7		Prevalence Index worksheet:
8		Total % Cover of: Multiply by:
	0 = Total Cover	OBL species x 1 = FACW species 2 x 2 = 4
50% of total cover:	20% of total cover:	FACW species $2 = 4$
Sapling/Shrub Stratum (Plot size: 3044x3044)		FAC species $x_3 =$ FACU species 5 $x_4 =$ 20
1 205200		
2		UPL species x 5 =
3		Column Totals: (A) (B)
4		Prevalence Index = $B/A = 3 \cdot 4$
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
	0 = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 30ff x 30ff)		Indiastees of buddle cell and until and budgetons must
1. Eupatorium capillifolium	5 Y FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Andropogon alomeratus	2 Y FACW	Definitions of Four Vegetation Strata:
4		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5		height.
67		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		
25	= Total Cover	
50% of total cover: 3.5	20% of total cover: 114	
Woody Vine Stratum (Plot size: 30++ x 30++)		
1. non-e		
2		
3		
4		
5		Hydrophytic
	U = Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes No X
Remarks: (If observed, list morphological adaptations belo	w).	

Sampling Point: WChoD14-4

Depth (inches)	Matrix Color (moist)	<u>%</u>	Redo Color (moist)	x Feature %		Loc ²	Texture	Remarks
Hydric Soli Histosol Histic Er Black Hi Hydroge Stratifier Organic 5 cm Mu Muck Pr 1 cm Mu Depleter Thick De Coast P Sandy M Sandy C Sandy R Stripped Dark Su Restrictive Type: Depth (intre-	bipedon (A2) stic (A3) in Sulfide (A4) d Layers (A5) Bodies (A6) (LRR P, icky Mineral (A7) (LR esence (A8) (LRR U) ick (A9) (LRR P, T) d Below Dark Surface irk Surface (A12) rairie Redox (A16) (M Mucky Mineral (S1) (L Beyed Matrix (S4) ledox (S5) Matrix (S6) rface (S7) (LRR P, S Layer (If observed):	T, U) T, U) R P, T, U) (A11) LRA 150A) RR O, S)	Rs, unless other Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (L Depleted Oct Iron-Mangan Umbric Surfa Delta Ochric Reduced Ver Piedmont Flo	wise not rface (S9) y Mineral ed Matrix (trix (F3) Surface (F rk Surface essions (F1 RR U) nric (F11) ese Massi ce (F13) ((F17) (ML tic (F18) (bodplain S bright Loar	ed.) ce (S8) (LI (F1) (LRR S, 7 (F1) (LRR F2) (6) (F7) 8) (MLRA 15 es (F12) (L LRR P, T, RA 151) MLRA 150 oils (F19) (ny Soils (F	RR S, T, U F, U) O) RR O, P, ⁻ U) DA, 150B) MLRA 145 20) (MLRA	Indicators for 1 cm Muck 2 cm Muck Reduced V Piedmont I Anomalous (MLRA 1 Red Paren Very Shalle Other (Exp T) ³ Indicator wetland unless of A 149A, 153C, 153 Hydric Soll Pre	(A10) (LRR S) /ertic (F18) (outside MLRA 150A,B) Floodplain Soils (F19) (LRR P, S, T) s Bright Loamy Soils (F20) 153B) It Material (TF2) ow Dark Surface (TF12) Is of hydrophytic vegetation and I hydrology must be present, disturbed or problematic. 3D) sent? Yes No



Upland data point wcho014_u facing southwest



Upland data point wcho014_u facing southeast

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	city/county: Chesapeake Sampling Date: 12/15/15
Applicant/Owner: Dominion	State: VA Sampling Point: WCh30162-W
	Section, Township, Range: NONC
	Local relief (concave, convex, none): none Slope (%): D-21
	77428 Long: -76, 29722 Datum: W(+584
Soil Map Unit Name: Udor thents - Urban land	FARM
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	V
Are Vegetation, Soil, or Hydrology naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes X No	within a wetland? Yes <u>No</u> No
Remarks:	
Tidal emergent wetlan	2
inder entergent werter	10
Could not evaluate soils	on/near power plant
HYDROLOGY	originat power plant.
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13	
High Water Table (A2) Marl Deposits (B15)	
Saturation (A3) Hydrogen Sulfide O	
	eres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduce	
Drift Deposits (B3) Recent Iron Reduct	ion in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in Re	emarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	K FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No X Depth (inches):	NA
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if available:
Remarks:	
C (1) /	
portions of wetland in	induted
	P - hulplen - hear
could not evaluate subs	orface hydrology on near
power plant	

Absolute Dominant Indicator	Dominance Test worksheet:
Absolute Dominant Indicator <u>% Cover Species? Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
	Total Number of Dominant
	Species Across All Strata: (B)
	Percent of Dominant Species DO (A/B)
	Prevalence Index worksheet:
	Total % Cover of: Multiply by:
0 - Total Course	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%
0 = Total Cover	3 - Prevalence Index is ≤3.0 ¹
	Problematic Hydrophytic Vegetation ¹ (Explain)
	Indicators of hydric soil and wetland hydrology must
<u>15 Y FACW</u>	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.
	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
	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.
	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.
	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
	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
95 = Total Cover	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
	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
$\frac{95}{15} = \text{Total Cover}$	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
$\frac{95}{15} = \text{Total Cover}$	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
$\frac{95}{15} = \text{Total Cover}$	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
95 = Total Cover 20% of total cover: 19	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.
95 = Total Cover 3 20% of total cover: 19	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

US Army Corps of Engineers

Atlantic and Gulf Coastal Plain Region - Version 2.0

Depth	cription: (Describe t						the absence t	in individual any
(inches)	Matrix Color (moist)	%	Color (moist)	% Feature	Type ¹	_Loc ²	Texture	Remarks
						1		
		<u>ل است</u>						
	<u> </u>							
_								
					_			
Type: C=C	oncentration, D=Deple	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	² Location: F	PL=Pore Lining, M=Matrix.
ydric Soil I	ndicators: (Applica	ble to all L	RRs, unless other	wise note	ed.)		Indicators fo	or Problematic Hydric Solis ³ :
_ Histosol			Polyvalue Be				1 cm Mu	ick (A9) (LRR O)
	bipedon (A2)		Thin Dark Su					ick (A10) (LRR S)
_ Black Hi	n Sulfide (A4)		Loamy Muck			0)		Vertic (F18) (outside MLRA 150A,B)
	Layers (A5)		Depleted Mat		-2)			nt Floodplain Soils (F19) (LRR P, S, T) bus Bright Loamy Soils (F20)
	Bodies (A5) (LRR P,	T, U)	Redox Dark S		6)			A 153B)
	cky Mineral (A7) (LRI		Depleted Dar					ent Material (TF2)
	esence (A8) (LRR U)		Redox Depre		3)			allow Dark Surface (TF12)
	ck (A9) (LRR P, T) Below Dark Surface		Marl (F10) (L			22	Other (E	xplain in Remarks)
	rk Surface (A12)	(A11)	Depleted Och				a Jacked	and of hereine hereine and attack at
	airie Redox (A16) (MI	LRA 150A)	Umbric Surfa					ors of hydrophytic vegetation and nd hydrology must be present.
_ Sandy M	ucky Mineral (S1) (LF	RR O, S)	Delta Ochric			-,		s disturbed or problematic.
	leyed Matrix (S4)		Reduced Ver	tic (F18) (I	MLRA 15			
	edox (S5)		Piedmont Flo					
	Matrix (S6)		Anomalous B	right Loan	ny Soils (F	20) (MLRA	149A, 153C, 1	53D)
	face (S7) (LRR P, S, aver (If observed):	1, 0)		_		1		
lestrictive L	ayer (If observed):	1, 0)						
testrictive L Type:	ayer (If observed):	1, 0)	-				Hydric Soil P	resent? Vec No
Type: Depth (inc	ayer (If observed): hes):	_	_				Hydric Soll P	
Type: Depth (inc	ayer (If observed): hes):	_		TL	64	10.00		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	- ite 50	otl3	oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	= 1. te 50	orls	oh	nea		wer plant
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	= 1.te 50	otls	oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	te 50	orls	oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	_ .te 50	orls	oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	<u>-</u> .te 50	orls	oh	/neo-		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	= ite 50	orls	oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	te 50	orls	Oh	/nea		
Type: Depth (inc	ayer (If observed): hes):	_	te 50	orls	oh	/nea		
Type: Depth (inc	ayer (If observed): hes):	_	te 50	orls	oh	/nea		
Type: Depth (inc	ayer (If observed): hes):	_	_ .te 50	orls	Oh	/neo-		
Type: Depth (inc	ayer (If observed): hes):	_	_ .te 50	orls	oh	/neo-		
Type: Depth (inc	ayer (If observed): hes):	_	_ .te 50	orls	oh	/neo-		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	te 50	orls	oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	te 50	orls	Oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	_ .te 50	orls	Oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	_ .te 50	orls	Oh	/neo-		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	_ .te 50	orls	Oh	/neo-		
Type: Depth (inc	ayer (If observed): hes):	_	_ .te 50	orls	oh	/neo-		
Type: Depth (inc	ayer (If observed): hes):	_	_ .te 50	orls	oh	/neo-		
strictive L Type: Depth (inc marks:	ayer (If observed): hes):	_	_ .te 50	orls	oh	/neo		



Wetland data point wcho016e_w facing west



Wetland data point wcho016e_w facing south

Photo Sheet 1 of 2

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Chesa peake Sampling Date: 12/15/15
Applicantowner: Dominion	State: VA Sampling Point: WChOOL 6 Full
Investigator(s): Li Roper, Riturnbull	
Landform (hillslope, terrace, etc.):flat	Local relief (concave, convex, none): NDNP Slope (%) 0-21,
Subregion (LRR or MLRA): LRR T Lat: 310	
	und complex NWI classification: PFD
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantl	
Are Vegetation, Soil, or Hydrology naturally p	
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes No	
Wetland Hydrology Present? Yes X No	·
NCWAM Classification: Both	
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 (B	13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B1	5) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide	그는 그는 것 같은 것 같은 것 같은 것 같은 것 같이 같이 많이
	heres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Redu	
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface Iron Deposits (B5) Other (Explain in I	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
X Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No X Depth (inches	a): <u>NA</u>
Water Table Present? Yes No Depth (inches	s):
Saturation Present? Yes No Depth (inches	s): Wetland Hydrology Present? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	
portions of wetland inu	NOATEd
,	
dull not evaluate, sub-	surface hydrology on/near
CONO VIUT CONTRACTO DODA	
power plant	
porter plotte	

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EGETATION (Four Strata) – Use scientific nar		Dominant	Indicator	Dominance Test worksheet:	ig Point: with	
<u>Aler</u> (Plot size: <u>30ft X30ft</u>) <u>Aler</u> rubrum <u>Liguidambar</u> styracitlua	D/ Cours	Consine?	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	4	(A)
Liguidambar styracitlua		_Y	FAC	Total Number of Dominant Species Across All Strata:	4	(B)
				Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)
				Prevalence Index worksheet: Total % Cover of:	A feathing for being	
				OBL species x1		
		= Total Co				
50% of total cover: 715	20% of	total cover	3	FACW species x 2		
Sapling/Shrub Stratum (Plot size: 30++ x 30++)				FAC species x 3		
none				FACU species x 4		
				UPL species x 5		
L				Column Totals: (A)		_ (B)
	<u> </u>			Prevalence Index = B/A =	_	_
				Hydrophytic Vegetation Indicate	ors:	
i	<u> </u>			1 - Rapid Test for Hydrophytic	· Vegetation	
	_	· · · · · · · · ·	_	Z - Dominance Test is >50%		
3.				3 - Prevalence Index is ≤3.01		
	Ð	= Total Co	ver	Problematic Hydrophytic Veg	etation ¹ (Expla	ain)
50% of total cover:	20% of	total cover				
Herb Stratum (Pict size: 30 ++ x 30 ++)				Indicators of hydric soil and wella	nd hydrology	must
Rubus prautus	5	X	FAC	be present, unless disturbed or pr	oblematic.	
				Definitions of Four Vegetation	Strata:	
3.						
				Tree – Woody plants, excluding v more in diameter at breast height	(DBH) regard	less of
4				height.	(DDI(), regul	
5					i fi san	
5				Sapling/Shrub – Woody plants, e than 3 in. DBH and greater than 3	28 ft (1 m) ta	s, less
7				than 5 m. DBH and greater than c		
3				Herb - All herbaceous (non-wood	y) plants, reg	ardless
9				of size, and woody plants less that	in 3.28 ft tall.	
10				Woody vine - All woody vines gr	eater than 3.2	8 ft in
11				height.		
12		_				
		= Total Co		-		
50% of total cover: 2.5	5 20% 0	f total cove	-			
Woody Vine Stratum (Plot size: 30 ft x 30ft)						
. Smilax rotunditolia	5	<u>y</u>	FAC			
2.		1				
3.						
4						
5	1200	2		Hydrophytic		
	5	= Total Co	ver	Magatallan		
50% of total cover: 2.5	5 = Total Cover			Present? Yes	No	
		i total core				
Remarks: (If observed, list morphological adaptations belo						

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Sampling Point: wchoblef_w

rofile Description: (Describe to the depti Depth <u>Matrix</u> nches) Color (moist) %	Redox Features	cator or confirm /pe ¹ _Loc ² _	the absence of In Texture	dicators.) Remarks
Ype: C=Concentration, D=Depletion, RM=1 ydric Soil Indicators: (Applicable to all L Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A5) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (if observed): Type: Depth (inches): marks: Could Not Evalue	Reduced Matrix, MS=Masked Sar RRs, unless otherwise noted.) Polyvalue Below Surface (S) Thin Dark Surface (S9) (LF Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F6) Depleted Dark Surface (F7 Redox Depressions (F8) Marl (F10) (LRR U) Depleted Ochric (F11) (ML Iron-Manganese Masses (H Delta Ochric (F17) (MLRA Reduced Vertic (F18) (MLF Piedmont Floodplain Soils Anomalous Bright Loamy S	nd Grains. S8) (LRR S, T, U) RR S, T, U) (LRR O) RA 151) F12) (LRR O, P, T R P, T, U) 151) RA 150A, 150B) (F19) (MLRA 145 Soils (F20) (MLRA	² Location: PL=I Indicators for P)1 cm Muck 1 2 cm Muck 1 2 cm Muck 1 2 cm Muck 1 2 cm Muck 1 Piedmont FI A nomalous (MLRA 15 (MLRA 15 (MLRA 15 (MLRA 15 (MLRA 15 Other (Expla Other (Expla Other (Expla Other (Expla Other (Expla (MLRA 15 	Pore Lining. M=Matrix. Troblematic Hydric Solls ³ : (A9) (LRR O) (A10) (LRR S) ertic (F18) (outside MLRA 150A, B) oodplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20) i3B) Material (TF2) w Dark Surface (TF12) ain in Remarks) of hydrophytic vegetation and hydrology must be present, isturbed or problematic. D) ent? Yes No



Wetland data point wcho016f_w facing northwest



Wetland data point wcho016f_w facing northeast

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

	City/County: Chesapeare Sampling Date: 12/15/15
Applicant/Owner Dominion	State VH Sampling Point: WCho DIb-14
	_ Section, Township, Range: NOVL
Landform (hillslope, terrace, etc.):Flat Subregion (LRR or MLRA):R. TLat: 36	Local relief (concave, convex, none): <u>NDNE</u> Slope (%) <u>D-2/1</u> 17418 Long: <u>-710, 29799</u> Datum: <u>W6584</u>
Soil Map Unit Name: Udorthents-Urban]	and complex NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of y	2 1
Are Vegetation, Soil, or Hydrology significantl	
Are Vegetation, Soil, or Hydrology naturally p	
	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 No
Could not evaluate soils a	on/hear power plant
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 (B	13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B1	
Saturation (A3) Hydrogen Sulfide	
Water Marks (B1) Oxidized Rhizosp Sediment Deposits (B2) Presence of Redu	heres along Living Roots (C3) Dry-Season Water Table (C2) uced Iron (C4) Crayfish Burrows (C8)
	Inction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in i	Remarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
	s): NH
Water Table Present? Yes No Depth (inches	
Saturation Present? Yes No Depth (inches	X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	
Remarks:	
Could not evaluate sub	surface hydrology on/near
	/ 0/ /
power plant	
1 . Vecher	areat
No surface water indicators p	reserve

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	Dominant Species?		Dominance Test worksheet:
5		FAC	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
5	_¥	FAC	Total Number of Dominant Species Across All Strata:(B)
			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B
			Prevalence Index worksheet: Total % Cover of: Multiply by:
ID			OBL species x1 =
2004 of	= Total Cov	2 2	FACW species x 2 =
20% 01	total cover		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
			Z - Dominance Test is >50%
0	Total Co		3 - Prevalence Index is ≤3.0 ¹
			Problematic Hydrophytic Vegetation' (Explain)
			¹ Indicators of hydric soil and wetland hydrology must
1D	Y	FAL	be present, unless disturbed or problematic.
	_		Definitions of Four Vegetation Strata:
			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of
			height.
			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, regardles of size, and woody plants less than 3.28 ft tall.
			Woody vine - All woody vines greater than 3.28 ft in
	-		height.
10	- Total Co	var	
		-	
15	Y	FH.	
5	Y	FAL	
	- 1		
		24	Hydrophytic
	-		
20	= Total Co	wer	Vegetation Present? Yes X No
	D 20% of 1D 1D	D = Total Cov 20% of total cover 0 = Total Cov 20% of total cover 10 Y	$\frac{ D }{20\% \text{ of total cover}} = Total Cover 20\% \text{ of total cover} = 22$

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Atlantic and

Sampling Point: wchollb - ch

Type: C=Concentration. D=Depietion. RM=Reduced Matrix. MS=Masked Sand Grains "Location: PL=Pore Lining. M=Matrix. Ydrlc Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: GP roblematte Hydrlc Solls ¹ : Histosol (A1) — Pelyvalue Below Surface (S3) (LRR S, T, U) 1 cm Muck (A0) (LRR O) Histosol (A2) — Thin Dark Surface (S3) (LRR S, T, U) 2 cm Muck (A10) (LRR P) Black Histic (A3) — Loamy Gleyed Matrix (F2) — Piedmont Floodplain Solis (F19) (LRR P), S, T Straffed Layers (A5) — Depleted Matrix (F3) — Anomalous Bright Leamy Solis (F20) Muck Mineral (A7) (LRR P, T, U) — Red xDark Surface (F6)	(inches) Color (moist) %	Color (moist)	x Features 		Texture	Remarks
	Type: C=Concentration, D=Depletion, RM lydric Soll Indicators: (Applicable to al Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150 Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type:	EReduced Matrix, M3 I LRRs, unless other Polyvalue Be Thin Dark Su Loamy Muck Loamy Muck Depleted Ma Redox Dark Redox Dark Depleted Dar Redox Depre Marl (F10) (L Depleted Oct Iron-Mangan Delta Ochric Reduced Ver Piedmont Flo	S=Masked Sand Gr rwise noted.) elow Surface (S8) (LRR S, y Mineral (F1) (LRF ed Matrix (F2) trix (F3) Surface (F6) rk Surface (F6) rk Surface (F6) rk Surface (F7) essions (F8) .RR U) hric (F11) (MLRA 1 ese Masses (F12) (ace (F13) (LRR P, T (F17) (MLRA 151) rtic (F18) (MLRA 15 codplain Soils (F19) Bright Leamy Soils (ains. RR S, T, U T, U) O) 51) LRR O, P, ; U) 50A, 150B) (MLRA 14: F20) (MLRA	² Location: PL= Indicators for I) 1 cm Muck 2 cm Muck Reduced V Piedmont F Anomalous (MLRA 1 Very Shalld Other (Expl T) ³ Indicators wetland unless c 9A) A 149A, 153C, 153 Hydrlc Soll Pres	Pore Lining, M=Matrix. Problematic Hydric Solls ^a : (A9) (LRR O) (A10) (LRR S) ertic (F18) (outside MLRA 150A,B loodplain Soils (F19) (LRR P, S, T) Eright Loarny Solls (F20) 53B) Material (TF2) w Dark Surface (TF12) ain in Remarks) a of hydrophytic vegetation and hydrology must be present, listurbed or problematic. (D) Seant? Yes No



Upland data point wcho016_u facing southwest



Upland data point wcho016_u facing southeast

Photo Sheet 3 of 2

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

	_ city/county Chesapeake _ sampling Date 12/15/15
Applicant/Owner: Dominion	State VA Sampling Point WCho017e-w
	_ Section, Township, Range: NDNC
	_ Local relief (concave, convex, none): Slope (%) D-21.
Subregion (LRR or MLRA): LR R T Lat: 31	0.77428 Long: -76.29722 Datum: W6384
	and complex NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of	f year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significar	
Are Vegetation, Soil, or Hydrology adurally	
The second s	
SUMMARY OF FINDINGS – Attach site map showi	ing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soll Present? Yes No Wetland Hydrology Present? Yes No	within a Wetland? Yes No
COOLS NOT EVALUATE SUIT	on/near power plant
HYDROLOGY	Construction of the second
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 (
High Water Table (A2) Marl Deposits (E Saturation (A3) Hydrogen Sulfid	
	le Odor (C1) Moss Trim Lines (B16) 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	ace (C7) Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in	n Remarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	K FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No X Depth (inch	es): NA
Water Table Present? Yes No Depth (inch Saturation Present? Yes No Depth (inch	
(includes capillary fringe)	wettand Hydrology Present? Tes No
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	
portions of wetland invn.	du to 1
0 11 1 1 1	ubsurface hydrology on/near
Could not evaluate si	ubsurface nyorongy on man
power plant	
-	

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2011 2011	Absolute	Dominant		Dominance Test worksheet:	
NONE				Number of Dominant Species That Are OBL, FACW, or FAC	
				Total Number of Dominant Species Across All Strata:	(B)
				Percent of Dominant Species That Are OBL, FACW, or FAC	
				Prevalence Index worksheet	t:
				Total % Cover of:	Multiply by:
	0	= Total Co		OBL species	x 1 =
5004 - 51 - 61 - 61 - 61 - 61 - 61 - 61 - 61	20% of			FACW species	x 2 =
50% of total cover:	20% 0	total cover		FAC species	x 3 =
Salix nigra	10	V	OBL	FACU species	
				UPL species	x 5 =
U				Column Totals:	(A) (B)
				Prevalence Index = B/A	
				Hydrophytic Vegetation Ind	
				1 - Rapid Test for Hydrop	
				X 2 - Dominance Test is >5	
				3 - Prevalence Index is S	
	D	= Total Co	ver	Problematic Hydrophytic	
50% of total cover: 5	20% of	f total cover		- Tobienado Tijdiopiljud	regulation (mapping)
b Stratum (Plot size: 36Ft x 30Ft			1.1.1.1	¹ Indicators of hydric soil and v	vetland hydrology must
Phragmites australis	80	y	FACW	be present, unless disturbed	or problematic.
U	1.1.1			Definitions of Four Vegetati	on Strata:
				Tree – Woody plants, excludi more in diameter at breast he	ng vines, 3 in. (7.6 cm) o ight (DBH), regardless o
				height. Sapling/Shrub – Woody plan	
				than 3 in. DBH and greater th	an 3.28 ft (1 m) tall.
				Herb – All herbaceous (non-v of size, and woody plants less	voody) plants, regardless s than 3.28 ft tall.
			_	Woody vine - All woody vine height.	s greater than 3.28 ft in
	20			1 - A	
hir-	00	= Total Co			
50% of total cover: 40	20% 0	f total cove	r: <u>T</u>		
oody Vine Stratum (Plot size: 30f4x30ff)					
hone					
				2127212	
	0	= Total Co		Hydrophytic Vegetation X	
110 171	1	St. Strategies		Present? Yes	No
50% of total cover;		of total cove	r		
emarks: (If observed, list morphological adaptations be	low).				

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		licator o	rconfirm	the absence of in	dicators.)
Color (moist)		Type	Loc ²	Texture	Remarks
IRs, unless othe Polyvalue Be Thin Dark St Loamy Muck Loamy Gleyn Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (I Depleted Oc Iron-Mangar Umbric Surfa Delta Ochric Reduced Ve Piedmont Flo	rwise noted. elow Surface urface (S9) (L cy Mineral (F1 ed Matrix (F2 thrix (F3) Surface (F6) rk Surface (F6) rk Surface (F6) .RR U) hric (F11) (M lese Masses ace (F13) (LF (F17) (MLR) rtic (F18) (ML codplain Soils	.) (S8) (LI .RR S, 1 1) (LRR 1) (F12) (L RR P, T, A 151) LRA 150 s (F19) (RR S, T, U F, U) O) I, RR O, P, U) DA, 150B) (MLRA 14	Indicators for F I) 1 cm Muck 2 cm Muck Reduced Vi Piedmont F Anomalous (MLRA 1: Red Parent Very Shallo Other (Expl T) ³ Indicators wetland unless d 9A)	(A10) (LRR S) ertic (F18) (outside MLRA 150A, B loodplain Soils (F19) (LRR P, S, T, Bright Loamy Soils (F20) 53B) Material (TF2) w Dark Surface (TF12) ain in Remarks) s of hydrophytic vegetation and hydrology must be present, isturbed or problematic.
				Hydric Soll Pres	sent? Yes No
soils	on/n	near	Pov	uer plan	t
	Redoc Color (moist)	Redox Features Color (moist) % Mari (F10)	Redox Features Color (moist) % Type Color (moist) % % Color (flow (moist) % % Color (f	Redox Features Color (moist) % Type' Loc² Color (moist) % Mained (for the second color (Color (moist) % Type Loc ² Texture



Wetland data point wcho017e_w facing southeast



Wetland data point wcho017e_w facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

	City/County: Chesapeake Sampling Date: 12/15/15
Applicant/Owner: Dominion	State VA Sampling Point: Jchool7-4
Investigator(s): Likoper, E. Turnbull	
	Local relief (concave, convex, none): <u>none</u> Slope (%) <u>D-2'/</u>
	11378 Long: -76.29823 Datum: W6584
Soil Map Unit Name: Udor thents - Urban 10	and complex NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of ye	ar? Yes K No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally pro	
	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soli Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Could not evaluate soils	on/hear power plant
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B1)	
High Water Table (A2) Marl Deposits (B15	
Saturation (A3) Hydrogen Sulfide C Water Marks (B1) Oxidized Rhizosph	—
Valer Marks (B1) Oxidized Milzospin	그는 것 같은 것 같
Drift Deposits (B3) Recent Iron Reduct	
Algal Mat or Crust (B4) Thin Muck Surface	승규는 정말 수도 없는 것 같아요. 그는 것 같아요. 그는 것 같아요. 정말 감독하는 것이 있는 것이 같아요. 이 것 같아요. 가지 않는 것 않는 것 같아요. 가지 않는 것 않는
Iron Deposits (B5) Other (Explain in R	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No X Depth (inches)	NA
Water Table Present? Yes No Depth (inches)	·
Saturation Present? Yes No Depth (inches)	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if available:
Remarks:	
and have a start	la istalación platación
Could not evaluate subsurface	e nyavology on near
	1 07 1
POWER Plant No surface water indicators prese	
I interesting over	At
No surface water indicators pros	
140	

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Free Stratum (Plot size: 30ft x 30ft)	Absolute % Cover		Indicator	Dominance Test worksheet:
ree Stratum (Plot size: <u>JUTT X JUTT</u>)				Number of Dominant Species O (A)
				Total Number of Dominant
				Species Across All Strata: (B)
				Percent of Dominant Species
i				That Are OBL, FACW, or FAC: (A/B
3				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
3			<u> </u>	OBL species D $x1 = O$
	-	= Total Co		FACW species $15 \times 2 = 30$
50% of total cover:	20% of	total cove	F	FAC species x3 =36
Sapling/Shrub Stratum (Plot size: 30ft x 30ft)	-7	-10	E D/	FACU species 90 x4= 360
. Pinus treda			FIL	UPL species D x 5 = D
2				Column Totals: 117 (A) 426 (B)
3				bit is the second s
	and the second second			Prevalence Index = $B/A = 3.64$
5				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
		= Total Co		3 - Prevalence Index is ≤3.0'
		total cove	DH	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: Herb Stratum (Pict size: 30 ft x 30 ft_)	20% 0	total cove		
1. Phraamiter australis	5	N	FACH	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Seteria punila	10	N	FAL	Definitions of Four Vegetation Strata:
3. Eremounion ophiuroides	80	Y	FAW	
4. Andropagn alomeratis		N	FACH	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of
5. Lespedeta concata	ID	N	FACU	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, 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.			_	
	115	= Total Co	wer	
50% of total cover: 5	7.5 20% 0	f total cove	1.23	
Woody Vine Stratum (Plot size: 30.44 × 30.44)	1000			
1. None				
2.		_		
3.			1.1	
4		-	-	
5	_			Hydrophytic
	0	= Total Co	wer	Present? Yes No X
50% of total cover:	20% 0	f total cove	r	Present? Yes No X
Remarks: (If observed, list morphological adaptations be	elow).			

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Atlantic and Gulf Coastal Plain Region - Version 2.0

nches) Color (moist) %	Redox Features Color (moist) %	<u>Type' Loc²</u>	Texture	Remarks
ype: C=Concentration, D=Depletion, RM=R ydric Soil Indicators: (Applicable to all LF Histosol (A1) Histosol (A1) Histosol (A1) Histosol (A1) Histosol (A1) Stratified Layers (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bedies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (If observed): Type:	Rs, unless otherwise note Polyvalue Below Surface Thin Dark Surface (S9) Loamy Mucky Mineral (Loamy Gleyed Matrix (F Depleted Matrix (F3) Redox Dark Surface (Fi Depleted Dark Surface (Fi Depleted Dark Surface (Fi Marl (F10) (LRR U) Depleted Ochric (F11) (Iron-Manganese Masse	d.) e (S8) (LRR S, T, U) (LRR S, T, U) F1) (LRR O) F2) (F7) (F7) (F7) (F7) (F7) (F7) (F7) (F7	Indicators for F 1 cm Muck 2 cm Muck Reduced Ve Piedmont F Anomalous (MLRA 12 Red Parent Very Shallo Other (Expl: T) ³ Indicators wetland unless d DA) A 149A, 153C, 153	A10) (LRR S) ertic (F18) (outside MLRA 150A, E loodplain Soils (F19) (LRR P, S, T Bright Loamy Soils (F20) 53B) Material (TF2) w Dark Surface (TF12) ain in Remarks) of hydrophytic vegetation and hydrology must be present, isturbed or problematic.
emarks: could not evaluate	soils on/ne	ar powe	Hydric Soli Pres	ent? Yes No

Atlantic and Gulf Coastal Plain Region - Version 2.0



Upland data point wcho017_u facing southwest



Upland data point wcho017_u facing northwest

Project/Site: ACP	city/county: Chesapeake Sampling Date: 12/15/15
Applicant/Owner: Dominion	State: VA Sampling Point: WCh30162-20
	Section, Township, Range: NONC
	Local relief (concave, convex, none): none Slope (%): D-21
	77428 Long: -76, 29722 Datum: W(+584
Soil Map Unit Name: Udor thents - Urban land	FARM
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	V
Are Vegetation, Soil, or Hydrology naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes X No	within a wetland? Yes <u>No</u> No
Remarks:	
Tidal emergent wetlan	2
inder entergent werter	10
Could not evaluate soils	on/near power plant
HYDROLOGY	originat power plant.
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13	
High Water Table (A2) Marl Deposits (B15)	
Saturation (A3) Hydrogen Sulfide O	
	eres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduce	
Drift Deposits (B3) Recent Iron Reduct	ion in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in Re	emarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	K FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No X Depth (inches):	NA
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if available:
Remarks:	
C (1) /	
portions of wetland in	induted
	P - hulplen - hear
Could not evaluate subs	orface hydrology on near
power plant	

Absolute Dominant Indicator	Dominance Test worksheet:
Absolute Dominant Indicator <u>% Cover Species? Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
	Total Number of Dominant
	Species Across All Strata: (B)
	Percent of Dominant Species DO (A/B)
	Prevalence Index worksheet:
	Total % Cover of: Multiply by:
0 - Total Course	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%
0 = Total Cover	3 - Prevalence Index is ≤3.0 ¹
	Problematic Hydrophytic Vegetation ¹ (Explain)
	Indicators of hydric soil and wetland hydrology must
<u>15 Y FACW</u>	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.
	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
	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.
	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.
	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
	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
95 = Total Cover	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
	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
$\frac{95}{15} = \text{Total Cover}$	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
$\frac{95}{15} = \text{Total Cover}$	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
$\frac{95}{15} = \text{Total Cover}$	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
95 = Total Cover 20% of total cover: 19	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.
95 = Total Cover 20% of total cover: 19	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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Depth	cription: (Describe t						the absence t	in individual any
(inches)	Matrix Color (moist)	%	Color (moist)	% Feature	Type ¹	_Loc ²	Texture	Remarks
						1		
		<u>ل است</u>						
	<u> </u>							
_								
					_			
Type: C=C	oncentration, D=Deple	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	² Location: F	PL=Pore Lining, M=Matrix.
ydric Soil I	ndicators: (Applica	ble to all L	RRs, unless other	wise note	ed.)		Indicators fo	or Problematic Hydric Solis ³ :
_ Histosol			Polyvalue Be				1 cm Mu	ick (A9) (LRR O)
	bipedon (A2)		Thin Dark Su					ick (A10) (LRR S)
_ Black Hi	n Sulfide (A4)		Loamy Muck			0)		Vertic (F18) (outside MLRA 150A,B)
	Layers (A5)		Depleted Mat		-2)			nt Floodplain Soils (F19) (LRR P, S, T) bus Bright Loamy Soils (F20)
	Bodies (A5) (LRR P,	T, U)	Redox Dark S		6)			A 153B)
	cky Mineral (A7) (LRI		Depleted Dar					ent Material (TF2)
	esence (A8) (LRR U)		Redox Depre		3)			allow Dark Surface (TF12)
	ck (A9) (LRR P, T) Below Dark Surface		Marl (F10) (L			22	Other (E	xplain in Remarks)
	rk Surface (A12)	(A11)	Depleted Och				a Jacked	and of heads and the second officer and
	airie Redox (A16) (MI	LRA 150A)	Umbric Surfa					ors of hydrophytic vegetation and nd hydrology must be present.
_ Sandy M	ucky Mineral (S1) (LF	RR O, S)	Delta Ochric			-,		s disturbed or problematic.
	leyed Matrix (S4)		Reduced Ver	tic (F18) (I	MLRA 15			
	edox (S5)		Piedmont Flo					
	Matrix (S6)		Anomalous B	right Loan	ny Soils (F	20) (MLRA	149A, 153C, 1	53D)
	face (S7) (LRR P, S, aver (If observed):	1, 0)		_		1		
lestrictive L	ayer (If observed):	1, 0)						
testrictive L Type:	ayer (If observed):	1, 0)	-				Hydric Soil P	resent? Vec No
Type: Depth (inc	ayer (If observed): hes):	_	_				Hydric Soll P	
Type: Depth (inc	ayer (If observed): hes):	_		TL	64	10.00		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	- ite 50	otl3	oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	= 1. te 50	orls	oh	nea		wer plant
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	= 1.te 50	otls	oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	te 50	orls	oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	_ .te 50	orls	oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	<u>-</u> .te 50	orls	oh	/neo-		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	= ite 50	orls	oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	te 50	orls	Oh	/nea		
Type: Depth (inc	ayer (If observed): hes):	_	te 50	orls	oh	/nea		
Type: Depth (inc	ayer (If observed): hes):	_	te 50	orls	oh	/nea		
Type: Depth (inc	ayer (If observed): hes):	_	_ .te 50	orls	oh	/neo-		
Type: Depth (inc	ayer (If observed): hes):	_	_ .te 50	orls	oh	/neo-		
Type: Depth (inc	ayer (If observed): hes):	_	_ .te 50	orls	oh	/neo-		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	te 50	orls	oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	te 50	orls	Oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	_ .te 50	orls	Oh	/nea		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	_ .te 50	orls	Oh	/neo-		
estrictive L Type: Depth (inc emarks:	ayer (If observed): hes):	_	_ .te 50	orls	Oh	/neo-		
Type: Depth (inc	ayer (If observed): hes):	_	_ .te 50	orls	oh	/neo-		
Type: Depth (inc	ayer (If observed): hes):	_	_ .te 50	orls	oh	/neo-		
strictive L Type: Depth (inc marks:	ayer (If observed): hes):	_	_ .te 50	orls	oh	/neo		

Environmental Field Surveys Wetland Photo Page



Wetland data point wcho016e_w facing west



Wetland data point wcho016e_w facing south

Photo Sheet 1 of 2

Project/Site: ACP	City/County: Chesa peake Sampling Date: 12/15/15
Applicantowner: Dominion	State: VA Sampling Point: WChOOL 6 Full
Investigator(s): Li Roper, Riturnbull	
Landform (hillslope, terrace, etc.):flat	Local relief (concave, convex, none): NDNP Slope (%) 0-21,
Subregion (LRR or MLRA): LRRT Lat: 310	
	und complex NWI classification: PFD
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantl	
Are Vegetation, Soil, or Hydrology naturally p	
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes No	
Wetland Hydrology Present? Yes X No	·
NCWAM Classification: Both	
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 (B	13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B1	5) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide	그는 그는 것 같은 것 같은 것 같은 것 같은 것 같이 같이 많이
	heres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Redu	
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface Iron Deposits (B5) Other (Explain in I	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
X Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No X Depth (inches	a): <u>NA</u>
Water Table Present? Yes No Depth (inches	s):
Saturation Present? Yes No Depth (inches	s): Wetland Hydrology Present? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	
portions of wetland inu	NOATEd
,	
dull not evaluate, sub-	surface hydrology on/near
CONO VIUT CONTRACTO DODA	
power plant	
porter plotte	

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EGETATION (Four Strata) – Use scientific nar		Dominant	Indicator	Dominance Test worksheet:	ig Point: with	
<u>Aler</u> (Plot size: <u>30ft X30ft</u>) <u>Aler</u> rubrum <u>Liguidambar</u> styracitlua	D/ Cours	Consine?	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	4	(A)
Liguidambar styracitlua		_Y	FAC	Total Number of Dominant Species Across All Strata:	4	(B)
				Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)
				Prevalence Index worksheet: Total % Cover of:	A feathing for being	
				OBL species x1		
		= Total Co				
50% of total cover: 715	20% of	total cover	3	FACW species x 2		
Sapling/Shrub Stratum (Plot size: 30++ x 30++)				FAC species x 3		
none				FACU species x 4		
				UPL species x 5		
L				Column Totals: (A)		_ (B)
	<u> </u>			Prevalence Index = B/A =	_	_
				Hydrophytic Vegetation Indicate	ors:	
i	<u> </u>			1 - Rapid Test for Hydrophytic	· Vegetation	
	_	· · · · · · · · ·	_	Z - Dominance Test is >50%		
3.				3 - Prevalence Index is ≤3.01		
	Ð	= Total Co	ver	Problematic Hydrophytic Veg	etation ¹ (Expla	ain)
50% of total cover:	20% of	total cover				
Herb Stratum (Pict size: 30 ++ x 30 ++)				Indicators of hydric soil and wella	nd hydrology	must
Rubus prautus	5	X	FAC	be present, unless disturbed or pr	oblematic.	
				Definitions of Four Vegetation	Strata:	
3.						
				Tree – Woody plants, excluding v more in diameter at breast height	(DBH) regard	less of
4				height.	(DDI(), regul	
5					i fi san	
5				Sapling/Shrub – Woody plants, e than 3 in. DBH and greater than 3	28 ft (1 m) ta	s, less
7				than 5 m. DBH and greater than c		
3				Herb - All herbaceous (non-wood	y) plants, reg	ardless
9				of size, and woody plants less that	in 3.28 ft tall.	
10				Woody vine - All woody vines gr	eater than 3.2	8 ft in
11				height.		
12		_				
		= Total Co		-		
50% of total cover: 2.5	5 20% 0	f total cove	-			
Woody Vine Stratum (Plot size: 30 ft x 30ft)						
. Smilax rotunditolia	5	<u>y</u>	FAC			
2.		1				
3.						
4						
5	1200	2		Hydrophytic		
	5	= Total Co	ver	Magatallan		
50% of total cover: 2.5	2004	f total cove	- 1	Present? Yes	No	
		i total core				
Remarks: (If observed, list morphological adaptations belo						

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Sampling Point: wchoblef_w

rofile Description: (Describe to the depti Depth <u>Matrix</u> nches) Color (moist) %	Redox Features	cator or confirm /pe ¹ _Loc ² _	the absence of In Texture	dicators.) Remarks
Ype: C=Concentration, D=Depletion, RM=1 ydric Soil Indicators: (Applicable to all L Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A5) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (if observed): Type: Depth (inches): marks: Could Not Evalue	Reduced Matrix, MS=Masked Sar RRs, unless otherwise noted.) Polyvalue Below Surface (S) Thin Dark Surface (S9) (LF Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F6) Depleted Dark Surface (F7 Redox Depressions (F8) Marl (F10) (LRR U) Depleted Ochric (F11) (ML Iron-Manganese Masses (H Delta Ochric (F17) (MLRA Reduced Vertic (F18) (MLF Piedmont Floodplain Soils Anomalous Bright Loamy S	nd Grains. S8) (LRR S, T, U) RR S, T, U) (LRR O) RA 151) F12) (LRR O, P, T R P, T, U) 151) RA 150A, 150B) (F19) (MLRA 145 Soils (F20) (MLRA	² Location: PL=I Indicators for P)1 cm Muck 1 2 cm Muck 1 2 cm Muck 1 2 cm Muck 1 2 cm Muck 1 Piedmont FI A nomalous (MLRA 15 (MLRA 15 (MLRA 15 (MLRA 15 (MLRA 15 Other (Expla Other (Expla Other (Expla Other (Expla Other (Expla (MLRA 15 	Pore Lining. M=Matrix. Troblematic Hydric Solls ³ : (A9) (LRR O) (A10) (LRR S) ertic (F18) (outside MLRA 150A, B) oodplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20) i3B) Material (TF2) w Dark Surface (TF12) ain in Remarks) of hydrophytic vegetation and hydrology must be present, isturbed or problematic. D) ent? Yes No

Environmental Field Surveys Wetland Photo Page



Wetland data point wcho016f_w facing northwest



Wetland data point wcho016f_w facing northeast

	City/County: Chesapeare Sampling Date: 12/15/15
Applicant/Owner Dominion	State VH Sampling Point: WCho DIb-14
	_ Section, Township, Range: NOVL
Landform (hillslope, terrace, etc.):Flat Subregion (LRR or MLRA):R. TLat: 36	Local relief (concave, convex, none): <u>NDNE</u> Slope (%) <u>D-2/1</u> 17418 Long: <u>-710, 29799</u> Datum: <u>W6584</u>
Soil Map Unit Name: Udorthents-Urban]	and complex NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of y	2 1
Are Vegetation, Soil, or Hydrology significantl	
Are Vegetation, Soil, or Hydrology naturally p	
	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 No
Could not evaluate soils a	on/hear power plant
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 (B	13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B1	
Saturation (A3) Hydrogen Sulfide	
Water Marks (B1) Oxidized Rhizosp Sediment Deposits (B2) Presence of Redu	heres along Living Roots (C3) Dry-Season Water Table (C2) uced Iron (C4) Crayfish Burrows (C8)
	Inction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in i	Remarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
	s): NH
Water Table Present? Yes No Depth (inches	
Saturation Present? Yes No Depth (inches	X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	
Remarks:	
Could not evaluate sub	surface hydrology on/near
	/ 0/ /
power plant	
1 . Vecher	areat
No surface water indicators p	reserve

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	Dominant Species?		Dominance Test worksheet:
5		FAC	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
5	_¥	FAC	Total Number of Dominant Species Across All Strata:(B)
			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B
			Prevalence Index worksheet: Total % Cover of: Multiply by:
ID			OBL species x1 =
2004 of	= Total Cov	2 2	FACW species x 2 =
20% 01	total cover		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
			Z - Dominance Test is >50%
0	Total Co		3 - Prevalence Index is ≤3.0 ¹
			Problematic Hydrophytic Vegetation' (Explain)
			¹ Indicators of hydric soil and wetland hydrology must
1D	Y	FAL	be present, unless disturbed or problematic.
	_		Definitions of Four Vegetation Strata:
			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of
			height.
			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, regardles of size, and woody plants less than 3.28 ft tall.
			Woody vine - All woody vines greater than 3.28 ft in
	-		height.
10	- Total Co	var	
		-	
15	Y	FH.	
5	Y	FAL	
	- 1		
		24	Hydrophytic
	-		
20	= Total Co	wer	Vegetation Present? Yes X No
	D 20% of 1D 1D	D = Total Cov 20% of total cover 0 = Total Cov 20% of total cover 10 Y	$\frac{ D }{20\% \text{ of total cover}} = Total Cover} = \frac{2}{2}$

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Atlantic and

Sampling Point: wchollb - ch

Type: C=Concentration. D=Depietion. RM=Reduced Matrix. MS=Masked Sand Grains "Location: PL=Pore Lining. M=Matrix. Ydrlc Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: GP roblematte Hydrlc Solls ¹ : Histosol (A1) — Pelyvalue Below Surface (S3) (LRR S, T, U) 1 cm Muck (A0) (LRR O) Histosol (A2) — Thin Dark Surface (S3) (LRR S, T, U) 2 cm Muck (A10) (LRR P) Black Histic (A3) — Loamy Gleyed Matrix (F2) — Piedmont Floodplain Solis (F19) (LRR P), S, T Straffed Layers (A5) — Depleted Matrix (F3) — Anomalous Bright Leamy Solis (F20) Muck Mineral (A7) (LRR P, T, U) — Red xDark Surface (F6) _ Matrix (F10) (LRR U) Sor Muck (A9) (LRR P, T, U) — Red xDark Surface (F7) _ Red Prent Material (TF2) Muck (A9) (LRR P, T, U) — Depleted Dark Surface (F7) _ Red Prent Material (TF2) Muck (A9) (LRR P, T, U) — Depleted Octric (F11) (MLRA 151) _ Other (Explain In Remarks) Depleted Below Dark Surface (A11) — Depleted Octric (F11) (MLRA 151) _ Other (Explain In Remarks) Sandy Micry (16) (LRR D, S) — Delta Octric (F17) (MLRA 151) _ Other (Explain In Remarks) Sandy Micry (16) (LRR D, S) — Delta Octric (F17) (MLRA 150, 150B) _ anomalous Bright Leamy Solis (F20) (MLRA 149A) Stripted Matrix (S6)	(inches) Color (moist) %	Color (moist)	x Features 		Texture	Remarks
	Type: C=Concentration, D=Depletion, RM lydric Soll Indicators: (Applicable to al Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150 Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type:	EReduced Matrix, M3 I LRRs, unless other Polyvalue Be Thin Dark Su Loamy Muck Loamy Muck Depleted Ma Redox Dark Redox Dark Depleted Dar Redox Depre Marl (F10) (L Depleted Oct Iron-Mangan Delta Ochric Reduced Ver Piedmont Flo	S=Masked Sand Gr rwise noted.) elow Surface (S8) (LRR S, y Mineral (F1) (LRF ed Matrix (F2) trix (F3) Surface (F6) rk Surface (F6) rk Surface (F7) essions (F8) .RR U) hric (F11) (MLRA 1 ese Masses (F12) (ace (F13) (LRR P, T (F17) (MLRA 151) rtic (F18) (MLRA 15 codplain Soils (F19) Bright Leamy Soils (ains. RR S, T, U T, U) O) 51) LRR O, P, ; U) 50A, 150B) (MLRA 14: F20) (MLRA	² Location: PL= Indicators for I) 1 cm Muck 2 cm Muck Reduced V Piedmont F Anomalous (MLRA 1 Very Shalld Other (Expl T) ³ Indicators wetland unless c 9A) A 149A, 153C, 153 Hydrlc Soll Pres	Pore Lining, M=Matrix. Problematic Hydric Solls ^a : (A9) (LRR O) (A10) (LRR S) ertic (F18) (outside MLRA 150A,B loodplain Soils (F19) (LRR P, S, T) Eright Loarny Solls (F20) 53B) Material (TF2) w Dark Surface (TF12) ain in Remarks) a of hydrophytic vegetation and hydrology must be present, listurbed or problematic. (D) Seant? Yes No

Environmental Field Surveys Wetland Photo Page



Upland data point wcho016_u facing southwest



Upland data point wcho016_u facing southeast

Photo Sheet 3 of 2

Project/Site: Atlantic Coast Pipeline	City/County:	City of Chesapeake	Sampling Date: <u>8/18/2015</u>
Applicant/Owner: Dominion		State: VA	Sampling Point: WCHB001f_w
Investigator(s):			
Landform (hillslope, terrace, etc.): broad flat			
Subregion (LRR or MLRA): T Lat:			
Soil Map Unit Name: Udorthents-Urban land complex, 0 to 45 p			
Are climatic / hydrologic conditions on the site typical for this tim Are Vegetation, Soil, or Hydrology signif Are Vegetation, Soil, or Hydrology natur SUMMARY OF FINDINGS – Attach site map sho	ficantly disturbed? ally problematic?	Are "Normal Circumstance (If needed, explain any and	es" present? Yes <u>/</u> No swers in Remarks.)
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes _ No Wetland Hydrology Present? Yes _ No	within	Sampled Area a Wetland? Yes _	<u>и No</u>
Remarks: PFO wetland in a broad swale that drains into a road side ditch Crayfish burrows appeared to be 10YR 5/1. HYDROLOGY	n. Please note, we co	uld not complete soil profile du	e to potential contamination.
Wetland Hydrology Indicators:		Secondary In	dicators (minimum of two required)

wetiand Hydrology mulcat	015.				Secondary indicators (minimum or two required)		
Primary Indicators (minimum of one is required; check all that apply)					Surface Soil Cracks (B6)		
Surface Water (A1) Aquatic Fauna (B13)					Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)			✓ Drainage Patterns (B10)				
Saturation (A3)		Hydrogen S		Moss Trim Lines (B16)			
Water Marks (B1)		Dry-Season Water Table (C2)					
Sediment Deposits (B2) Presence of Reduced Iron (C4)					 Crayfish Burrows (C8) 		
✓ Drift Deposits (B3)		Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)		Thin Muck Surface (C7)			Geomorphic Position (D2)		
Iron Deposits (B5)		Other (Expla	ain in Remarks)		Shallow Aquitard (D3)		
Inundation Visible on Ae	rial Imager	/ (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? (includes capillary fringe)	Yes	No 🖌 Depth (inches):	Wetland	Hydrology Present? Yes 🖌 No		
Describe Recorded Data (str	eam gauge	, monitoring well, aeria	I photos, previous	inspections), if available	ailable:		
Remarks:							

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

Sampling Point: WCHB001f_w

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:30)		Species?	<u>Status</u>	Number of Dominant Species
1. Acer rubrum	30	Yes	FAC	That Are OBL, FACW, or FAC:6 (A)
2. Liquidambar styraciflua	25	Yes	FAC	Total Number of Dominant
3. Ulmus rubra	10	No	FAC	Species Across All Strata:6 (B)
4				Descent of Demission Creation
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of:Multiply by:
	05	= Total Cov	er	OBL species x 1 =0
50% of total cover:32.5	20% of	total cover:	12	FACW species x 2 =0
Sapling/Shrub Stratum (Plot size:15)	207001		·	FAC species 125 x 3 = 375
1. Ulmus rubra	20	Yes	FAC	FACU species $0 x 4 = 0$
2. Acer rubrum	20	Yes	FAC	UPL species $0 x 5 = 0$
3. Liquidambar styraciflua	15	Yes	FAC	Column Totals: 125 (A) 375 (B)
4				Prevalence Index = B/A =3
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7			. <u> </u>	✓ 2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is $\leq 3.0^{1}$
	55	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 27.5	20% of	total cover:	11	
Herb Stratum (Plot size: 5)				¹ Indicators of hydric soil and wetland hydrology must
1. Campsis radicans	5	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 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
9				of size, and woody plants less than 3.28 ft tall.
10			<u> </u>	Woody vine - All woody vines greater than 3.28 ft in
11			<u> </u>	height.
12				
		= Total Cov		
50% of total cover: 2.5	20% of	total cover:	1	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				Hadaaa ka da
0		= Total Cov	or	Hydrophytic Vegetation
50% of total cover:0				Present? Yes <u>V</u> No
		lotal cover.		
Remarks: (If observed, list morphological adaptations below	N).			

Profile Desc	ription: (Describe to	the depth	needed to docum	nent the ir	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
				<u> </u>				
		·		·				
				<u> </u>				
¹ Type: C=Co	oncentration, D=Deple	tion, RM=Re	educed Matrix, MS	=Masked	Sand Gra	ains.	² Location:	PL=Pore Lining, M=Matrix.
	ndicators: (Applica							for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Bel	ow Surfac	e (S8) (L	RR S, T, U) 1 cm N	/luck (A9) (LRR O)
Histic Ep	pipedon (A2)		Thin Dark Su	rface (S9)	(LRR S,	T, U)	2 cm N	/luck (A10) (LRR S)
Black Hi	stic (A3)		Loamy Mucky	Mineral (F1) (LRR	0)	Reduc	ed Vertic (F18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (F	-2)		Piedm	ont Floodplain Soils (F19) (LRR P, S, T)
Stratified	I Layers (A5)		Depleted Mat	rix (F3)			Anoma	alous Bright Loamy Soils (F20)
-	Bodies (A6) (LRR P,		Redox Dark S	Surface (F6	6)		(MLI	RA 153B)
5 cm Mu	cky Mineral (A7) (LRI	R P, T, U)	Depleted Dar	k Surface	(F7)		Red P	arent Material (TF2)
Muck Pr	esence (A8) (LRR U)		Redox Depres		3)			hallow Dark Surface (TF12)
	ck (A9) (LRR P, T)		Marl (F10) (L l				Other	(Explain in Remarks)
	Below Dark Surface	(A11)	Depleted Och					
	ark Surface (A12)		Iron-Mangane					ators of hydrophytic vegetation and
	airie Redox (A16) (M		Umbric Surfac			, U)		land hydrology must be present,
	lucky Mineral (S1) (Lf	RR O, S)	Delta Ochric (· · ·			unle	ess disturbed or problematic.
-	leyed Matrix (S4)		Reduced Vert					
	edox (S5)		Piedmont Flo	•	. ,	•	•	
	Matrix (S6)		Anomalous B	right Loarr	ny Soils (I	=20) (MLR	A 149A, 153C	, 153D)
	face (S7) (LRR P, S,	T, U)					-	
Restrictive I	ayer (if observed):							
Туре:			_					
Depth (ind	ches):						Hydric Soil	Present? Yes 🥙 No
Remarks:								
Could not aug	er due to soil contami	nation, but c	rayfish burrows ap	opeared to	be 10YF	R5/1.		



Photo 1 Wetland data point WCHB001f_w facing northeast



Photo 2 Wetland data point WCHB001f_w facing northwest

Project/Site: Atlantic Coast Pipeline			City/County:	City of Chesape	eake	_ Sampling D	Sampling Date: 8/18/2015	
Applicant/Owner: Dominion			State: VA	_ Sampling F	Sampling Point: WCHB001_u			
Investigator(s): TP, SA					No PLSS in this are			
Landform (hillslope, terrace, etc.): hill s					Slope (%): <u>15</u>			
Subregion (LRR or MLRA): T								
Soil Map Unit Name: Udorthents-Urbar								
Are climatic / hydrologic conditions on t	the site typical fo	r this time of y	ear?Yes 📕	No	(If no, explain in I	Remarks.)		
Are Vegetation, Soil, or					al Circumstances"		es 🖌	No
Are Vegetation, Soil, or	Hydrology	naturally pr	roblematic?	(If needed	, explain any answ	ers in Remarl	ks.)	
SUMMARY OF FINDINGS - A	Attach site m	ap showing	g sampling	j point locat	ions, transect	s, importa	nt featı	ires, etc.
Hydrophytic Vegetation Present?	Yes 🖌	No	lo the	Compled Area				
Hydric Soil Present?	Yes	No 🖌		e Sampled Area n a Wetland?		No	~	
Wetland Hydrology Present?	Yes	No 🖌	with		165			
Remarks:								
Could not complete soil profile due to	possible soil con	tamination.						
HYDROLOGY								

Wetland Hydrology Indicator		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum o	of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)					
High Water Table (A2)	Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)					
Saturation (A3)	Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)					
Water Marks (B1)	Oxidized Rhizospheres along Living R	ts (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 Aeria	al Imagery (B7)	FAC-Neutral Test (D5)					
Water-Stained Leaves (BS	3)	Sphagnum moss (D8) (LRR T, U)					
Field Observations:							
Surface Water Present?	Yes No Depth (inches):						
Water Table Present?	Yes No Depth (inches):						
Saturation Present? (includes capillary fringe)	Yes No Depth (inches):	Wetland Hydrology Present? Yes No					
	am gauge, monitoring well, aerial photos, previous inspec	tions), if available:					
Remarks:							
Remarks.							

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

Sampling Point: <u>WCHB001_u</u>

20	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u>)		Species?	Status	Number of Dominant Species
1. Liquidambar styraciflua	20	Yes	FAC	That Are OBL, FACW, or FAC:6 (A)
2. Acer rubrum	10	Yes	FAC	Total Number of Deminent
3. Pinus taeda	10	Yes	FAC	Total Number of Dominant Species Across All Strata: ⁶ (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:100 (A/B)
6				Development in development of
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	40	= Total Cove	r	OBL species x 1 =0
20			8	FACW species x 2 =0
50% of total cover:20	20% of	total cover:		FAC species x 3 = 285
Sapling/Shrub Stratum (Plot size: 15)				0
1. Acer rubrum	25	Yes	FAC	FACU species $0 \times 4 = 0$
2 Ligustrum sinense	10	Yes	FAC	UPL species x 5 =
2				Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =3
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				
				∠ 2 - Dominance Test is >50%
8	25			\checkmark 3 - Prevalence Index is ≤3.0 ¹
		= Total Cove		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:17.5	20% of	total cover:	7	
Herb Stratum (Plot size: 5)				¹ In directory of hundrid and unable and hundrals are recent
1 Toxicodendron radicans	20	Yes	FAC	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
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	20	= Total Cove	r	
50% of total cover:10		total cover:		
	2070.01			
Woody Vine Stratum (Plot size: 30)				
1		···········		
2				
3				
4				
5				Hydrophytic
	0	= Total Cove	r	Vegetation
50% of total cover:0	20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations belo		-		
	vv).			

Profile Desc	cription: (Describe to	o the depth	needed to docun	nent the in	dicator	or confirm t	he absence	e of indicator	's.)		
Depth	Matrix		Redox	<pre>K Features</pre>							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks		
		·									
				·							
				<u> </u>							
				<u> </u>							
¹ Type: C=C	oncentration, D=Deple	tion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ains.	² Location:	PL=Pore Li	ning, M=Matri	x.	
Hydric Soil	Indicators: (Applica	ble to all LF	Rs, unless other	wise note	d.)		Indicators	for Problen	natic Hydric	Soils³:	
Histosol	(A1)		Polyvalue Be	low Surfac	e (S8) (L	RR S, T, U)	1 cm l	Muck (A9) (L	RR O)		
Histic Ep	pipedon (A2)		Thin Dark Su					Muck (A10) (I			
	istic (A3)		Loamy Mucky							MLRA 150A,B)	
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F	2)		Piedm	nont Floodpla	in Soils (F19)	(LRR P, S, T)	
Stratified	d Layers (A5)		Depleted Mat	rix (F3)			Anom	alous Bright I	_oamy Soils (F20)	
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark S	Surface (F6	6)		(ML	RA 153B)			
5 cm Mu	ucky Mineral (A7) (LRI	R P, T, U)	Depleted Dar	k Surface ((F7)		Red F	Parent Materia	al (TF2)		
Muck Pr	esence (A8) (LRR U)		Redox Depre	· · ·)		Very Shallow Dark Surface (TF12)				
	uck (A9) (LRR P, T)		Marl (F10) (L				Other	(Explain in R	emarks)		
	d Below Dark Surface	(A11)	Depleted Och								
	ark Surface (A12)		Iron-Mangane		. , .		•		rophytic vege		
	rairie Redox (A16) (M		Umbric Surfa			, U)		•	gy must be pi		
	lucky Mineral (S1) (LF	RR O, S)	Delta Ochric		,		un	less disturbed	d or problema	tic.	
	Bleyed Matrix (S4)		Reduced Ver	· / ·		• •					
	Redox (S5)		Piedmont Flo								
	Matrix (S6)		Anomalous B	right Loam	iy Soils (I	-20) (MLRA	149A, 153C	C, 153D)			
	rface (S7) (LRR P, S,	T, U)									
	Layer (if observed):										
Туре:			_								
Depth (in	ches):						Hydric Soi	I Present?	Yes	No	
Remarks:											
Could not auc	ner due to soil contami	nation									

Could not auger due to soil contamination.



Photo 1 Upland data point WCHB001_u facing east



Photo 2 Upland data point WCHB001_u facing south