District SERR City/County NA	Prince Edward sampling Date: 08/02-12014
	States Sampling Date: UN
Applicant/Owner:	State Samping Point. WTLNOU(L_V
Investigator(s): <u>W. POROLIA Stewn</u> Section, Township,	
Landform (hillslope, terrace, etc.): <u>Jectoral Storal</u> Local relief (concave, o	convex, none): $(ONCAVE)$ Slope (%): 5
Subregion (LRR or MLRA): <u>LKK P</u> Lat: <u>57, 314 ST / 606</u>	Long: -18, 29134,3422 Datum: NAD 1983
Soil Map Unit Name: Wilkes sandy loan, severely eroded hilly phase	(WK) NWI classification: YEM (C
Are climatic / hydrologic conditions on the site typical for this time of year? Yes N	o (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? A	re "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (I	f needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling poir	It locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Jad Aroa
Hydric Soil Present? Yes V No within a We	tland? Yes No
Wetland Hydrology Present? Yes V No	
Remarks: This action is a separate slade Southern in	I designit land contranding
Adjournant in Latersbarce way have could	excess sedimentation in this
La ward NU 7 actacia MOL	
diamage: All 5 chiefty to 6417	
PHOTOS # 100 - 0409 to 0413 Soils NESW (WLA	n convera)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	L Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living R	oots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Sol	ls (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): NA	
Water Table Present? Yes No Depth (inches): NA	
Saturation Present? Yes Ves Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspecti	ons), if available:
AL	
Remarks: Hudrology (Fitz - Mat	
I I I I I I I I I I I I I I I I I I I	

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

Sampling Point: WPEKOGIE_W

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: <u>ろじ トイ</u>) 1. <u>ハノ</u> A	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species		
2				Total Number of Dominant		
4			·	Percent of Dominant Species		
5		·	· ·	That Are OBL, FACW, or FAC: 100 % (A/B)		
ь 7.		<u> </u>	·	Prevalence Index worksheet:		
		= Total Cov	ver .	Total % Cover of: Multiply by:		
Sapling Stratum (Plot size: 15 f-F)	Landon			OBL species x 1 =		
1. NA		<u> </u>		FACW species x 2 =		
2				FAC species x 3 =		
3		- ,		FACU species x 4 =		
4		·		UPL species x 5 =		
5		-		Column Totals: (A) (B)		
6	······			Prevalence Index = B/A =		
7				Hydrophytic Vegetation Indicators:		
Shrub Stratum (Plot size: 15 ft)		= Total Cov	'er	1 - Rapid Test for Hydrophytic Vegetation		
1 Salix Wigen	20	Y	OBL	2 - Dominance Test is >50%		
2				3 - Prevalence index is ≤3.0 ¹		
2	·····			4 - Morphological Adaptations ¹ (Provide supporting		
4				data in Remarks or on a separate sheet)		
5		·	·	Problematic Hydrophytic Vegetation ¹ (Explain)		
6	_					
7		,	·	¹ Indicators of hydric soil and wetland hydrology must		
· ·	10	= Total Cov	er.	be present, unless disturbed or problematic.		
Herb Stratum (Plot size: 10 - (++	······	, ,		Definitions of Five Vegetation Strata:		
1. Junus effusus			FACN	Tree - Woody plants, excluding woody vines,		
2. Sciepus cyperinus	65	<u> Y </u>	OBL	approximately 20 ft (6 m) or more in height and 3 in.		
3. Symphyotrichum pilosum	10		FAC			
4. Dicharthelium clandestinum	25		FAC	Sapling – Woody plants, excluding woody vines,		
5. Typha latifolia	10		<u>OBL</u>	than 3 in. (7.6 cm) DBH.		
6. Liciodendron tulipitera	15		FACU	Chrub Meady planta avaluding woody vince		
7. Rubus grvensis	_ 20_	·	FAC	approximately 3 to 20 ft (1 to 6 m) in height.		
8. Galium aparine		·	FAC	Hark All hashaccours (non-woods) plants, including		
9. Salix nigra	<u> </u>		OBL	herbaceous vines, regardless of size, and woody		
10. <u>Solidayo Canadensis</u>	2.0		FACU	plants, except woody vines, less than approximately 3		
11. Fragaria Virginiana	5.		FACU	ft (1 m) in height.		
12		• •	·	Woody vine - All woody vines, regardless of height.		
Warder Vine Obstant (Discolory 20) CL	2.50	= Total Cov	rer	· · ·		
$\frac{\text{voody vine Stratum}}{1 \text{ NAW}} (\text{Mot size}, \frac{1}{2} \text{ tr})$	5	Y	FAcial			
1. DAN INITANIA SCANDERS		·	FININ			
2						
۵ ۸				Hydrophytic		
4				Vegetation Present? Yes No		
ð	5	– Total Cov				
Demarka, Arabida akata ayorturra turra arawa	choot \		<u> </u>	·		
Remarks: (Include photo numbers here or on a separate	sneet.)					
Hydrophytic Vegetation criteria	15 Me	Te.				

SOIL

Sampling Point: WPEKOCIE_W

Profile Desc	cription: (Describe (to the dept	th needed to docun	nent the in	dicator	or confirm	the absence of indicators)
Depth (inchor)	Matrix Color (moist)	0/.	Color (moist)	x Features %	Type ¹	1.002	Texture	Remarks
A. L	10 VR 3/2	<u> </u>	10×18 5/18		C	<u></u>	Sache clay lagra	Komano
1/2	1011-12		7540514	25	<u> </u>	M	Sudin chy lacas	
	10113/3		NO CIA	lin		<u> </u>	wild alex la	
	IDYR SIT	<u> </u>	<u>>185/8</u>	<u>-90</u>	<u> </u>	<u>PU</u>	Sandy Chy Town	
16-20	1018 9/4		1046 216	_13	C	MPL	Sandy clay 100001	
						·		
¹ Type: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location: PL=Pore Lining,	M=Matrix.
Hydric Soil	Indicators:						Indicators for Prob	lematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2 cm Muck (A10)) (MLRA 147)
Histic E	pipedon (A2)		Polyvalue Be	low Surface	∋ (S8) (ľ	MLRA 147,	148) Coast Prairie Re	edox (A16)
Black Hi	isuc (A3) an Sulfide (A4)		Loamy Gleve	nace (S9) (d Matrix /F	(WILKA 2)	147, 148)	(WLKA 147, Piedmont Flood	olain Soils (F19)
Stratified	d Layers (A5)		Depleted Mat	trix (F3)	_,		(MLRA 136,	147)
2 cm Mu	uck (A10) (LRR N)		Redox Dark S	Surface (F6	i)		Very Shallow D	ark Surface (TF12)
Deplete	d Below Dark Surface	∋ (A11)	Depleted Dar	k Surface (F7)		Other (Explain i	n Remarks)
Thick Da	ark Surface (A12) Aucky Mineral (S1) /I	RRN	Redox Depre	SSIONS (F8)) s (F12) (
MLR/	A 147, 148)		MLRA 13	6)	3 (1 1 2) (
Sandy G	Sleyed Matrix (S4)		Umbric Surfa	ce (F13) (N	ILRA 1	36, 122)	³ Indicators of hydr	ophytic vegetation and
Sandy F	Redox (S5)		Piedmont Fio	odplain So	ils (F19)	(MLRA 14	wetland hydrolog	y must be present,
Stripped	Matrix (S6)		Red Parent N	haterial (F2	1) (MLF	(A 127, 147	() Unless disturbed	or problematic.
	J/A					,		
Denth (in	ches): , IA						Hydric Soil Present?	es No
Remarks:								· · · · · · · · · · · · · · · · · · ·
tomation	hydric soils .	criterio	. Met. Evi	dence	ot	possibl	e historic sedime	ntation due
47	and clearing	na a	etivities			•		
10	points course	5						
l								



Wetland data point wpek001e_w facing East



Wetland data point wpek001e_w facing West



Wetland data point wpek001e_w soil sample

Project/Site: <u>SE Reliability Project</u> City/County: <u>NA/Prince</u> Applicant/Owner: <u>Dominion transmission</u> Investigator(s): <u>W. Medlin</u> , <u>J. Dean</u> Section, Township, Range: <u>N</u> Landform (hillslope, terrace, etc.): <u>hillslope</u> Local relief (concave, convex, none Subregion (LRR or MLRA): <u>LRR P</u> Lat: <u>37.314505879</u> Long: <u>77</u> Soil Map Unit Name: <u>Wilkes Sardy Ican, Severely eroded hilly phase (WK)</u> Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>No</u> (I Are Vegetation <u>Soil</u> , or Hydrology <u>significantly disturbed</u> ? Are "Normal Are Vegetation <u>Soil</u> , or Hydrology <u>naturally problematic</u> ? (If needed, ex SUMMARY OF FINDINGS – Attach site map showing sampling point location	Edward Sampling Date: 08/02/2014 State: <u>VA</u> Sampling Poin WPEKCO1_W JA e): <u>Concave</u> Slope (%): 5-8 <u>8 291638606</u> Datum: NAD 1983 <u>NWI classification: Upland</u> If no, explain in Remarks.) Circumstances'' present? Yes <u>No</u> xplain any answers in Remarks.) ns, transects, important features, etc.
Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Wetland Hydrology Present? Remarks: This area is an worldand hill slope that has been are not met. PHOTOS # 100 - 0418 to 0422 Soils, N, E, S, W (were come	Yes No clearant. All 3 criteria
THOIDS # 100 - 0418 10 0400 2010 101-1-1-1 (
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) No Depth (inches): Description Present? Yes No Depth (inches): Uncludes capillary fringe) Wetland H	lydrology Present? Yes No //
NA Remarks: Hydrology criteria is not Met.	

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

Sampling Point Wpekcol_u

Trop Stratum (Distaires 30 Etc.)	Absolute	Dominant	Indicator	Dominance Test worksheet:
$\frac{1166 \text{ Stratum}}{1 \text{ FA}} (\text{PIOUSIZE}, \underline{334 \text{ F}})$	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species
2.				
3.				Total Number of Dominant
4.	····		- <u> </u>	(B)
5.				Percent of Dominant Species
6.			-	
7				Prevalence Index worksheet:
		= Total Cov	/er	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 15 ++)				OBL species x 1 =
1NA		-		FACW species x 2 =
2·				FAC species x 3 =
3			·	FACU species x 4 =
4			·	UPL species x 5 =
5				Column Totals: (A) (B)
ð		<u></u>	·	Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 15 FF		= Total Cov	/er	1 - Rapid Test for Hydrophytic Vegetation
1 Facus aranditation	10	V	FAG)	2 - Dominance Test is >50%
2 Caputa tomentos		-1-	NI	3 - Prevalence Index is ≤3.0 ¹
3 Rubbs a cautus	117		CA(1)	4 - Morphological Adaptations ¹ (Provide supporting
4		{		data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6		•		
7.			, <u> </u>	¹ Indicators of hydric soil and wetland hydrology must
	25	= Total Cov	er	be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>10 F+</u>)	# *		 E4	Definitions of Five Vegetation Strata:
1- Crapthatium-obtusitalium			N	Tree – Woody plants, excluding woody vines,
2. Liriodendron tulipitera	40	<u>Y</u>	FALU	(7.6 cm) or larger in diameter at breast height (DBH).
3. Andropogon Virginicus	15	•••••	FACU	
1. Solidago canadensis			FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
5. Enpatorium copillitolium			FACU	than 3 in. (7.6 cm) DBH.
) - for circle antiget on the		·····		
· Dicharthelium spr. laxitlorum		<u> </u>	FACU	approximately 3 to 20 ft (1 to 6 m) in height.
3. Finus tarda vulgore			FAC	Harb All berbaceous (non-woody) plants, including
). CITSIUM - Autoridation - Carolineman			FACU	herbaceous vines, regardless of size, and woody
10. Symphyotrichum pilosim	10		FAC	plants, except woody vines, less than approximately 3
· · · · · · · · · · · · · · · · · · ·		.		n (r m) in neight.
2				Woody vine – All woody vines, regardless of height.
Noody Vine Stratum (Plot size: 30 ft)	:	= Total Cov	er	
NA (FIOLAND (FIOLSIZE, <u>JUT)</u>)				
)				
3		·		
1.				Hydrophytic
-	·····	·		Vegetation Present? Yes No
)				
	-	= Total Cov	or.	

SOIL

Sampling Point WPek001_W

Profile Desc	cription: (Describe	to the dept	th needed to docur	nent the ir	ndicator	or confirm	the abs	sence o	findicat	ors.)		
Depth	Matrix		Redo	x Features			- <i>i</i>			-		
(inches)	<u>Color (moist)</u>	<u>%</u>	Color (moist)		lype'	<u></u>	lext	ure		Rema	rks	
0-4	10 1K 3/3	100	ATTRONGS	400 ⁴⁰⁰			Saja	<u>1 100</u>	<u>11</u>			
4-11	<u>10 YRGJQ</u>	100		am ^a	• کلیوہ ہ		Schidy	<u>_clay</u>	han			
11-20	10 YR 6/6	- 85	75YR 6/8	_15_	_ <u>C</u> _	<u>M</u>	Sandy	law				
			,				,					
		· ······	ţ					<u> </u>				
						. <u> </u>	<u>.</u>					
¹ Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Locati	on: PL:	Pore Lin	ing, M=Ma	trix.	
Hydric Soil	Indicators:							Indicat	ors for P	roblemati	c Hydrie	: Soils ³ :
Histosol	(A1)		Dark Surface	e (S7)				2 c	m Muck (A10) (MLF	RA 147)	
Histic E	pipedon (A2)		Polyvalue Be	low Surfac	e (S8) (N	ILRA 147,	148)	Co	ast Prairie	e Redox (A	(16)	
Black H	istic (A3)		Thin Dark Su	Inface (S9)	(MLRA 1	47, 148)		(Die	MLRA 14	17, 148) aadalain S	oilo (E1)	2)
Stratifie	d Lavers (A5)		Denleted Ma	trix (E3)	-2)				MLRA 1:	36. 147)		<i>»</i>)
2 cm Mi	uck (A10) (LRR N)		Redox Dark	Surface (F	6)			Ve	ry Shallov	v Dark Sur	face (TF	-12)
Deplete	d Below Dark Surface	e (A11)	Depleted Da	rk Surface	(F7)			Otł	ier (Expla	ain in Rema	arks)	
Thick D	ark Surface (A12)		Redox Depre	essions (F8	3)							
Sandy N	/lucky Mineral (S1) (L	.RR N,	Iron-Mangan	ese Masse	es (F12) (LRR N,						
MLR/ Sondy (A 147, 148) Sloved Matrix (S4)		WLRA 13 Umbric Surfs	6) vco (E13) (i	MI DA 13	6 122)		³ Indic	ators of h	vdronhytic	veneta	tion and
Sandy E	Sedox (S5)		Piedmont Flo	odnlain Sr	nils (F19)	0, 122) (MLRA 14	(8)	wet	and hydro	oloav must	be pres	ent.
Stripped	Matrix (S6)		Red Parent M	Material (F:	21) (MLR	A 127, 147	7)	unle	ss disturt	ed or prob	lematic.	,
Restrictive	Layer (if observed):											
Type:	NA											
Depth (in	ches): N/A						Hydri	c Soil F	resent?	Yes	N	io 🖌
Remarks:							1					
	hydric soils	criter	ia not Mut									
											•	
							-					
												,
											*	



Upland data point wpek001_u facing South



Upland data point wpek001_u facing West



Upland data point wpek001_u soil sample

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Project/Site: <u>SE Reliability Project</u> City/County: <u>NA/Prince</u> Applicant/Owner: <u>Dominion Transmission</u> Investigator(s): <u>W. Medlin</u> J. Dean Section, Township, Range: Landform (hillslope, terrace, etc.): <u>hillslope Seepage</u> Local relief (concave, convex, no Subregion (LRR or MLRA): <u>LRR P</u> Lat: <u>37, 305 \$99120</u> Long: <u>75</u> Soil Map Unit Name: <u>Vance fine sandy loom</u> , <u>roiling Phase (Va)</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 "Norma Are Vegetation <u>, Soil</u> , or Hydrology <u>naturally problematic?</u> (If needed, or SUMMARY OF FINDINGS – Attach site map showing sampling point location	Edward Sampling Date: 08/04/2014 State: VA Sampling Point: WPEK002E-W VA ne): <u>concove</u> Slope (%): 0-3 <u>8,282221575</u> Datum: NAD 1983 NWI classification: PEMIC (If no, explain in Remarks.) I Circumstances" present? Yes No explain any answers in Remarks.) Datument of the statement of the
Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: This area is a seepage slope that abuts a sh (SPEKO12), The area around the wetland/stream is a to hove been fenced off. All 3 criteria met. Area is	Yes No nall intermittent Stream cattle pasture, but appears s a wetland.
Photos # 100-0456 to 0460 soils + N, E, S, W (wim	Camera)
HYDROLOGY	
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) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Surface Water Present? Yes No Depth (inches): NA Water Table Present? Yes No Depth (inches): G Saturation Present? Yes No Depth (inches): G Vincludes capillary fringe) Ves No Depth (inches): O Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available	Hydrology Present? Yes No
Remarks: Hydrology criteria Met.	

US Army Corps of Engineers

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

Sampling Point: WPEKOO'2E_W

2. []	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $20 + 1$)	<u>% Cover</u>	<u>Species?</u>	<u>Status</u>	Number of Dominant Species
1 <u>N</u> A	·			That Are OBL, FACW, or FAC: (A)
2	-			Total Number of Dominant
3	·			Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: <u>86%</u> (A/B)
6			<u> </u>	Prove la deserva de la set
7				Frevalence index worksneet:
		= Total Cov	er	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 15 ++				OBL species 33 x 1 = 33
1. NA	·		<u></u>	FACW species 40 x 2 = 30
2				FAC species $10 \times 3 = 30$
3	·			FACU species 5 x 4 = 60
4				UPL species $0 \times 5 = 0$
5				Column Totals: 100 (A) 205 (B)
6				$Bravelance Index = P(A = 2.5)S^{-1}$
7				Prevalence index = B/A = 2,0 2
i son re		= Total Cov	er	Hydrophytic vegetation indicators:
Shrub Stratum (Plot size: $15 + 4$)		. /	~	1 - Rapid Test for Hydrophytic Vegetation
1. Kubus arvensis	<u>ì0</u>	<u> Y </u>	FAC	$\underline{\nu}$ 2 - Dominance Test is >50%
2. Rosa Multiflora	10	<u> </u>	FACU	✓ 3 - Prevalence Index is ≤3.0'
3. Hibiscus noschentos	10	<u> </u>	OBL	4 - Morphological Adaptations ¹ (Provide supporting
4				data in Remarks or on a separate sneet)
5				Problematic Hydrophytic Vegetation (Explain)
6				
7				Indicators of hydric soil and wetland hydrology must
N :	20	= Total Cov	er	Definitions of Five Vegetation Strata:
Herb Stratum (Plot size: 10 ++)	- "Lo			bennicons of the vegetation of ata.
1- Hidiscos Moschertos		<u> </u>		Tree Woody plants, excluding woody vines,
2. Carex Jurida	15	<u>Y</u>	<u>OBL</u>	(7.6 cm) or larger in diameter at breast height (DBH).
3. Juncus effusus	20	<u> Y </u>	FACIN	
4. Minutus ringens			OBL	Sapling – Woody plants, excluding woody vines,
5. Eupatorium perfoliatum	10	<u> </u>	FACW	than 3 in. (7.6 cm) DBH.
6. Carex Fronkin	5		<u>081</u>	
7. Persicara pensylvanica		<u> Y </u>	FACW	Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height
8. Schedonorus arundinaceus	_ 5		FACU	
9.				Herb – All herbaceous (non-woody) plants, including
10.				plants, except woody vines, less than approximately 3
11.				ft (1 m) in height.
12.				Woody vine – All woody vines, regardless of height
	70	= Total Cov	er	Hoody vines, regardloss of height.
Woody Vine Stratum (Plot size: 30 ++)		1010.001		
1. NA				
2				
3				
4.				Hydrophytic /
5.	,			Present? Yes V No
		= Total Cov	er	
Remarks: (Include photo numbers here or on a separate	sheet)			
Iladrophytic Machine Collar	Mat			
requiring regulation chiteria	PUCT.			

SOIL

Profile Desc	cription: (Describe	to the dep	oth needed to docum	ent the i	indicator	or confirm	the absence of indicators.)	
Depth (inches)	Matrix	0/.	Redox	Feature	s Type ¹		Texture Rem:	arks
	1012 217	 		<u>/0</u>			Sandy Clay loan So	me organir
1-9	LAVE 5/1	70	754R 5/4	30	<u> </u>	PI	Saudy clay born a	carel is smalle land
\$ -20	10100/1 10100/3	90	LOYB SIX	10	 C	M	Sanchy long	<u></u>
<u> </u>	<u>10 1 K 010</u>		10111-70					
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							particular to a	
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	apagetration D-Don	lotion RM	=Reduced Matrix_MS		t Sand Gr		² Location: PI =Pore Lining M=M	afrix
Hydric Soil	Indicators:	ieuon, rav	-Reduced Maan, Mo			anno.	Indicators for Problemat	ic Hydric Soils ³ :
Histosol	l (A1)		Dark Surface	(S7)			2 cm Muck (A10) (ML	RA 147)
Histic E	pipedon (A2)		Polyvalue Bel	ow Surfa	ice (S8) (N	ILRA 147,	148) Coast Prairie Redox (A16)
Black H	istic (A3) an Sulfide (A4)		Loamv Glever	tace (S9 d Matrix /) (IVILKA 1 (F2)	47, 148)	(IVILKA 147, 148) Piedmont Floodolain	Soils (F19)
Stratified	d Layers (A5)		Depleted Mat	rix (F3)	()		(MLRA 136, 147)	· · ·
2 cm Mi	uck (A10) (LRR N)		Redox Dark S	Surface (F	-6)		Very Shallow Dark Su	rface (TF12)
Deplete	d Below Dark Surfac ark Surface (A12)	e (A11)	Depleted Darl Redox Depres	< Surface ssions (F	e (F7) ≅8)		Other (Explain in Ren	iarks)
Sandy M	Aucky Mineral (S1) (I	RR N,	Iron-Mangane	se Mass	es (F12) (LRR N,		
MLR	A 147, 148)		MLRA 136	i)			3	
Sandy C	Gleyed Matrix (S4)		Umbric Surfac	ce (F13) odolain S	(MLRA 13 Soile (E19)	6, 122) (MI RA 14	Indicators of hydrophyti wetland bydrology mus	c vegetation and
Sandy F	d Matrix (S6)		Red Parent M	laterial (F	21) (MLR	A 127, 147	 wetand hydrology index unless disturbed or pro 	blematic.
Restrictive	Layer (if observed)			`				
Туре: 🕻	JA							
Depth (in	ches): NA						Hydric Soil Present? Yes	No No
Remarks:	Hudrie soils	e cis	teria Met					
	Ingonic sons							
							· · · · · · · · · · · · · · · · · · ·	



Wetland data point wpek002e_w facing South



Wetland data point wpek002e_w facing West



Wetland data point wpek002e_w soil sample

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Project/Site: SE Reliability Project City/County: NA/	Prince Edward Sampling Date: 08/04/2014
Applicant/Owner: Dominion Transmission	State: VA Sampling Point: VP2K007_1A
Investigator(s): W. Medlin, J. Dean Section, Township, F	Range: NA CONVEX
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, co	onvex, none): <u>Concade</u> Slope (%): 2-5
Subregion (LRR or MLRA): LRR P Lat: 37, 305636734 Lot	ong: <u>~78, 282175131</u> Datum: NAD 1983
Soll Map Unit Name: Vance fine sandy loan, rolling phase (Va)	NWI classification: Ufland
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	e "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology, naturally problematic? (If	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	ed Area
Hydric Soil Present? Yes No V within a Wetl	land? Yes No 🗸
Wetland Hydrology Present? Yes No 🗸	
Remarks: This area is canadiand hillslope in a cattle of	Dasture, Houses also in a fenced
Orea to SE All 2 antipoint and wat Am	
10 10 JP. An o chierra are not mer. Area i	is not a methada.
Photos # 100-0461 to 0465 soils N.E.S.W (W	ILM conera)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hvdrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living Ro	ools (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Solis	s (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	
Field Observations:	
Surface Water Present? Yes No Depth (inches): NA	
Water Fable Present? Yes No beptn (inches): NA	Makland Hudenland Decout? You No. V.
Saturation Present? Yes <u>No Z</u> Depth (incres): NA	wetiand hydrology Present? Tes No V
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspection	ns), if available:
NA	
Remarks:	
Hydrology criteria is not met.	
	· .

VEGETATION (Five Strata) – Use scientific names o	of plants.
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Samp	lina	Point:	WPC	14002	U`
Obility	iii iu	I OILL	V ~ r ~		

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 36 ++-)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. Liriodendron tulipitera	_15_	<u> </u>	FALU	That Are OBL, FACW, or FAC: (A)
2.				Talei Number of Deminent
3.				Species Across All Strata:
A	· · · · · · · · · · · · · · · · · · ·	<u></u>		
7		·		Percent of Dominant Species
5			•••••••••••••••••••••••••••••••••••••••	That Are OBL, FACW, or FAC: (A/B)
6	• •	· · · · · · · · · · · · · · · · · · ·		Prevalence Index worksheet:
7			<u></u>	Total % Cover of: Multiply by:
15 12 1	15	= Total Cove	er	
Sapling Stratum (Plot size: 1.5 PP)				
1. <u>NA</u>	·			FAUW species $O_{x2} = O$
2				FAC species x 3 = 0
3				FACU species 165 x4 = 660
4.				UPL species x 5 = 🛇
5				Column Totals: 165 (A) 660 (B)
6		······	<u>.</u>	
7	. <u>.</u>		· · · · · · · · · · · · · · · · · · ·	Prevalence Index = $B/A = 4.0$
ſ	·	<u> </u>		Hydrophytic Vegetation Indicators:
Charle Charles (Distained 10 ft)		= Total Cove	er	1 - Rapid Test for Hydrophylic Vegetation
Bar and Cham	~	\checkmark	CAL IN	2 - Dominance Test is >50%
1. <u>FOZA MULITIOTA</u>	 سو		FACO	$\frac{1}{2} Derivation of the transformed of the second $
2. Caltis occidentalis		<u> </u>	FACU	3 - Prevalence index is as.0
3			<u></u> ,	4 - Morphological Adaptations' (Provide supporting
4		<u>.</u>		Decklemette Underskutte Manatotice ¹ (Exploin)
5.	•			Problematic Hydrophytic Vegetation (Explain)
6	·			
		<u></u>	<u></u>	Indicators of hydric soil and wetland hydrology must
· ·	10			be present, unless disturbed or problematic.
Harb Stratum (Plot size: 10 Ft)			ər	Definitions of Five Vegetation Strata:
Tieno Otracular (Flor Size)	110	N	****	
LA THORAD A D. C. ARKING MARKES		Y	PACAL	Tree Moody plants excluding woody vines
1. Schedbrorns arundinacens	<u> </u>	<u> </u>	FACO	Tree Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
1. Schednorus arundinaceus 2. Eupatorium capillifolium	<u> </u>	<u> </u>	FACU	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1. Schedonorus arundinaceus 2. Eugatorium capillifolium 3. Solanum carolinense	<u> </u>	<u>ү</u> <u>Ү</u>	FACU FACU	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1. Schedonorus arundinaceus 2. Eugatorium capillifolium 3. Solanum carolinense 4. Ulmus alata	70 45 10 5	Y 	FACU FACU FACU	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and lass
1. Schedonorus arundinaceus 2. Eugatorium capillifolium 3. Solanum carolinense 4. Ulmus alata 5.	<u>70</u> <u>45</u> <u>10</u> <u>5</u>	<u>Y</u>	FACU FACU FACU	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and lass than 3 in. (7.6 cm) DBH.
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1. <u>Schedonorus arundinaceus</u> 2. <u>Eugatorium capillifolium</u> 3. <u>Solanum carolinense</u> 4. <u>Ulmus alata</u> 5 6	<u> </u>	Y 	FACU FACU FACU	 Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 20 ft (4 to 6 m) is bailed.
1. Schedonorus arundinaceus 2. Eugatorium capillifolium 3. Solanum carolinense 4. Ulmus alata 5. 6. 7. 2.	<u> </u>	<u>Y</u>	FACU FACU FACU	 Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
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1. Schednorus arundinaceus 2. Eugatorium capillifolium 3. Solanum carolinense 4. Ulmus alata 5. 6. 7. 8. 9. 10. 11. 12.		Y 	FACU FACU FACU	 Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and lass than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
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1. Schedonorus arundinaceus 2. Eugatorium capillifolium 3. Solanum carolinense 4. Ulmus alata 5. 6. 7. 8. 9. 10. 11. 12. Woody Vine Stratum (Plot size: 30 f.t.) 1. NA 2. 3. 4. 5. 5. 6. 7. 8. 9. 10. 11. 12. Woody Vine Stratum (Plot size: 30 f.t.) 1. NA 2. 3. 4. 5.	780 45 10 55	Y Y =		Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. Hydrophytic Vegetation Present? Yes No
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SOIL

Compling Doint:	1. 2001	n-2 1	ι
Sampling Point:	WARK	002-0	<u>.</u>

Profile Description: (Desc	ribe to the dent	h needed to docum	ent the li	ulicator o	nr confirm	the absence of indic	ators.)	
Depth Mat	rix	Redox	Features					
(inches) Color (mois	st) %	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-6 10YR 4/	4 100					Sandy clay los	an	
6-17 INR 5/4	1 100	e m		-		Sardy clay loa	и	
17-20 IOYR 6/4	95	10YR 5/8	5	c	M	Sanly loan		
			<u></u>		<u>,</u>			
	<u> </u>	•••••••	<u> </u>					
-		·······	<u></u>			*		
		·			******	<u></u>		
······································	· ·			•	·			
	·				<u> </u>	· ·		
·	·							
. <u> </u>					. <u> </u>			
¹ Type: C=Concentration, D=	Depletion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ins.	² Localion: PL=Pore I	_ining, M≍Matrix.	0.11-3.
Hydric Soil Indicators:			(07)			Indicators to	Problematic Hydri	C 50115 ":
Histosol (A1) Histic Eninedon (A2)		Dark Surface	(S7) ow Surfac	e (S8) (M	I RA 147.	148) Coast Pra	k (A10) (WLRA 147) irie Redox (A16)	
Black Histic (A3)		Thin Dark Su	face (S9)	(MLRA 14	47, 148)	(MLRA	147, 148)	
Hydrogen Sulfide (A4)		Loamy Gleye	d Matrix (F	=2)	- ,	Piedmont	Floodplain Solis (F1	9)
Stralified Layers (A5)		Depleted Mat	rix (F3)			(MLRA	. 136, 147) (Davis Guata an (T	540)
2 cm Muck (A10) (LRR	N) urface (A11)	Redox Dark S	iuriace (Fl c Surface	5) (F7)		Very Shai Other (Fx	iow Dark Surrace (T nlain in Remarks)	F12)
Thick Dark Surface (A12	2)	Redox Depres	ssions (F8	(, , , , i)			picini in tomanico,	
Sandy Mucky Mineral (S	51) (LRR N,	Iron-Mangane	se Masse	s (F12) (L	.RR N,			
MLRA 147, 148)		MLRA 136	9) 			3. 1	61	the second
Sandy Gleyed Matrix (S	4)	Umbric Surfac	38 (F13) (I adalain Sc	VLRA 130	5, 122) (MI RA 14	 Indicators o wetland by 	r nyaropnyuc vegeta drology must be pres	ition and sent
Stripped Matrix (S6)		Red Parent M	laterial (F2	21) (MLRA	A 127, 147	') unless dist	urbed or problematic	2014, X
Restrictive Layer (If observ	ved):	······	•					
туре: ЛА								,
Depth (inches): NA						Hydric Soll Present	t? Yes I	NO home
Remarks:								
Hydrik Sol	ils criter	iia is not	net	۳.				
								-



Upland data point wpek002_u facing South



Upland data point wpek002_u facing West



Upland data point wpek002_u soil sample

Project/Site: Atlantic Coast Pipeline	(City/County:	Prince Edward		Sampling Date: 10/2	20/2014
Applicant/Owner: Dominion				State: VA	Sampling Point: ^V	vpea005f_w
Investigator(s):		Section, Tow	nship, Range: <u>No</u>	PLSS in this a	area	
Landform (hillslope, terrace, etc.): flood	lplain Loc	cal relief (con	cave, convex, non	e): <u>none</u>	Slope	(%): <u>1</u>
Subregion (LRR or MLRA): P	Lat: 37.30257538		Long: <u>-78.2</u>	7102012	Datum: ^V	NGS 1984
Soil Map Unit Name: Wilkes sandy loan	n, eroded hilly phase			NWI class	sification: None	
Are climatic / hydrologic conditions on th	he site typical for this time of yea	ar?Yes_	No (lf no, explain i	in Remarks.)	
Are Vegetation, Soil, or	Hydrology significantly	disturbed?	Are "Normal	Circumstance	es" present? Yes 🔽	No
Are Vegetation, Soil, or	Hydrology naturally pro	blematic?	(If needed, e	xplain any ans	swers in Remarks.)	
SUMMARY OF FINDINGS – A	ttach site map showing	sampling	point locatio	ns, transed	cts, important feat	ures, etc.
Hydrophytic Vegetation Present?	Yes Vo	Is the	Sampled Area		,	
Hydric Soll Present?	Yes <u>No</u>	withir	n a Wetland?	Yes	No	
Wetland Hydrology Present?	Yes Ves No					
Remarks:						
Wetland data point for a saturated to te	emporarily flooded PFO wetland	located on fl	oodplain of Little S	Saylers Creek;	; the stream and upline e	extent of this
				Extern Could I	De lecolueu.	

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
 Surface Water (A1) High Water Table (A2) Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living I Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled Sc Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) 	
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspection)	Wetland Hydrology Present? Yes <u>V</u> No tions), if available:

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

Sampling Point: wpea005f_w

	AL 1.4	D · · ·					
Tree Stratum (Plot size:30)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksh	eet:		
1. Platanus occidentalis	20	Yes	FACW	That Are OBL, FACW, or	FAC:	7	(A)
2. Betula nigra	20	Yes	FACW	Total Number of Deminer			
_{3.} Liquidambar styraciflua	10	No	FAC	Species Across All Strata:	[7	(B)
4. Fraxinus pennsylvanica	10	No	FACW				_ ()
5. Acer rubrum	10	No	FAC	Percent of Dominant Spec	ies =AC:	100	(Δ/R)
6. Ulmus rubra	10	No	FAC	That Ale ODE, I AOW, OF	AO		_ (7,0)
7.				Prevalence Index works	neet:		
	80	= Total Cove	er.	Total % Cover of:	M	ultiply by:	
50% of total cover: 40	20% of	total cover:	16	OBL species 48	x 1 =	48	
Sapling/Shrub Stratum (Plot size: 15)		-		FACW species 61	x 2 =	122	
Lindera benzoin	12	Yes	FAC	FAC species 82	x 3 =	246	
2 Asimina triloba	10	Yes	FAC	FACU species 0	x 4 =	0	
2 Carpinus caroliniana	10	Yes	FAC	UPL species 0	x 5 =	0	
Δ Fraxinus pennsvlvanica	6	No	FACW	Column Totals: 191	(A)	416	(B)
Acer rubrum	5	No	FAC		、 /		、 /
c Liquidambar styraciflua	2	No	FAC	Prevalence Index =	B/A =	2.17	
0. <u></u>				Hydrophytic Vegetation	Indicators	:	
/				1 - Rapid Test for Hyd	Irophytic V	egetation	
8				2 - Dominance Test is	>50%		
9	45	. <u> </u>		✓ 3 - Prevalence Index	s ≤3.0 ¹		
	40	= Total Cove	er 9	4 - Morphological Ada	ptations ¹ (Provide su	pporting
50% of total cover: <u>22.3</u>	<u>20% of 20% of 2</u>	total cover:		data in Remarks o	r on a sepa	arate sheet)
Herb Stratum (Plot size:)	45	Voc		Problematic Hydrophy	vtic Vegeta	tion ¹ (Expla	ain)
1. Boehmeria ovlindrica		No			-		
2. Woodwardia virginica	3	No		¹ Indicators of hydric soil a	nd wetland	hydrology	must
3. Athyrium asplenioides	3	No	EAC	be present, unless disturb	ed or probl	ematic.	
		INU	TAC	Definitions of Four Vege	tation Stra	ata:	
5		·		Tree – Woody plants, exc	udina vine	s 3 in (7 6	S cm) or
6		. <u> </u>		more in diameter at breas	height (Dl	BH), regard	dless of
7				height.			
8				Sapling/Shrub – Woody r	plants, exc	ludina vine:	s. less
9				than 3 in. DBH and greate	r than or e	qual to 3.2	8 ft (1
10				m) tall.			
11				Herb – All herbaceous (no	n-woody)	plants, rega	ardless
	56	= Total Cove	er	of size, and woody plants	less than 3	3.28 ft tall.	
50% of total cover: 28	20% of	total cover:	11.2	Woody vine – All woody y	vines areat	er than 3.2	8 ft in
Woody Vine Stratum (Plot size: 30)				height.	litee great		
1. Toxicodendron radicans	10	Yes	FAC				
2							
3							
4				Hydrophytic			
5				Vegetation			
	10	= Total Cove	ər	Present? Yes	<u> </u>	o	
50% of total cover: 5	20% of	total cover:	2				
Remarks: (Include photo numbers here or on a separate s	heet.)						

Profile Desc	cription: (Describe t	o the dep	oth needed to docum	nent the i	indicator of	or confirm	the absence of indicators.)	
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR 4/2	90	7.5YR 4/6	10	С	PL/M	SICL	
6-20	10YR 4/1	80	7.5YR 4/6	20	С	PL/M	SICL	
<u> </u>								
¹ Type: C=C	oncentration, D=Deple	etion, RM	=Reduced Matrix, MS	S=Masked	d Sand Gra	ains.	² Location: PL=Pore Lining,	M=Matrix.
Hydric Soil	Indicators:	,	,				Indicators for Proble	ematic Hydric Soils ³ :
<pre> Histosol Histic Epi </pre>	(A1) pipedon (A2)		Dark Surface Polyvalue Be	(S7) low Surfa	ice (S8) (N	ILRA 147,	2 cm Muck (A10) 148) Coast Prairie Re	(MLRA 147) dox (A16)
Black Hi	istic (A3)		Thin Dark Su	rface (S9) (MLRA 1	47, 148)	(MLRA 147, 1	48)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix ((F2)		Piedmont Floodp	lain Soils (F19)
Stratified	d Layers (A5)		 Depleted Mat 	trix (F3)			(MLRA 136, 1	47)
2 cm Mu	uck (A10) (LRR N)		Redox Dark	Surface (F	-6)		Very Shallow Da	rk Surface (TF12)
Deplete	d Below Dark Surface	(A11)	Depleted Dar	k Surface	e (F7)		Other (Explain in	Remarks)
Thick Da	ark Surface (A12)		Redox Depre	ssions (F	8)			
Sandy N	/lucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Mass	es (F12) (LRR N,		
MLR	A 147, 148)		MLRA 13	6)				
Sandy G	Gleyed Matrix (S4)		Umbric Surfa	ce (F13)	(MLRA 13	6, 122)	³ Indicators of hydro	phytic vegetation and
Sandy F	Redox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 14	 wetland hydrology 	must be present,
Stripped	I Matrix (S6)		Red Parent M	/laterial (F	21) (MLR	A 127, 147) unless disturbed o	r problematic.
Restrictive	Layer (if observed):							
Type: <u>no</u>	ne							
Depth (in	ches):						Hydric Soil Present? Ye	es 🖌 No
Remarks:								



Photo 1 Wetland data point WPEA005f_w facing west



Photo 2 Wetland data point WPEA005f_w facing northeast

Project/Site: Atlantic Coast Pipeline	_ City/County: Prince Edward		Sampling Date: 10/20/2014
Applicant/Owner: Dominion		State: VA	_ Sampling Point: wpea005_u
Investigator(s): GB, TP	_ Section, Township, Range:	Io PLSS in this area	
Landform (hillslope, terrace, etc.): slope	ocal relief (concave, convex, n	one): none	Slope (%): <u>60</u>
Subregion (LRR or MLRA): P Lat: <u>37.30245003</u>	Long: <u>-78</u>	3.27098218	Datum: WGS 1984
Soil Map Unit Name: Wilkes sandy loam, eroded hilly phase		NWI classifica	tion: None
Are climatic / hydrologic conditions on the site typical for this time of	year?Yes 🖌 No	(If no, explain in Re	marks.)
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are "Norm	al Circumstances" pr	esent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	oroblematic? (If needed	, explain any answers	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	ig sampling point locat	ions, transects,	important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	< < <	Is the Sampled Area within a Wetland?	Yes	No
Remarks: Upland data point on a steep sideslope	above a satura	ted to t	emporarily floo	oded PFO wetland located c	on the floodpla	in of Little Saylers Creek

HYDROLOGY

	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Roots (C3) Moss Trim Lines (B16) Dry-Season Water Table (C2) oils (C6) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes <u>No</u> Depth (inches): <u>(includes capillary fringe</u>)	Wetland Hydrology Present? Yes No
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	Wetland Hydrology Present? Yes No tions), if available:

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

Sampling Point: <u>wpea005_u</u>

	Absolute	Dominant Ir	dicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	
Fagus grandifolia	25	Yes	FACU	Number of Dominant Species
Liriodendron tulinifera	20	Yes	FACU	That Are OBL, FACW, of FAC: (A)
		<u> </u>	FACU	Total Number of Dominant
3. Quercus alba	20	res	FACU	Species Across All Strata: 7 (B)
4. Carya cordiformis	10	No	FACU	
5				Percent of Dominant Species
		······		That Are OBL, FACW, of FAC: (A/B)
0		·		Prevalence Index worksheet:
7	75	·		Total % Cover of: Multiply by:
		= Total Cover		
50% of total cover: 37.5	20% of	total cover:	15	OBL species $x_1 = 0$
Sapling/Shrub Stratum (Plot size: 15)				FACW species x 2 =0
1 Fagus grandifolia	25	Yes	FACU	FAC species $3 \times 3 = 9$
o Cornus florida	10	Yes	FACU	FACU species $135 \times 4 = 540$
			EACU	$\frac{1}{100} \frac{1}{100} \frac{1}$
3. Quercus alba	5		FACU	VPL species X 5 =
4. Quercus rubra	5	No	FACU	Column Totals: (A) (B)
5.				3.07
6		······		Prevalence Index = $B/A = \frac{5.97}{1000000000000000000000000000000000000$
				Hydrophytic Vegetation Indicators:
/				1 - Rapid Test for Hydrophytic Vegetation
8		<u> </u>		2 - Dominance Test is >50%
9				$\frac{1}{2} \text{Drawalance heaving C2 of}$
	45	= Total Cover		3 - Prevalence index is \$3.0
50% of total cover: 22.5	20% of	total cover:	9	4 - Morphological Adaptations' (Provide supporting
$\frac{1}{5}$				data in Remarks or on a separate sheet)
<u>Herb Stratum</u> (Plot size:)	10	N	FAOL	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Forystichulli acrostichoides		res	FACU	
2. Luzula multiflora	3	Yes	FACU	The discrete section of the defense in the end of the design of the section of th
3.				ha prosent, upless disturbed or problematic
4				be present, unless disturbed of problematic.
				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8.				
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10		· ·		III) tali.
11		. <u> </u>		Herb – All herbaceous (non-woody) plants, regardless
	15	= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 7.5	20% of	total cover:	3	
Woody Vine Stratum (Plot size: 30)				Woody vine – All woody vines greater than 3.28 ft in
	3	No	FAC	neight.
1. <u></u>				
2				
3				
4.				
5		······		Hydrophytic
J				Present? Yes No
	<u> </u>	= Total Cover	0.6	
50% of total cover: 1.5	20% of	total cover:	0.0	
Remarks: (Include photo numbers here or on a separate s	heet.)			
L				

Profile Desc	cription: (Describe to	o the dept	h needed to docun	nent the ir	ndicator	or confirm	the absence of indicators.)	
Depth	Matrix		Redo	x Features	5			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	
0-8	10YR 4/4	100					SL	
8-20	10YR 3/6	100					SL	
		·				<u> </u>		
		·						
		·						
		·						
·								
¹ Type: C=C	oncentration, D=Deple	etion, RM=I	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	² Location: PL=Pore Lining, M=Matrix.	-
Hydric Soil	Indicators:						Indicators for Problematic Hydric So	oils³:
Histosol	(A1)		Dark Surface	(S7)			2 cm Muck (A10) (MLRA 147)	
Histic Ep	pipedon (A2)		Polyvalue Be	low Surfac	e (S8) (N	ILRA 147,	148) Coast Prairie Redox (A16)	
Black Hi	istic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)	(MLRA 147, 148)	
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F	-2)		Piedmont Floodplain Soils (F19)	
Stratified	d Layers (A5)		Depleted Mat	trix (F3)			(MLRA 136, 147)	
2 cm Mu	uck (A10) (LRR N)		Redox Dark \$	Surface (F	6)		Very Shallow Dark Surface (TF12)	1
Depletee	d Below Dark Surface	(A11)	Depleted Dar	k Surface	(F7)		Other (Explain in Remarks)	
Thick Da	ark Surface (A12)		Redox Depre	ssions (F8	B)			
Sandy N	Aucky Mineral (S1) (LI	RR N,	Iron-Mangan	ese Masse	es (F12) (I	LRR N,		
MLRA	A 147, 148)		MLRA 13	6) (F10) (1			3	
Sandy G	Bleyed Matrix (S4)		Umbric Surfa	ce (F13) (I		6, 122)	Indicators of hydrophytic vegetation	and
Sandy F	Kedox (SS)		Pleamont Flo	oapiain Sc		(WLRA 14)	8) wetland hydrology must be present,	i.
Surpped	I Mainx (50)			naterial (F2		A 127, 147) unless disturbed of problematic.	
	ne							
Type:								~
Depth (in	ches):						Hydric Soil Present? Yes No _	<u> </u>
Remarks:								



Photo 1 Upland data point WPEA005_u facing northeast



Photo 2 Upland data point WPEA005_u facing west

Project/Site: Atlantic Coast Pipeline	City/County: Prince Edward Sampling Date: 10/17/2014
Applicant/Owner: Dominion	State: VA Sampling Point: wpea001f_w
Investigator(s): GB, LE	Section, Township, Range: No PLSS in this area
Landform (hillslope, terrace, etc.): draw Lo	cal relief (concave, convex, none): <u>concave</u> Slope (%): <u>2</u>
Subregion (LRR or MLRA): P Lat: <u>37.2996208</u>	Long: <u>-78.26357587</u> Datum: WGS 1984
Soil Map Unit Name: Madison clay loam, eroded hilly phase	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances" present? Yes 🖌 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? Hydric Soil Present? Wetland Hydrology Present?	Yes 🖌 Yes 🖌 Yes 🖌	No No No	Is the Sampled Area within a Wetland?	Yes 🖌	No
Remarks: Wetland data point for a saturated PFO v	vetland locate	d at the confluence o	f intermittent streams spea001	& spea002	
······					

HYDROLOGY

Wetland Hydrology Indicate	Drs:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum	of one is required; check all that apply)	Surface Soil Cracks (B6)
 Surface Water (A1) High Water Table (A2) 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) 	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Thin Muck Surface (C7) Other (Explain in Remarks) rial Imagery (B7)	 Surface Soft Cracks (B0) Sparsely Vegetated Concave Surface (B8) ✓ Drainage Patterns (B10) s (C3) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) ✓ Microtopographic Relief (D4) ✓ FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present?	Yes No _	
Water Table Present?	Yes <u>V</u> No Depth (inches): 3	
Saturation Present? (includes capillary fringe)	Yes <u>v</u> No <u>Depth (inches)</u> . 0 We	tland Hydrology Present? Yes 🖌 No
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos, previous inspections)), if available:
Remarks:		

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

Sampling Point: wpea001f_w

	AL 1.4	- - · · ·				
Tree Stratum (Plat size: 30)	Absolute	Dominant	Indicator	Dominance Test worksheet:		
<u>Platanum</u> (Plot size:)	<u>% Cover</u>	<u>Species</u>	<u>Status</u>	Number of Dominant Species	0	
1. Platanus occidentalis	10	res		That Are OBL, FACW, or FAC:	8	(A)
2. Acer rubrum	10	Yes	FAC	Total Number of Deminent		
_{3.} Ulmus rubra	10	Yes	FAC	Species Across All Strata:	8	(B)
4. Liquidambar styraciflua	10	Yes	FAC		;	(-)
ь Carpinus caroliniana	3	No	FAC	Percent of Dominant Species	100	(
9 <u></u>				That Are OBL, FACW, or FAC:	100	(A/B)
6				Prevalence Index worksheet:		
7	10			Total % Cover of:	Multiply by:	
	40	= Total Cove	er		<u></u>	
50% of total cover: 24	20% of	total cover:	9.0	OBL species X	1 =	
Sapling/Shrub Stratum (Plot size: 15)				FACW species x	2 =	_
_{1.} Alnus serrulata	15	Yes	OBL	FAC species 73 x	3 =	_
2 Carpinus caroliniana	15	Yes	FAC	FACU species 0 x	4 = 0	_
2	5	No	FAC	UPL species 0 x	5 = 0	
5		No	FAC	Column Totals: 128 (A	314	(B)
						_ (D)
5. Platanus occidentalis	5	<u>N0</u>	FACW	Prevalence Index = B/A =	2.45	
6. Vaccinium corymbosum	5	No	FACW	Hydronhytic Vegetation Indica	ators:	_
7				1 Danid Test for Lludranbud	tie Venetetien	
8				1 - Rapid Test for Hydrophyt	tic vegetation	
0				2 - Dominance Test is >50%	, o	
9	50			<u>✓</u> 3 - Prevalence Index is ≤3.0) ¹	
25		= Total Cove	er 10	4 - Morphological Adaptation	ns ¹ (Provide sup	porting
50% of total cover: 25	20% of	total cover:	10	data in Remarks or on a	senarate sheet)	. 0
Herb Stratum (Plot size: 5)						·
1. Microstegium vimineum	12	Yes	FAC		getation (Explai	in)
2 Agrimonia parviflora	8	Yes	FACW			
2 Boehmeria cylindrica	5	No	FACW	¹ Indicators of hydric soil and wetl	land hydrology n	nust
. Poa autumnalis	3	No	FAC	be present, unless disturbed or p	problematic.	
4. 1 obalia condinalia			<u> </u>	Definitions of Four Vegetation	Strata:	
5. Lobella caldinalis		NO	FACW	Trop Woody planta evaluding	vince 2 in (7.6	om) or
6				more in diameter at breast heigh	t (DBH) regard	ess of
7				height.	it (DDFI), rogarai	000 01
8						
0				Sapling/Shrub – Woody plants,	excluding vines	, less
9				than 3 in. DBH and greater than	or equal to 3.28	ft (1
10			<u> </u>	III) tall.		
11			. <u> </u>	Herb – All herbaceous (non-woo	ody) plants, rega	rdless
		= Total Cove	er	of size, and woody plants less th	nan 3.28 ft tall.	
50% of total cover: 15	20% of	total cover:	6			ff :
Woody Vine Stratum (Plot size: 30)				woody vine – All woody vines g	Jreater than 3.28	πin
1.						
·						
2						
3						
4				Hydrophytic		
5				Vegetation		
	0	= Total Cove	er	Present? Yes	No	
50% of total cover: 0	20% of	total cover:	0			
Remarks: (Include photo numbers here or on a separate s	heet)					
Nomano. (molude proto numbers here of on a separate si	noet.)					

Depth	Matrix Redox Features									
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-6	10YR 3/1	92	7.5YR 4/6	8	С	PL/M	SL			
6-20	10YR 4/2	90	7.5YR 4/6	10	С	PL/M	SL			
			·							
4			·							
Type: C=C	Concentration, D=Depl	etion, RM	I=Reduced Matrix, MS	S=Masked	Sand Gra	ains.	² Location: P	L=Pore Lini	ng, M=Matrix.	
Hydric Soil	Indicators:						Indica	ators for Pi	oblematic Hy	dric Soils":
Histosc	ol (A1)		Dark Surface	(S7)			2	cm Muck (A	A10) (MLRA 1	47)
Histic E	pipedon (A2)		Polyvalue Be	low Surfa	ce (S8) (N	LRA 147,	148) C	oast Prairie	Redox (A16)	
Black H	listic (A3)		Thin Dark Su	rface (S9)) (MLRA 1	47, 148)		(MLRA 14	7, 148)	
Hydrog	en Sulfide (A4)		Loamy Gleye	ed Matrix (F2)		P	iedmont Flo	odplain Soils	(F19)
Stratifie	ed Layers (A5)		Depleted Ma	trix (F3)				(MLRA 13	6, 147)	
2 cm M	uck (A10) (LRR N)		Redox Dark \$	Surface (F	-6)		V	ery Shallow	Dark Surface	(TF12)
Deplete	ed Below Dark Surface	e (A11)	Depleted Date	k Surface	e (F7)		0	ther (Expla	in in Remarks)
Thick D	Dark Surface (A12)		Redox Depre	ssions (F	8)					
Sandy	Mucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Mass	es (F12) (_RR N,				
MLR	A 147, 148)		MLRA 13	6)	· / ·					
Sandv	Gleved Matrix (S4)		Umbric Surfa	, ce (F13) (MLRA 13	6. 122)	³ Ind	icators of h	drophytic vec	etation and
Sandy	Redox (S5)		Piedmont Flo	odolain S	oils (F19)	(MI RA 14	8) we	tland hydro	loav must be i	present
Strippe	d Matrix (S6)		Red Parent M	/aterial (F	21) (MI R	Δ 127 147) un	ess disturb	ed or problem	atic
<u> </u>	Laver (if observed):					A 127, 147)			410.
	one									
Dooth (ir							Hudria Sail	Brocont?	Vac V	No
							Hyune 301	FIESEII(?	162	



Photo 1 Wetland data point WPEA001f_w facing north



Photo 2 Wetland data point WPEA001f_w facing south

Project/Site: Atlantic Coast Pipeline	City/County: Prince Edw	ard	Sampling Date: 10/17/2014		
Applicant/Owner: Dominion		State: VA	Sampling Point: wpea001_u		
Investigator(s): GB, LE	_ Section, Township, Rang	_{ge:} No PLSS in this are	a		
Landform (hillslope, terrace, etc.): slope	ocal relief (concave, conve	x, none): <u>none</u>	Slope (%): <u>6</u>		
Subregion (LRR or MLRA): P Lat: 37.29963759	Long:	-78.26365592	Datum: WGS 1984		
Soil Map Unit Name: Madison clay loam, eroded hilly phase		NWI classifi	ication: None		
Are climatic / hydrologic conditions on the site typical for this time of y	vear? Yes 🗹 No 🔄	(If no, explain in I	Remarks.)		
Are Vegetation, Soil, or Hydrology significant	y disturbed? Are "N	ormal Circumstances"	present? Yes 🖌 No		
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If need	ded, explain any answ	ers in Remarks.)		
SUMMARY OF FINDINGS – Attach site map showin	g sampling point lo	cations, transect	s, important features, etc.		

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks: Upland data point taken on a sideslope f	for a saturated	PFO wetland located	d at confluence of two streams	;	

HYDROLOGY

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

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

Sampling Point: wpea001_u

	Abcoluto	Dominant Ir	dicator	Dominanco Tost workshoot:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Dominance rest worksheet.
Pinus taeda	25	Yes	FAC	Number of Dominant Species
Liriodendron tulipifera	10	Yes	FACU	That Are OBL, FACW, of FAC: (A)
2	7	No	FACU	Total Number of Dominant
	7	No	FACIL	Species Across All Strata: (B)
4. Quercus alba		No	EACU	Percent of Dominant Species
5. Carya cordiformis	5	INU	FACU	That Are OBL, FACW, or FAC: <u>57.14285714</u> (A/B)
6. Prunus serotina	5	No	FACU	
7				Prevalence Index worksheet:
	59	= Total Cove	 r	Total % Cover of:Multiply by:
50% of total cover: 29.5	20% of	total cover:	11.8	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15				FACW species $\begin{array}{c} 0 \\ x 2 = \end{array}$
<u>Carpinus caroliniana</u>	15	Yes	FAC	FAC species $61 \times 3 = 183$
- Corpus florida	10	Vos	EACU	62 $4 - 248$
2. Contras nontras				$1 \text{ Act species} \qquad 0 \qquad x \neq - \qquad 0$
3. Liquidambar styracinua	0	res	FAC	$\begin{array}{c} \text{OPL species} \\ 123 \\ $
4. Acer rubrum	5	No	FAC	Column Totals: (A) (B)
5. Pinus taeda	5	No	FAC	Brovelence Index = B/A = 35
_{6.} Quercus alba	4	No	FACU	
7 Carya glabra	4	No	FACU	Hydrophytic Vegetation Indicators:
Carva cordiformis	4	No	FACU	1 - Rapid Test for Hydrophytic Vegetation
<u>0.</u>				2 - Dominance Test is >50%
9		·		3 - Prevalence Index is ≤3.0 ¹
00.5	55	= Total Cover	10.6	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 26.5	20% of	total cover:	10.0	data in Remarks or on a senarate sheet)
Herb Stratum (Plot size: 5)				
1. Polystichum acrostichoides	6	Yes	FACU	Problematic Hydrophytic Vegetation (Explain)
2				
2				¹ Indicators of hydric soil and wetland hydrology must
3		·		be present, unless disturbed or problematic.
4		·		Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7.				height.
8				
0		·		Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10		·		11 <i>1)</i> tali.
11				Herb – All herbaceous (non-woody) plants, regardless
	6	= Total Cover	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 3	20% of	total cover:	1.2	Weedy vine All weedy vince greater than 2.20 ft in
Woody Vine Stratum (Plot size: 30)				beight
1 Lonicera japonica	5	Yes	FAC	
2				
2		·		
3		·		
4				Hydrophytic
5				Vegetation
	5	= Total Cover	r	Present? Yes V No
50% of total cover: 2.5	20% of	total cover:	1	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Des	cription: (Describe t	o the dept	h needed to docun	nent the indi	icator o	or confirm	the absence o	f indicator	s.)	
Depth	Matrix		Redox	x Features						
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u> T	Гуре ¹	Loc ²	Texture		Remarks	
0-5	10YR 5/3	100					SL			
5-20	10YR 5/4	100					SL			
		·				. <u> </u>				
		·								
		·				·	<u> </u>			
		·				·				
	·						. <u> </u>			
¹ Type: $C=C$	concentration, D=Depl	etion. RM=I	Reduced Matrix, MS	S=Masked Sa	and Gra	ins	² Location: PL =	Pore Linin	a. M=Matrix.	
Hydric Soil	Indicators:						Indicate	ors for Pro	blematic Hy	dric Soils ³ :
Histoso	l (A1)		Dark Surface	(S7)			2 c	m Muck (A	10) (MLRA 1	47)
Histic E	pipedon (A2)		Polyvalue Be	low Surface	(S8) (M	LRA 147,	148) <u> </u>	ast Prairie	Redox (A16)	,
Black H	listic (A3)		Thin Dark Su	rface (S9) (N	ILRA 14	47, 148)	(MLRA 147	, 148)	
Hydrog	en Sulfide (A4)		Loamy Gleye	d Matrix (F2))		Pie	dmont Floo	dplain Soils	(F19)
Stratifie	d Layers (A5)		Depleted Mat	trix (F3)			(MLRA 136	, 147)	
2 cm M	uck (A10) (LRR N)		Redox Dark S	Surface (F6)			Ver	y Shallow	Dark Surface	(TF12)
Deplete	d Below Dark Surface	e (A11)	Depleted Dar	k Surface (F	7)		Oth	er (Explair	in Remarks)	
Thick D	ark Surface (A12)		Redox Depre	ssions (F8)						
Sandy I	Mucky Mineral (S1) (L	RR N,	Iron-Mangane	ese Masses ((F12) (L	.RR N,				
MLR.	A 147, 148)		MLRA 130	b)	DA 436	. 400)	³ India	otoro of hu	drankutia vaa	atation and
Sandy C	Bieyeu Malinx (54)		Uniblic Sulla Diodmont Flo	ce (F13) (IVIL	-KA 130), 122) MIDA 14		ators of nyo	arophytic veg	
Strinner	d Matrix (S6)		Red Parent M	Aterial (F21)) (MIRA	101 LICA 140) unleg	ss disturbe	d or problem:	atic
Restrictive	Laver (if observed):					(127, 147				
Type: no	one									
Depth (in	nches):						Hydric Soil P	resent?	Yes	No 🖌
Remarks:							L .			



Photo 1 Upland data point WPEA001_u facing north



Photo 2 Upland data point WPEA001_u facing south
Project/Site: Atlantic Coast Pipeline	City/County: Prince E	dward	Sampling Date: 10/17/2014
Applicant/Owner: Dominion		State: VA	Sampling Point: wpea002f_w
Investigator(s): <u>GB, LE</u>	Section, Township, Ra	ange: No PLSS in this area	l
Landform (hillslope, terrace, etc.): depression	Local relief (concave, cor	ivex, none): <u>concave</u>	Slope (%): <u>1</u>
Subregion (LRR or MLRA): P Lat: 37.298	32234 Lo	ng:78.2612602	Datum: WGS 1984
Soil Map Unit Name: Worsham sandy loam		NWI classific	ation: None
Are climatic / hydrologic conditions on the site typical for this tir	ne of year? Yes 🖌 No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrologysign	ificantly disturbed? Are	"Normal Circumstances" p	oresent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natu	rally problematic? (If n	eeded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map sh	owing sampling point	locations, transects	, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u> </u>	No No No	Is the Sampled Area within a Wetland?	Yes 🖌	No
Remarks: Wetland data point taken for a saturate	ed PFO seep w	vetland in a depressior	located between streams sp	ea003 & spea00	04 at their confluence

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
✓ High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
✓ Saturation (A3) Oxidized Rhizospheres on Living F	coots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Sol	ls (C6) 🖌 Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	✓ Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes <u>V</u> No Depth (inches): 10	
Water Table Present? Yes V Depth (inches): 10 Saturation Present? Yes V No Depth (inches): 7	Wetland Hydrology Present? Yes <u></u> No
Water Table Present? Yes V No Depth (inches): 10 Saturation Present? Yes V No Depth (inches): 7 (includes capillary fringe) V V V V V	Wetland Hydrology Present? Yes <u></u> No
Water Table Present? Yes V No Depth (inches): 10 Saturation Present? Yes V No Depth (inches): 7 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	Wetland Hydrology Present? Yes <u>V</u> No ons), if available:
Water Table Present? Yes V No Depth (inches): 10 Saturation Present? Yes V No Depth (inches): 7 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Remarks:	Wetland Hydrology Present? Yes <u>V</u> No ons), if available:
Water Table Present? Yes V No Depth (inches): 10 Saturation Present? Yes V No Depth (inches): 7 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Remarks:	Wetland Hydrology Present? Yes <u>V</u> No ons), if available:
Water Table Present? Yes V No Depth (inches): 10 Saturation Present? Yes V No Depth (inches): 7 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Remarks:	Wetland Hydrology Present? Yes <u>V</u> No ons), if available:
Water Table Present? Yes V No Depth (inches): 10 Saturation Present? Yes V No Depth (inches): 7 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Remarks:	Wetland Hydrology Present? Yes <u>V</u> No ons), if available:
Water Table Present? Yes V No Depth (inches): 10 Saturation Present? Yes V No Depth (inches): 7 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Remarks:	Wetland Hydrology Present? Yes <u>V</u> No ons), if available:
Water Table Present? Yes V No Depth (inches): 10 Saturation Present? Yes V No Depth (inches): 7 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Remarks:	Wetland Hydrology Present? Yes <u>Yes</u> No ons), if available:
Water Table Present? Yes V No Depth (inches): 10 Saturation Present? Yes V No Depth (inches): 7 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Remarks:	Wetland Hydrology Present? Yes <u>Yes</u> No ons), if available:
Water Table Present? Yes V No Depth (inches): 10 Saturation Present? Yes V No Depth (inches): 7 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Remarks:	Wetland Hydrology Present? Yes <u>V</u> No ons), if available:
Water Table Present? Yes V No Depth (inches): 10 Saturation Present? Yes V No Depth (inches): 7 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Remarks:	Wetland Hydrology Present? Yes <u>Yes</u> No ons), if available:

Sampling Point: wpea002f_w

	Abaaluta	Dominant	Indiantar	Deminence Test werksheet
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Dominance rest worksheet.
Liquidambar aturaciflua	25	Vee	FAC	Number of Dominant Species
		165		That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	15	Yes	FAC	
2 Liriodendron tulipifera	5	No	FACU	I otal Number of Dominant
S				Species Across All Strata: (B)
4				Dercent of Dominant Species
5.				That Are OBL EACW/ or EAC: $100 (A/B)$
6				
0				Prevalence Index worksheet
7				
	45	= Total Cov	er	I otal % Cover of: Multiply by:
50% of total cover: 22.5	20% of	total cover:	9	OBL species x 1 = 30
	2070 01			EACW species 8 x 2 - 16
Sapling/Shrub Stratum (Plot size:)				
1. Alnus serrulata	15	Yes	OBL	FAC species $x_3 = 270$
₂ Lindera benzoin	12	Yes	FAC	FACU species $\frac{8}{x4} = \frac{32}{x4}$
_ Asimina triloha	4	No	FAC	LIPL species $0 \times 5 = 0$
3				
4. Fagus grandifolia	3	No	FACU	Column Totals: (A) (B)
5				
				Prevalence Index = B/A = 2.56
6				Hydrophytic Vegetation Indicators:
7.				
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				\checkmark 3 - Provalence Index is <3.0 ¹
	34	= Total Cov	ər	
50% of total cover: 17	20% of	total cover:	6.8	4 - Morphological Adaptations' (Provide supporting
50% of total cover:	2078.01			data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)				Droblematic Hydrophytic Vegetation ¹ (Evaluin)
_{1.} Athyrium asplenioides	10	Yes	FAC	
Microstegium vimineum	9	Yes	FAC	
Z. Agrimonia nonvillara	0	Vaa		¹ Indicators of hydric soil and wetland hydrology must
3. Agrimonia parvillora	8	res	FACW	be present, unless disturbed or problematic.
_{4.} Carex lupulina	8	Yes	OBL	Definitions of Four Vagatation Strata
E Carex comosa	7	No	OBI	Demittoris of Four vegetation Strata.
S				Tree – Woody plants, excluding vines 3 in (7.6 cm) or
6. Poa autumnalis	6	NO	FAC	more in diameter at breast height (DBH) regardless of
7.				height.
0				
0				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11				
	19			Herb – All herbaceous (non-woody) plants, regardless
	40	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 24	20% of	total cover:	9.6	Weedware Alloweedware meder then 2.00 ft in
Woody Vine Stratum (Plot size: 30)				beight
Lonicera japonica	6	Yes	FAC	neight.
2. Smilax rotundifolia	4	Yes	FAC	
3				
4				Hydrophytic
5				Vegetation
	10	- Total Cov	٥r	Present? Yes Ves No
E00/ of total anyon 5			2	
	20% 0	total cover.		
Remarks: (Include photo numbers here or on a separate s	heet.)			

LIEUIII	Motrix		Pod	N Footuroo				
(inches)	Color (moist)	%	Color (moist)	% Tvr	$e^1 loc^2$	Texture		Remarks
0-4	10YR 2/1	100				SL		
4-8	10YR 3/1	100				SL		
8-20	10YR 4/1	100				SL		
		·						
¹ Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked Sand	d Grains.	² Location: P	L=Pore Lini	ng, M=Matrix.
Hydric Soil	Indicators:					Indica	ators for Pr	oblematic Hydric Soils ³ :
Histosol Histic E Black Hi Hydroge Stratifier 2 cm Mu Deplete Thick D Sandy M	I (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) uck (A10) (LRR N) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) (L	e (A11) .RR N,	 Dark Surfact Polyvalue Bi Thin Dark Si Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Iron-Mangar 	e (S7) elow Surface (S8) urface (S9) (MLI ed Matrix (F2) atrix (F3) Surface (F6) urk Surface (F7) essions (F8) nese Masses (F1	3) (MLRA 147 RA 147, 148) 12) (LRR N,	, 148) C	cm Muck (/ coast Prairie (MLRA 14 riedmont Flo (MLRA 13 fery Shallow other (Expla	A10) (MLRA 147) Redox (A16) 7, 148) bodplain Soils (F19) 6, 147) v Dark Surface (TF12) in in Remarks)
MLRA Sandy C Sandy F Strippec Restrictive	A 147, 148) Gleyed Matrix (S4) Redox (S5) Matrix (S6) Layer (if observed):		MLRA 13 <u>V</u> Umbric Surfa Piedmont FI Red Parent	36) ace (F13) (MLR oodplain Soils (F Material (F21) (N	A 136, 122) 19) (MLRA 14 ILRA 127, 14	³ lnd 48) we 7) un	icators of hy atland hydro less disturb	ydrophytic vegetation and logy must be present, ed or problematic.
Type: <u>no</u> Depth (in	ches):					Hydric Soil	Present?	Yes 🖌 No
2004.1 (11								



Photo 1 Wetland data point WPEA002f_w facing south



Photo 2 Wetland data point WPEA002f_w facing north

Project/Site: Atlantic Coast Pipeline	_ City/County: Prince Edward	Sampling Date: 10/17/2014
Applicant/Owner: Dominion	State: <u>VA</u>	Sampling Point: <u>wpea002_u</u>
Investigator(s): GB, LE	_ Section, Township, Range: <u>No PLSS in thi</u>	s area
Landform (hillslope, terrace, etc.): slope	_ocal relief (concave, convex, none): <u>none</u>	Slope (%): <u>4</u>
Subregion (LRR or MLRA): P Lat: 37.29828844	4 Long: <u>-78.26134147</u>	Datum: WGS 1984
Soil Map Unit Name: Worsham sandy loam	NWI cl	assification: None
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes 🗹 No (If no, explai	in in Remarks.)
Are Vegetation, Soil, or Hydrology significant	tly disturbed? Are "Normal Circumstar	nces" present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed, explain any a	answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	ng sampling point locations, trans	sects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes 🖌	No No	 	Is the Sampled Area within a Wetland?	Yes	No 🖌
Wetland Hydrology Present?	Yes	No	✓			
Remarks:						
Upland data point taken on a sideslope a	above a PFO s	eep we	etland locate	d at the confluence of streams	s spea003 & sp	bea004

Primary Indicators (minimum of one is required; check all that apply)
Algal Mat or Crust (B4)Other (Explain in Remarks)Stunted or Stressed Plants (D1) Iron Deposits (B5)Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7)Shallow Aquitard (D3) Water-Stained Leaves (B9)Microtopographic Relief (D4) Aquatic Fauna (B13)RAC-Neutral Test (D5) Field Observations: Surface Water Present? YesNoDepth (inches): Water Table Present? YesNoDepth (inches): Water Table Present? YesNoDepth (inches): Wetland Hydrology Present? YesNo Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: no hydrology indicators present
Aquatic Fauna (B13) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No _ v Depth (inches): Water Table Present? Yes No _ v Depth (inches): Saturation Present? Yes No _ v Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: no hydrology indicators present
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: no hydrology indicators present
Surface Water Present? Yes No V Water Table Present? Yes No V Saturation Present? Yes No V Depth (inches): Ves No V Cincludes capillary fringe) Ves Depth (inches): Wetland Hydrology Present? Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Water Table Present? YesNo _ Saturation Present? YesNo _ Uncludes capillary fringe) YesNo _ Depth (inches):Wetland Hydrology Present? YesNo _ No _ Mo
Saturation Present? YesNo _ Mo _ Wetland Hydrology Present? YesNo _ No _ Wetland Hydrology Present? YesNo _ No _ Remarks: Remarks: no hydrology indicators present
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: no hydrology indicators present
Remarks: no hydrology indicators present
Remarks: no hydrology indicators present
no hydrology indicators present

Sampling Point: wpea002_u

	-	Abaaluta	- Dominant Ir	diaatar	Deminence Test	werkeheet			
Trop Stratum (Plat aiza)	30		Dominant Ir	Stotuo	Dominance Test	worksneet:			
)	25	<u>Species</u>	FACI1	Number of Domin	ant Species		<u>^</u>	
1. Liriodendron tulipifera			Tes	1700	That Are OBL, FA	ACW, or FAC	:	0	(A)
2. Liquidambar styraciflua		20	Yes	FAC					
o Quercus rubra		10	No	FACU	Total Number of I	Dominant		8	(5)
3			No	EAC	Species Across A	Il Strata:		0	(B)
4. Acer rubrum			110	TAC	Doroont of Domin	ant Species			
_{5.} Pinus taeda		6	No	FAC	That Are OBL EA			75	(A/P)
6							·		(7,0)
0					Prevalence Inde	x worksheet	•		
7						,	•		
		68	= Total Cover		Total % Cove	<u>er of:</u>	Mult	iply by:	
	50% of total cover: 34	20% of	total cover:	13.6	OBL species	0	x 1 =	0	_
Capling/Chauk Ctrature (Distain					FACW species	0	x 2 =	0	
Sapling/Shrub Stratum (Plot size	e:)	45	N/	540		77	~_ <u>_</u>	231	-
1. Liquidambar styracifiua		15	Yes	FAC	FAC species	65	x 3 =	260	-
_{2.} Carpinus caroliniana		10	Yes	FAC	FACU species	00	x 4 =	200	_
o Ulmus rubra		7	No	FAC	UPL species	5	x 5 =	25	
3			No	FACU		147	(4)	516	
4. Corylus americana		5	INO	FACU	Column Totals:		(A)		_ (B)
5. Oxydendrum arboreum		5	No	UPL				2 51	
6					Prevalence	Index = B/A	=	3.51	-
0					Hydrophytic Veg	jetation Indi	cators:		
7					1 - Ranid Tes	st for Hydroph	ovtic Vec	etation	
8.							iyile veg	Jetation	
0					2 - Dominanc	ce Test is >50)%		
9		40			3 - Prevalence	e Index is ≤3	.0 ¹		
		42	= Total Cover		4 - Morpholo	aical Adaptati	ions ¹ (Pr	ovide sun	orting
	50% of total cover: 21	20% of	total cover:	8.4					Jonang
Herb Stratum (Plot size	5)				data in Re	marks or on	a separa	ate sheet)	
Polystichum acrostichoides	/	25	Vec	FACU	Problematic I	Hydrophytic \	/egetatio	on ¹ (Explai	n)
1. <u></u>			163	1700					
2					1				
3.					Indicators of hyd	ric soil and w	etiand n	yarology n	nust
					be present, unles	s disturbed o	r probler	natic.	
4					Definitions of Fo	our Vegetatic	on Strata	a:	
5			. <u> </u>						
6					Tree – Woody pla	ants, excludin	g vines,	3 in. (7.6 o	cm) or
7					more in diameter	at breast heig	ght (DB⊦	l), regardle	ess of
7					height.				
8. <u></u>			. <u> </u>		Conling/Chruh	Maadu plant		linguingo	
9.					than 3 in DBH ar	areater the		al to 3.28	1655 ft (1
10					m) tall	la greater tha		10 0.20	
10									
11					Herb – All herbad	ceous (non-w	oody) pla	ants, regar	dless
		25	= Total Cover		of size, and wood	ly plants less	than 3.2	8 ft tall.	
	50% of total cover: 12.5	20% of	total cover:	5					
) Maarke) (in a Other turn (Dist since	30				Woody vine – Al	I woody vines	greater	than 3.28	ft in
)	0	N/s s	F AQ	height.				
1. Lonicera japonica		6	Yes	FAC					
2. Smilax rotundifolia		3	Yes	FAC					
 Toxicodendron radicans 		3	Yes	FAC					
3									
4			. <u> </u>		Hydrophytic				
5.					Vegetation				
		12	Tatal Cause		Present?	Yes 🖌	No		
	6		= Total Cover	24					
	50% of total cover: 0	20% of	total cover:	2.7					
Remarks: (Include photo numbe	ers here or on a separate s	heet.)							

Profile Des	cription: (Describe t	o the dept	h needed to docum	nent the indicat	or or confirm	the absence of in	ndicators.)	
Depth	Matrix	<u> </u>	Redox	x Features				
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u> Type	$\frac{1}{1}$ Loc ²	Texture	Rema	rks
0-5	10YR 3/2	100				SL		
5-20	10YR 5/3	100				SL		
		<u> </u>						
			<u> </u>		<u> </u>			<u> </u>
¹ Tvpe: C=C	oncentration. D=Depl	etion. RM=	Reduced Matrix. MS	S=Masked Sand	Grains.	² Location: PL=Po	ore Lining. M=Ma	trix.
Hydric Soil	Indicators:		, .			Indicators	s for Problemati	c Hydric Soils ³ :
Histoso	l (A1)		Dark Surface	(S7)		2 cm	Muck (A10) (MLF	RA 147)
Histic E	pipedon (A2)		Polyvalue Bel	low Surface (S8)	(MLRA 147,	148) Coast	Prairie Redox (A	, 16)
Black H	istic (A3)		Thin Dark Su	rface (S9) (MLR	A 147, 148)	(ML	_RA 147, 148)	
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F2)		Piedm	nont Floodplain S	oils (F19)
Stratifie	d Layers (A5)		Depleted Mat	rix (F3)		(ML	_RA 136, 147)	
2 cm M	uck (A10) (LRR N)		Redox Dark S	Surface (F6)		Very S	Shallow Dark Sur	face (TF12)
Deplete	d Below Dark Surface	e (A11)	Depleted Dar	k Surface (F7)		Other	(Explain in Rem	arks)
Thick D	ark Surface (A12)		Redox Depres	ssions (F8)				
Sandy M	Mucky Mineral (S1) (L	RR N,	Iron-Mangane	ese Masses (F12	2) (LRR N,			
MLR	A 147, 148)		MLRA 13t	5) 	400 400)	31	un of hundred budde	
Sandy C	Dedex (S5)		Unblic Surial	de (F13) (IVILKA	130, 122)	a) wotland	h bydrology must	be procent
Sanuy r	Matrix (S6)		Red Parent M	Material (F21) (M	$ S \rangle (W C C C 14)$		disturbed or prof	be present, Jematic
Restrictive	Laver (if observed):				ERA 127, 147			inclinatio.
Type: no	one							
Depth (in	ches):					Hydric Soil Pres	sent? Yes	No 🖌
Remarks:	-						<u> </u>	



Photo 1 Upland data point WPEA002_u facing south



Photo 2 Upland data point WPEA002_u facing north

Project/Site: Atlantic Coast Pipeline	City/County: Prince Edward	Sampling Date: <u>10/17/2014</u>
Applicant/Owner: Dominion	State: VA	Sampling Point: wpea003f_w
Investigator(s): GB, LE	_ Section, Township, Range: No PLSS in this ar	ea
Landform (hillslope, terrace, etc.): SLOPE L	ocal relief (concave, convex, none): <u>concave</u>	Slope (%): <u>2</u>
Subregion (LRR or MLRA): <u>P</u> Lat: <u>37.29713562</u>	Long:78.25799187	Datum: WGS 1984
Soil Map Unit Name: Cecil fine sandy loam, rolling phase	NWI classi	fication: None
Are climatic / hydrologic conditions on the site typical for this time of y	year? Yes 🔽 No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are "Normal Circumstances"	" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	ng 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	
Remarks:					
Wetland data point taken for a saturated PEM wetland in a 1 year old clear cut; logging destroyed the headwaters of spea005 leaving this transient wetland feature					

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
 Surface Water (A1) High Water Table (A2) Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living I Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled Sc Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) 	
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	Wetland Hydrology Present? Yes <u>V</u> No tions), if available:

Sampling Point: wpea003f_w

	Absoluto	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	
1				Number of Dominant Species
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4.				· · · · · · · · · · · · · · · · · · ·
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
7.				Prevalence Index worksheet:
	0	- Total Covo	-	Total % Cover of: Multiply by:
	000/ - (0	OBL species $65 \times 1 = 65$
50% of total cover:	20% of	total cover:		$\frac{25}{25}$ $\frac{50}{50}$
Sapling/Shrub Stratum (Plot size: 10)				FACW species $x_2 = \frac{15}{15}$
1.				FAC species $5 \times 3 = 15$
2				FACU species 15 x 4 = 60
Z				1 IPL species 0 x 5 $ 0$
3				110 190
4				Column Totals: (A) (B)
5				4.70
<u> </u>				Prevalence Index = $B/A = 1.72$
o				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				
9				
- J	0			Y 3 - Prevalence Index is ≤3.0 ¹
		= I otal Cove	r O	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0	20% of	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5)				
1 Carex comosa	30	Yes	OBL	Problematic Hydrophytic Vegetation' (Explain)
 Rhynchospora fusca 	15	Yes	OBI	
2. Augustus diandrus	15			¹ Indicators of hydric soil and wetland hydrology must
3. Cyperus diandrus	15	res	FACW	be present, unless disturbed or problematic.
4. Ludwigia linearis	12	No	OBL	Definitions of Four Vegetation Strata
5 Sonchus arvensis	10	No	FACU	Deminions of Four Vegetation Strata.
	10	No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Juncus enusus				more in diameter at breast height (DBH), regardless of
7. Mimulus alatus	8	NO	OBL	height.
_{8.} Solidago rugosa	5	No	FAC	
Eupatorium capillifolium	5	No	FACU	Sapling/Shrub – Woody plants, excluding vines, less
9. <u></u>				than 3 In. DBH and greater than or equal to 3.28 ft (1
10				III) tali.
11				Herb – All herbaceous (non-woody) plants, regardless
	110	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 55	20% of	total cover:	22	
M_{add}	2070 01			Woody vine – All woody vines greater than 3.28 ft in
<u>vvoody vine Stratum</u> (Piot size:)				height.
1				
2.				
2				
4				Hydrophytic
5				Vegetation
	0	= Total Cove	r	Present? Yes V No
50% of total cover: 0	20% of	total cover:	0	
	20 /0 01			
Remarks: (Include photo numbers here or on a separate s	heet.)			

(Inches) Color (moist) % Color (moist) % Type' Loc' Texture Remain 0-6 10YR 3/1 100 100 1 <th>arks</th>	arks
0-6 10YR 3/1 100 L 6-18 10YR 5/2 75 7.5YR 4/6 25 C PL/M SCL	
6-18 10YR 5/2 75 7.5YR 4/6 25 C PL/M SCL	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Ma Hydric Soil Indicators: Indicators: Histosol (A1) Dark Surface (S7) Histosol (A1) Dark Surface (S7) Histosol (A1) Dark Surface (S7) Histosol (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148)	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Ma Indicators: Indicators: Indicators: Indicators for Problemati Histosol (A1) Dark Surface (S7) -2 cm Muck (A10) (MLR Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) -2 cm Muck (A10) (MLR Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) -Coast Prairie Redox (A	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Ma Iydric Soil Indicators: Indicators for Problemati	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Ma Iydric Soil Indicators: Indicators for Problemati	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Ma Iydric Soil Indicators: Indicators for Problemati	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Ma Iydric Soil Indicators: Indicators for Problemati	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Ma ydric Soil Indicators: Indicators for Problemati	
Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix, MS=Masked Sand Grains. Ivdric Soil Indicators: Indicators for Problemati	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix lydric Soil Indicators: Indicators for Problemation Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLR Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MI RA 147, 148)	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix, MS=Masked Sand Grains. lydric Soil Indicators: Indicators for Problemat	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Mi lydric Soil Indicators: Indicators for Problemat Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLR Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148)	
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLF Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) 2 coast Prairie Redox (A Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148)	atrix.
	ic Hydric Solis :
	RA 147)
	\16)
Hydrogen Sulfide (A4) Loamy Gleved Matrix (F2)	
	olis (F19)
2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Sur	face (TF12)
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Rema	arks)
Thick Dark Surface (A12) Redox Depressions (F8)	,
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MI DA 147, 149)	
MILRA 147, 140) MILRA 130) Sandy Gleved Matrix (S4) Limbric Surface (E13) (MI RA 136 122) ³ Indicators of hydrophyti	c vegetation and
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology mus	t be present.
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or pro	blematic.
Restrictive Layer (if observed):	
Type:	
Depth (inches): Hydric Soil Present? Yes	<u>и No</u>
Remarks:	
This wetland was still forested in 10/2012.	



Photo 1 Wetland data point WPEA003f_w facing east



Photo 2 Wetland data point WPEA003f_w facing west

Project/Site: Atlantic Coast Pipeline	ct/Site: Atlantic Coast Pipeline City/County: Prince E		Sampling Date: 10/17/2014	
Applicant/Owner: Dominion		State: VA	Sampling Point: wpea003_u	
Investigator(s): GB, LE	Section, Tow	nship, Range: <u>No PLSS in this are</u>	ea	
Landform (hillslope, terrace, etc.): slope	Local relief (con	cave, convex, none): <u>none</u>	Slope (%): <u>5</u>	
Subregion (LRR or MLRA): P Lat:	37.29712917	Long: <u>-78.25782294</u>	Datum: WGS 1984	
Soil Map Unit Name: Cecil fine sandy loam, rolling phas	е	NWI classif	ication: 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	significantly disturbed?	Are "Normal Circumstances"	present? Yes 🖌 No	
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answ	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site ma	ap showing sampling	point locations, transect	s, important features, etc.	

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

Remarks:

Upland data point taken on a slope above a concavity in the slope where a saturated PEM wetland is present. The area has been clearcut within the last year.

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

Sampling Point: wpea003_u

. ,	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Deminent Species
1		· <u> </u>		Number of Dominant Species 2 (A)
1 <u></u>		·		
2				Total Number of Dominant
3				Species Across All Strata: 6 (B)
4.				
5		·		Percent of Dominant Species
		·		That Are OBL, FACW, or FAC:(A/B)
6				Brovalanca Index workshoot:
7				Flevalence muex worksheet.
	0	= Total Cove	۹r	Total % Cover of: Multiply by:
50% of total cover:	0 20% of	total cover	0	OBL species x 1 =0
0 or the state of	<u> </u>			FACW species $0 = x^2 = 0$
Sapling/Shrub Stratum (Plot size:)	N	FAOL	$\frac{22}{100}$ $\frac{22}{100}$ $\frac{22}{100}$
1. Rubus argutus	10	Yes	FACU	FAC species $\underline{\qquad}$ X 3 = $\underline{\qquad}$ 280
2. Liquidambar styraciflua	7	Yes	FAC	FACU species 70 x 4 = 280
3				UPL species0 x 5 =0
		·		Column Totals: 92 (A) 346 (B)
4				
5				Browalance Index - B/A - 3.76
6.				
7		·		Hydrophytic Vegetation Indicators:
· ·				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9.				
	17	- Total Cove		3 - Prevalence Index is ≤3.0°
EQ0/ of total approxim	8.5 200/ of		3.4	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: _	20% 0	total cover:	-	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)				Droblemetic Hydrophytic Vegetation ¹ (Evaluin)
1. Sonchus arvensis	25	Yes	FACU	
2 Andropogon virginicus	20	Yes	FACU	
2. Panicum canillare	15	Ves	FAC	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4. Eupatorium capillifolium	15	Yes	FACU	Definitions of Four Vegetation Strata:
5.				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
0				more in diameter at breast height (DBH), regardless of
7				height.
8.				
9				Sapling/Shrub – Woody plants, excluding vines, less
9		·		than 3 ln. DBH and greater than or equal to 3.28 ft (1
10				m) tan.
11		·		Herb – All herbaceous (non-woody) plants, regardless
	75	T () O		Terb / Interbucedue (Herr Weedy) plants, regulatese
		= 10tal (:0ve	r	I of size, and woody plants less than 3.28 ft tall.
50% of total cover	37.5 20% of	= Total Cover:	er 15	of size, and woody plants less than 3.28 ft tall.
50% of total cover:	37.5 20% of	total cover:	er 15	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
50% of total cover:	37.5 20% of	= Total Cove total cover:	er 15	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover:	37.5 20% of	= Total Cover:	er 15	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover:	37.5 20% of	= Total Cover:	97 15	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover:	37.5 20% of	= Total Cover:	er 15 	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover:	<u>37.5</u> 20% of	total cover:	15 	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover:	<u>37.5</u> 20% of	= Total Cover:	er 15	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
50% of total cover:	<u>37.5</u> 20% of	= Total Cover:		of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
50% of total cover:	<u>37.5</u> 20% of	= Total Cover:	er 15	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
50% of total cover:	<u>37.5</u> 20% of	= Total Cover:		of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
50% of total cover:	<u>37.5</u> 20% of 	= Total Cover:		of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
50% of total cover: Woody Vine Stratum (Plot size:30) 1	37.5 20% of	= Total Cover:		of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
50% of total cover: Woody Vine Stratum (Plot size:	37.5 20% of	= Total Cover:	er 0	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
50% of total cover: Woody Vine Stratum (Plot size:30) 1 2 3 4 5 50% of total cover: Remarks: (Include photo numbers here or on a separed)	37.5 20% of	= Total Cover:	er 0	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
50% of total cover: Woody Vine Stratum (Plot size:	37.5 20% of	= Total Cover:	er 0	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
50% of total cover: Woody Vine Stratum (Plot size:30) 1	37.5 20% of	= Total Cover:	er 0	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
50% of total cover: Woody Vine Stratum (Plot size:30) 1	37.5 20% of	= Total Cover:	er 0	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
50% of total cover: Woody Vine Stratum (Plot size:30) 1	<u>37.5</u> 20% of	= Total Cover:	er 0	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
50% of total cover: Woody Vine Stratum (Plot size:30) 1	<u>37.5</u> 20% of	= Total Cover:	er 0	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
50% of total cover: Woody Vine Stratum (Plot size:30) 1	<u>37.5</u> 20% of	= Total Cover:	er 15	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
50% of total cover: Woody Vine Stratum (Plot size:30) 1	37.5 20% of	= Total Cover:	er 15	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No

Profile Desc	cription: (Describe to	o the depth	needed to docun	nent the i	ndicator	or confirm	n the absence of indicators.)	
Depth	Matrix		Redo	x Features	8			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	
0-5	10YR 3/3	100					SCL	
5-12	10YR 5/4	100					SCL	
12-20	7.5YR 4/4	100					SCL	
·							· · · · · · · · · · _ /	
·							· · · · · · · · · · · · · _	
								—
·								
$\frac{1}{1}$		tion PM_E	Poducod Matrix MS	-Mackad	Sand Gr	inc	² Location: PL-Pore Lining M-Matrix	
	Indicators:			5=IVIASKEU	Sanu Gra	aii 15.	Indicators for Problematic Hydric Soils ³ :	
Histosol	(A1)		Dark Surface	(\$7)			2 cm Muck (A10) (MI RA 147)	
Histic Er	vinedon (A2)		Polyvalue Be	low Surfac	ce (S8) (N	II RA 147.	148) Coast Prairie Redox (A16)	
Black Hi	stic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)	(MLRA 147, 148)	
Hvdroge	en Sulfide (A4)		Loamy Gleve	d Matrix (I	(,,	Piedmont Floodplain Soils (F19)	
Stratified	d Lavers (A5)		Depleted Mat	trix (F3)	_,		(MLRA 136, 147)	
2 cm Mu	uck (A10) (LRR N)		Redox Dark S	Surface (F	6)		Very Shallow Dark Surface (TF12)	
Depleted	d Below Dark Surface	(A11)	Depleted Dar	k Surface	, (F7)		Other (Explain in Remarks)	
Thick Da	ark Surface (A12)	. ,	Redox Depre	ssions (F8	3)			
Sandy M	lucky Mineral (S1) (LI	RR N,	Iron-Mangane	ese Masse	es (F12) (I	LRR N,		
MLRA	A 147, 148)		MLRA 13	6)				
Sandy G	Bleyed Matrix (S4)		Umbric Surfa	ce (F13) (MLRA 13	6, 122)	³ Indicators of hydrophytic vegetation and	
Sandy R	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	48) wetland hydrology must be present,	
Stripped	l Matrix (S6)		Red Parent M	Aaterial (F	21) (MLR	A 127, 147	7) unless disturbed or problematic.	
Restrictive I	Layer (if observed):							
Type: <u>no</u>	ne							
Depth (in	ches):						Hydric Soil Present? Yes No	-
Remarks:								



Photo 1 Upland data point WPEA003_u facing east

Project/Site: Atlantic Coast Pipeline	City/County:	Prince Edward	_ Sampling Date: 10/17/2014
Applicant/Owner: Dominion		State: VA	Sampling Point: wpea004f_w
Investigator(s): GB, LE	Section, Tow	nship, Range: No PLSS in this are	a
Landform (hillslope, terrace, etc.): swale	Local relief (con	cave, convex, none): <u>concave</u>	Slope (%): <u>2</u>
Subregion (LRR or MLRA): P Lat: 37.295	3921	Long: <u>-78.25529414</u>	Datum: WGS 1984
Soil Map Unit Name: Cecil fine sandy loam, rolling phase		NWI classifi	cation: None
Are climatic / hydrologic conditions on the site typical for this tin	ne of year? Yes	No (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrologysigni	ificantly disturbed?	Are "Normal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natu	rally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map she	owing sampling	point locations, transects	s, 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 🖌 No						
Remarks:							
Wetland data point taken within a saturated PFO wetland in a wet swale at the edge of a recent clear cut; excessive run off has caused drainage patterns and microtopography within the swale.							

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Primary indicators (minimum of one is required; check all that apply)	
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🔽 Depth (inches):	
Water Table Present? Yes No 🔽 Depth (inches):	
Saturation Present? Yes No Ves Depth (inches):	Wetland Hydrology Present? Yes <u>V</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	ions), if available:
Remarks:	

Sampling Point: wpea004f_w

	Abaaluta	- Dominant	Indiaatar	Deminence Test worksheet:
Trop Stratum (Plot size: 30)		Species?	Status	Dominance Test worksneet:
<u>Piece Stratum</u> (Plot Size)	<u>% Cover</u>	<u>Species</u>	FAC	Number of Dominant Species
1. Pinus taeda		Tes	TAU	That Are OBL, FACW, or FAC: <u>8</u> (A)
2. Liquidambar styraciflua	10	No	FAC	
- Acer rubrum	7	No	FAC	Total Number of Dominant
3		No		Species Across All Strata: (B)
4. Quercus montana	3	INO	UPL	Demonstrat Demoiser at Operation
5				That Are OBL FACIAL as FAC: 100
		·		That Are OBL, FACW, of FAC: (A/B)
6				Brovalance Index workshoet
7				Flevalence index worksheet.
	70	- Total Cove	or	Total % Cover of: Multiply by:
50% of total anyon 35	200/ of		14	OBL species $32 \times 1 = 32$
50% of total cover:	20% 0	total cover.		
Sapling/Shrub Stratum (Plot size: 13)				FACW species $x = 2$
_{1.} Alnus serrulata	30	Yes	OBL	FAC species $x_3 = {390}$
o Acer rubrum	10	Yes	FAC	EACLU species $2 \times 4 = 8$
2. 1001 1001011				
3. Nyssa sylvatica	5	NO	FAC	UPL species $x_5 = \frac{100}{454}$
⊿ Liguidambar styraciflua	5	No	FAC	Column Totals:(A)(B)
-		·		
5				Prevalence Index = $B/A = 2.66$
6.				
7				Hydrophytic Vegetation Indicators:
1				1 - Rapid Test for Hydrophytic Vegetation
8		. <u> </u>		✓ 2 - Dominance Test is >50%
9.				
	50	Tatal Cau		Yerevalence Index is ≤3.0
25			er 10	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 25	20% of	total cover:	10	data in Romarks or on a concrate sheet)
Herb Stratum (Plot size: ⁵)				
Athvrium asplenioides	8	Yes	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Microstegium vimineum	3	Yes	FAC	
3. Carex comosa	2	No	OBL	Indicators of hydric soil and wetland hydrology must
Polystichum acrostichoides	2	No	FACU	be present, unless disturbed or problematic.
4. 1 olystionam dorostionoldes			17.00	Definitions of Four Vegetation Strata:
5. Solidago rugosa	2	No	FAC	
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
_		·		more in diameter at breast height (DBH), regardless of
7				height.
8				
a				Sapling/Snrub – woody plants, excluding vines, less
J		·		than 3 In. DBH and greater than or equal to 3.28 ft (1
10		·		m) tail.
11.				Herb All berbacoous (non woody) plants, regardless
	17	- Total Car		of size, and woody plants less than 3.28 ft tall
500/ of total action 85	2001/ -		34	
50% of total cover:	20% 0	total cover:	0.4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30)				height.
1 Smilax rotundifolia	12	Yes	FAC	
- Campsis radicans	12	Vec	FAC	
2	12			
_{З.} Lonicera japonica	8	Yes	FAC	
1				
4		·		Hydrophytic
5				Vegetation
	32	= Total Cove	er	Present? Yes Vo No
50% of total cover: 16	20% of	total cover	6.4	
	2070 01			
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	cription: (Describe t	o the de	pth needed to docur	nent the i	ndicator of	or confirm	the absence of	f indicators.)		
Depth	Matrix		Redo	x Feature	s	-				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-4	10YR 3/2	100					SCL			
4-10	10YR 3/1	98	10YR 4/6	2	С	PL	SCL			
10-20	10YR 5/1	80	10YR 4/6	20	С	PL/M	SCL			
¹ Type: C=C	oncentration, D=Deple	etion, RN	I=Reduced Matrix, MS	S=Masked	Sand Gra	ains.	² Location: PL=	Pore Lining, M=Matrix.		
Hydric Soil	Indicators:						Indicato	ors for Problematic Hydric Soils ³ :		
Histosol	(A1)		Dark Surface	(S7)			2 cr	m Muck (A10) (MLRA 147)		
Histic Ep	oipedon (A2)		Polyvalue Be	low Surfa	ce (S8) (M	ILRA 147,	148) <u></u> Coa	ast Prairie Redox (A16)		
Black Hi	stic (A3)		Thin Dark Su	rface (S9)) (MLRA 1	47, 148)	(MLRA 147, 148)		
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F2)		Pie	dmont Floodplain Soils (F19)		
Stratified	d Layers (A5)		Depleted Ma	trix (F3)			(MLRA 136, 147)		
2 cm Mu	uck (A10) (LRR N)		Redox Dark	Surface (F	-6)		Very Shallow Dark Surface (TF12)			
Deplete	d Below Dark Surface	(A11)	Depleted Dar	k Surface	e (F7)		Oth	er (Explain in Remarks)		
Thick Da	ark Surface (A12)		Redox Depre	ssions (F	8)					
Sandy N	/ucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Mass	, es (F12) (I	_RR N,				
MLR	A 147, 148)		MLRA 13	6)	· / ·					
Sandy G	Bleved Matrix (S4)		Umbric Surfa	, ce (F13) (MLRA 13	6, 122)	³ Indica	ators of hydrophytic vegetation and		
Sandy R	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	8) wetla	and hydrology must be present.		
Stripped	Matrix (S6)		Red Parent N	Aterial (F	21) (MLR	A 127, 147) unles	ss disturbed or problematic.		
Restrictive	Layer (if observed):				, (,			
Type: ^{no}	ne									
Depth (in	ches):						Hydric Soil P	resent? Yes 🖌 No		
Remarks:							L			



Photo 1 Wetland data point WPEA004f_w facing west



Photo 2 Wetland data point WPEA004f_w facing east

Project/Site: Atlantic Coast Pipeline	City/County:	Prince Edward	Sampling Date: 10/17/2014			
Applicant/Owner: Dominion		State: VA	Sampling Point: wpea004_u			
Investigator(s):	Section, Tow	Section, Township, Range: No PLSS in this area				
Landform (hillslope, terrace, etc.): slope	Local relief (con	cave, convex, none): <u>none</u>	Slope (%): <u>4</u>			
Subregion (LRR or MLRA): P Lat: 37.2954	18665	Long: <u>-78.25527707</u>	Datum: WGS 1984			
Soil Map Unit Name: Cecil fine sandy loam, rolling phase		NWI classi	fication: None			
Are climatic / hydrologic conditions on the site typical for this tim	ne of year? Yes	No (If no, explain in	Remarks.)			
Are Vegetation, Soil, or Hydrology signif	ficantly disturbed?	Are "Normal Circumstances'	" present? Yes 🖌 No			
Are Vegetation, Soil, or Hydrology natur	rally problematic?	(If needed, explain any answ	vers in Remarks.)			
SUMMARY OF FINDINGS – Attach site map sho	owing sampling	point locations, transect	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
Remarks: Upland data point taken above toe of slo	pe for a saturat	ted PFO wetland in a	a wet swale; at the edge of a n	ecent cutover.	
			-		

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

Sampling Point: wpea004_u

20	Absolute	Dominant I	ndicator	Dominance Test worksheet:			
Tree Stratum (Plot size:)	<u>% Cover</u> 40	<u>Species?</u> Yes	<u>Status</u> FAC	Number of Dominant Species			
1. <i>I iriodendron tulipifera</i>	8	No	FACU	That Are OBL, FACW, or FAC: (A)			
2	2	No	FAC	Total Number of Dominant			
3				Species Across All Strata: (B)			
4				Percent of Dominant Species			
S				That Are OBL, FACW, or FAC:(A/B)			
7				Prevalence Index worksheet:			
/·	50	= Total Cove		Total % Cover of: Multiply by:			
50% of total cover: 25	20% of	total cover:	10	OBL species x 1 =			
Sapling/Shrub Stratum (Plot size: 15)		_		FACW species $2 x 2 = 4$			
1. Acer rubrum	20	Yes	FAC	FAC species $\frac{86}{15}$ x 3 = $\frac{258}{100}$			
2. Liriodendron tulipifera	5	No	FACU	FACU species x 4 =			
3. Juniperus virginiana	5	No	FACU	UPL species $0 \times 5 = 0$			
4. Nyssa sylvatica	4	No	FAC	Column Totals:133 (A)442 (B)			
5. Ulmus alata	4	No	FACU	Drevelance Index D(A 332			
6. Vaccinium corymbosum	2	No	FACW	Prevalence Index = B/A =			
7.				Hydrophytic Vegetation Indicators:			
8.				1 - Rapid Test for Hydrophytic Vegetation			
9.				2 - Dominance Test is >50%			
	40	= Total Cove	r	3 - Prevalence Index is ≤3.0°			
50% of total cover: 20	20% of	total cover:	8	4 - Morphological Adaptations' (Provide supporting			
Herb Stratum (Plot size: 5)				data in Remarks or on a separate sheet)			
1. Panicum capillare	15	Yes	FAC	Problematic Hydrophytic Vegetation' (Explain)			
2. Sonchus arvensis	10	Yes	FACU				
3. Andropogon virginicus	8	Yes	FACU	Indicators of hydric soil and wetland hydrology must			
4. Rubus argutus	5	No	FACU	Definitions of Four Vogotation Strata:			
5.				Deminitions of Four Vegetation Strata.			
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or			
7.				height.			
8.							
9.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in DBH and greater than or equal to 3 28 ft (1			
10.				m) tall.			
11.				Harb All horbaccous (non woody) plants, regardloss			
	38	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.			
50% of total cover:19	20% of	total cover:	7.6	We advantage Allowed by the prostory them 2,00 ft in			
Woody Vine Stratum (Plot size: 30)				height.			
1. Campsis radicans	5	Yes	FAC				
2							
3							
4				Hydrophytic			
5				Vegetation			
	5	= Total Cove	r	Present? Yes Vo No			
50% of total cover: 2.5	20% of	total cover:	1				
Remarks: (Include photo numbers here or on a separate s	heet.)						

Profile Desc	cription: (Describe to	o the depth	n needed to docun	nent the i	ndicator	or confirm	n the absence of indicators.)
Depth	Matrix		Redox	k Features	5		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-4	10YR 4/4	100					SCL
4-12	10YR 5/6	100					SCL
12-20	10YR 5/8	100					SCL
·							<u></u> <u></u> _
<u> </u>							
¹ Type: C=Co	oncentration, D=Deple	etion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils ³ :
<u> </u>	(A1)		Dark Surface	(S7)			2 cm Muck (A10) (MLRA 147)
Histic Ep	pipedon (A2)		Polyvalue Be	low Surfac	ce (S8) (N	ILRA 147,	148) Coast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)	(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (I	F2)		Piedmont Floodplain Soils (F19)
Stratified	d Layers (A5)		Depleted Mat	rix (F3)			(MLRA 136, 147)
2 cm Mu	uck (A10) (LRR N)		Redox Dark S	Surface (F	6)		Very Shallow Dark Surface (TF12)
Depleted	d Below Dark Surface	(A11)	Depleted Dar	k Surface	(F7)		Other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depre	ssions (F8	B)		
Sandy M	lucky Mineral (S1) (LF	RR N,	Iron-Mangane	ese Masse	es (F12) (LRR N,	
MLRA	A 147, 148)		MLRA 130	6)			
Sandy G	Gleyed Matrix (S4)		Umbric Surfa	, ce (F13) (MLRA 13	6, 122)	³ Indicators of hydrophytic vegetation and
Sandy R	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	(8) wetland hydrology must be present,
Stripped	Matrix (S6)		Red Parent M	laterial (F	21) (MLR	A 127, 147	7) unless disturbed or problematic.
Restrictive I	Layer (if observed):						
Type: no	ne						
Depth (ind	ches):						Hydric Soil Present? Yes No
Remarks:							•



Photo 1 Upland data point WPEA004_u facing west



Photo 2 Upland data point WPEA004_u facing east

Project/Site: Atlantic Coast Pipeline	City/County: Prince	e Edward	Sampling Date: 1/7/2015			
Applicant/Owner: DOMINION		State: VA	Sampling Point: wpec001f_w			
Investigator(s): Team C	Section, Township,	Fownship, Range: No PLSS in this area				
Landform (hillslope, terrace, etc.): Floodplain	Local relief (concave, o	convex, none): <u>none</u>	Slope (%): <u>2</u>			
Subregion (LRR or MLRA): P Lat: 37.28	8773328	Long: <u>-78.24236324</u>	Datum: WGS 1984			
Soil Map Unit Name: Louisburg sandy loam, rolling phase		NWI classific	cation: None			
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes N	o (If no, explain in R	emarks.)			
Are Vegetation, Soil, or Hydrology sig	gnificantly disturbed? A	re "Normal Circumstances" p	oresent? Yes 🖌 No			
Are Vegetation, Soil, or Hydrology na	aturally problematic? (I	f needed, explain any answe	rs in Remarks.)			

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

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

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
✓ High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
✓ Saturation (A3) Oxidized Rhizospheres on Living Rom	ots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils	(C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	✓ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes <u></u> No <u>Depth</u> (inches): 7	
Saturation Present? Yes <u>V</u> No Depth (inches): 0	/etland Hydrology Present? Yes 🥢 No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspectior	ns), if available:
Remarks:	
Wetland hydrology present	

Sampling Point: wpec001f_w

Tree Stratum (Plot size: 30)	Absolute			Deminence Test werkelset
	0/ Cover	Dominant Ir	Stotuo	Dominance Test worksneet:
	<u>45</u>	<u>Species</u>	FAC	Number of Dominant Species
1. Liquidambar styracifiua	+5	Tes	TAO	That Are OBL, FACW, or FAC:4 (A)
2. Acer rubrum	25	Yes	FAC	
 Gordonia lasianthus 	10	No	FACW	Total Number of Dominant
3				Species Across All Strata: (B)
4				Demonstrat Deminent Creation
5.				Thet Are OBL FACIAL or FAC: 100 (A/D)
6				Provalence Index worksheet:
7				Trevalence index worksheet.
	80	= Total Cove		Total % Cover of: Multiply by:
E0% of total anyor: 40	20% of	total cover	16	OBL species $82 \times 1 = 82$
50% OF IOIAL COVER	20% 01	total cover.	-	$\frac{45}{90}$
Sapling/Shrub Stratum (Plot size:)				$\begin{array}{c} \text{FACW species} \\ \hline 70 \\ \hline 70 \\ \hline 71 $
_{1.} Gordonia lasianthus	20	Yes	FACW	FAC species 70 x 3 = 210
				EACLI species $0 \times 4 = 0$
2				
3				UPL species $x_{5} = 0$
1				Column Totals: ¹⁹⁷ (A) ³⁸² (B)
т		·		
5		. <u> </u>		Prevalence Index $= B/A = 1.93$
6.				
7				Hydrophytic Vegetation Indicators:
1				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 Deminance Test is ≥ E00/
a				
0	20			Y 3 - Prevalence Index is ≤3.0 ¹
	:	= Total Cover		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 10	20% of	total cover:	4	
Herb Stratum (Plot size: 5)				data in Remarks or on a separate sheet)
	65	Vaa		Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Carex lupulina</u>		res	UBL	
_{2.} Juncus effusus	15	No	FACW	
o Osmunda spectabilis	15	No	OBI	¹ Indicators of hydric soil and wetland hydrology must
S. Commente operations		Nie		be present, unless disturbed or problematic.
4. Symplocarpus foetidus	2	NO	OBL	Definitions of Four Vegetation Strata
5.				Demitions of Four Vegetation of ata.
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5 6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5 6 7				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
5 6 7 8				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
5 6 7 8				 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
5 6 7 8 9				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
5 6 7 8 9 10.				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
5 6 7 8 9 10				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
5 6 7 8 9 10 11				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
5. 6. 7. 8. 9. 10. 11.		 = Total Cover		 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
5 6 7 8 9 10 11 50% of total cover:48.5		Total Cover	19.4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
5 6 7 8 9 10 11 50% of total cover:48.5 Woody Vine Stratum (Plot size:30)		= Total Cover total cover:_	19.4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in the statement of the
56 6 7 8 9 10 11 50% of total cover: <u>48.5</u> <u>Woody Vine Stratum</u> (Plot size: <u>30</u>)		= Total Cover total cover:_		 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
56 6 7 8 9 10 11 50% of total cover:48.5 <u>Woody Vine Stratum</u> (Plot size:30) 1		= Total Cover total cover:	19.4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
56 6 7 8 9 10 11 <u>50% of total cover:48.5</u> <u>Woody Vine Stratum</u> (Plot size:30) 1 2.		= Total Cover total cover:	19.4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5. 6. 7. 8. 9. 10. 11. 50% of total cover: 48.5 Woody Vine Stratum (Plot size: 30 1. 2.		= Total Cover total cover:	19.4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5. 6. 7. 8. 9. 10. 11. 50% of total cover: 48.5 Woody Vine Stratum (Plot size: 30 1. 2. 3.		= Total Cover total cover:	19.4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5. 6. 7. 8. 9. 10. 11. 50% of total cover: 48.5 Woody Vine Stratum (Plot size: 30 1. 2. 3. 4.		= Total Cover total cover:	19.4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5. 6. 7. 8. 9. 10. 11. 50% of total cover: 48.5 Woody Vine Stratum (Plot size: 30 1. 2. 3. 4. 5		= Total Cover total cover:	19.4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5. 6. 7. 8. 9. 10. 11. 50% of total cover: 48.5 Woody Vine Stratum (Plot size: 30 1. 2. 3. 4. 5.		= Total Cover total cover:	19.4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Proceed?
5. 6. 7. 8. 9. 10. 11. 50% of total cover: 48.5 Woody Vine Stratum (Plot size: 30 1. 2. 3. 4. 5.	97 97 20% of	= Total Cover total cover:	19.4	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
5. 6. 6. . 7. . 8. . 9. . 10. . 11. . 50% of total cover: 48.5 Woody Vine Stratum (Plot size: 30 1. . 2. . 3. . 4. . 5. . 50% of total cover: 0	97 97 20% of 	= Total Cover total cover:	19.4	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Yegetation Present? Yes No
5. 6. 6. . 7. . 8. . 9. . 10. . 11. . 50% of total cover: 48.5 Woody Vine Stratum (Plot size: 30 1. . 2. . 3. . 4. . 5. . 50% of total cover: 0 Bemarks: . 10. . . <	97 	= Total Cover total cover:	19.4	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
5. 6. 6. . 7. . 8. . 9. . 10. . 11. . 50% of total cover:	97 20% of 20% of 20% of 20% of heet.)	= Total Cover total cover:	19.4	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
5. 6. 6. . 7. . 8. . 9. . 10. . 11. . 50% of total cover:	97 20% of 20% of 20% of 20% of heet.)	= Total Cover total cover:	 19.4 	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
5. 6. 6. . 7. . 8. . 9. . 10. . 11. . 50% of total cover:48.5 Woody Vine Stratum (Plot size:30) 1. . 2. . 3. . 4. . 5. . 50% of total cover:	97 20% of 20% of 20% of 20% of heet.)	= Total Cover total cover:	<u> </u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
5. 6. 6. . 7. . 8. . 9. . 10. . 11. . 50% of total cover:48.5 Woody Vine Stratum (Plot size:30) 1. . 2. . 3. . 4. . 5. . 50% of total cover:0 Remarks: (Include photo numbers here or on a separate s	97 20% of 20% of 20% of heet.)	= Total Cover total cover:	 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 or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
5. 6. 6. . 7. . 8. . 9. . 10. . 11. . 50% of total cover:48.5 Woody Vine Stratum (Plot size:30) 1. . 2. . 3. . 4. . 5. . 50% of total cover:	97 20% of 20% of 20% of 20% of	= Total Cover total cover:	<u> </u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
5.	97 20% of 20% of 20% of 20% of heet.)	= Total Cover total cover:	<u> </u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
5. 6. 6. . 7. . 8. . 9. . 10. . 11. . 50% of total cover:48.5 Woody Vine Stratum (Plot size:30) 1. . 2. . 3. . 4. . 5. . 50% of total cover:	97 20% of 20% of 20% of 20% of	= Total Cover total cover:	<u> </u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
5.	97 20% of 20% of 20% of 20% of	= Total Cover total cover:	<u> </u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No
5.	97 20% of 20% of 20% of heet.)	= Total Cover total cover:	<u> </u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No

Depth	Matrix		Redo	x Feature	s						
inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textur	e	Remarks		
0-14	10 YR 4/2	95	10 YR 3/4	5	C	PL	SL				
							21				
ype: C=C	oncentration, D=Dep	etion, RM	Reduced Matrix, M	S=Masked	d Sand Gra	ains.	Location	n: PL=Pore Lin	ng, M=Matrix.		
aric Soli	Indicators:						Ir	ndicators for P	roblematic Hy	aric Solis :	
Histoso	l (A1)		Dark Surface	e (S7)				2 cm Muck (A10) (MLRA 1	47)	
_ Histic E	pipedon (A2)		Polyvalue Be	elow Surfa	ice (S8) (N	ILRA 147,	148) _	Coast Prairie	e Redox (A16)		
Black H	istic (A3)		Thin Dark Su	urface (S9) (MLRA 1	47, 148)		(MLRA 14	7, 148)		
_ Hydrog	en Sulfide (A4)		Loamy Gleye	ed Matrix	(F2)		_	Piedmont FI	odplain Soils	(F19)	
_ Stratifie	d Layers (A5)		Depleted Ma	trix (F3)				(MLRA 1	6, 147)		
_ 2 cm M	uck (A10) (LRR N)		Redox Dark	Surface (F	-6)		Very Shallow Dark Surface (TF12)				
_ Deplete	d Below Dark Surface	e (A11)	Depleted Da	rk Surface	e (F7)		Other (Explain in Remarks)				
Thick D	ark Surface (A12)		Redox Depre	essions (F	8)						
Sandy I	Mucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Mass	es (F12) (LRR N,					
MLR	A 147, 148)		MLRA 13	6)	. , .						
Sandv	Gleved Matrix (S4)		Umbric Surfa	, ace (F13)	(MLRA 13	6. 122)		³ Indicators of h	vdrophytic vea	etation and	
Sandv I	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	8)	wetland hvdro	loav must be r	present.	
Strippe	d Matrix (S6)		Red Parent	Material (F	21) (MLR	、 A 127. 147	7)	unless disturb	ed or problem	atic.	
estrictive	Laver (if observed):				/ (,	Í				
Type:	.,,										
Donth /:-	abaa);						- اسامه رابا	Soil Broomto	Vac V	No	
Depth (Ir	icites):						nyaric	Soli Present?	res		



Photo 1 Wetland data point wpec001f_w facing north



Photo 2 Wetland data point wpec001f_w facing east



Photo 3 Wetland data point wpec001f_w facing south



Photo 4 Wetland data point wpec001f_w facing west

Project/Site: Atlantic Coast Pipeline	City/County: Prin	ce Edward	Sampling Date: 1/7/2015			
Applicant/Owner: DOMINION		State: VA	_ Sampling Point: wpec001_u			
Investigator(s): Team C	Section, Townshi	ownship, Range: No PLSS in this area				
Landform (hillslope, terrace, etc.): Hill Slope	Local relief (concave	e, convex, none): <u>none</u>	Slope (%): <u>50</u>			
Subregion (LRR or MLRA): P Lat: 37.2	8768501	_ Long: <u>-78.242369</u>	Datum: WGS 1984			
Soil Map Unit Name: Louisburg sandy loam, rolling phase		NWI classifica	ation: None			
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes	No (If no, explain in Re	emarks.)			
Are Vegetation, Soil, or Hydrologysi	gnificantly disturbed?	Are "Normal Circumstances" p	resent? Yes 🖌 No			
Are Vegetation, Soil, or Hydrology na	aturally problematic?	(If needed, explain any answer	s in Remarks.)			

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

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

Wetland Hydrology Indicators: Secondary Indicators (mini	mum of two required)		
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B	Surface Soil Cracks (B6)		
Surface Water (A1) True Aquatic Plants (B14) Sparsely Vegetated Co	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B1	Drainage Patterns (B10)		
Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)			
Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Tak	ole (C2)		
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8)	Crayfish Burrows (C8)		
Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on A	erial Imagery (C9)		
Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Pl	ants (D1)		
Iron Deposits (B5) Geomorphic Position (D2)		
Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3)			
Water-Stained Leaves (B9) Microtopographic Relie	ef (D4)		
Aquatic Fauna (B13) FAC-Neutral Test (D5)			
Field Observations:			
Surface Water Present? Yes No 🖌 Depth (inches):			
Water Table Present? Yes No 🖌 Depth (inches):			
Saturation Present? Yes No <u>v</u> Depth (inches): Wetland Hydrology Present? Yes	No∕		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			
No wetland hydrology present			

Sampling Point: wpec001_u

, , ,	Absolute	-	. Pastan	Deminence Testandahari
Tree Streture (Plot size) 30	Absolute	Dominant II	ndicator	Dominance Test worksheet:
	<u>% Cover</u>	<u>Species</u>	FACIL	Number of Dominant Species
1. Fagus grandifolia	50	res	TACO	That Are OBL, FACW, or FAC:3 (A)
_{2.} Quercus alba	20	Yes	FACU	
3 Quercus falcata	10	No	FACU	Total Number of Dominant
				Species Across All Strata. (B)
4				Percent of Dominant Species
5				That Are OBL_FACW_or FAC- 42.85714285 (A/B)
6				
-				Prevalence Index worksheet:
7	00	·		Total % Cover of: Multiply by:
	00	= Total Cove	r	
50% of total cover: 40	20% of	total cover:	16	OBL species $0 x 1 = 0$
Sapling/Shrub Stratum (Plot size: 15)				FACW species $5 \times 2 = 10$
Eagus grandifolia	10	Ves	FACU	FAC species 15 x_{3} = 45
	10	163	1700	$100 \qquad 400$
2. Carpinus caroliniana	5	Yes	FAC	FACU species $x 4 = $
3				UPL species $0 x 5 = 0$
				Column Totals: 120 (A) 455 (B)
4			<u> </u>	
5				$Provolonce Index = P/A = -\frac{3}{3} 79$
6				
		. <u></u> .		Hydrophytic Vegetation Indicators:
1		. <u> </u>		1 - Rapid Test for Hydrophytic Vegetation
8.				
0				2 - Dominance Test is >50%
3	15			3 - Prevalence Index is ≤3.0 ¹
	15	= Total Cove	r 2	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 7.5	20% of	total cover:	3	
Herb Stratum (Plot size: ⁵)				data in Remarks or on a separate sneet)
Andropogon virginicus	10	Ves	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>····································</u>				
2. Acer rubrum	10	res	FAC	¹ Indiantary of hydric coll and watland hydrology must
_{3.} Gordonia lasianthus	5	Yes	FACW	ha propert uplace disturbed or problematic
A				be present, unless disturbed of problematic.
4				Definitions of Four Vegetation Strata:
5				
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of
/			<u> </u>	
8				Sanling/Shrub - Woody plants, excluding vines, less
9.				than 3 in DBH and greater than or equal to 3 28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	25	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 12.5	20% of	total cover:	5	
Weedy Vine Stretum (Plet size) 30				Woody vine – All woody vines greater than 3.28 ft in
				height.
1				
2.				
2				
3		<u> </u>		
4				Hydrophytic
5.				Vegetation
	0	Total Cava	-	Present? Yes No
			0	
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Des	cription: (Describe te	o the depth	needed to docur	nent the in	dicator of	or confirm	the absence of indicators.)
Depth	Matrix		Redox Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-10	2.5 Y 5/4	100					S
10-16	2.5 Y 6/6	100					 S
			<u> </u>				
			<u> </u>				
	- <u></u> .		<u> </u>				·
¹ Type: C=C	oncentration, D=Deple	etion, RM=R	educed Matrix, M	S=Masked	Sand Gra	ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Problematic Hydric Soils ³ :
Histoso	(A1)		Dark Surface	e (S7)			2 cm Muck (A10) (MLRA 147)
Histic E	pipedon (A2)		Polyvalue Be	low Surfac	e (S8) (N	ILRA 147,	148) Coast Prairie Redox (A16)
Black H	istic (A3)		Thin Dark Su	urface (S9)	(MLRA 1	47, 148)	(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (F	2)		Piedmont Floodplain Soils (F19)
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)			(MLRA 136, 147)
2 cm M	uck (A10) (LRR N)		Redox Dark	Surface (F6	6)		Very Shallow Dark Surface (TF12)
Deplete	d Below Dark Surface	(A11)	Depleted Da	rk Surface	(F7)		Other (Explain in Remarks)
Thick D	ark Surface (A12)		Redox Depre	essions (F8)		
Sandy M	Mucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Masse	s (F12) (I	_RR N,	
MLR	A 147, 148)		MLRA 13	6)			3
Sandy C	Gleyed Matrix (S4)		Umbric Surfa	ace (F13) (N	MLRA 13	6, 122)	Indicators of hydrophytic vegetation and
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 14					8) wetland hydrology must be present,		
Stripped	d Matrix (S6)		Red Parent N	Material (F2	21) (MLR	A 127, 147) unless disturbed or problematic.
Restrictive	Layer (if observed):						
Туре:							
Depth (in	ches):						Hydric Soil Present? Yes No
Remarks:							
No hydric soi	l present						



Photo 1 Wetland data point wpec001_u facing north



Photo 2 Wetland data point wpec001_u facing east



Photo 3 Wetland data point wpec001_u facing south



Photo 4 Wetland data point wpec001_u facing west

Project/Site: Atlantic Coast Pipelin	าย	City/County:	Prince Edward	Sampling Date: <u>10/20/2014</u>
Applicant/Owner: Dominion			State: VA	Sampling Point: wpea006f_w
Investigator(s): GB, TP		Section, Tow	nship, Range: <u>No PLSS in this are</u>	ea
Landform (hillslope, terrace, etc.):	draw	Local relief (con	cave, convex, none): <u>concave</u>	Slope (%): <u>2</u>
Subregion (LRR or MLRA): P	Lat: 37.2852	28469	Long: <u>-78.23746661</u>	Datum: WGS 1984
Soil Map Unit Name: Appling san	dy loam, rolling phase		NWI classif	fication: None
Are climatic / hydrologic condition	s on the site typical for this tin	ne of year? Yes	No (If no, explain in	Remarks.)
Are Vegetation, Soil	_, or Hydrology signi	ificantly disturbed?	Are "Normal Circumstances"	" present? Yes 🖌 No
Are Vegetation, Soil	_, or Hydrology natu	rally problematic?	(If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS	6 – Attach site map she	owing sampling	point locations, transect	ts, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes 🖌	No No No	Is the Sampled Area within a Wetland?	Yes 🖌	No
Remarks: Wetland data point for a saturated PFO v	vetland in a for	ested draw between	hayfields, intermittent stream	spea007 flows	through feature

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

Sampling Point: wpea006f_w

	Absolute	Dominant I	ndicator	Dominance Test worksheet:					
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Dominant Species					
1. Acer rubrum	20	Yes	FAC	That Are OBL, FACW, or FAC: 6 (A)					
2 Liriodendron tulipifera	20	Yes	FACU						
 Nvssa svlvatica 	5	No	FAC	Total Number of Dominant					
3		·		Species Across All Strata: (B)					
4			·	Percent of Dominant Species					
5				That Are OBL, FACW, or FAC: <u>85.71428571</u> (A/B)					
6				、 ,					
7.				Prevalence Index worksheet:					
	45			Total % Cover of: Multiply by:					
50% of total cover: 22.5	20% of	total cover:	9	OBL species15 x 1 =15					
Conting (Chrish Stratium (Dist since 15	2078 01			FACW species 40 x 2 = 80					
Sapling/Shrub Stratum (Plot size:)	10	Vaa		$\frac{71}{71}$ $x_{2} = \frac{213}{213}$					
	10			$x_{3} = 100$					
2. Carpinus caroliniana	6	Yes	FAC	FACU species $x = 0$					
3. Acer rubrum	4	No	FAC	UPL species $0 \times 5 = 0$					
A Magnolia virginiana	4	No	FACW	Column Totals:151 (A)408 (B)					
5. Sambucus nigra	3	No	FAC						
		·		Prevalence Index = B/A = 2.7					
6		·	<u> </u>	Hydrophytic Vegetation Indicators:					
7		·		1 - Rapid Test for Hydrophytic Vegetation					
8		<u> </u>		\checkmark 2 Dominance Test is >50%					
9.									
	27	- Total Cove	r	3 - Prevalence Index is ≤3.0°					
50% of total cover: 13.5	20% of	total cover:	5.4	4 - Morphological Adaptations ¹ (Provide supporting					
	20 % 01	total cover.		data in Remarks or on a separate sheet)					
Herb Stratum (Plot size:)	25		EA 014	Problematic Hydrophytic Vegetation ¹ (Explain)					
1. Woodwardia areolata	25	Yes	FACW						
2. Osmundastrum cinnamomeum	6	No	FACW						
3. Polystichum acrostichoides	5	No	FACU	Indicators of hydric soil and wetland hydrology must					
A Boehmeria cylindrica	5	No	FACW	be present, unless disturbed of problematic.					
Comunda spectabilis	5	No	OBI	Definitions of Four Vegetation Strata:					
5. <u></u>				Tree – Woody plants, excluding vines, 3 in, (7.6 cm) or					
6				more in diameter at breast height (DBH), regardless of					
7				height.					
8									
9.				than 3 in DBH and greater than or equal to 3 28 ft (1					
10				m) tall.					
10			·						
11	46	·		Herb – All herbaceous (non-woody) plants, regardless					
00	40	= Total Cove	er 0.0	of size, and woody plants less than 3.28 ft tall.					
50% of total cover: 23	20% of	total cover:	9.2	Woody vine – All woody vines greater than 3 28 ft in					
Woody Vine Stratum (Plot size: 30)				height.					
_{1.} Lonicera japonica	25	Yes	FAC						
2 Smilax rotundifolia	8	Yes	FAC						
2			·						
3		·							
4			. <u> </u>	Hydrophytic					
5				Vegetation					
	33	= Total Cove	er	Present? Yes Ves No					
50% of total cover: 16.5	20% of	total cover:	6.6						
Remarks: (Include photo numbers here or on a separate s	heet)	-							
	moot.)								
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
---	--------------------------	----------------	----------------------	--------------------------	--	---	-------------------------------	--	--
Depth	Matrix	Redox Features							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-5	10YR 4/2	100					SL		
5-10	10YR 4/2	97	7.5YR 4/6	3	С	PL	SL		
10-20	10YR 4/1	97	7.5YR 4/6	3	С	PL	SL		
						·			
						<u> </u>			
							. <u></u>		
						·			
						·			
						<u> </u>			
¹ Type: C=C	oncentration, D=Deple	etion, RN	l=Reduced Matrix, MS	S=Masked	d Sand Gra	ains.	² Location: PL=F	Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicator	rs for Problematic Hydric Soils ³ :	
Histosol	(A1)		Dark Surface	(S7)			2 cm	Muck (A10) (MLRA 147)	
Histic Ep	oipedon (A2)		Polyvalue Be	low Surfa	ce (S8) (N	ILRA 147,	148) Coas	st Prairie Redox (A16)	
Black Hi	stic (A3)		Thin Dark Su	rface (S9)) (MLRA 1	47, 148)	(M	ILRA 147, 148)	
Hydroge	en Sulfide (A4)		Loamy Gleye	Loamy Gleyed Matrix (F2)				mont Floodplain Soils (F19)	
Stratified	d Layers (A5)		Depleted Mar	trix (F3)			(M	ILRA 136, 147)	
2 cm Mu	uck (A10) (LRR N)		Redox Dark \$	Surface (F	-6)		Very	Shallow Dark Surface (TF12)	
Deplete	d Below Dark Surface	(A11)	Depleted Dar	k Surface	e (F7)		Othe	r (Explain in Remarks)	
Thick Da	ark Surface (A12)		Redox Depre	ssions (F	8)				
Sandy N	/lucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Mass	es (F12) (I	_RR N,			
MLR	A 147, 148)		MLRA 13	6)					
Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122)						³ Indicators of hydrophytic vegetation and			
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 14					 wetland hydrology must be present, 				
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 14					') unless	s disturbed or problematic.			
Restrictive	Layer (if observed):								
Type: no	ne								
Depth (in	ches):		_				Hydric Soil Present? Yes 🔽 No		
Remarks:							·		



Photo 1 Wetland data point WPEA006f_w facing west



Photo 2 Wetland data point WPEA006f_w facing east

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Prince Edw	ard	Sampling Date: 10/20/2014			
Applicant/Owner: Dominion		State: VA	Sampling Point: wpea006_u			
Investigator(s): GB, TP	Section, Township, Range: No PLSS in this area					
Landform (hillslope, terrace, etc.): slope Lo	ocal relief (concave, conve	ex, none): <u>none</u>	Slope (%): <u>8</u>			
Subregion (LRR or MLRA): <u>P</u> Lat: <u>37.28521067</u>	Long	-78.23734821	Datum: WGS 1984			
Soil Map Unit Name: Appling sandy loam, rolling phase		NWI classifi	cation: None			
Are climatic / hydrologic conditions on the site typical for this time of ye	ear?Yes 🖌 No 🔄	(If no, explain in I	Remarks.)			
Are Vegetation, Soil, or Hydrology significantly	v disturbed? Are "N	ormal Circumstances"	present? Yes 🖌 No			
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If nee	ded, explain any answ	ers in Remarks.)			
SUMMARY OF FINDINGS – Attach site map showing	g sampling point lo	cations, transects	s, important features, etc.			

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No					
Remarks:										
Upland data point taken on a sideslope above a saturated PFO wetland in a wet draw along stream spea007										

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	y) Surface Soil Cracks (B6)
Surface Water (A1) True Aquati	Plants (B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen S	ulfide Odor (C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rł	izospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of	Reduced Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron	Reduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck S	Surface (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Expl	in in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (incl	es):
Water Table Present? Yes No 🖌 Depth (incl	es):
Saturation Present? Yes No <u></u> Depth (includes capillary fringe)	es): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial pl	otos, previous inspections), if available:
Remarks:	
no hydrology indicators present	

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

Sampling Point: wpea006_u

, , , , , , , , , , , , , , , , , , ,	Abaaluta	Dominant Indi	iontor	Dominanaa Taat warkabaati
Tree Stratum (Plot size: 30) ADSOIULE % Cover	Species? St	tatus	Dominance rest worksneet.
Liriodendron tulipifera	40	Yes F	ACU	Number of Dominant Species
Quercus alba	15	No F	ACU	
2. Quercus alba				Total Number of Dominant
3. Acer rubrum	15		FAC	Species Across All Strata: 7 (B)
_{4.} Quercus montana	10	No	UPL	
5.				Percent of Dominant Species
6				
0				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	00	= Total Cover	10	
50% of tota	l cover: <u>40</u> 20% o	f total cover:	10	$OBL species \qquad 0 \qquad x^{T} = 0$
Sapling/Shrub Stratum (Plot size:15)			FACW species $x^2 = 0$
1. Acer rubrum	6	Yes	FAC	FAC species 42 x 3 = 126
2 Liquidambar styraciflua	6	Yes	FAC	FACU species 65 x 4 = 260
 Nvssa svlvatica 	3	Yes	FAC	LIPL species $10 \times 5 = 50$
3	<u>_</u>	103	TAO	$\frac{117}{117}$ (4) $\frac{436}{117}$ (5)
4				Column Totals: (A) (B)
5				Drovelance Index D/A 372
6.				
7				Hydrophytic Vegetation Indicators:
1				1 - Rapid Test for Hydrophytic Vegetation
8	·			✓ 2 - Dominance Test is >50%
9				$3 - \text{Prevalence Index is } \leq 3.0^{1}$
	15	= Total Cover		3 - Trevalence index is ≤5.0
50% of tota	l cover: 7.5 20% o	f total cover:	3	4 - Morphological Adaptations' (Provide supporting
Herb Stratum (Plot size: 5)			data in Remarks or on a separate sheet)
Polystichum acrostichoides	, 5	Voc E		Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u></u>	0		ACU	
2				¹ Indicators of hydric soil and wotland hydrology must
3				be present unless disturbed or problematic
4.				Definitions of Four Venetation Strates
5				Definitions of Four vegetation Strata:
5	·			Tree – Woody plants, excluding vines, 3 in, (7.6 cm) or
б				more in diameter at breast height (DBH), regardless of
7				height.
8				One line (Ohmethin Mars de relation and a line a la se
9.				than 3 in DBH and greater than or equal to 3.28 ft (1
10				m) tall.
10:	·			,
11				Herb – All herbaceous (non-woody) plants, regardless
	5	= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of tota	l cover: <u>2.5</u> 20% o	f total cover:	1	Woody vine All woody vines greater than 2.28 ft in
Woody Vine Stratum (Plot size: 30)			height
_{1.} Lonicera japonica	12	Yes I	FAC	- Holgha
2 Smilax bona-nox	5	Yes F	ACU	
Z. <u> </u>				
3				
4				Hydrophytic
5				Vegetation
	17	= Total Cover		Present? Yes V No
50% of tota	Lover: 8.5 20% o	f total cover: 3	3.4	
Pomorko: (Include photo numbers berging				
Remarks: (Include photo numbers here or o	on a separate sneet.)			

Profile Desc	cription: (Describe to	o the dept	h needed to docun	nent the in	dicator	or confirm	the absence	of indicator	s.)	
Depth	Matrix		Redox	K Features						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-8	10YR 4/3	100					SL			
8-20	10YR 4/4	100					SCL	light SCL		
		·								
		·								
	<u> </u>	·								
¹ Type: C=C	oncentration, D=Deple	etion, RM=I	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	² Location: P	L=Pore Lining	g, M=Matrix.	
Hydric Soil	Indicators:	,	,				Indica	ators for Pro	blematic Hyd	ric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A	10) (MLRA 14	7)
Histic Ep	pipedon (A2)		Polyvalue Be	low Surfac	e (S8) (N	LRA 147,	148) C	oast Prairie F	Redox (A16)	
Black Hi	istic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)	· <u> </u>	(MLRA 147	, 148)	
Hydroge	en Sulfide (A4)		Loamy Gleve	d Matrix (F	2)	, .,	P	iedmont Floo	dplain Soils (F	-19)
Stratified	d Lavers (A5)		Depleted Matrix (F3)				(MLRA 136, 147)			
2 cm Mu	uck (A10) (LRR N)		Redox Dark S	Surface (F6	5)		V	ery Shallow [, Dark Surface (TF12)
Deplete	d Below Dark Surface	(A11)	Depleted Dar	k Surface	(F7)		c	ther (Explain	in Remarks)	,
Thick Da	ark Surface (A12)	()	Redox Depre	ssions (F8)				,	
Sandy N	/lucky Mineral (S1) (LI	RR N.	Iron-Mangane	ese Masse	, s (F12) (I	_RR N.				
MLR/	A 147. 148)	,	MLRA 130	5)	- (/ (,				
Sandy G	Bleyed Matrix (S4)		Umbric Surfa	, ce (F13) (N	ILRA 13	6, 122)	³ Ind	icators of hyd	drophytic vege	tation and
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 14						3) wetland hydrology must be present,				
Stripped	Matrix (S6)		Red Parent M	1aterial (F2	21) (MLR	A 127, 147) un	less disturbed	d or problemat	ic.
Restrictive	Layer (if observed):									
Type: <u>no</u>	ne									
Depth (in	ches):						Hydric Soil	Present?	Yes	No 🖌
Remarks:							•			



Photo 1 Upland data point WPEA006_u facing east



Photo 2 Upland data point WPEA006_u facing west