Environmental Field Surveys Wetland Photo Page



Upland data point wsuo017_u facing southwest.



Project/Site: Atlantic Coast Pipelin	e	City/C	ounty: City of Suffolk		Sampling Date: 2/1/2016	
Applicant/Owner: DOMINION			State: VA	Sampling Point: wsuc009f_w		
Investigator(s): Team C		on, Township, Range: N				
Landform (hillslope, terrace, etc.):						
Subregion (LRR or MLRA): T						
Soil Map Unit Name: Rains fine sa	andy loam	Lat	LONG	NWI classific	PURHx	
			_			
Are climatic / hydrologic conditions						
Are Vegetation, Soil				I Circumstances" ¡	present? Yes No	
Are Vegetation, Soil	_, or Hydrology _	naturally problema	atic? (If needed,	explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS	 Attach site 	map showing sam	pling point location	ons, transects	s, important features, etc.	
Hydrophytic Vegetation Present?	Yes •	/ No				
Hydric Soil Present?		No	Is the Sampled Area	., .,	,	
Wetland Hydrology Present?			within a Wetland?	Yes	No	
Remarks:		<u> </u>				
Depressional wetland near agricu	ltural field.					
HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)	
Primary Indicators (minimum of o	ne is required; ch	neck all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)		Aquatic Fauna (B13)		Sparsely Ve	getated Concave Surface (B8)	
✓ High Water Table (A2)	!	Marl Deposits (B15) (LRF	R U)	Drainage Pa	tterns (B10)	
✓ Saturation (A3)		Hydrogen Sulfide Odor (C	C1)	Moss Trim L		
<u>✓</u> Water Marks (B1)		Oxidized Rhizospheres al			Water Table (C2)	
Sediment Deposits (B2)		Presence of Reduced Iron		Crayfish Bur		
Drift Deposits (B3)		Recent Iron Reduction in	Tilled Soils (C6)	_	isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		Thin Muck Surface (C7)		<u>✓</u> Geomorphic		
Iron Deposits (B5)		Other (Explain in Remark	s)	Shallow Aqu		
Inundation Visible on Aerial I	magery (B7)			FAC-Neutral Test (D5)		
Water-Stained Leaves (B9)				Sphagnum r	noss (D8) (LRR T, U)	
Field Observations:	· · · · · · · · · · · · · · · · · · ·	Death (balance), 4				
		Depth (inches): 4				
Water Table Present? Y	es No No	Depth (inches): $\frac{0}{0}$			- w W N	
Saturation Present? Y (includes capillary fringe)	es <u> </u>	Depth (inches): 0	Wetland i	Hydrology Preser	nt? Yes V No	
Describe Recorded Data (stream	gauge, monitorin	ng well, aerial photos, pre	vious inspections), if ava	ailable:		
Remarks:						
Wetland hydrology indicators pres	sent					

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Liquidambar styraciflua	50	Yes	FAC	That Are OBL, FACW, or FAC:6 (A)
2. Acer rubrum	20	Yes	FAC	
3. Pinus taeda	10	No	FAC	Total Number of Dominant Species Across All Strata: 6 (B)
				Opecies Across Air otrata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				ORL analisa 0 v.1 = 0
	80	= Total Cov	er	OBL species X 1 =
50% of total cover:	20% of	total cover:	16	1 AOV species
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1 Liquidambar styraciflua	20	Yes	FAC	FACU species0 x 4 =0
2. Quercus nigra	15	Yes	FAC	UPL species0 x 5 =0
3. Betula nigra	15	Yes	FACW	Column Totals:150 (A)435 (B)
	10	No	FAC	
4. Ilex opaca			FAC	Prevalence Index = B/A = 2.9
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.				✓ 3 - Prevalence Index is ≤3.0 ¹
	60	= Total Cov		
50% of total cover: 30			40	Problematic Hydrophytic Vegetation ¹ (Explain)
l	20% 01	total cover:		
Herb Stratum (Plot size:)	40		E40	¹ Indicators of hydric soil and wetland hydrology must
1. Smilax rotundifolia	10	Yes	FAC	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree Meady plants avaluating vince 2 in (7.0 am) as
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				
12.	10	= Total Cov		
5				
50% of total cover:5	20% of	total cover:		
Woody Vine Stratum (Plot size:)				
1				
2				
3.				
4				
5				Hydrophytic
		= Total Cov		Vegetation Present? Yes No
50% of total cover:0	20% of	total cover:	0	rieseitt! ies No
Remarks: (If observed, list morphological adaptations below	w).			1
	,			

SOIL Sampling Point: wsuc009f_w

Profile Des	cription: (Describe	to the dep	th needed to docur	ment the i	ndicator	or confirm	the absence of ir	ndicators.)
Depth	Matrix	0/		x Features			- .	5
(inches) 0-8	Color (moist) 10 YR 2/1	<u>%</u> 100	Color (moist)	%	Type ¹	Loc ²	Texture SL	Remarks
-	· -							
8-18	5 Y 6/1	97	2.5 Y 5/6	3	С	PL/M	SL	
-								
	<u> </u>							
¹ Type: C=C	Concentration, D=Dep	oletion, RM=	Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location: PL=	Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless othe	rwise note	ed.)		Indicators for I	Problematic Hydric Soils ³ :
Histoso	l (A1)		Polyvalue Be	elow Surfa	ce (S8) (L	.RR S, T, U) 1 cm Muck	(A9) (LRR O)
	pipedon (A2)		Thin Dark Su					(A10) (LRR S)
	listic (A3)		Loamy Muck			(O)		ertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		F2)			Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)	T 11\	✓ Depleted Ma Redox Dark	, ,	·6\			Bright Loamy Soils (F20)
_	: Bodies (A6) (LRR P ucky Mineral (A7) (Ll			•	,		(MLRA 1 Red Parent	t Material (TF2)
	resence (A8) (LRR L		Redox Depre					ow Dark Surface (TF12)
	uck (A9) (LRR P, T)	,	Marl (F10) (L		- /			lain in Remarks)
<u>✓</u> Deplete	ed Below Dark Surfac	e (A11)	Depleted Oc	hric (F11)				
	ark Surface (A12)		Iron-Mangan				•	s of hydrophytic vegetation and
	Prairie Redox (A16) (I					, U)		hydrology must be present,
-	Mucky Mineral (S1) (LRR O, S)	Delta Ochric			0.4 4E0D\	unless o	disturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve Piedmont Flo				24)	
-	d Matrix (S6)						A 149A, 153C, 153	BD)
	urface (S7) (LRR P, \$	S, T, U)	/	g =	, (,
	Layer (if observed)							
Type:								
Depth (ir	nches):						Hydric Soil Pres	sent? Yes <u>'</u> No
Remarks:								
Hydric soil in	dicators present							
	·							



Photo 1
Wetland data point wsuc009f_w facing northeast



Photo 2Wetland data point wsuc009f_w facing southeast

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/C	county: City of Suffolk	Sampling Date: 2/1/2016				
Applicant/Owner: DOMINION		Sta	e: VA Sampling Point: wsuc009_u				
Investigator(s): Team C Section, Township, Range: No PLSS in this area							
Landform (hillslope, terrace, etc.): Slight slope							
Subregion (LRR or MLRA): T							
Soil Map Unit Name: Eunola loamy fine sand,	0 to 2 percent slopes	13g 1	IWI classification: None				
Are climatic / hydrologic conditions on the site	typical for this time of year? Y	res No (If no,	explain in Remarks.)				
Are Vegetation, Soil, or Hydrole	ogy significantly distur	bed? Are "Normal Circu	mstances" present? Yes No				
Are Vegetation, Soil, or Hydrole							
SUMMARY OF FINDINGS – Attach							
	S No S No	Is the Sampled Area	.,				
	No	within a Wetland?	Yes No				
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:		Seco	ndary Indicators (minimum of two required)				
Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)	True Aquatic Plants (Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Hydrogen Sulfide Od		Prainage Patterns (B10)				
Saturation (A3)	Oxidized Rhizospher		Moss Trim Lines (B16)				
Water Marks (B1)	Presence of Reduced		Ory-Season Water Table (C2)				
Sediment Deposits (B2)	Recent Iron Reduction						
Drift Deposits (B3)	Thin Muck Surface (0		Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in Rer		Stunted or Stressed Plants (D1)				
Iron Deposits (B5)			Geomorphic Position (D2)				
Inundation Visible on Aerial Imagery (B7)Water-Stained Leaves (B9)			Shallow Aquitard (D3)				
Aquatic Fauna (B13)			Microtopographic Relief (D4) FAC-Neutral Test (D5)				
Field Observations:			AO Nedital Test (DS)				
	o Depth (inches):						
	o Depth (inches):						
		6 Wetland Hydrol	ogy Present? Yes 🗸 No				
Saturation Present? Yes Ves No Depth (inches): 6 Wetland Hydrology Present? Yes No							
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, pre	vious inspections), if available:					
Remarks:							
itemarks.							

VEGETATION (Four Strata) - Use scientific names of plants

⁵ ____)

2. Liquidambar styraciflua

Sapling/Shrub Stratum (Plot size: 15)

Tree Stratum (Plot size: ___

1 Liquidambar styraciflua 2. Magnolia virginiana

Herb Stratum (Plot size: ____ 1. Smilax rotundifolia

3. Pinus taeda

1. Acer rubrum

3. Ilex opaca

) – Use scientific n	Absolute	Dominant I	ndicator	Sampling Point: wsuc009_u Dominance Test worksheet:
0)			Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)
	10	Yes	FAC	
	10	Yes	FACU	Total Number of Dominant Species Across All Strata: 6 (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC: 83.33333333 (A/B)
				Prevalence Index worksheet:
	50	Total Cava		Total % Cover of: Multiply by:
0% of total cover: 25		= Total Cove total cover:_	10	OBL species0 x 1 =0
15	2070 01	total cover		FACW species 20
)	50	Yes	FAC	FAC species 150 x 3 = 450
	20	Yes	FACW	FACU species 10 x 4 = 40
	10	No	FAC	UPL species $0 \times 5 = 0$
				Column Totals: 180 (A) 530 (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				✓ 2 - Dominance Test is >50%
				✓ 3 - Prevalence Index is ≤3.0 ¹
40		= Total Cove	r 16	4 - Morphological Adaptations ¹ (Provide supporting
0% of total cover: 40	20% of	total cover:_		data in Remarks or on a separate sheet)
5)	50			Problematic Hydrophytic Vegetation ¹ (Explain)
	50	Yes	FAC	
				¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
				m) tall.
	50			Herb – All herbaceous (non-woody) plants, regardless
0% of total cover· 25		= Total Cove	r 10	of size, and woody plants less than 3.28 ft tall.
0% of total cover:25_)	ZU% Of	total cover:_		Woody vine – All woody vines greater than 3.28 ft in height.
				Hydrophytic Vegetation
	0	= Total Cove	r	Present? Yes No
0% of total cover:		total cover:	0	

Remarks: (Include photo numbers here or on a separate sheet.)

Woody Vine Stratum (Plot size: 30)

Sampling Point: wsuc009_u

Profile Des	cription: (Describe	to the dept				or confirm	the absen	ice of indicators.)
Depth	Matrix		Redo	K Feature	s	. 2	_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-8	10 YR 2/1	100					LS	
8-18	2.5 YR 5/6	100					S	
		· 					-	
	· -	. ——						
						· 		-
		· 			-			
	·							
	-	· 				· ——		
1							2	
	Concentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		: PL=Pore Lining, M=Matrix.
-	Indicators:						Inc	dicators for Problematic Hydric Soils ³ :
Histoso	l (A1)		Dark Surface					2 cm Muck (A10) (MLRA 147)
Histic E	pipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
Black H	listic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	147, 148)		(MLRA 147, 148)
Hydrog	en Sulfide (A4)		Loamy Gleye	d Matrix (F2)			Piedmont Floodplain Soils (F19)
Stratifie	ed Layers (A5)		Depleted Mat	rix (F3)				(MLRA 136, 147)
2 cm M	uck (A10) (LRR N)		Redox Dark S	Surface (F	- 6)			Very Shallow Dark Surface (TF12)
Deplete	ed Below Dark Surface	e (A11)	Depleted Dar	k Surface	(F7)			Other (Explain in Remarks)
Thick D	ark Surface (A12)		Redox Depre	ssions (F	8)			
Sandy	Mucky Mineral (S1) (L	.RR N,	Iron-Mangan	ese Mass	es (F12) (LRR N,		
	A 147, 148)		MLRA 13					
	Gleyed Matrix (S4)		Umbric Surfa	ce (F13) (MLRA 13	6, 122)	3	Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					wetland hydrology must be present,
	d Matrix (S6)		Red Parent N					unless disturbed or problematic.
	Layer (if observed):			(-	, (,	′	
	_uyo: (0200: 10u).							
Type:			<u> </u>					
Depth (ir	nches):						Hydric S	Soil Present? Yes No
Remarks:								
lo hydric so	il present							



Photo 1
Upland data point wsuc009_u facing northwest



Photo 2
Upland data point wsuc009_u facing southwest

	M – Atlantic and Guif Coastal Plain Region
Project/Site: ACP City/C	County: SOUTHAMPTON Sampling Date: 10 21 10
Applicant/Owner: DVMININ	State: VA Sampling Point: WSuo 020f
	on, Township, Range:
Landform (hillslope, terrace, etc.): Flatwoods Local	I relief (concave, convex, none): NONE Slope (%): 0 - 9
Subregion (LRR or MLRA): LRRT Lat: 36, 66	782 Long: -76.808717 Datum: WGS9
Soil Map Unit Name: Rains fine sandy 10 am	
Are climatic / hydrologic conditions on the site typical for this time of year?	V
Are Vegetation, Soil, or Hydrology significantly distur	V
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes _X_ No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No
Wetland Hydrology Present? YesX No	Within a Vettaria!
Remarks:	
NCWAM: Headwater Forest	
HYDROLOGY	
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)
Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (LRI	
Saturation (A3) Hydrogen Sulfide Odor (6)	
Water Marks (B1) — Oxidized Rhizospheres a	THE STATE OF THE S
Sediment Deposits (B2) Presence of Reduced Iro	
Drift Deposits (B3) Recent Iron Reduction in	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remark	ks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	N/A
Surface Water Present? Yes No X Depth (inches):	(1)
vvater rable Present? Yes No Depth (inches):	20
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
	,
Remarks:	Supplier of the result of the
B B	

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

Sampling Point: WSu 0005-w

2042051	Absolute	Dominant	Indicator	Dominance Test worksheet:
1. Quercus phellos	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2. Carpinus' caroliniana	10		FAC	Total Number of Dominant Species Across All Strata: (B)
3				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	45	= Total Cov		OBL species x 1 =
50% of total cover: 22 C	7 200/ 04	total cover	9	FACW species x 2 =
211/2/14		total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	20	Y	FAC	FACU species x 4 =
1. Carpinus caroliniana 2. TIEX ODDA(250	-	FAC	UPL species x 5 =
				Column Totals: (A) (B)
3. 4.				Prevalence Index = B/A =
5.				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0¹
	45	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:				Problematic Hydrophytic vegetation (Explain)
Herb Stratum (Plot size: 30 × 30++)	16	Y		¹ Indicators of hydric soil and wetland hydrology must
1. Athyrium asplenoides			FAC	be present, unless disturbed or problematic.
2. Dsmundustrum Linnamomea	14	-7	PACW	Definitions of Four Vegetation Strata:
3. Woodwardia areolata	10			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Clethra alnifolia		<u>N</u>	FACW	more in diameter at breast height (DBH), regardless of
5. Quercus alba		N	FACU	height.
6. Ilex opaca	_5_	N	FAC	Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
7		= Total Cov		
50% of total cover: 25	20% o	f total cover	10	
Woody Vine Stratum (Plot size: 30 x 30 ft)	_	V	FAL	
1. Smilax rotunditolia	5			
2. Toxicodendron radicans	3		FAL	
3				
4.				
5				Hydrophytic
A	8	= Total Co		Vegetation
50% of total cover:	20% 0	f total cover	1.6	Present? Yes No
Remarks: (If observed, list morphological adaptations below				
(1.50)	1			

Profile Description: (Describe to the dept	h needed to docur	nent the Indic	ator or confir	m the absence of	Indicators.)	
Depth Matrix		x Features			-	
(inches) Color (moist) %	Color (moist)		pe Loc²	Texture _	Remarks	
0-0 10 1R2/2 100	10340-111	10	1 1			
6-12 104R 612 90	10 AKOLD	10 C	M	<u> </u>		
12-20 104R511 85	INVRUE 9	15 C	M	LS		
-	101. 10					
						· .
<u> </u>						
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS	S=Masked San	d Grains.	² Location: P	L=Pore Lining, M=Matr	ix.
Hydric Soil Indicators: (Applicable to all L	RRs, unless other	rwise noted.)		Indicators fo	r Problematic Hydric	Solls ³ :
Histosol (A1)	Polyvalue Be	low Surface (S	8) (LRR S, T,	U) 1 cm Muc	ck (A9) (LRR O)	
Histic Epipedon (A2)	Thin Dark Su	ırface (S9) (LR	R S, T, U)		ck (A10) (LRR S)	
Black Histic (A3)		y Mineral (F1)	(LRR O)		Vertic (F18) (outside	
Hydrogen Sulfide (A4)		d Matrix (F2)			t Floodplain Soils (F19)	
Stratified Layers (A5)	Depleted Ma Redox Dark			A STATE OF THE PARTY OF THE PAR	us Bright Loamy Soils	(F20)
Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U)		rk Surface (F6)		(MLRA	ent Material (TF2)	
Muck Presence (A8) (LRR U)	Redox Depre				llow Dark Surface (TF	12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (L				(plain in Remarks)	. =/
Depleted Below Dark Surface (A11)		hric (F11) (MLF	RA 151)			
Thick Dark Surface (A12)	Iron-Mangan	ese Masses (F	12) (LRR O, I	P, T) ³ Indicate	ors of hydrophytic vege	tation and
Coast Prairie Redox (A16) (MLRA 150A		ce (F13) (LRR	6 6 6 6		nd hydrology must be p	
Sandy Mucky Mineral (S1) (LRR O, S)		(F17) (MLRA			s disturbed or problema	itic.
Sandy Gleyed Matrix (S4)		rtic (F18) (MLR		Di Piller Lacerooma		
Sandy Redox (S5)		odplain Soils (149A) .RA 149A, 153C, 1	530)	
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)	Anomalous	signt Loanly S	0115 (F20) (INL	.KA 143A, 1330, 1	330)	
Restrictive Layer (if observed):				T		
Type:						
Depth (inches):				Hydric Soll Pi	resent? Yes 🗶	No
Remarks:				1.7		
Remarks.						
				5		

Environmental Field Surveys Wetland Photo Page



Wetland data point wsuo020f_w facing southeast.



Wetland data point wsuo020f_w facing northwest.

WETLAND DETERMINATION DATA	FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: ACP	City/County: SuffOlk Sampling Date: 10/21/15
Applicant/Owner: D/M/N/N	State: A Sampling Point: W5u0020-u
Investigator(s): L. RIPLY, S. IOSEFEI	Section, Township, Range:Section, Township, Range:
Landform (hillslope, terrace, etc.): Prainage	Local relief (concave, convex, none): Loncave Slope (%): 5-10
	66782 Long: -76.808644 Datum: MOSE 4
Soil Map Unit Name: Rains fine sandy loan	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantl	,
Are Vegetation, Soil, or Hydrology naturally p	
	g sampling point locations, transects, important features, etc.
- Attach site map showin	g sampling point locations, transects, important leatures, etc.
Hydrophytic Vegetation Present? Yes	Is the Sampled Area within a Wetland? Yes No
Remarks:	,
m 0/25/ 0/25	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Aquatic Fauna (B	
High Water Table (A2) Marl Deposits (B1	
Saturation (A3) Hydrogen Sulfide Water Marks (B1) Oxidized Rhizosph	
Sediment Deposits (B2) — Oxidized Rhizospi — Oxidized Rhizospi — Presence of Redu	heres along Living Roots (C3) Dry-Season Water Table (C2)
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in F	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches	s): 1V/A
Water Table Present? Yes No Depth (inches	s): <u>>20</u>
Saturation Present? Yes X No Depth (inches includes capillary fringe)	s): Wetland Hydrology Present? Yes No _X
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	

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

20 V211++	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size: 30 X20++)	% Cover	Species?		Number of Dominant Species That Are ORL FACW or FAC: (A)
1. PINIS TARAU	30	1	FAC	That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Research of Descinant Species
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 53 1/2 (A/B)
6.				
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
o	20	= Total Co	·05	OBL species x 1 =
	300		10	FACW species x 2 =
50% of total cover:	20% of	total cover	: <u></u>	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 20 X 20 FT)	20	V	FAC	FACU species x 4 =
1. Nyssa sylvatica		-	FAL	UPL species x 5 =
2 Acer rubrum	10			Column Totals: (A) (B)
3. Liriodendron tulipifera	10	4	FACU	Coldinii Totals (A) (5)
4. Quercus alba	6	N	FACU	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				× 2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0¹
	40.	Total Co	ver	
50% of total cover: 22	720% of	total cover	9	Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 30 X 30 ft.)	20 /0 01	total cover		
1. Clethra alnifolia	15	Y	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	8.0	V		
2. Arundinaria gigantea	10		FACW	Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4.				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				Herb - All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in height.
11				neight.
12	00			
12.	25	= Total Co	ver g	
50% of total cover: 12.	20% of	total cove	r:	
Woody Vine Stratum (Plot size: 31)				77
1. hone				
2				
3				
4.				
5.				Hydrophytic
	()	= Total Co	ver	Vegetation
50% of total cover:				Present? Yes No No
Remarks: (If observed, list morphological adaptations believed)				
Remarks. (If observed, list morphological adaptations ber	OW).			

Profile Description: (Describe to the dept	h needed to document the indicator or confirm	m the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture Remarks
0-10 10 YR 2/2 100		LS
(0-20) 10YR 5110 950	10VR 619 15 C M	()
	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T,	
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)		Red Parent Material (TF2) Very Shallow Dark Surface (TF12)
Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T)	Redox Depressions (F8) Marl (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P	T) 3Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A		wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 1	i a
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLF	
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Туре:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
		1

Environmental Field Surveys Wetland Photo Page



Upland data point wsuo020_u facing north.



Upland data point wsuo020_u facing east.

Project/Site: Atlantic Coast Pipeline	City/County: City of Suffolk	Sampling Date: 9/22/2015
Applicant/Owner: Dominion		State: VA Sampling Point: wsua076f_w1
• •	Section, Township, Range: No.	
Landform (hillslope, terrace, etc.): flat		
Subregion (LRR or MLRA): T Lat: 3		
Soil Map Unit Name: Rains fine sandy loam	Long	NWI classification: PFO1C, PUBH
Are climatic / hydrologic conditions on the site typical for this time		
Are Vegetation, Soil, or Hydrology signifi		
Are Vegetation, Soil, or Hydrology natura	ılly problematic? (If needed, e	explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point location	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes _ ✓ No		
Hydric Soil Present? Yes ✓ No	is the Sampled Area	Var. V Na
Wetland Hydrology Present? Yes No		Yes No
Remarks:		
Wetland data point for PEM porition of an extensive saturated to power line ROW and adjacent recent clear cut; sandy clay B ho cut 2-3 years ago. Logging disturbance has created complex m	rizon limits infiltration and perches wa	ater in some areas. Timber appears to have been
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	pply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Faur		Sparsely Vegetated Concave Surface (B8)
	s (B15) (LRR U)	Drainage Patterns (B10)
Saturation (A3) Hydrogen Su Water Marks (B1) Oxidized Rhi		Moss Trim Lines (B16)
<u> </u>	zospheres along Living Roots (C3)	Dry-Season Water Table (C2)
	Reduced Iron (C4) Reduction in Tilled Soils (C6)	Crayfish Burrows (C8) ✓ Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Si	` '	Geomorphic Position (D2)
Iron Deposits (B5) Other (Expla		Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	- ,	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)		Sphagnum moss (D8) (LRR T, U)
Field Observations:		
Surface Water Present? Yes No Depth (i	· ·	
Water Table Present? Yes No Depth (i		
Saturation Present? Yes No Depth (i	nches): Wetland F	lydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aeria	photos, previous inspections), if ava	ilable:
Remarks:		
	side of the right of way has	
been clea	arcut since 2013.	

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 6 (A)
2				
3.				Total Number of Dominant Species Across All Strata: 7 (B)
				Species Across Air Strata (b)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 85.71428571 (A/B)
6				Bassalan as Indonesial about
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	0	= Total Cov	er	OBL species x 1 = 35
50% of total cover:0		total cover:	Λ	FACW species 52
	20 /6 01	lulai cuvei.		FAC species4
Sapling/Shrub Stratum (Plot size: 15)		V	EA 0\A/	FACU species 15 x 4 = 60
1. Clethra alnifolia	4	Yes	FACW	0
2. Magnolia virginiana	3	Yes	FACW	UPL species $\frac{0}{106}$ $x = 5 = \frac{0}{211}$
3. Liquidambar styraciflua	2	No	FAC	Column Totals: (A) (B)
4. Acer rubrum	2	No	FAC	Prevalence Index = B/A = 1.99
				Trevalence index B//
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	11	= Total Cov	er	<u> </u>
50% of total cover: 5.5		total cover:	~ ~	Problematic Hydrophytic Vegetation¹ (Explain)
F	20 /0 01	total cover.		
Tierb Stratum (1 lot size)	25	V	ODI	¹ Indicators of hydric soil and wetland hydrology must
1. Scirpus cyperinus	25	Yes	OBL	be present, unless disturbed or problematic.
2. Arundinaria gigantea	20	Yes	FACW	Definitions of Four Vegetation Strata:
3. Panicum dichotomiflorum	10	Yes	FACW	Tana Mandu planta avaluding vince 2 in (7 C am) an
4. Eupatorium capillifolium	10	Yes	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. Eleocharis palustris	10	Yes	OBL	height.
6 Echinochloa crus-galli	5	No	FACW	
5				Sapling/Shrub – Woody plants, excluding vines, less
7. Eupatorium perfoliatum		No	FACW	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8. Sporobolus indicus	5	No	FACU	Herb – All herbaceous (non-woody) plants, regardless
9. Solidago gigantea	5	No	FACW	of size, and woody plants less than 3.28 ft tall.
10.				
				Woody vine – All woody vines greater than 3.28 ft in
				height.
12				
47.5		= Total Cov		
50% of total cover: 47.5	20% of	total cover:	19	
Woody Vine Stratum (Plot size:)				
1.				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover: 0	20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations below				
Remarks. (II observed, list morphological adaptations below	v).			

SOIL Sampling Point: wsua076f_w1

Profile Desc	ription: (Describe	o the dep	th needed to docum	nent the i	ndicator	or confirm	the absence o	f indicators.)			
Depth	Matrix			K Features		3					
(inches) 0-5	Color (moist) 10YR 2/2	<u>%</u> 100	Color (moist)	<u></u> %	Type ¹	Loc ²	<u>Texture</u> SL	Remarks			
5-10	10YR 3/1	93	7.5YR 4/6	7	C	PL/M	SCL				
10-20	10YR 4/1	85	7.5YR 4/6	15	С	PL/M	SC				
								_			
											
	-										
			=Reduced Matrix, MS			ains.		PL=Pore Lining, M=Matrix.			
-		able to all	LRRs, unless other			DD 0 T 11		or Problematic Hydric Soils ³ :			
Histosol	(A1) pipedon (A2)		Polyvalue Bel Thin Dark Su					uck (A9) (LRR O) uck (A10) (LRR S)			
	stic (A3)		Loamy Mucky					d Vertic (F18) (outside MLRA 150A,B)			
	n Sulfide (A4)		Loamy Gleye			-,		nt Floodplain Soils (F19) (LRR P, S, T)			
Stratified	d Layers (A5)		✓ Depleted Mat	rix (F3)			Anomalo	ous Bright Loamy Soils (F20)			
_	Bodies (A6) (LRR P,		Redox Dark S					A 153B)			
	icky Mineral (A7) (LR				, ,			rent Material (TF2)			
	esence (A8) (LRR U) ick (A9) (LRR P, T))	Redox Depre		3)			allow Dark Surface (TF12) Explain in Remarks)			
	d Below Dark Surface	e (A11)	Depleted Och		(MLRA 1	51)	Other (E	Explain in Nemarks)			
	ark Surface (A12)	,	Iron-Mangane				T) ³ Indica	tors of hydrophytic vegetation and			
			A) Umbric Surfac			, U)		and hydrology must be present,			
-	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric (0.4. 4505)	unles	ss disturbed or problematic.			
	Gleyed Matrix (S4) Redox (S5)		Reduced Veri				24)				
-	Matrix (S6)						A 149A, 153C, [,]	153D)			
	rface (S7) (LRR P, S	, T, U)	/ triomalous B	ngni Loan	ily collo (i	20) (MEIN)	1402, 1000,	1005)			
Restrictive I	Laver (if observed):	,									
Type: sar	ndy clay										
Depth (in	ches): <u>10</u>						Hydric Soil P	Present? Yes No			
Remarks:											



Photo 1 Wetland data point wsua076f_w1 facing east



Photo 2
Wetland data point wsua076f_w1 facing west

Project/Site: Atlantic Coast Pipeline	City/County: City of Suffolk	Sampling	Date: 9/22/2015
Applicant/Owner: Dominion	St	ate: VA Sampling	Point: wsua076f_w2
	Section, Township, Range: No F		
Landform (hillslope, terrace, etc.): flat			Slone (%): 2
Subregion (LRR or MLRA): T Lat: 36.670	30072 Long: -76	.80058586	Datum: WGS 1984
Soil Map Unit Name: Nansemond fine sandy loam, 0 to 2 percent slop	es	NIVI alassification, NO	Datum ne
			<u> </u>
Are climatic / hydrologic conditions on the site typical for this time of year			🗸
Are Vegetation, Soil, or Hydrology significantly			
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, exp	plain any answers in Rema	arks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point location	s, transects, import	tant features, etc.
Hydrophytic Vegetation Present? Yes _ ✓ No	la di a Camania di Anna		
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland?	Yes V No	
Wetland Hydrology Present? Yes No	within a wettand:	165 140	
Remarks:			
Wetland data point for the PSS porition of an extensive saturated to s existing power line ROW and adjacent recent clear cut; sandy clay B have been cut 2-3 years ago. Logging disturbance has created companapped extent.	horizon limits infiltration and perc	nes water in some areas.	Timber appears to
HYDROLOGY			
Wetland Hydrology Indicators:	<u>S</u>	econdary Indicators (minir	mum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (B	6)
Surface Water (A1) Aquatic Fauna (B1		Sparsely Vegetated Co	
High Water Table (A2) Marl Deposits (B19)		_ Drainage Patterns (B10	
Saturation (A3) Hydrogen Sulfide (_ Moss Trim Lines (B16)	
Water Marks (B1) Oxidized Rhizosph Sediment Deposits (B2) Presence of Reduc	neres along Living Roots (C3) _	Dry-Season Water TabCrayfish Burrows (C8)	ile (G2)
	ction in Tilled Soils (C6)	Saturation Visible on A	erial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	` '	Geomorphic Position (I	
Iron Deposits (B5) Other (Explain in F		Shallow Aquitard (D3)	,
Inundation Visible on Aerial Imagery (B7)	<u>.</u>	FAC-Neutral Test (D5)	
Water-Stained Leaves (B9)	_	_ Sphagnum moss (D8)	(LRR T, U)
Field Observations:			
Surface Water Present? Yes No Depth (inches			
Water Table Present? Yes No Depth (inches			
Saturation Present? Yes No Depth (inches (includes capillary fringe)	:): Wetland Hy	drology Present? Yes	No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if availa	ble:	
Remarks: This wetland has been clear-order.	cut since 2013.		

,				
Troo Stratum (Plot size: 30		Dominant Species?		Dominance Test worksheet:
Tiee Stratum (Flot size)			Status	Number of Dominant Species That Are ORL FACW or FAC: 8 (A)
1				That Are OBL, FACW, or FAC:8 (A)
2				Total Number of Dominant
3				Species Across All Strata: 9 (B)
4				
5				Percent of Dominant Species That Are OBL_FACW_or_FAC: 88.88888888 (A/R)
				That Are OBL, FACW, or FAC: 88.88888888 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species15 x 1 =15
	0	= Total Cov	_	58 116
50% of total cover:0	20% of	total cover:	0	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1. Clethra alnifolia	12	Yes	FACW	FACU species23 x 4 =92
2. Magnolia virginiana	8	Yes	FACW	UPL species2 x 5 =10
	7			Column Totals: 128 (A) 323 (B)
3. Acer rubrum		Yes	FAC	(2)
4. Symplocos tinctoria	5	No	FAC	Prevalence Index = B/A = 2.52
5. Pinus taeda	3	No	FAC	Hydrophytic Vegetation Indicators:
6. Vaccinium corymbosum	3	No	FACW	
7. Oxydendrum arboreum	3	No	FACU	1 - Rapid Test for Hydrophytic Vegetation
8. Sassafras albidum	2	No	FACU	2 - Dominance Test is >50%
8. december distant				<u>✓</u> 3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	_	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 22.5	20% of	total cover:	9	
Herb Stratum (Plot size:				¹ Indicators of hydric soil and wetland hydrology must
1 Andropogon glomeratus	20	Yes	FACW	be present, unless disturbed or problematic.
2 Scirpus cyperinus	15	Yes	OBL	Definitions of Four Vegetation Strata:
3. Eupatorium capillifolium	15	Yes	FACU	Definitions of Four Pogetation Strata.
4 Panicum dichotomiflorum	15	Yes	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
··				more in diameter at breast height (DBH), regardless of
5. Sporobolus indicus	3	No	FACU	height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
•				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				or size, and woody plants less than 5.20 it tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	68	= Total Cov	er	
50% of total cover: 34	20% of	total cover:	13.6	
	20 /0 01	10101 00101		
Woody Vine Stratum (Plot size:) 1. Vitis rotundifolia)	10	Yes	FAC	
2. Smilax rotundifolia	5	Yes	FAC	
3				
4.				
5				
J	15	- Total Cau		Hydrophytic Vegetation
50% of total cover: 7.5		= Total Cov	_	Present? Yes No No
50% of total cover:	20% of	total cover:		
Remarks: (If observed, list morphological adaptations below	N).			

SOIL Sampling Point: wsua076f_w2

Profile Des	cription: (Describe t	o the dep	th needed to docum	nent the	indicator	or confirm	the absence of ir	ndicators.)
Depth	Matrix			x Feature		. 2		
(inches) 0-4	Color (moist) 10YR 2/1	<u>%</u> 100	Color (moist)	%	Type ¹	Loc ²	Texture SL	Remarks
4-8	10YR 3/1	100					SL	
8-11	10YR 4/2	97	10YR 5/6	3	С	PL/M	SL	
11-20	10YR 5/2	92	10YR 4/6	8	C	PL/M	SCL	
Type: C=C Hydric Soil Histosol Histic E Black H Hydroge Stratifie Organic 5 cm Mi Muck P 1 cm Mi L Deplete Thick D Coast P Sandy N Sandy N Sandy F Strippec Dark Su Restrictive	oncentration, D=Deplation (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Bodies (A6) (LRR P, Lucky Mineral (A7) (LR resence (A8) (LRR U) Luck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rairie Redox (A16) (Mucky Mineral (S1) (LE) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR P, S, Layer (if observed):	T, U) (A11) LRA 150A RR O, S)	FReduced Matrix, MS LRRs, unless other Polyvalue Be Thin Dark Su Loamy Mucky Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Marl (F10) (L Depleted Och Iron-Mangane Delta Ochrice Reduced Ver Piedmont Flo	S=Masked wise not low Surfa rface (S9 y Mineral d Matrix (trix (F3) Surface (F14) ese Mass ce (F13) (F17) (ML tic (F18) (odplain S	d Sand Graded.) ace (S8) (L) (LRR S, (F1) (LRR (F2) (G) (MLRA 15) (MLRA 15) (MLRA 15) (MLRA 15) (MLRA 15)	ains. RR S, T, U T, U) O) OA, 150B) (MLRA 149	² Location: PL= Indicators for I) 1 cm Muck 2 cm Muck Reduced V Piedmont F Anomalous	(A10) (LRR S) ertic (F18) (outside MLRA 150A,B) floodplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20) 53B) Material (TF2) W Dark Surface (TF12) Iain in Remarks) s of hydrophytic vegetation and hydrology must be present, listurbed or problematic.



Photo 1
Wetland data point wsua076f_w2 facing east



Photo 2
Wetland data point wsua076f_w2 facing west

Project/Site: Atlantic Coast Pipeline	City/C	County: City of Suffolk		Sampling Date: 9/22/2015
Applicant/Owner: Dominion	City/C		State: VA	Sampling Point: wsua076_u
	Section			
Landform (hillslope, terrace, etc.): flat				
				Datum: WGS 1984
Soil Map Unit Name: Dragston fine sandy lo		Long		
Are climatic / hydrologic conditions on the si				
Are Vegetation, Soil, or Hyd				
Are Vegetation, Soil, or Hyd	rology naturally problema	atic? (If needed, e	explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS - Attac	ch site map showing san	npling point location	ons, transects	s, important features, etc.
Hydrophytia Vagatation Brocont2	Voc. W No.			
	Yes No Yes No	Is the Sampled Area		
Wetland Hydrology Present?	Yes No <u>✓</u>	within a Wetland?	Yes	No
Remarks:				
Upland data point taken on a disturbed flat	for a saturated to seasonally-floc	oded PEM/PSS wetland o	complex.	
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is requ	uired; check all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (LRI	₹ U)	Drainage Pa	
Saturation (A3)	Hydrogen Sulfide Odor (0		Moss Trim L	
Water Marks (B1)	Oxidized Rhizospheres a	long Living Roots (C3)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iro	n (C4)	Crayfish Bur	rrows (C8)
Drift Deposits (B3)	Recent Iron Reduction in	Tilled Soils (C6)	Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		Geomorphic	Position (D2)
Iron Deposits (B5)	Other (Explain in Remark	(S)	Shallow Aqu	uitard (D3)
Inundation Visible on Aerial Imagery (37)		FAC-Neutra	l Test (D5)
Water-Stained Leaves (B9)			Sphagnum r	moss (D8) (LRR T, U)
Field Observations:				
Surface Water Present? Yes	No Depth (inches):			
Water Table Present? Yes	No Depth (inches):			
	No Depth (inches):	Wetland H	lydrology Prese	nt? Yes No 🗸
(includes capillary fringe) Describe Recorded Data (stream gauge, n	nonitoring well aerial photos pre	vious inspections) if ava	ilable.	
Booking Roserada Bata (etream gaage, m	Tormorning Won, dornar priotoco, pro	riodo iriopodiorio), ir ava	masio.	
Remarks:				
no hydrology indicators present				
				ļ
				ļ

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)
2				Total Number of Dominant
3				Species Across All Strata: 8 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 62.5 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	0	= Total Cov		OBL species0 x 1 =0
50% of total cover:0		total cover:	0	FACW species45
Sapling/Shrub Stratum (Plot size: 15)	20 /6 01	total cover.	·	FAC species58
1 Clethra alnifolia	15	Yes	FACW	FACU species53 x 4 =212
2. Acer rubrum	10	Yes	FAC	UPL species x 5 =
3. Rhus copallinum	10	Yes	UPL	Column Totals:181 (A)601 (B)
4. Liquidambar styraciflua	5	No	FAC	Prevalence Index = R/Δ = 3.32
5. Aralia spinosa	5	No	FAC	T Tevalcinec index = B/A =
6. Pinus taeda	3	No	FAC	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
7. Quercus alba	3	No	FACU	2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0 ¹
	51	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 25.5	20% of	total cover:	10.2	1 Toblematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 5)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	20	Yes	FACW	be present, unless disturbed or problematic.
2. Eupatorium capillifolium	20	Yes	FACU	Definitions of Four Vegetation Strata:
3. Phytolacca americana	15	No	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Sonchus arvensis	15	No	UPL	more in diameter at breast height (DBH), regardless of
5. Panicum dichotomiflorum	10	No	FACW	height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
40		= Total Cov	40	
50% of total cover:40	20% of	total cover:	16	
Woody Vine Stratum (Plot size: 30)	00	V	E40	
1. Vitis rotundifolia	20	Yes Yes	FAC FAC	
2. Smilax rotundifolia	15			
3. Vitis aestivalis 4. Parthenocissus quinquefolia	<u>10</u> 5	Yes No	FACU FACU	
		INO	FACU	
5				Hydrophytic
50% of total cover: 25		= Total Cov	40	Vegetation Present? Yes No
30 % Of total cover.		total cover:		
Remarks: (If observed, list morphological adaptations below	W).			

SOIL Sampling Point: wsua076_u

Profile Desc	cription: (Describe t	to the depth	needed to docur	ment the	indicator	or confirm	the absence of in-	dicators.)	
Depth	Matrix	0′		x Feature	1	1 2	T4	5	_
(inches) 0-5	Color (moist) 10YR 2/2	100	Color (moist)	%	Type'	Loc ²	Texture SL	Remarks	<u>s</u>
5-11	10YR 4/3	100					SL		
11-20	10YR 5/6	100					SL		
¹Type: C=C	oncentration, D=Depl	etion, RM=R	educed Matrix, M	S=Masked	d Sand Gr	ains.	² Location: PL=F	Pore Lining, M=Ma	atrix.
Hydric Soil	Indicators: (Applica	able to all LR	RRs, unless othe	rwise not	ed.)		Indicators for P	roblematic Hydri	ic Soils³:
Histosol			Polyvalue Be						
	pipedon (A2) istic (A3)		Thin Dark Su Loamy Muck					(A10) (LRR S) ertic (F18) (outsid	e MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye	-		. 0)		oodplain Soils (F1	
Stratified	d Layers (A5)		Depleted Ma		,		Anomalous	Bright Loamy Soil	
_	Bodies (A6) (LRR P,		Redox Dark	•	,		(MLRA 15		
	ucky Mineral (A7) (LR esence (A8) (LRR U)		Depleted Da Redox Depre					Material (TF2) w Dark Surface (T	F12)
	uck (A9) (LRR P, T)	•	Marl (F10) (L		0)			ain in Remarks)	,
	d Below Dark Surface	e (A11)	Depleted Oc	, ,	-	•	3		
	ark Surface (A12) rairie Redox (A16) (N	II DA 150A)	Iron-Mangan Umbric Surfa					of hydrophytic ve nydrology must be	-
	//ucky Mineral (S1) (L		Delta Ochric			, 0)		sturbed or probler	
	Sleyed Matrix (S4)	, ,	Reduced Ve	rtic (F18)	(MLRA 15			•	
-	Redox (S5)		Piedmont Flo						
	l Matrix (S6) rface (S7) (LRR P, S	T 11)	Anomalous E	Bright Loa	my Soils (F20) (MLRA	A 149A, 153C, 153I	ט)	
Restrictive	Layer (if observed):	, 1, 0,							
Type: no	ne		<u> </u>						
	ches):						Hydric Soil Pres	ent? Yes	No
Remarks:							l		



Photo 1 Upland data point wsua076_u facing northwest



Photo 2 Upland data point wsua076_u facing southwest

Project/Site: Atlantic Coast Pipeline	City/County: Cit	y of Suffolk	Sampling Date: 9/19/2015
Applicant/Owner: Dominion		State: V	Sampling Date: 9/19/2015 /A Sampling Point: wsua074e_w
	Section, Townsl		
Landform (hillslope, terrace, etc.): ditch			
Subregion (LRR or MLRA): T			
Soil Map Unit Name: Rains fine sandy loam			VI classification: None
	· ·		
Are climatic / hydrologic conditions on the site typical for			
Are Vegetation, Soil, or Hydrology		Are "Normal Circum	stances" present? Yes No
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain a	any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site m	ap showing sampling p	oint locations, tr	ansects, important features, etc.
Hydrophytic Vegetation Present? Yes	_ No Is the Sa		
	No.	mpled Area	Van V Na
Wetland Hydrology Present? Yes	_ No within a	Wetland?	Yes No
Remarks: Wetland data point for a seasonally-flooded PEM wetla			
HYDROLOGY			
Wetland Hydrology Indicators:			dary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check			rface Soil Cracks (B6)
	uatic Fauna (B13)		arsely Vegetated Concave Surface (B8)
_	rl Deposits (B15) (LRR U)		ainage Patterns (B10)
	drogen Sulfide Odor (C1)		oss Trim Lines (B16)
	dized Rhizospheres along Living		y-Season Water Table (C2)
	sence of Reduced Iron (C4) cent Iron Reduction in Tilled Soil		ayfish Burrows (C8) turation Visible on Aerial Imagery (C9)
	n Muck Surface (C7)		eomorphic Position (D2)
	ner (Explain in Remarks)		allow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	er (Explain in Remarke)		C-Neutral Test (D5)
Water-Stained Leaves (B9)			hagnum moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No	Depth (inches):	_	
Water Table Present? Yes No	Depth (inches): 5	_	
Saturation Present? Yes _ V No	Depth (inches): 2	Wetland Hydrolog	gy Present? Yes <u></u> No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring v	vell aerial nhotos previous insp	ections) if available:	
Describe Recorded Data (Stream gauge, monitoring v	veii, aeriai priotos, previous irisp	ections), ii available.	
Remarks:			
remarks.			

		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30) 1	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant Species Across All Strata: 2 (B)
3				Species Across All Strata:2 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
8				Total % Cover of: OBL species 40 x 1 = 40
	0	= Total Cov	_	10 20
· · · · · · · · · · · · · · · · · · ·	_ 20% of	total cover:	0	FACW species X Z = 190
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 = 0
1				FACU species x 4 =
2				UPL species
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =2.18
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
<u>-</u>		= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:0	_ 20% of	total cover:	0	
Herb Stratum (Plot size:5) 1 Murdannia spirata	60	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2 Leersia oryzoides	35	Yes	OBL	Definitions of Four Vegetation Strata:
3. Setaria magna	5	No	FACW	Seminoris of Four Vegetation Strata.
4. Eupatorium perfoliatum	5	No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Ludwigia alternifolia	5	No	OBL	more in diameter at breast height (DBH), regardless of height.
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				and one of the control of the contro
8				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
·				of size, and woody plants less than 3.20 it tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	110			
50% of total cover: 55		= Total Cov	22	
30 % Of total cover.	_ 20% of	total cover:		
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				Hydrophytic
	0 :	= Total Cov	er	Vegetation Present? Yes No
50% of total cover:0	_ 20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations below	<i>'</i>).			

SOIL Sampling Point: wsua074e_w

Depth	cription: (Describe t Matrix			x Feature				,
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-5	10YR 3/2	100					SL	
5-18	10YR 6/1	75	7.5YR 4/6	25	С	M	SC	
					·			
¹ Type: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	able to all l	RRs, unless other	wise not	ed.)		Indicators for	Problematic Hydric Soils ³ :
Histoso	I (A1)		Polyvalue Be	low Surfa	ice (S8) (L	.RR S, T, U) 1 cm Muc	k (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					k (A10) (LRR S)
	istic (A3)		Loamy Muck			R O)		Vertic (F18) (outside MLRA 150A,B
	en Sulfide (A4) d Layers (A5)		Loamy Gleye ✓ Depleted Ma		(F2)			Floodplain Soils (F19) (LRR P, S, T) is Bright Loamy Soils (F20)
	Bodies (A6) (LRR P ,	T. U)	Redox Dark	` '	- 6)		(MLRA	
-	ucky Mineral (A7) (LR		Depleted Dar	•	,		•	nt Material (TF2)
	resence (A8) (LRR U)		Redox Depre					low Dark Surface (TF12)
	uck (A9) (LRR P, T)		Marl (F10) (L	RR U)				plain in Remarks)
	d Below Dark Surface	(A11)	Depleted Oct				•	
	ark Surface (A12)		Iron-Mangan					rs of hydrophytic vegetation and
	Prairie Redox (A16) (N					', U)		d hydrology must be present,
	Mucky Mineral (S1) (L Gleyed Matrix (S4)	KK 0, 5)	Delta Ochric Reduced Ver			OA 150B)	uniess	disturbed or problematic.
-	Redox (S5)		Piedmont Flo				9Δ)	
-	d Matrix (S6)						A 149A, 153C, 15	i3D)
	urface (S7) (LRR P, S	, T, U)	_	J	, (- / (,,	•
Restrictive	Layer (if observed):							
Type: sa								
Depth (ir	iches): ⁶						Hydric Soil Pre	esent? Yes No
Remarks:							1	



Photo 1
Wetland data point wsua074e_w facing northeast



Photo 2Wetland data point wsua074e_w facing southwest

Project/Site: Atlantic Coast Pipeline		City/	County: City of Suffolk		Sampling Date: 9/19/2015 VA Sampling Point: wsua074_u		
Applicant/Owner: Dominion			•	State: VA	Sampling Point: wsua074_u		
• •			ion, Township, Range: N				
Landform (hillslope, terrace, etc.): fla					Slope (%): <u>1</u>		
Subregion (LRR or MLRA): T		Lat: 36.6680821	1 Lona: -	76.79307746	Datum: WGS 1984		
Soil Map Unit Name: Rains fine sand							
Are climatic / hydrologic conditions or	n the site typical						
Are Vegetation, Soil,							
Are Vegetation, Soil, SUMMARY OF FINDINGS -							
SOWIMANT OF FINDINGS -	Attach Site i	nap snowing sai		ons, transects	s, important reatures, etc.		
Hydrophytic Vegetation Present?		No	Is the Sampled Area				
Hydric Soil Present?		No	within a Wetland?	Yes	No <u> </u>		
Wetland Hydrology Present? Remarks:	Yes	No					
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one	-	ck all that apply) Juatic Fauna (B13)		Surface Soil			
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)						
High Water Table (A2)	Ma Hy	Drainage Patterns (B10)					
Saturation (A3)	Moss Trim Lines (B16) Dry-Season Water Table (C2)						
Sediment Deposits (B2)	Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Sediment Deposits (B2) Presence of Reduced Iron (C4)						
Sediment Deposits (B2) Drift Deposits (B3)		ecent Iron Reduction is		Crayfish Bur	isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Geomorphic Position (D2)					
Iron Deposits (B5)		in Muck Surface (C7) her (Explain in Remar		Shallow Aqu			
Inundation Visible on Aerial Ima		` '	,	FAC-Neutral			
Water-Stained Leaves (B9)				Sphagnum n	noss (D8) (LRR T, U)		
Field Observations:							
Surface Water Present? Yes	No <u> </u>	Depth (inches):					
Water Table Present? Yes	No <u> </u>	Depth (inches):					
Saturation Present? Yes No Depth (inches):			Wetland Hydrology Present? Yes No				
(includes capillary fringe) Describe Recorded Data (stream ga	auge, monitoring	well, aerial photos, pr	evious inspections), if ava	ailable:			
3	3	, , , , , , , , , , , , , , , , , , ,					
Remarks:							
no hydrology indicators present							

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
				mat Aic OBE, I AOW, OI I AO. (A)
2				Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 33.33333333 (A/B)
6				
7				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8				•
		= Total Cov		35 70
50% of total cover:	20% of	total cover	. 0	FACW species x 2 =
				FAC species10 x 3 =30
Sapling/Shrub Stratum (Plot size:)				FACU species 75 x 4 = 300
1				
2				UPL species x 5 =
				Column Totals:(A)(B)
3				、 , 、 ,
4				Prevalence Index = B/A =3.33
5				
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	0			3 - Prevalence Index is ≤3.0 ¹
_		= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover	0	
Herb Stratum (Plot size: 5)				1
1 Ambrosia artemisiifolia	30	V	EACH	¹ Indicators of hydric soil and wetland hydrology must
	30	Yes	FACU	be present, unless disturbed or problematic.
2. Setaria magna	25	Yes	FACW	Definitions of Four Vegetation Strata:
3. Sporobolus indicus	20	Yes	FACU	
		No		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Echinochloa crus-galli	10	INO	FACW	more in diameter at breast height (DBH), regardless of
5. Erigeron canadensis	10	No	FACU	height.
6				
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
9				of size, and woody plants less than 3.20 it tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				
12.				
	95	= Total Cov		
50% of total cover: 47.5	20% of	total cover	19	
Woody Vine Stratum (Plot size: 30)				
Treedy ville circulation (1 lot 6)26:			FACU	
1 Vitis aestivalis	10		FACU	
:-	10	Yes		
2. Toxicodendron radicans	10	Yes Yes	FAC	
		Yes	FAC	
3. Parthenocissus quinquefolia	10 5			
	10 5	Yes	FAC	
3. Parthenocissus quinquefolia	10 5	Yes	FAC	Hydrophytic
3. Parthenocissus quinquefolia 4	10 5	Yes Yes	FACU	Hydrophytic Vegetation
3. Parthenocissus quinquefolia 4 5	10 5 25	Yes Yes Total Cov	FACU FACU	Vegetation
3. Parthenocissus quinquefolia 4	10 5 25	Yes Yes	FACU FACU	
3. Parthenocissus quinquefolia 4 5 50% of total cover:12.5	10 5 25 20% of	Yes Yes Total Cov	FACU FACU	Vegetation
3. Parthenocissus quinquefolia 4 5	10 5 25 20% of	Yes Yes Total Cov	FACU FACU	Vegetation
3. Parthenocissus quinquefolia 4 5 50% of total cover:12.5	10 5 25 20% of	Yes Yes Total Cov	FACU FACU	Vegetation
3. Parthenocissus quinquefolia 4 5 50% of total cover:12.5	10 5 25 20% of	Yes Yes Total Cov	FACU FACU	Vegetation
3. Parthenocissus quinquefolia 4 5 50% of total cover:12.5	10 5 25 20% of	Yes Yes Total Cov	FACU FACU	Vegetation
3. Parthenocissus quinquefolia 4 5 50% of total cover:12.5	10 5 25 20% of	Yes Yes Total Cov	FACU FACU	Vegetation
3. Parthenocissus quinquefolia 4 5 50% of total cover:12.5	10 5 25 20% of	Yes Yes Total Cov	FACU FACU	Vegetation
3. Parthenocissus quinquefolia 4 5 50% of total cover:12.5	10 5 25 20% of	Yes Yes Total Cov	FACU FACU	Vegetation
3. Parthenocissus quinquefolia 4 5 50% of total cover:12.5	10 5 25 20% of	Yes Yes Total Cov	FACU FACU	Vegetation

SOIL Sampling Point: wsua074_u

Depth	cription: (Describe to Matrix			x Feature						
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remark	ks	
0-5	10YR 3/2	100					SL			
5-18	10YR 4/3	100					SL			
					-					
				-	·					
										
1- 0.0							2, ,,			
	concentration, D=Depl Indicators: (Application)					ains.		Pore Lining, M=M Problematic Hyd		
-		able to all L				DD 0 T 11		-	iic solis .	
Histoso			Polyvalue Be Thin Dark Su							
	pipedon (A2) listic (A3)		Loamy Muck					(A10) (LRR S) ertic (F18) (outsi d	de MLRA 150A,B)	
	en Sulfide (A4)		Loamy Gleye	-		. 0,		. , .	19) (LRR P, S, T)	
	d Layers (A5)		Depleted Ma		(- –)			Bright Loamy So		
	Bodies (A6) (LRR P,	T, U)	Redox Dark		- 6)		(MLRA 15		- ()	
-	ucky Mineral (A7) (LR		Depleted Da	rk Surface	e (F7)			Material (TF2)		
Muck P	resence (A8) (LRR U)	Redox Depre		(8)		Very Shallow Dark Surface (TF12)			
	uck (A9) (LRR P, T)		Marl (F10) (L				Other (Expl	ain in Remarks)		
	d Below Dark Surface	e (A11)	Depleted Oc	, ,	-	•	3			
	ark Surface (A12)	U DA 450A\	Iron-Mangan					of hydrophytic ve	-	
	Prairie Redox (A16) (N Mucky Mineral (S1) (L					, U)		hydrology must b isturbed or proble		
	Gleyed Matrix (S4)	.KK 0, 3)	Delta Ochric Reduced Ve			ΩΔ 150R)	uniess u	isturbed or proble	mauc.	
	Redox (S5)		Piedmont Flo				9A)			
-	d Matrix (S6)						A 149A, 153C, 153	D)		
	urface (S7) (LRR P, S	, T, U)	_	J	, (- / (,,	,		
Restrictive	Layer (if observed):									
Type: no	one									
	iches):						Hydric Soil Pres	ent? Yes	No	
Remarks:	,									



Photo 1 Upland data point wsua074_u facing southwest



Photo 2
Upland data point wsua074_u facing northeast

Project/Site: Atlantic Coast Pipeline		City/C	County: City of S	Suffolk		_ Sampling Dat	te: 9/19/2015
Applicant/Owner: Dominion	s	tate: VA	Sampling Poi	nt: wsua073f_w			
		Section					
Landform (hillslope terrace etc.): flat		Local	relief (concave	convex n	one) microtopo	ography s	Slone (%): 1
Subregion (LRR or MLRA): T		1 at: 36.66712486)	Long76	6.78578656	_ -	Datum: WGS 1984
Soil Map Unit Name: Rains fine sandy loam		Lat		Long	NIMI classifi	ication: PFO4A	Datum.
Are climatic / hydrologic conditions on the site	t migal for	- this time of year? V	_				
							✓ Na
Are Vegetation, Soil, or Hydro							
Are Vegetation, Soil, or Hydro						ers in Remarks.	
SUMMARY OF FINDINGS – Attac	ı site ma	ap showing sam	npling point	location	ns, transect	s, important	t features, etc.
Hydrophytic Vegetation Present? Y	Hydrophytic Vegetation Present?			od ∆rea			
			Is the Sample within a Wetla		Yes •	/ No	
Wetland Hydrology Present? Y Remarks:	es <u>/</u>	No	W.W.III & 1.4	ui.u.			
HYDROLOGY							
Wetland Hydrology Indicators:	l -baak	9.0 (-		-	of two required)
Primary Indicators (minimum of one is requ					Surface Soi	, ,	O ((DO)
Surface Water (A1)		atic Fauna (B13)	חות	-			ve Surface (B8)
High Water Table (A2) Saturation (A3)		I Deposits (B15) (LRF rogen Sulfide Odor (C		-	Drainage Pa Moss Trim I	atterns (B10) Lines (B16)	
Water Marks (B1)	-	dized Rhizospheres a		ots (C3)		n Water Table (0	C2)
Sediment Deposits (B2)		sence of Reduced Iron			Crayfish Bu		<i>5</i> 2,
Drift Deposits (B3)		ent Iron Reduction in		s) _		√isible on Aerial	Imagery (C9)
Algal Mat or Crust (B4)	Thin	Muck Surface (C7)		· -	Geomorphic Position (D2)		
Iron Deposits (B5)		er (Explain in Remark	(s)	-	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B	7)			FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)				-	Sphagnum	moss (D8) (LRF	R T, U)
Field Observations: Surface Water Present? Yes	NIO V	Depth (inches):					
		Depth (inches):					
		Depth (inches):		Vetland Hy	drology Prese	ent? Yes	No
(includes capillary fringe)				•		:III: 165	
Describe Recorded Data (stream gauge, m	nitoring w	ell, aerial photos, pre	vious inspection	ns), if avail	able:		
Remarks:							

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1 Pinus taeda	60	Yes	FAC	That Are OBL, FACW, or FAC: 7 (A)
2. Liquidambar styraciflua	5	No	FAC	matric obe, thow, of the
3. Quercus nigra	3	No		Total Number of Dominant
3. Quercus riigia			FAC	Species Across All Strata: 7 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				(*=/
7				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8	68			OBL species0 x 1 =0
24		= Total Cov		FACW species 33 x 2 = 66
50% of total cover:34	20% of	total cover:	13.6	404 400
Sapling/Shrub Stratum (Plot size: 15)				FAC species $\frac{161}{0}$ x 3 = $\frac{483}{0}$
1. Clethra alnifolia	25	Yes	FACW	FACU species X 4 =
2. Ilex opaca	10	Yes	FAC	UPL species0 x 5 =0
3. Symplocos tinctoria	10	Yes	FAC	Column Totals:194 (A)549 (B)
	10	Yes	FAC	
4. Liquidambar styraciflua				Prevalence Index = B/A =
5. Vaccinium corymbosum	5	No	FACW	Hydrophytic Vegetation Indicators:
6. Acer rubrum	5	No	FAC	1 - Rapid Test for Hydrophytic Vegetation
7 Quercus nigra	5	No	FAC	
8. Pinus taeda		No	FAC	2 - Dominance Test is >50%
8	78			3 - Prevalence Index is ≤3.0 ¹
20		= Total Cov	450	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 39	20% of	total cover:	15.6	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1				be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
				Definitions of Four Vegetation Strata.
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				and one born and ground and one in (1 m) tame
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11.				height.
12.				
12.	0			
0		= Total Cov	•	
50% of total cover:0	20% of	total cover:		
Woody Vine Stratum (Plot size:)				
1. Smilax rotundifolia	30	Yes	FAC	
2 Vitis rotundifolia	10	Yes	FAC	
	8	No	FAC	
3. Geisemium sempervirens				
4				
5				Hydrophytic
	48	= Total Cov	er	Vegetation
50% of total cover: 24		total cover:	~ ~	Present? Yes No
·		total cover.		
Remarks: (If observed, list morphological adaptations below	v).			

SOIL Sampling Point: wsua073f_w

Profile Desc	cription: (Describe t	o the depth	n needed to docum	nent the i	indicator	or confirm	the absence of in	dicators.)
Depth	Matrix	%		x Feature		Loc ²	Texture	Remarks
(inches) 0-5	Color (moist) 10YR 3/2	100	Color (moist)	<u></u> %	Type ¹	LOC	SL	Remarks
5-10	10YR 4/2	100					SCL	
10-20	10YR 5/2	95	10YR 5/6	5	C	PL/M	SCL	
Type: C=C Hydric Soil Histosol Histic E Black H Hydroge Stratifier Organic 5 cm Mu Muck Pi 1 cm Mu Deplete Thick Di Coast P Sandy N Sandy N Sandy F Stripped Dark Su Restrictive	oncentration, D=Depl Indicators: (Application) (A1) Dipedon (A2) Sistic (A3) En Sulfide (A4) Cd Layers (A5) Bodies (A6) (LRR P, Jucky Mineral (A7) (LR Pesence (A8) (LRR P, T) Cd Below Dark Surface Surface (A12) Trairie Redox (A16) (No Mucky Mineral (S1) (LO Gleyed Matrix (S4) Redox (S5) I Matrix (S6) I Matrix (S6) I fface (S7) (LRR P, S Layer (if observed):	T, U) R P, T, U) (A11) (ILRA 150A) RR O, S)	Reduced Matrix, MS RRs, unless other Polyvalue Be Thin Dark Su Loamy Mucky Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Marl (F10) (L Depleted Och Iron-Mangane Umbric Surfa Delta Ochric Reduced Ver Piedmont Flo	S=Masked rwise not low Surfa rface (S9 y Mineral ed Matrix (trix (F3) Surface (F ek Surface essions (F RR U) nric (F11) ese Mass ce (F13) ((F17) (ML tic (F18) (d Sand Graed.) (ce (S8) (L) (LRR S, (F1) (LRR (F2) (MLRA 15) (LRR P, TLRA 151) (MLRA 15)	ains. RR S, T, U T, U) O) OA, 150B) (MLRA 145	² Location: PL= Indicators for F) 1 cm Muck 2 cm Muck Reduced Ve Piedmont F Anomalous (MLRA 15 Red Parent Very Shallo Other (Explications) Wetland unless d	(A10) (LRR S) ertic (F18) (outside MLRA 150A,B) loodplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20) 53B) Material (TF2) w Dark Surface (TF12) ain in Remarks) s of hydrophytic vegetation and hydrology must be present, isturbed or problematic. D)



Photo 1 Wetland data point wsua073f_w facing norhtwest



Photo 2
Wetland data point wsua073f_w facing southwest

Project/Site: Atlantic Coast Pipeline	City/County: City c	of Suffolk	_ Sampling Date: 9/19/2015			
Applicant/Owner: Dominion	City/County: City c	State: VA	Sampling Point: wsua073_u			
	Section, Township					
Landform (hillslope, terrace, etc.): flat						
Subregion (LRR or MLRA): T						
Soil Map Unit Name: Rains fine sandy loam		NWI classif				
Are climatic / hydrologic conditions on the site typic						
Are Vegetation, Soil, or Hydrology						
Are Vegetation, Soil, or Hydrology		(If needed, explain any answ	•			
SUMMARY OF FINDINGS – Attach sit	e map snowing sampling pol	nt locations, transect	s, important features, etc.			
	No Is the Sam	pled Area				
	No V within a W	•	No 🗸			
Wetland Hydrology Present? Yes Remarks:	No					
Upland data point for a seasonally-saturated PFO						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indic	cators (minimum of two required)			
Primary Indicators (minimum of one is required; of	heck all that apply)	Surface Soi				
	Aquatic Fauna (B13)		egetated Concave Surface (B8)			
	Marl Deposits (B15) (LRR U)		atterns (B10)			
	Hydrogen Sulfide Odor (C1)	Moss Trim				
· · ·	Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4)		Dry-Season Water Table (C2) Crayfish Burrows (C8)			
	Recent Iron Reduction in Tilled Soils (Saturation Visible on Aerial Imagery (C9)			
	Thin Muck Surface (C7)		Geomorphic Position (D2)			
	Other (Explain in Remarks)	Shallow Aq	, ,			
Inundation Visible on Aerial Imagery (B7)	,	FAC-Neutra				
Water-Stained Leaves (B9)			moss (D8) (LRR T, U)			
Field Observations:						
Surface Water Present? Yes No	Depth (inches):					
Water Table Present? Yes No	Depth (inches):					
	Depth (inches):	Wetland Hydrology Prese	ent? Yes No			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous inspec	tions), if available:				
Remarks:						
no hydrology indicators present						

00	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1	% Cover 40	Species?		Number of Dominant Species
Ouereus nieve	5	Yes No	FAC FAC	That Are OBL, FACW, or FAC:4 (A)
2. Quercus nigra 3 Liquidambar styraciflua		No	FAC	Total Number of Dominant
4. Quercus alba		No	FACU	Species Across All Strata: 6 (B)
5. Acer rubrum		No	FAC	Percent of Dominant Species
•			170	That Are OBL, FACW, or FAC: 66.6666666 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	60			OBL species 0 x 1 = 0
EON/ of total covers 30		= Total Cov	12	FACW species9 x 2 =18
50% of total cover: 50% of total cover: 15	20% 01	total cover:		FAC species132 x 3 =396
Sapling/Shrub Stratum (Plot size:15) 1 Liquidambar styraciflua	10	Yes	FAC	FACU species40
2. Quercus alba	10	Yes	FACU	UPL species0 x 5 =0
3. Quercus nigra	8	Yes	FAC	Column Totals:181(A)574(B)
4. Oxydendrum arboreum	6	No	FACU	2.47
5. Symplocos tinctoria	5	No	FAC	Prevalence Index = B/A =3.17
6. Clethra alnifolia	5	No	FACW	Hydrophytic Vegetation Indicators:
7 Vaccinium corymbosum	4	No	FACW	1 - Rapid Test for Hydrophytic Vegetation
8. Prunus serotina	4	No	FACU	2 - Dominance Test is >50%
0	56	= Total Cov		3 - Prevalence Index is ≤3.0¹
50% of total cover: 28		total cover:	44.0	Problematic Hydrophytic Vegetation ¹ (Explain)
50 % of total cover	20 /0 01	total cover.	·	
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1				Definitions of Four Vegetation Strata:
2				Definitions of Four Vegetation Strata.
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
v				of size, and woody plants less than size it tall.
10				Woody vine – All woody vines greater than 3.28 ft in
12.				height.
12.	0	= Total Cov		
50% of total cover:		total cover:	^	
Woody Vine Stratum (Plot size: 30)	20 /0 01	total cover.	·	
1. Smilax rotundifolia	40	Yes	FAC	
2 Vitis aestivalis	15	Yes	FACU	
3. Vitis rotundifolia	10	No	FAC	
5	65	= Total Cov		Hydrophytic Vegetation
50% of total cover:32.5		total cover:	40	Present? Yes No
		total cover.		
Remarks: (If observed, list morphological adaptations below	W).			

SOIL Sampling Point: wsua073_u

Profile Desc	cription: (Describe t	o the depth	needed to docui	ment the	indicator	or confirm	the absence of in-	dicators.)	
Depth	Matrix			x Feature	1	1 2	T4	5 .	_
(inches) 0-5	Color (moist) 10YR 3/2	100	Color (moist)	%	Type'	Loc ²	Texture SL	Remarks	<u>S</u>
5-11	10YR 4/2	100					SL		
11-20	10YR 5/3	100		_			SCL		
									_
									_
¹Type: C=C	oncentration, D=Depl	etion, RM=Re	educed Matrix, M	S=Masked	d Sand Gr	ains.	² Location: PL=F	Pore Lining, M=Ma	atrix.
	Indicators: (Applica							roblematic Hydri	
Histosol			Polyvalue Be						
	pipedon (A2) istic (A3)		Thin Dark Sι Loamy Muck					(A10) (LRR S) ertic (F18) (outsid e	o MI DA 150A B)
	en Sulfide (A4)		Loamy Gleye	-		. 0)		oodplain Soils (F1	
	d Layers (A5)		Depleted Ma		,			Bright Loamy Soil	
_	Bodies (A6) (LRR P,		Redox Dark	•	,		(MLRA 15		
	ucky Mineral (A7) (LR esence (A8) (LRR U)		Depleted Da Redox Depre		, ,			Material (TF2) w Dark Surface (T	E12\
	uck (A9) (LRR P, T)	1	Nedox Depre Marl (F10) (L		0)			ain in Remarks)	112)
	d Below Dark Surface	e (A11)	Depleted Oc		(MLRA 1	51)	<u> </u>	,	
	ark Surface (A12)		Iron-Mangan					of hydrophytic ve	
	rairie Redox (A16) (N ⁄lucky Mineral (S1) (L		Umbric Surfa Delta Ochric			, U)		nydrology must be sturbed or probler	
	Gleyed Matrix (S4)	KK 0, 3)	Reduced Ve			0A, 150B)	uniess ui	sturbed or probler	nauc.
	Redox (S5)		Piedmont Flo				9A)		
	l Matrix (S6)		Anomalous E	Bright Loa	my Soils (F20) (MLR	A 149A, 153C, 153I	D)	
	rface (S7) (LRR P, S Layer (if observed):	, T, U)					<u> </u>		
Type: no									
	ches):						Hydric Soil Pres	ent? Yes	No 🗸
Remarks:			_						
l									



Photo 1 Upland data point wsua073_u facing south



Photo 2 Upland data point wsua073_u facing north

Project/Site: Atlantic Coast Pipeline		City/C	ounty: City of Suffolk	(Sampling Date: 9/18/2015			
Applicant/Owner: DOMINION				State: VA	Sampling Date: 9/18/2015 Sampling Point: wsuc101f_w1			
Investigator(s): Team C Section, Township, Range: No PLSS in this area								
Landform (hillslope, terrace, etc.): Basin					Slope (%): 2			
					Datum: WGS 1984			
Soil Map Unit Name: Rains fine sandy loa				NWI cla	ssification: PEM1E, PSS1/FO1C,			
Are climatic / hydrologic conditions on the		this time of year? V						
Are Vegetation, Soil, or H								
Are Vegetation, Soil, or H	ydrology	_ naturally problema	itic? (If neede	d, explain any a	nswers in Remarks.)			
SUMMARY OF FINDINGS – Att	ach site ma	p showing sam	pling point loca	tions, transe	ects, important features, etc.			
Hydrophytic Vegetation Present?	Yes 🔽	No	In the Committed Am	_				
Hydric Soil Present?	Yes 🗸		Is the Sampled Are		V 11-			
Wetland Hydrology Present?	Yes 🗸		within a Wetland?	res .	No			
Remarks:								
Large basin wetland which is a mosaic w	ith some uplan	d sections scattered	throughout.					
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary I	ndicators (minimum of two required)			
Primary Indicators (minimum of one is re	equired; check	all that apply)			Soil Cracks (B6)			
Surface Water (A1)		itic Fauna (B13)			y Vegetated Concave Surface (B8)			
High Water Table (A2)		Deposits (B15) (LRF	R U)		e Patterns (B10)			
Saturation (A3)		ogen Sulfide Odor (C			rim Lines (B16)			
Water Marks (B1)	-	-	long Living Roots (C3		ason Water Table (C2)			
Sediment Deposits (B2)		ence of Reduced Iron		-	n Burrows (C8)			
Drift Deposits (B3)		ent Iron Reduction in			Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Muck Surface (C7)	` .		Geomorphic Position (D2)			
Iron Deposits (B5)		r (Explain in Remark	s)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imager			-,		eutral Test (D5)			
Water-Stained Leaves (B9)	, ,				um moss (D8) (LRR T, U)			
Field Observations:								
Surface Water Present? Yes	No	Depth (inches):						
		Depth (inches):						
		Depth (inches): 10	Wetlan	nd Hydrology Present? Yes 🗸 No				
(includes capillary fringe)								
Describe Recorded Data (stream gauge	e, monitoring we	ell, aerial photos, pre	vious inspections), if	available:				
Remarks:								
Wetland hydrology present								

00	Absolute	Dominant	Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size:)		Species?	Status	Number of Dominant Species	
1. Acer rubrum	35	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)	(،
2. Quercus nigra	30	Yes	FAC	Total Number of Dominant	
3. Ilex opaca	10	No	FAC	Species Across All Strata: 5 (B)	3)
4.					,
5.				Percent of Dominant Species That Are OBL FACW or FAC: 100	(D)
				That Are OBL, FACW, or FAC: 100 (A)	/B)
6				Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	
8	75		-	OBL species3 x 1 =3	
27.5		= Total Cove		FACW species75	
50% of total cover:37.5	20% of	total cover:	15	00 240	
Sapling/Shrub Stratum (Plot size: 15)				FAC species 0 $x = 0$	
1. Gordonia lasianthus	5	Yes	FACW	FACU species x 4 =	
2. Ilex opaca	5	Yes	FAC	UPL species $\frac{0}{158}$ $x = \frac{0}{393}$	
3.				Column Totals:(A)(B	(B)
4.				Prevalence Index = R/A = 2.48	
				Trevalence mack Birt	
5				Hydrophytic Vegetation Indicators:	
6			-	1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8				3 - Prevalence Index is ≤3.0 ¹	
	10	= Total Cove	er	Problematic Hydrophytic Vegetation ¹ (Explain)	
50% of total cover:5	20% of	total cover:	2		
Herb Stratum (Plot size:5				¹ Indicators of hydric soil and wetland hydrology must	+
1 Arundinaria gigantea	70	Yes	FACW	be present, unless disturbed or problematic.	
2. Eleocharis obtusa	3	No	OBL	Definitions of Four Vegetation Strata:	
				Definitions of Four Pogetation Grada.	
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm)	
4				more in diameter at breast height (DBH), regardless	of
5				height.	
6				Sapling/Shrub – Woody plants, excluding vines, les	ss
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8				Herb – All herbaceous (non-woody) plants, regardles	
9				of size, and woody plants less than 3.28 ft tall.	55
10					
				Woody vine – All woody vines greater than 3.28 ft in	n
				height.	
12	73				
36.5		= Total Cove			
50% of total cover: 36.5	20% of	total cover:	14.0		
Woody Vine Stratum (Plot size:)					
1					
2					
3					
4.					
5					
J		= Total Cove		Hydrophytic Vegetation	
500/ (1.1.)				Present? Yes No	
50% of total cover: 0		total cover:			
Remarks: (If observed, list morphological adaptations below	w).				

SOIL Sampling Point: wsuc101f_w1

Depth (inches)						01 0011111111	the absence of	indicators.)
	Matrix Color (moist)	%	Color (moist)	x Feature %	s Type ¹	Loc²	Texture	Remarks
0-11	10 YR 2/2	100					SL	
11-18	10 YR 5/1	98	10 YR 6/6	2	С	PL		
				-				
				-				
				-				
1							2	
	oncentration, D=Deple Indicators: (Applica					ains.		L=Pore Lining, M=Matrix. or Problematic Hydric Soils ³ :
Histosol		bic to an	Polyvalue Be			RRSTU		ck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					ck (A10) (LRR S)
· ·	istic (A3)		Loamy Muck					Vertic (F18) (outside MLRA 150A
	en Sulfide (A4)		Loamy Gleye		(F2)		Piedmon	t Floodplain Soils (F19) (LRR P, S ,
	d Layers (A5)		Depleted Ma	. ,				ous Bright Loamy Soils (F20)
_	Bodies (A6) (LRR P,		Redox Dark	•	,			A 153B)
	ucky Mineral (A7) (LR l resence (A8) (LRR U)		Depleted Dai Redox Depre					ent Material (TF2) allow Dark Surface (TF12)
	uck (A9) (LRR P, T)		Redox Depre		0)			xplain in Remarks)
· ——	d Below Dark Surface	(A11)	Depleted Ocl		(MLRA 1	51)	outer (E	xpiair ir remarks)
	ark Surface (A12)	(Iron-Mangan				T) ³ Indicat	ors of hydrophytic vegetation and
Coast P	rairie Redox (A16) (M	LRA 150 <i>A</i>	A) Umbric Surfa	ce (F13)	(LRR P, T	, U)	wetla	nd hydrology must be present,
-	/lucky Mineral (S1) (Ll	RR O, S)	Delta Ochric				unles	s disturbed or problematic.
-	Gleyed Matrix (S4)		Reduced Ver					
-	Redox (S5)		Piedmont Flo					(52D)
	l Matrix (S6) rface (S7) (LRR P, S,	T 11\	Anomalous E	sright Loa	my Solis (-20) (NILR	A 149A, 153C, 1	153D)
	Layer (if observed):	1, 0)					I	
Type:	_ayo: (oboo: roa):							
• • •	ches):						Hydric Soil P	resent? Yes No
Remarks:							1.7	
Hydric soil pr	esent							
riyano con pr	ocom							



Photo 1
Wetland data point wsuc101f_w1 facing north



Photo 2
Wetland data point wsuc101f_w1 facing east

Project/Site: Atlantic Coast Pipeline		City/County: City of Suffolk Sampling Date: 9/19/2015					
Applicant/Owner: DOMINION			State: VA	Sampling Point: wsuc101f_w2			
••	nvestigator(s): Team C Section, Township, Range:						
Landform (hillslope, terrace, etc.): Basin							
Subregion (LRR or MLRA): T							
Soil Map Unit Name: Rains fine sandy loar		cation: PEM1E, PSS1/FO1C,					
		- 41-1- 41					
Are climatic / hydrologic conditions on the s							
Are Vegetation, Soil, or Hyd							
Are Vegetation, Soil, or Hyd	drology	naturally problema	atic? (If needed	, explain any answ	ers in Remarks.)		
SUMMARY OF FINDINGS – Atta	ch site m	ap showing sam	pling point locat	ions, transect	s, important features, etc.		
Hydrophytic Vegetation Present?	No	la tha Oammia d Ama					
		No	Is the Sampled Area within a Wetland?		No		
Wetland Hydrology Present?	Yes 🔽	No	within a wetland?	res	NO		
Remarks:							
Wetland within a large basin system							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is rec				Surface Soi	, ,		
Surface Water (A1)		atic Fauna (B13)			egetated Concave Surface (B8)		
High Water Table (A2)		Deposits (B15) (LRF			atterns (B10)		
Saturation (A3)	-	rogen Sulfide Odor (0		Moss Trim I			
Water Marks (B1) Sediment Deposits (B2)		sence of Reduced Iro	long Living Roots (C3)	Dry-Seasor Crayfish Bu	Water Table (C2)		
Drift Deposits (B3)		ent Iron Reduction in		-	/isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Muck Surface (C7)	Tilled Collo (CO)	✓ Geomorphic			
Iron Deposits (B5)		er (Explain in Remark	(S)	Shallow Aq			
Inundation Visible on Aerial Imagery		` '	,	✓ FAC-Neutra			
Water-Stained Leaves (B9)				Sphagnum	moss (D8) (LRR T, U)		
Field Observations:							
Surface Water Present? Yes	_ No	Depth (inches):					
Water Table Present? Yes	_ No	Depth (inches):					
	_ No _ 🗸	Depth (inches):	Wetland	and Hydrology Present? Yes <u>✓</u> No			
(includes capillary fringe) Describe Recorded Data (stream gauge,	monitorina w	ell. aerial photos, pre	vious inspections), if a	vailable:			
33.,	3	- , , -	.,,				
Remarks:							
Wetland hydrology present							

••	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Liquidambar styraciflua	15	Yes	FAC	That Are OBL, FACW, or FAC:8 (A)
2. Acer rubrum	10	Yes	FAC	Total Number of Dominant
3. Quercus nigra	10	Yes	FAC	Species Across All Strata: 8 (B)
4. Pinus taeda	3	No	FAC	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				That / (10 0 bz., 17 to w, 01 17 to
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	38	= Total Cov	er	OBL species x 1 =20
50% of total cover:19		total cover:	7.6	FACW species 37 x 2 = 74
Sapling/Shrub Stratum (Plot size: 15)	2070 01	total cover.	·	FAC species133
1. Gordonia lasianthus	10	Yes	FACW	FACU species0 x 4 =0
1	7	Yes	FAC	UPL species0 x 5 =0
2. Acer rubrum 3. Rubus argutus	5	Yes	FAC	Column Totals:190 (A)493 (B)
4. Pinus taeda	3	No	FAC	.,,
· ·				Prevalence Index = B/A =2.59
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 12.5	20% of	total cover:	5	
Herb Stratum (Plot size: 5				¹ Indicators of hydric soil and wetland hydrology must
1. Panicum capillare	50	Yes	FAC	be present, unless disturbed or problematic.
2. Andropogon virginicus	30	Yes	FAC	Definitions of Four Vegetation Strata:
3. Arundinaria gigantea	15	No	FACW	- W
4. Carex prasina	10	No	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. Eleocharis obtusa	10	No	OBL	height.
6. Ilex coriacea	7	No	FACW	Continue/Charaka Mandaunta avaluation vinas lass
7. Dichanthelium clandestinum	5	No	FACW	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
			-	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
· ·				of size, and woody plants less than 5.20 it tall.
10	-			Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	107			
62.5		= Total Cov	0- 4	
50% of total cover:63.5	20% of	total cover:	25.4	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
	0 :	= Total Cov	er	Vegetation
50% of total cover:0	20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations below	w).			
	,			

SOIL Sampling Point: wsuc101f_w2

Depth	cription: (Describe t Matrix			x Features				,
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
9-18	5 Y 6/1		YR 4/6	2	C	PL	SL	
-				·				
-								
-								
				·				
¹ Type: C=0	oncentration, D=Depl	etion, RM=Re	duced Matrix, MS	S=Masked	Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	able to all LRF	Rs, unless other	wise note	ed.)		Indicators t	for Problematic Hydric Soils ³ :
Histoso	I (A1)		Polyvalue Be	low Surfac	ce (S8) (L	.RR S, T, U	1 cm M	luck (A9) (LRR O)
	pipedon (A2)	-	Thin Dark Su					luck (A10) (LRR S)
	istic (A3)	_	Loamy Mucky					ed Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)	_	Loamy Gleye			,		ont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	-	Depleted Mat		/			lous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P,	T. U)	Redox Dark S	. ,	6)			RA 153B)
_	ucky Mineral (A7) (LR		Depleted Dar	•	,			arent Material (TF2)
· 	resence (A8) (LRR U)		Redox Depre					hallow Dark Surface (TF12)
	uck (A9) (LRR P, T)	_	Marl (F10) (L		-,		-	Explain in Remarks)
	d Below Dark Surface	- (A11)	Depleted Och		(MLRA 1	51)	0.1101 (1	explain in Formanie,
	ark Surface (A12)	_	Iron-Mangane	, ,	•	•	r) ³ Indica	ators of hydrophytic vegetation and
	Prairie Redox (A16) (N	II RA 150A)	Umbric Surfa				•	and hydrology must be present,
	Mucky Mineral (S1) (L		Delta Ochric			, •,		ess disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ver			0Δ 150R)	anic	os distarbed of problematio.
	Redox (S5)	_	Piedmont Flo				9Δ)	
-	d Matrix (S6)	_					л, \ 149A, 153C,	153D)
	urface (S7) (LRR P, S	T II)	/ Womalous B	rigini Loui	ny cono (1 20) (III EI (7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1002)
	Layer (if observed):	, 1, 0)						
Type:			=					~
Depth (ir	iches):		_				Hydric Soil I	Present? Yes No
Remarks:								
Hydric soi pr	esent							
,								



Photo 1
Wetland data point wsuc101f_w2 facing south



Photo 2
Wetland data point wsuc101f_w2 facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region City/County: Suffolk Project/Site: ACP Sampling Point: 4546 Applicant/Owner: DOMINION Section, Township, Range: None Landform (hillslope, terrace, etc.): interstream flat Local relief (concave, convex, none): None Lat: 36. 66644 Long: -76. Subregion (LRR or MLRA): LR Soil Map Unit Name: Pains NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes __ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes ___ significantly disturbed? Are Vegetation _____, Soil _____, or Hydrology ____ 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? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Sparsely Vegetated Concave Surface (B8) Aquatic Fauna (B13) Surface Water (A1) Drainage Patterns (B10) Marl Deposits (B15) (LRR U) High Water Table (A2) Moss Trim Lines (B16) Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Water Marks (B1) Crayfish Burrows (C8) Presence of Reduced Iron (C4) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Recent Iron Reduction in Tilled Soils (C6) Drift Deposits (B3) Geomorphic Position (D2) Thin Muck Surface (C7) Algal Mat or Crust (B4) Shallow Aquitard (D3) Other (Explain in Remarks) Iron Deposits (B5) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Sphagnum moss (D8) (LRR T, U) Water-Stained Leaves (B9) Field Observations: Yes ____ No __/ Depth (inches): Surface Water Present? Yes No Depth (inches): Water Table Present? Wetland Hydrology Present? Yes No ___ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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

25/25	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30 x30) 1. Pinus tae da	50	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
2. Liquidantsar styraciflua			FAC	Total Number of Dominant Species Across All Strata:	(B)
4				Remont of Deminent Species) (A/B)
6					_ (,,,,
7				Prevalence Index worksheet:	
8.				Total % Cover of: Multiply by	
		= Total Cov	/er	OBL species x 1 =	- Committee of the Comm
50% of total cover: 25				FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30 x30)	20,000	total octo		FAC species x 3 =	
1. Liquidambar styraciflua	10	V	FAC.	FACU species x 4 =	
_ ()			1110	UPL species x 5 =	
			A STATE OF THE STA	Column Totals: (A)	(B)
3.			CONTRACTOR OFFICE CONTRACTOR		
4			S 96	Prevalence Index = B/A =	
5			-9 (1111)	Hydrophytic Vegetation Indicators:	
6				1 Rapid Test for Hydrophytic Vegetatio	n
7.				2 - Dominance Test is >50%	
8				3 - Prevalence Index is ≤3.01	100
		= Total Co		Problematic Hydrophytic Vegetation¹ (E:	xplain)
50% of total cover:	20% 0	f total cove	:_2		
Herb Stratum (Plot size: 30 x30)				¹ Indicators of hydric soil and wetland hydrolo	oav must
1. Acer rubrum	10	V	FAC	be present, unless disturbed or problematic.	,g,act
2. Arundinaria gigantea	10	y	FACW	Definitions of Four Vegetation Strata:	1912
3.		-			
the second section of the second seco	Arrest pro-			Tree - Woody plants, excluding vines, 3 in.	
4				more in diameter at breast height (DBH), reg	gardiess of
5	-			Tro-grad.	
6				Sapling/Shrub - Woody plants, excluding v	rines, less
7.		-		than 3 in. DBH and greater than 3.28 ft (1 m	i) tall.
8				Herb - All herbaceous (non-woody) plants,	regardless
9				of size, and woody plants less than 3.28 ft to	all.
10				Woody vine - All woody vines greater than	3.28 ft in
11	AND SHAPE OF SHAPE OF			height.	
12					
	20	= Total Co	over		
50% of total cover:10	_	of total cove	11	20 00	=
Woody Vine Stratum (Plot size: 30 x30)					
					4 1
1. none				8	
2	-				* n " =
3					11
4					
5				Hydrophytic /	
	_0	_ = Total C	over	Vegetation	
50% of total cover:	20%	of total cov	er:	Present? Yes No	_
Remarks: (If observed, list morphological adaptations be	elow).				
	0.00				
an 11 0					
				1, 1	
and the second s					

Profile Desc	ription: (Describe	to the depth i			dicator	or confirm	the absence of inc	dicators.)
Depth	Matrix Color (majet)			Features	Type	Loc²	Toyturo	Remarks
(inches)	Color (moist)	<u>%</u> _	Color (moist)	%	Type ¹	LUC	Texture	Menigiva
0-4	213111	100			_		FS_	
4-6	2,5 45/3	95 11	04R 5/6	5	6	PL	5	
1-70	2.5 44/2	96 1	0 YR 5/4	6	C	PI	5	
10-60	610 / 1/6	10 1	Olacio			1 405		
Histosol Histic E Black H Hydroge Stratifle Organic 5 cm Mi Muck P 1 cm M Deplete	oncentration, D=Deplindicators: (Applied (A1)) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) e Bodies (A6) (LRR Foucky Mineral (A7) (Loresence (A8) (LRR P, T) ed Below Dark Surface (A12)	cable to all LR P, T, U) RR P, T, U) J)		wise note low Surface rface (S9) r Mineral (I d Matrix (F rix (F3) Surface (F6 k Surface ssions (F8 RR U)	d.) e (S8) (L (LRR S, F1) (LRR F2) 6) (F7)	RR S, T, U T, U) O)	Indicators for P 1 cm Muck 2 cm Muck Reduced Verent Piedmont F Anomalous (MLRA 1: Red Parent Very Shallo Other (Expl	Pore Lining, M=Matrix. Problematic Hydric Soils ³ : (A9) (LRR O) (A10) (LRR S) ertic (F18) (outside MLRA 150A,B) loodplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20) 53B) Material (TF2) w Dark Surface (TF12) lain in Remarks) s of hydrophytic vegetation and
Coast F Sandy I Sandy Sandy Sandy Strippe Dark Strippe	Prairie Redox (A16) (Mucky Mineral (S1) (Gleyed Matrix (S4) (Redox (S5) (d Matrix (S6) (urface (S7) (LRR P, Layer (if observed	(LRR O, S) S, T, U)	Umbric Surfa Delta Ochric Reduced Vei Piedmont Flo	ce (F13) ((F17) (ML tic (F18) (oodplain So	LRR P, T RA 151) MLRA 15 Dils (F19)	, U) 50A, 150B) (MLRA 14	wetland unless d	hydrology must be present, listurbed or problematic.
Type: Depth (is	nches):		-				Hydric Soil Pre	sent? Yes No
Remarks:	iches).		_				11,411.00.11.10	

Environmental Field Surveys Wetland Photo Page



Wetland data point wsuc101f_w facing northeast.

Project/Site: Atlantic Coast Pipeline	City/0	County: City of Suffolk		Sampling Date: 9/18/2015	
Applicant/Owner: DOMINION	City/0		State: VA	Sampling Point: wsuc101e_w	
	Secti				
Landform (hillslope, terrace, etc.): Depres					
	Lat: 36.67094561				
Soil Map Unit Name: Rains fine sandy loa			NWI classific	ation: PEM1E, PSS1A	
Are climatic / hydrologic conditions on the					
Are Vegetation, Soil, or Hy					
Are Vegetation, Soil, or Hy					
SUMMARY OF FINDINGS – Atta	ach site map showing san	npling point locatio	ons, transects	, important features, etc.	
Hydrophytic Vegetation Present?	Yes No	Is the Sampled Area			
Hydric Soil Present?	Yes No	within a Wetland?	Yes 🗸	No	
Wetland Hydrology Present? Remarks:	Yes No				
Wetland located with a small depression/					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of two required)	
Primary Indicators (minimum of one is re	equired; check all that apply)		✓ Surface Soil	Cracks (B6)	
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Marl Deposits (B15) (LR		Drainage Pat		
Saturation (A3)	Hydrogen Sulfide Odor (Moss Trim Li		
Water Marks (B1)	Oxidized Rhizospheres aPresence of Reduced Iro		-	Water Table (C2)	
Sediment Deposits (B2) Drift Deposits (B3)	Recent Iron Reduction in		Crayfish Burr	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Thin Muck Surface (C7)	Tilled Collo (CO)	✓ Geomorphic		
Iron Deposits (B5)	Other (Explain in Remark	ks)	Shallow Aqui		
Inundation Visible on Aerial Imagery		,	FAC-Neutral	` '	
Water-Stained Leaves (B9)			Sphagnum m	noss (D8) (LRR T, U)	
Field Observations:					
	No Depth (inches):				
·	No Depth (inches):				
Saturation Present? Yes (includes capillary fringe)	No Depth (inches):	Wetland F	lydrology Presen	t? Yes <u>/</u> No	
Describe Recorded Data (stream gauge,	, monitoring well, aerial photos, pre	evious inspections), if ava	ilable:		
Remarks: Wetland hydrology present					

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				
5.				Percent of Dominant Species That Are ORL FACILITIES 100 (A/R)
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 = 40
0	0	= Total Cov		20 40
50% of total cover:0	20% of	total cover:	0	FACW species x 2 = 40 120
Sapling/Shrub Stratum (Plot size:)				FAC species $\frac{40}{0}$ x 3 = $\frac{120}{0}$
1				FACU species x 4 =
2.				UPL species x 5 =
3.				Column Totals:(A)(B)
4				Prevalence Index = B/A =2
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is ≤3.0 ¹
	0	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:		total cover:	•	Problematic Hydrophytic vegetation (Explain)
		10101 00101.		
Herb Stratum (Plot size: 5 1 Panicum capillare	40	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must
·	40			be present, unless disturbed or problematic.
2. Eleocharis palustris		Yes	OBL	Definitions of Four Vegetation Strata:
3. Arundinaria gigantea	20	Yes	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6.		·		Sapling/Shrub – Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	100	= Total Cov	er	
50% of total cover: 50		total cover:		
Woody Vine Stratum (Plot size: 30)				
/ 100 d. 1110				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:0				Present? Yes No
Remarks: (If observed, list morphological adaptations belo				
Remarks. (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wsuc101e_w

Donth Matrix		Podo	x Feature	•			
Depth Matrix (inches) Color (moist)	%	Color (moist)	<u>x reature</u> %	Type ¹	Loc ²	Texture	Remarks
0-6 10 YR 3/2	98	10 YR 3/6	2	C	PL	SCL	
6-18 10 YR 5/1	98	10 YR 4/6	2	С	PL	SC	
1 Type: C=Concentration, D=Deple Hydric Soil Indicators: (Applicate Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, 7) 5 cm Mucky Mineral (A7) (LRR Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface Thick Dark Surface (A12) Coast Prairie Redox (A16) (MIC) Sandy Mucky Mineral (S1) (LR Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S,	T, U) R P, T, U (A11) RA 150 RR O, S)	Polyvalue Be Polyvalue Be Thin Dark Su Loamy Mucky Loamy Gleye Popleted Mat Redox Dark S Depleted Dar Redox Depre Marl (F10) (L Depleted Och Iron-Mangane Loamy Gleye Marl (F10) (L Depleted Dar Redox Depre Marl (F10) (L Depleted Och Iron-Mangane Reduced Ver Piedmont Flo	wise not low Surface (S9 y Mineral ed Matrix (F3) Surface (Fak Surface (F11) ese Mass ce (F13) (F17) (ML tic (F18) (podplain S	ed.) ice (S8) (L) (LRR S, (F1) (LRR (F2) 6 (F7) 8) (MLRA 15 es (F12) ((LRR P, T LRA 151) (MLRA 15 Goils (F19)	RR S, T, U T, U) O) LRR O, P, U) OA, 150B) (MLRA 149	Indicators for 1 cm Mucl 2 cm Mucl Reduced N Piedmont Anomalou (MLRA Red Parer Very Shall Other (Exp	nt Material (TF2) low Dark Surface (TF12) lolain in Remarks) rs of hydrophytic vegetation and d hydrology must be present, disturbed or problematic.
Restrictive Layer (if observed): Type:							
Depth (inches):						Hydric Soil Pre	esent? Yes No
Remarks:							
Hydric soil present							



Photo 1
Wetland data point wsuc101e_w facing north



Photo 2
Wetland data point wsuc101e_w facing west

Project/Site: Atlantic Coast Pipeline	City/0	County: City of Suffolk		Sampling Date: 9/18/2015			
Applicant/Owner: DOMINION	City/0	,	State: VA	Sampling Point: wsuc101s_w			
Investigator(s): Team C Section, Township, Range: No PLSS in this area							
	Loca						
				Datum: WGS 1984			
Soil Map Unit Name: Rains fine sandy loam	Lat	Long					
Are climatic / hydrologic conditions on the sit	e typical for this time of year?						
Are Vegetation, Soil, or Hydro							
Are Vegetation, Soil, or Hydro SUMMARY OF FINDINGS – Attac							
SUMMART OF FINDINGS - Attac	ii site iiiap siiowiiig sai		nis, transects,	, important leatures, etc.			
	es No	Is the Sampled Area					
	es No	within a Wetland?	Yes	No			
Wetland Hydrology Present? Y Remarks:	es No		'				
PSS area has been clearcut at some point v	The last two yours.						
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum of two required)			
Primary Indicators (minimum of one is requ		_	Surface Soil (
Surface Water (A1)	Aquatic Fauna (B13)			etated Concave Surface (B8)			
High Water Table (A2)	Marl Deposits (B15) (LR		Drainage Pat				
Saturation (A3)	Hydrogen Sulfide Odor (Moss Trim Lii				
Water Marks (B1)	Oxidized Rhizospheres a		· · · · · · · · · · · · · · · · · · ·				
Sediment Deposits (B2)	Presence of Reduced Iro		Crayfish Burn				
Drift Deposits (B3)	Recent Iron Reduction in	Tilled Soils (C6)		sible on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Iron Deposits (B5)	Thin Muck Surface (C7) Other (Explain in Remar	ke)	✓ Geomorphic I Shallow Aquit				
Inundation Visible on Aerial Imagery (E		N5)	FAC-Neutral	, ,			
Water-Stained Leaves (B9)	'')		· 	oss (D8) (LRR T, U)			
Field Observations:			<u> </u>	(20) (2.111 1, 0)			
Surface Water Present? Yes	No Depth (inches):						
	No Depth (inches):						
	No Depth (inches):		lydrology Presen	t? Yes 🗸 No			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, pre	evious inspections), if ava	ilable:				
Remarks: Wetland hydrology present							

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?	Status	Number of Dominant Species _
1				That Are OBL, FACW, or FAC:5 (A)
2				Total Number of Dominant
3				Species Across All Strata: 5 (B)
4				
5.				Percent of Dominant Species That Are OBL FACIN or FAC: 100 (A/B)
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 = 20
0	0	= Total Cove		FACW species 45 x 2 = 90
50% of total cover:0	20% of	total cover:	0	60 100
Sapling/Shrub Stratum (Plot size: 15)				FAC species $\frac{60}{2}$ x 3 = $\frac{160}{2}$
1. Gordonia lasianthus	15	Yes	FACW	FACU species x 4 =
2. Ilex opaca	10	Yes	FAC	UPL species x 5 =
3. Liquidambar styraciflua	5	No	FAC	Column Totals:125
4. Acer rubrum	5	No	FAC	2.22
				Prevalence Index = B/A =2.32
5			-	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	35	= Total Cove	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 17.5	20% of	total cover:	7	1 Toblematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 5)	_			1
1 Andropogon virginicus	40	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Arundinaria gigantea	30	Yes	FACW	
				Definitions of Four Vegetation Strata:
3. Scirpus cyperinus	20	Yes	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				
				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				or size, and woody plants less than 5.20 it tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	90	= Total Cove	er	
50% of total cover: 45	20% of	total cover:	18	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cove	er	Vegetation
50% of total cover:0	20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations below	v).			1
(··, ··	- /-			

SOIL Sampling Point: <u>wsuc101s_w</u>

		o the dept	h needed to docur			or confirm	the absence of	indicators.)
Depth	Matrix Color (moist)	0/		x Feature	1	1.002	Toytung	Domarka
(inches) 0-11	Color (moist) 10 YR 2/2	100	Color (moist)	<u> </u>	_Type'	Loc ²	Texture SL	Remarks
11-18	5 Y 5/1	99	10 YR 4/6	1	С	PL	SCL	
Type: C=C Hydric Soil Histosol Histic E Black H Hydroge Stratifier Organic 5 cm Mu Muck Pi 1 cm Mu Deplete Thick De Coast P Sandy M Sandy O	oncentration, D=Depl	etion, RM= able to all I T, U) R P, T, U) (A11)	Reduced Matrix, MS LRRs, unless other Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma Redox Dark Su Depleted Dark Redox Depre Marl (F10) (L	S=Masked rwise not elow Surfa urface (S9 y Mineral ed Matrix (trix (F3) Surface (F rk Surface essions (F .RR U) hric (F11) ese Mass ace (F13) ((F17) (ML	Sand Gred.) Ce (S8) (L (LRR S, (F1) (LRF F2) (MLRA 1; (F12) (LRR P, T LRA 151) (MLRA 15	ains. RR S, T, U T, U) O) 51) LRR O, P,	²Location: PL Indicators for) 1 cm Muci 2 cm Muci Reduced \(\) Piedmont Anomalou (MLRA \) Red Parer Very Shall Other (Exp	=Pore Lining, M=Matrix. Problematic Hydric Soils³: k (A9) (LRR O) k (A10) (LRR S) Vertic (F18) (outside MLRA 150A,B) Floodplain Soils (F19) (LRR P, S, T) us Bright Loamy Soils (F20) 153B) nt Material (TF2) low Dark Surface (TF12) plain in Remarks) urs of hydrophytic vegetation and d hydrology must be present, disturbed or problematic.
Stripped	Redox (S5) I Matrix (S6) rface (S7) (LRR P, S	, T, U)					эд) A 149A, 153C, 15	53D)
	Layer (if observed):	, , ,						
Type:	ches):		<u>—</u>				Hydric Soil Pre	esent? Yes No
Remarks:	ones)						Tryunc con i re	163 NO
Hydric soil pr	esent							



Photo 1
Wetland data point wsuc101s_w facing west



Photo 2
Wetland data point wsuc101s_w facing south

Project/Site: Atlantic Coast Pipeline	City/Co	unty: City of Suffolk		Sampling Date: 9/18/2015			
Applicant/Owner: DOMINION	City/County: City of Suffolk Sampling Date: 9/18/201 State: VA Sampling Point: wsuc101						
Landform (hillslope, terrace, etc.): Slight slope							
				Datum: WGS 1984			
Soil Map Unit Name: Rains fine sandy loam	Lai	Long					
	al familia timas of warm? Var	_					
Are climatic / hydrologic conditions on the site typic							
Are Vegetation, Soil, or Hydrology _							
Are Vegetation, Soil, or Hydrology _	naturally problemati	c? (If needed, e.	xplain any answe	rs in Remarks.)			
SUMMARY OF FINDINGS – Attach site	e map showing samp	oling point locatio	ns, transects	, important features, etc.			
Hydrophytic Vegetation Present? Yes	✓ No	la di a Oassanla d'Assa					
Hydric Soil Present? Yes	No <u> </u>	Is the Sampled Area within a Wetland?	Voc	No			
Wetland Hydrology Present? Yes	No	within a wettand?	1es	NO			
HYDROLOGY							
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil				
	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)				
	Marl Deposits (B15) (LRR		Drainage Patterns (B10)				
	Hydrogen Sulfide Odor (C1		Moss Trim Lines (B16)				
Water Marks (B1)	Oxidized Rhizospheres alo	ng Living Roots (C3)	Dry-Season	Water Table (C2)			
Sediment Deposits (B2)	Presence of Reduced Iron	(C4)	Crayfish Bur	rows (C8)			
	Recent Iron Reduction in T	illed Soils (C6)		isible on Aerial Imagery (C9)			
	Thin Muck Surface (C7)			Position (D2)			
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks))	Shallow Aqui FAC-Neutral				
Water-Stained Leaves (B9)				noss (D8) (LRR T, U)			
Field Observations:			opnagnam n	1000 (20) (2 1111 1, 0)			
	Depth (inches):						
	Depth (inches):						
Saturation Present? Yes No	Depth (inches):	Wetland H	ydrology Preser	nt? Yes No			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitori	ng well aerial photos, previ	ous inspections) if avai	lahle:				
Describe Necorded Data (stream gauge, monitori	ng well, aerial priotos, previ	ous mapechons), ii avai	iabic.				
Remarks:							
No hydrology present							

30		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?	Status	Number of Dominant Species That Are ORL FACW or FAC: 2 (A)
1				That Are OBL, FACW, or FAC:2 (A)
2				Total Number of Dominant Species Across All Strata: 2 (B)
4				Species Across All Strata: (B)
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				That Are OBL, FACW, or FAC:(A/B)
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	0	= Total Cov	er	OBL species x 1 =
50% of total cover:0	20% of	total cover	. 0	FACW species $\frac{0}{90}$ x 2 = $\frac{0}{270}$
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1				FACU species x 4 =
2.				UPL species x 5 = 117
3.				Column Totals: (A) (B)
4				Prevalence Index = B/A = 3.4
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	0	= Total Cov	er er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:0	20% of	total cover	0	
Herb Stratum (Plot size:5				¹ Indicators of hydric soil and wetland hydrology must
1. Panicum capillare	50	Yes	FAC	be present, unless disturbed or problematic.
2. Andropogon virginicus	40	Yes	FAC	Definitions of Four Vegetation Strata:
3. Rubus flagellaris	20	No	UPL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Sorghastrum nutans	7	No	FACU	more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
50.7	_	= Total Cov		
50% of total cover: 58.5	20% of	total cover	23.4	
Woody Vine Stratum (Plot size:)				
1				
2				
3	-			
4				
5				Hydrophytic
		= Total Cov		Vegetation Present? Yes No
50% of total cover:0		total cover	:	
Remarks: (If observed, list morphological adaptations below	ow).			

SOIL Sampling Point: wsuc101_u1

Depth	cription: (Describe to Matrix			x Feature				,
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-12	10 YR 2/2	100					LS	
12-18	2.5 Y 5/3	98	10 YR 4/6	2	C	PL	LS	
Type: C=C Hydric Soil Histosol Histic E Black H Hydroge Stratifiee Organic 5 cm Mc Muck Pr 1 cm Mc Depletee Thick Do Coast P Sandy N Sandy N Sandy F Strippec Dark Su Restrictive	oncentration, D=Deplated Indicators: (Application (A1) pipedon (A2) pistic (A3) pen Sulfide (A4) de Layers (A5) podies (A6) (LRR P, Lucky Mineral (A7) (LR P, Lucky Mineral (A7) (LR P, Luck (A9) (LRR P, T) de Below Dark Surface (A12) prairie Redox (A16) (Macky Mineral (S1) (Legel Matrix (S4) (Redox (S5) (LRR P, S, Layer (if observed):	T, U) (A11) LRA 150 RR O, S)	=Reduced Matrix, MS LRRs, unless other Polyvalue Be Thin Dark Su Loamy Mucky Loamy Gleye Depleted Mar Redox Dark S Redox Depre Marl (F10) (L Depleted Och Iron-Mangane	S=Masked rwise not low Surface rface (S9 y Mineral ed Matrix trix (F3) Surface (I ck Surface essions (F RR U) nric (F11) esse Mass ce (F13) (F17) (MI tic (F18) podplain S	d Sand Graded.) ace (S8) (L) (LRR S, (F1) (LRR (F2) (MLRA 1: es (F12) ((LRR P, T LRA 151) (MLRA 15 Goils (F19)	ains. RR S, T, U T, U) OA, 150B) (MLRA 14	² Location: F Indicators f)	



Photo 1 Upland data point wsuc101_u1 facing east



Photo 2 Upland data point wsuc101_u1 facing north

Project/Site: Atlantic Coast Pipeline		City/C	County: City of Suffolk	<	Sampling Date: 9/19/2015		
Applicant/Owner: DOMINION		State: VA Sampling Point: wsuc101_					
Investigator(s): Team C		Section	on, Township, Range				
Landform (hillslope, terrace, etc.): Slig							
Subregion (LRR or MLRA): T							
Soil Map Unit Name: Rains fine sandy	/ loam	_ Lai					
		this times of warm?					
Are climatic / hydrologic conditions on							
Are Vegetation, Soil, o							
Are Vegetation, Soil, o	r Hydrology	_ naturally problema	atic? (If neede	ed, explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS – A	Attach site ma	p showing san	npling point loca	ations, transects	s, important features, etc.		
Hydrophytic Vegetation Present?	Yes	No	la di a Cannala di Ann				
Hydric Soil Present?	Yes		Is the Sampled Are		No 🗸		
Wetland Hydrology Present?	Yes	No	within a Wetland?	res	NO		
HYDROLOGY							
Wetland Hydrology Indicators:				<u> </u>	ators (minimum of two required)		
Primary Indicators (minimum of one	-			Surface Soil	, ,		
Surface Water (A1)		atic Fauna (B13)	D 11\	Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)			
High Water Table (A2) Saturation (A3)		Deposits (B15) (LR) ogen Sulfide Odor (Moss Trim L			
Water Marks (B1)		-	along Living Roots (C		Water Table (C2)		
Sediment Deposits (B2)		ence of Reduced Iro		Crayfish Bu			
Drift Deposits (B3)		ent Iron Reduction in			/isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Thin	Muck Surface (C7)		Geomorphic	Position (D2)		
Iron Deposits (B5)		r (Explain in Remarl	(S)	Shallow Aqu			
Inundation Visible on Aerial Imag	gery (B7)			FAC-Neutra	, ,		
Water-Stained Leaves (B9)				Sphagnum i	moss (D8) (LRR T, U)		
Field Observations: Surface Water Present? Yes	No. V	Depth (inches):					
		Depth (inches):					
		Depth (inches):		nd Hydrology Prese	nt? Yes No ✔		
(includes capillary fringe)							
Describe Recorded Data (stream gain	uge, monitoring we	ell, aerial photos, pre	evious inspections), if	available:			
Domorko							
Remarks: No wetland hydrology indicators pres	ent						
The Welland Hydrelegy Indicators proc	J. 1.						

20	Absolute	Dominant	Indicator	Dominance Test worksheet:			
<u>Tree Stratum</u> (Plot size:)		Species?	Status	Number of Dominant Species			
1. Pinus taeda	70	Yes	FAC	That Are OBL, FACW, or FAC:3 (A)			
2. Liquidambar styraciflua		No	FAC	Total Number of Dominant			
3				Species Across All Strata: 4 (B)			
4				Descrit of Descinant Charies			
5				Percent of Dominant Species That Are OBL, FACW, or FAC:75 (A/B)			
6							
7				Prevalence Index worksheet:			
8.				Total % Cover of: Multiply by:			
·	77	= Total Cov	er	OBL species x 1 =0			
50% of total cover: 38.5		total cover:	15.4	FACW species0 x 2 =0			
Sapling/Shrub Stratum (Plot size: 15)	20 /0 01	total cover.		FAC species132			
Liquida sala sa atura aiffusa	30	Yes	FAC	FACU species15 x 4 =60			
1. Liquidambar styraciilua 2. Acer rubrum	20	Yes	FAC	UPL species 0 x 5 = 0			
	5			Column Totals: 147 (A) 456 (B)			
3. Aralia spinosa		No	FAC	(1)			
4				Prevalence Index = B/A = 3.1			
5				Hydrophytic Vegetation Indicators:			
6				1 - Rapid Test for Hydrophytic Vegetation			
7				✓ 2 - Dominance Test is >50%			
8				3 - Prevalence Index is ≤3.0 ¹			
	55 = Total Cover		er	Problematic Hydrophytic Vegetation¹ (Explain)			
50% of total cover: 27.5	20% of	total cover:	11	Troblematic Tryanophytic Vogetation (Explain)			
Herb Stratum (Plot size: 5)				¹ Indicators of hydric soil and wetland hydrology must			
1 Lonicera japonica	15	Yes	FACU	be present, unless disturbed or problematic.			
"				Definitions of Four Vegetation Strata:			
2				Definitions of Four Vegetation Strata.			
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or			
4				more in diameter at breast height (DBH), regardless of			
5				height.			
6				Sapling/Shrub – Woody plants, excluding vines, less			
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.			
8				Herb – All herbaceous (non-woody) plants, regardless			
9				of size, and woody plants less than 3.28 ft tall.			
10.							
11				Woody vine – All woody vines greater than 3.28 ft in height.			
12.				neight.			
12.	15						
50% of total cover: 7.5		= Total Cov	_				
30 /0 01 total cover.	20% of	total cover:					
Woody Vine Stratum (Plot size:)							
1							
2							
3							
4							
5.				Hydrophytic			
	0	= Total Cov	er	Vegetation			
50% of total cover:		total cover:		Present? Yes No No			
Remarks: (If observed, list morphological adaptations belo		total oover.					
Remarks. (II observed, list morphological adaptations belo	w).						

SOIL Sampling Point: wsuc101_u2

Depth (inches)	Matrix			x Feature			the absence of in	,	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remark	S
0-4	10 YR 2/2	100					LS		
4-18	2.5 Y 5/6	100					LS		
					· ——				
				-					
				_					
	oncentration, D=Depl					ains.		Pore Lining, M=Ma	
-	Indicators: (Applica	able to all L				DD C T II		Problematic Hydri	ic Solis :
Histoso	pipedon (A2)		Polyvalue Be Thin Dark Su					(A10) (LRR S)	
	istic (A3)		Loamy Muck					ertic (F18) (outsid	e MLRA 150A.B)
	en Sulfide (A4)		Loamy Gleye			-,		Floodplain Soils (F1	
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)			Anomalous	Bright Loamy Soil	s (F20)
_	Bodies (A6) (LRR P,		Redox Dark				(MLRA 1		
	ucky Mineral (A7) (LR		Depleted Da					t Material (TF2)	·
	resence (A8) (LRR U) uck (A9) (LRR P, T))	Redox Depre Marl (F10) (L		8)			ow Dark Surface (T lain in Remarks)	F12)
	d Below Dark Surface	e (A11)	Nan (F10) (L		(MLRA 1	51)	Other (Exp	iaiii iii Reiliaiks)	
	ark Surface (A12)	, (,)	Iron-Mangan				T) ³ Indicator	s of hydrophytic ve	getation and
Coast F	rairie Redox (A16) (N	ILRA 150A) Umbric Surfa	ace (F13)	(LRR P, T	, U)	wetland	hydrology must be	present,
-	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric				unless o	disturbed or probler	matic.
	Gleyed Matrix (S4)		Reduced Ve						
-	Redox (S5) d Matrix (S6)		Piedmont Flo				9A) A 149A, 153C, 153	SD)	
	irface (S7) (LRR P, S	. T. U)	Anomalous L	ongni Lua	illy Solis (20) (WILK)	4 149A, 133C, 130	50)	
	Layer (if observed):	, ., .,							
Type:			<u></u>						
Depth (in	ches):						Hydric Soil Pre	sent? Yes	No
Remarks:	•								
No hydric soi	l present								
No hydric soi	I present								
No hydric soi	I present								
No hydric soi	I present								
No hydric soi	I present								
No hydric soi	I present								
No hydric soi	I present								
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No hydric soi	I present								
No hydric soi	I present								
No hydric soi	I present								



Photo 1 Upland data point wsuc101_u2 facing north



Photo 2
Upland data point wsuc101_u2 facing west

000	C. CCOLK 10121114
Project/Site: ACP	City/County: SUFFOIK Sampling Date: 10/7/1/14
Applicant/Owner: Dominion	State: V Sampling Point: Wsuclol-u
Investigator(s): ESI (L Roper, R Turn by	Section, Township, Range: NONE
Landform (hillslope, terrace, etc.): Pine Flat	Local relief (concave, convex, none): 1 Slope (%): 2-5/6
Subregion (LRR or MLRA): LRT La	at: 36.66645 Long: -76.78487 Datum: W6589
	Ndv 10000 NWI classification: NA
	time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology sign	/
Are Vegetation, Soil, or Hydrology na	
	showing sampling point locations, transects, important features, etc.
	,
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	within a Wethanu!
Remarks:	·
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all t	
[]	Fauna (B13) Sparsely Vegetated Concave Surface (B8) Prince Particle (B10)
	eposits (B15) (LRR U) Drainage Patterns (B10) En Sulfide Odor (C1) Drainage Patterns (B16)
	d Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2)
	ce of Reduced Iron (C4) Crayfish Burrows (C8)
	Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	uck Surface (C7) Geomorphic Position (D2)
	Explain in Remarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
☐ Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	epth (inches): NA
Surface Water Present? Yes No De Water Table Present? Yes No De	
	epth (inches): 27D Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspections), if available:
Remarks:	
and value of the property of t	

25.25	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30130) 1. Places talda	50	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Liquidamber styraciflua 3.	3373		FAC	Total Number of Dominant Species Across All Strata: (B)
4		BY E		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6			-	Prevalence Index worksheet:
7	100	-		Total % Cover of: Multiply by:
8	1.5	= Total Co		OBL species x 1 =
50% of total cover: 30				FACW species x 2 =
50% of total cover:	20% 0	t total cover	12	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30x30)	110	\/	EN	FACU species x 4 =
1. Ligardambar styracifivo	(10	-y-	THO	UPL species x 5 =
2	-			Column Totals: (A) (B)
3		-		Column Totals (A) (S)
4				Prevalence Index = B/A =
5.				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	10.9			3 - Prevalence Index is ≤3.01
	10	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% c	of total cove	1: 2	
Herb Stratum (Plot size: 30 x 30)				¹ Indicators of hydric soil and wetland hydrology must
1. Acer rubrum	16	Y	FAL.	be present, unless disturbed or problematic.
2. Arundinaria mauntea	10	Y	PAIN	Definitions of Four Vegetation Strata:
3				
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11.				height.
12		11.0		1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	20	_ = Total C	over	
50% of total cover:	0 20%	of total cove	er: <u> </u>	
Woody Vine Stratum (Plot size: 30 X30)				
1. none		and Henry		
2				
3.				
4				
D				Hydrophytic
	_0	_ = Total C		Vegetation Present? Yes No
50% of total cover:	20%	of total cov	er:	
Remarks: (If observed, list morphological adaptations be	elow).			Service Search Service

pth Matrix ches) Color (moist) %	Red Color (moist)	ox Features	ype¹ Loc²		Remarks
-4 2.543/1 100				_FS	
1-20 2.54 5/3 95 1	07R 76	5_	C PL	<u> </u>	
pe: C=Concentration, D=Depletion, RM=R dric Soil Indicators: (Applicable to all Li Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)	RRs, unless oth Polyvalue E Thin Dark S Loamy Muc Loamy Gle Depleted M Redox Dar Depleted C Redox Dep Marl (F10) Depleted C Iron-Manga Umbric Su Delta Ochi Reduced N Piedmont	MS=Masked Salerwise noted. Below Surface (S9) (Leby Mineral (F1) yed Matrix (F2) Matrix (F3) k Surface (F6) Dark Surface (F6) (LRR U) Dehric (F11) (Manese Masses rface (F13) (LF) (F17) (MLR) (F16) (F18) (MR) (MR) (F16) (F18) (MR)) (S8) (LRR S, T, LRR S, T, U)) (LRR O)) (T) (F12) (LRR O, RR P, T, U) A 151) LRA 150A, 150 s (F19) (MLRA	Indicators for July 1 cm Much 2 cm M	L=Pore Lining, M=Matrix. or Problematic Hydric Soils ³ : ck (A9) (LRR O) ck (A10) (LRR S) I Vertic (F18) (outside MLRA 150A,E at Floodplain Soils (F19) (LRR P, S, T aus Bright Loamy Soils (F20) a 153B) ent Material (TF2) allow Dark Surface (TF12) xplain in Remarks) tors of hydrophytic vegetation and and hydrology must be present, as disturbed or problematic.
strictive Layer (if observed): Type:					
Depth (inches):				Hydric Soil P	Present? Yes No

Environmental Field Surveys Wetland Photo Page



Upland data point wsuc101_u facing west.

Project/Site: Atlantic Coast Pipeline	City/County: (City of Suffolk		Sampling Date: 9/18/2015	
Applicant/Owner: DOMINION		Sta	ite: VA	Sampling Point: wsuc100f_w	
	Section, Towr				
Landform (hillslope, terrace, etc.): Slight slope					
Subregion (LRR or MLRA): T					
Soil Map Unit Name: Rains fine sandy loam					
Are climatic / hydrologic conditions on the site typical f					
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Ci	rcumstances" pr	resent? Yes No	
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, exp	lain any answers	s in Remarks.)	
SUMMARY OF FINDINGS - Attach site n	nap showing sampling	point locations	s, transects,	important features, etc.	
Hydrophytic Vegetation Present? Yes	No Is the				
	No.	Sampled Area			
	No within	a Wetland?	Yes	No	
Remarks:					
Wetland is a mosaic of wetland with upland hummock	s.				
HYDROLOGY					
Wetland Hydrology Indicators:				ors (minimum of two required)	
Primary Indicators (minimum of one is required; chec			_ Surface Soil C	, ,	
	uatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)		
	arl Deposits (B15) (LRR U)				
	drogen Sulfide Odor (C1)	na Dooto (C2)	_ Moss Trim Lin		
	idized Rhizospheres along Livi esence of Reduced Iron (C4)	ng Roots (C3)	_ Dry-Season v _ Crayfish Burro	Vater Table (C2)	
	cent Iron Reduction in Tilled S		-	sible on Aerial Imagery (C9)	
	in Muck Surface (C7)		Geomorphic F		
	ner (Explain in Remarks)	_	Shallow Aquit		
Inundation Visible on Aerial Imagery (B7)	· (~	FAC-Neutral		
Water-Stained Leaves (B9)			Sphagnum mo	oss (D8) (LRR T, U)	
Field Observations:					
Surface Water Present? Yes No	Depth (inches):				
Water Table Present? Yes No	Depth (inches):				
	Depth (inches):	Wetland Hyd	Irology Present	? Yes <u>/</u> No	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring)	well aerial photos previous in	spections) if availat	nle:		
Describe Necorded Data (stream gauge, mornioring	wen, aenai priotos, previous in	spections), ii availai	oic.		
Remarks:					
Wetland hydrology indicators are present					
, , , , , , , , , , , , , , , , , , , ,					

••	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Acer rubrum	20	Yes	FAC	That Are OBL, FACW, or FAC: 6 (A)
2. Liquidambar styraciflua	15	Yes	FAC	Total Number of Deminent
3. Ilex opaca	10	Yes	FAC	Total Number of Dominant Species Across All Strata: 6 (B)
4				
5				Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/B)
				That Are OBL, FACW, or FAC:(A/B)
··				Prevalence Index worksheet:
7	-			Total % Cover of: Multiply by:
8	45			OBL species
22.5		= Total Cov	er 9	FACW species 10 x 2 = 20
50% of total cover: 22.5	20% of	total cover:		1/15 / 1/25
Sapling/Shrub Stratum (Plot size:)				FAC species
1. Ilex opaca	10	Yes	FAC	FACU species X 4 =
2. Acer rubrum	10	Yes	FAC	UPL species $\frac{0}{178}$ x 5 = $\frac{0}{487}$ (B)
3				Column Totals:(A)(B)
4				Prevalence Index = R/A = 2.73
_				T Tevalcinec index = B/A =
··-				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:10	20% of	total cover:	4	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Panicum capillare	60	Yes	FAC	be present, unless disturbed or problematic.
2. Andropogon virginicus	15	No	FAC	Definitions of Four Vegetation Strata:
3. Arundinaria gigantea	10	No	FACW	
4. Scirpus cyperinus	10	No	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Carex prasina	10	No	OBL	more in diameter at breast height (DBH), regardless of height.
6 Smilax rotundifolia	5	No	FAC	
0.	3			Sapling/Shrub – Woody plants, excluding vines, less
7. Sorghastrum nutans		No	FACU	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	113 :	= Total Cov	er	
50% of total cover: 56.5		total cover:	00.0	
Woody Vine Stratum (Plot size:30)				
,				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov	er	Vegetation
50% of total cover:0	20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations below	w).			
	,			

SOIL Sampling Point: wsuc100f_w

Depth	cription: (Describe t Matrix	·		x Feature				ŕ		
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	Loc ²	Texture	Re	marks	
0-8	10 YR 2/2	100					SCL			
8-18	10 YR 4/2	98	10 YR 4/6	2	С	PL	SC			
	Concentration, D=Depl Indicators: (Applica					ains.		L=Pore Lining, or Problematic		_
-		ible to all				DD C T II			-	Solis :
Histoso	pipedon (A2)		Polyvalue Be Thin Dark Su					ck (A9) (LRR O ck (A10) (LRR :		
	listic (A3)		Loamy Mucky							/ILRA 150A,B)
	en Sulfide (A4)		Loamy Gleye			·		t Floodplain So		
	ed Layers (A5)		Depleted Mat	. ,				us Bright Loam	y Soils (I	F20)
_	Bodies (A6) (LRR P,		Redox Dark S	•	,		(MLRA			
	ucky Mineral (A7) (LR		Depleted Dar					ent Material (TF	,	2)
	resence (A8) (LRR U) uck (A9) (LRR P, T)	1	Redox Depre Marl (F10) (L		8)			illow Dark Surfa xplain in Remar		2)
	ed Below Dark Surface	(A11)	Depleted Och		(MLRA 1	51)	Outer (E.	kpiaiii iii ikeiiiai	K3)	
	ark Surface (A12)	,	Iron-Mangan				T) ³ Indicat	ors of hydrophy	tic veget	tation and
	Prairie Redox (A16) (M) Umbric Surfa	ce (F13)	(LRR P, T	, U)	wetlar	nd hydrology m	ust be pr	resent,
	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric				unles	s disturbed or p	roblema	tic.
	Gleyed Matrix (S4)		Reduced Ver				0.4)			
-	Redox (S5) d Matrix (S6)		Piedmont Flo				9A) A 149A, 153C, 1	53D)		
	urface (S7) (LRR P, S	, T, U)	Anomaious E	night Loa	illy colls ((WEIC	A 143A, 1330, 1	330)		
	Layer (if observed):	,								
Type:			<u></u>							
Depth (ir	nches):						Hydric Soil P	resent? Yes		No
Remarks:							1			
Hydric soil in	dicators are present									
ı										



Photo 1
Wetland data point wsuc100f_w facing south



Photo 2
Wetland data point wsuc100f_w facing west

Project/Site: Atlantic Coast Pipeline	City/0	County: City of Suffolk		Sampling Date: 9/18/2015
Applicant/Owner: DOMINION	City/C	,	State: VA	Sampling Point: wsuc100s_w
	Secti			
	Local			
				Datum: WGS 1984
Soil Map Unit Name: Rains fine sandy loam		Long		
Are climatic / hydrologic conditions on the si				
Are Vegetation, Soil, or Hydr				
Are Vegetation, Soil, or Hydr	rology naturally problem	atic? (If needed, e	explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attac	ch site map showing san	npling point location	ons, transects	, important features, etc.
Hydrophytic Vegetation Present?	Yes No			
	res <u>✓</u> No	Is the Sampled Area		
	res V No	within a Wetland?	Yes	No
Remarks:				
PSS area has been clearcut at some point	within the last five years.			
·	•			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is requ	uired: check all that apply)		Surface Soil	
Surface Water (A1)	Aquatic Fauna (B13)			getated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (LR	R II)	Drainage Pat	
Saturation (A3)	Hydrogen Sulfide Odor (Moss Trim Li	
Water Marks (B1)	Oxidized Rhizospheres a			Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iro		Crayfish Burr	
Drift Deposits (B3)	Recent Iron Reduction in		-	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		✓ Geomorphic	
Iron Deposits (B5)	Other (Explain in Remark	ks)	Shallow Aqui	
Inundation Visible on Aerial Imagery (I		,	FAC-Neutral	
Water-Stained Leaves (B9)	,		·	noss (D8) (LRR T, U)
Field Observations:				
Surface Water Present? Yes	No Depth (inches):			
	No Depth (inches):			
	No Pepth (inches):		lydrology Presen	t? Yes 🗸 No
(includes capillary fringe)				
Describe Recorded Data (stream gauge, n	nonitoring well, aerial photos, pre	evious inspections), if ava	ilable:	
Davida				
Remarks:				
Wetland hydrology indicators present				

00	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Liquidambar styraciflua	10	Yes	FAC	That Are OBL, FACW, or FAC: 6 (A)
2				Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				
5.				Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/R)
				That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
7		-		Total % Cover of: Multiply by:
8	10			OBL species15 x 1 =15
E		= Total Cov		FACW species30
50% of total cover:5	20% of	total cover:	2	55 165
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 = 60
1. Acer rubrum	10	Yes	FAC	FACU species x 4 =
2. Liquidambar styraciflua	5	Yes	FAC	UPL species x 5 =
3. Gordonia lasianthus	5	Yes	FACW	Column Totals:115 (A) (B)
4.				Prevalence Index = R/Δ = 2.6
Ē				Trevalence mack - B/A -
···				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
	20	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 10	20% of	total cover:	4	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	25	Yes	FACW	be present, unless disturbed or problematic.
2. Panicum capillare	20	Yes	FAC	Definitions of Four Vegetation Strata:
3. Scirpus cyperinus	15	No	OBL	
4 Lactuca canadensis	15	No	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Andropogon virginicus	10	No	FAC	more in diameter at breast height (DBH), regardless of height.
•				
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10.				Weedy vine All woody vines greater than 2.29 ft in
11.				Woody vine – All woody vines greater than 3.28 ft in height.
12.				
	85	= Total Cov		
50% of total cover: 42.5		total cover:		
50 % of total cover.	20% 01	total cover.	· ——	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5.				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:		total cover:		Present? Yes No
		total cover.		
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: <u>wsuc100s_w</u>

		o the dept	h needed to docur			or confirm	the absence of	indicators.)
Depth	Matrix Color (moist)	0/		x Feature	1	1.002	Toytung	Domarka
(inches) 0-11	Color (moist) 10 YR 2/2	100	Color (moist)	<u> </u>	_Type'	Loc ²	Texture SL	Remarks
11-18	5 Y 5/1	99	10 YR 4/6	1	С	PL	SCL	
Type: C=C Hydric Soil Histosol Histic E Black H Hydroge Stratifier Organic 5 cm Mu Muck Pi 1 cm Mu Deplete Thick De Coast P Sandy M Sandy O	oncentration, D=Depl	etion, RM= able to all I T, U) R P, T, U) (A11)	Reduced Matrix, MS LRRs, unless other Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma Redox Dark Su Depleted Dark Redox Depre Marl (F10) (L	S=Masked rwise not elow Surfa urface (S9 y Mineral ed Matrix (trix (F3) Surface (F rk Surface essions (F .RR U) hric (F11) ese Mass ace (F13) ((F17) (ML	Sand Gred.) Ce (S8) (L (LRR S, (F1) (LRF F2) (MLRA 1; (F12) (LRR P, T LRA 151) (MLRA 15	ains. RR S, T, U T, U) O) 51) LRR O, P,	²Location: PL Indicators for) 1 cm Muci 2 cm Muci Reduced \(\) Piedmont Anomalou (MLRA \) Red Parer Very Shall Other (Exp	=Pore Lining, M=Matrix. Problematic Hydric Soils³: k (A9) (LRR O) k (A10) (LRR S) Vertic (F18) (outside MLRA 150A,B) Floodplain Soils (F19) (LRR P, S, T) us Bright Loamy Soils (F20) 153B) nt Material (TF2) low Dark Surface (TF12) plain in Remarks) urs of hydrophytic vegetation and d hydrology must be present, disturbed or problematic.
Stripped	Redox (S5) I Matrix (S6) rface (S7) (LRR P, S	, T, U)					эд) A 149A, 153C, 15	53D)
	Layer (if observed):	, , ,						
Type:	ches):		<u>—</u>				Hydric Soil Pre	esent? Yes No
Remarks:	ones)						Tryunc con i re	163 NO
Hydric soil pr	esent							



Photo 1
Wetland data point wsuc100s_w facing north



Photo 2
Wetland data point wsuc100s_w facing east

Project/Site: Atlantic Coast Pipeline	City/	County: City of Suffolk		Sampling Date: 9/18/2015	
Applicant/Owner: DOMINION	City/0	,	State: VA	Sampling Point: wsuc100_u	
Investigator(s): Team C	Secti				
Landform (hillslope, terrace, etc.): Slight s					
				Datum: WGS 1984	
Soil Map Unit Name: Rains fine sandy loa		Long			
Are climatic / hydrologic conditions on the					
Are Vegetation, Soil, or Hy					
Are Vegetation, Soil, or Hy			explain any answe		
SUMMARY OF FINDINGS – Atta	ach site map showing sar	npling point locatio	ons, transects	s, important reatures, etc.	
Hydrophytic Vegetation Present?	Yes No	Is the Sampled Area			
Hydric Soil Present?	Yes No	within a Wetland?	Yes	No 🗸	
Wetland Hydrology Present? Remarks:	Yes No				
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indica	ators (minimum of two required)	
Primary Indicators (minimum of one is re	equired; check all that apply)		Surface Soil		
Surface Water (A1)	Aquatic Fauna (B13)			getated Concave Surface (B8)	
High Water Table (A2)	Marl Deposits (B15) (LR	R U)	Drainage Pa		
Saturation (A3)	Hydrogen Sulfide Odor ((C1)	Moss Trim L	ines (B16)	
Water Marks (B1)	Oxidized Rhizospheres	along Living Roots (C3)			
Sediment Deposits (B2)	Presence of Reduced Ire	on (C4)	Crayfish Bur	rows (C8)	
Drift Deposits (B3)	Recent Iron Reduction in	n Tilled Soils (C6)	Saturation V	isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		Geomorphic	Position (D2)	
Iron Deposits (B5)	Other (Explain in Remar	ks)	Shallow Aqu		
Inundation Visible on Aerial Imagery	(B7)		FAC-Neutral		
Water-Stained Leaves (B9)			Sphagnum r	moss (D8) (LRR T, U)	
Field Observations:	No. V Double (inches).				
	No Depth (inches):				
	No Depth (inches): Depth (inches):		leedna la me Dana a se	nt? Yes No 🗸	
(includes capillary fringe)				nt? Yes No	
Describe Recorded Data (stream gauge,	monitoring well, aerial photos, pro	evious inspections), if ava	ilable:		
				_	
Remarks: No wetland hydrology indicators present					
No wettand hydrology indicators present					

00	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Quercus nigra	50	Yes	FAC	That Are OBL, FACW, or FAC: 2 (A)
2. Acer rubrum	15	No	FAC	Total Number of Dominant
3. Liquidambar styraciflua	10	No	FAC	Species Across All Strata: 3 (B)
4. Pinus taeda	5	No	FAC	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 66.6666666 (A/B)
6.				That Are OBL, I ACW, OF I AC.
				Prevalence Index worksheet:
7	•			Total % Cover of: Multiply by:
8	80			OBL species0 x 1 =0
40		= Total Cove	16	FACW species 60 x 2 = 120
50% of total cover: 40	20% of	total cover:		FAC species 95 x 3 = 285
Sapling/Shrub Stratum (Plot size: 15)				
1. Sassafras albidum	7	Yes	FACU	FACU species x 4 = 28
2				UPL species X 5 =
3				Column Totals: (A) 433 (B)
4.				Prevalence Index = R/A = 2.67
				Trevalence mack Birt
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
		= Total Cove	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 3.5	20% of	total cover:	1.4	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1 Arundinaria gigantea	60	Yes	FACW	be present, unless disturbed or problematic.
2. Smilax rotundifolia	10	No	FAC	Definitions of Four Vegetation Strata:
3. Toxicodendron radicans	5	No	FAC	Definitions of Four Vegetation of ata.
			1710	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
	-			Woody vine – All woody vines greater than 3.28 ft in
				height.
12	75			
27.5		= Total Cove		
50% of total cover: 37.5	20% of	total cover:	15	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4.				
5				
J		= Total Cove		Hydrophytic Vegetation
50% of total cover: 0				Present? Yes No
		total cover:		
Remarks: (If observed, list morphological adaptations below	w).			

SOIL Sampling Point: wsuc100_u

Depth	cription: (Describe to Matrix			x Feature				,	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remar	ks
0-3	10 YR 3/2	100					S		
13-18	2.5 Y 5/3	99	10 YR 3/6	1	С	PL	LS		
				-	-				
-				_					
				-					
	oncentration, D=Dep					ains.		=Pore Lining, M=N	
-	Indicators: (Applica	able to all						Problematic Hyd	lric Soils³:
Histoso	· ,		Polyvalue Be					k (A9) (LRR O)	
	pipedon (A2)		Thin Dark Su					k (A10) (LRR S)	
	istic (A3)		Loamy Muck			(0)			de MLRA 150A,B) -19) (LRR P, S, T)
	en Sulfide (A4) d Layers (A5)		Loamy Gleye Depleted Ma		(ГΖ)			is Bright Loamy Sc	
	: Bodies (A6) (LRR P	T. U)	Redox Dark		- 6)		(MLRA) (1 ZO)
_	ucky Mineral (A7) (LR		Depleted Da					nt Material (TF2)	
	resence (A8) (LRR U		Redox Depre					low Dark Surface (TF12)
	uck (A9) (LRR P, T)	•	Marl (F10) (L		,			plain in Remarks)	,
Deplete	d Below Dark Surface	e (A11)	Depleted Oc	hric (F11)	(MLRA 1	51)			
	ark Surface (A12)		Iron-Mangan					rs of hydrophytic v	-
	Prairie Redox (A16) (N					', U)		d hydrology must b	
	Mucky Mineral (S1) (L	.RR O, S)	Delta Ochric				unless	disturbed or proble	ematic.
	Gleyed Matrix (S4)		Reduced Ve				0.4.\		
	Redox (S5)		Piedmont Flo					(2D)	
	d Matrix (S6) urface (S7) (LRR P, S	T 11)	Anomalous E	angnt Loa	my Solls (F20) (WILK	A 149A, 153C, 15	30)	
	Layer (if observed):								
Type:	-h\.						Unadaia Cail Da	12 V	No. V
	iches):						Hydric Soil Pre	esent? Yes	No
Remarks:									
No hydric so	I indicators present								



Photo 1 Upland data point wsuc100_u facing south



Photo 2 Upland data point wsuc100_u facing east

Project/Site: Atlantic Coast Pipeline		City/County: City of Suffolk Sampling Date: 11/16/2015					
Applicant/Owner: DOMINION		State: VA Sampling Point: wsuc005f_w					
		Section	on, Township, Range: _				
Landform (hillslope, terrace, etc.): Basin							
Subregion (LRR or MLRA): T							
Soil Map Unit Name: Rains fine sandy loa	 m	Lai			cation: PSS1/FO1C		
		this time of year?	_				
Are climatic / hydrologic conditions on the							
Are Vegetation, Soil, or Hy							
Are Vegetation, Soil, or Hy	drology	naturally problema	atic? (If needed	, explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS – Atta	ach site ma	ap showing sam	pling point locat	ions, transects	s, important features, etc.		
Hydrophytic Vegetation Present?	Yes 🗸	No	the Original Annual				
Hydric Soil Present?		No	Is the Sampled Area within a Wetland?		No		
Wetland Hydrology Present?		No	WITHIN a Wetianu:	169	NO		
Remarks:		•					
Floodplain pool							
HYDROLOGY				O condition leading	· · · · · · · · · · · · · · · · · · ·		
Wetland Hydrology Indicators:	·!	" 414		Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)			
Primary Indicators (minimum of one is re							
Surface Water (A1)		atic Fauna (B13)	3 I IV		getated Concave Surface (B8)		
✓ High Water Table (A2)		Deposits (B15) (LRF		Drainage Pa	atterns (B10)		
Saturation (A3) Water Marks (B1)	-	rogen Sulfide Odor (0 lized Rhizospheres a	। long Living Roots (C3)		Water Table (C2)		
Sediment Deposits (B2)		sence of Reduced Iro		Crayfish Bu			
Drift Deposits (B3)		ent Iron Reduction in		-	isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Muck Surface (C7)	(,	✓ Geomorphic			
Iron Deposits (B5)		er (Explain in Remark	(S)	Shallow Aqu			
Inundation Visible on Aerial Imagery		` .	,	FAC-Neutra			
Water-Stained Leaves (B9)					moss (D8) (LRR T, U)		
Field Observations:							
		Depth (inches):					
		Depth (inches): $\frac{8}{0}$					
	No	Depth (inches): 0	Wetland	Hydrology Prese	nt? Yes 🔽 No		
(includes capillary fringe) Describe Recorded Data (stream gauge,	monitoring we	ell, aerial photos, pre	vious inspections), if a	vailable:			
			-				
Remarks:							
Wetland hydrology indicators present							

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Pinus taeda	85	Yes	FAC	That Are OBL, FACW, or FAC: 6 (A)
2. Ilex opaca	5	No	FAC	Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				
5				Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/B)
0				That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species0 x 1 =0
45	90	= Total Cov		10 00
50% of total cover: 45	20% of	total cover:	18	FACW species x 2 = 20 345
Sapling/Shrub Stratum (Plot size: 15)				FAC species $\frac{113}{0}$ $\times 3 = \frac{343}{0}$
1. Liquidambar styraciflua	10	Yes	FAC	FACU species x 4 =
2 Ilex opaca	5	Yes	FAC	UPL species x 5 =
3.				Column Totals:125
				2.02
4				Prevalence Index = B/A =2.92
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is ≤3.0¹
	15	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 7.5	20% of	total cover:	3	<u> </u>
Herb Stratum (Plot size: 5)				1 Indicators of hydric coil and watland hydrology must
1 Arundinaria gigantea	10	Yes	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Smilax rotundifolia	5	Yes	FAC	Definitions of Four Vegetation Strata:
3. Ilex opaca		Yes	FAC	Definitions of Four Vegetation Strata.
3. IIEX Opaca		163	170	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10.				
11				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
40		= Total Cov		
50% of total cover:10	20% of	total cover:		
Woody Vine Stratum (Plot size:)				
1				
2				
3.				
4.				
5.				
5	0	T-4-1 O		Hydrophytic Vegetation
50% of total cover: 0		= Total Cov		Present? Yes No
30 % of total cover		total cover:		
Remarks: (If observed, list morphological adaptations below	w).			

SOIL Sampling Point: wsuc005f_w

Profile Des	cription: (Describe	to the depth	needed to docur	ment the i	ndicator	or confirm	the absence of	indicators.)
Depth (in a base)	Matrix		Redox Features					Demonstra
(inches) 0-5	Color (moist) 7.5 YR 2.5/2	<u>%</u> 100	Color (moist)	%	_Type ¹	Loc ²	Texture SL	Remarks
-		· —— -						
5-18	2.5 Y 6/1	97 2	2.5 Y 5/6	3	C	PL/M	SL	
-		· 						
-		· —— -						
	-	· —— -						
¹ Type: C=C	concentration, D=Dep	letion RM=F	Reduced Matrix M	S=Masked	Sand Gr	ains	² l ocation: Pl	=Pore Lining, M=Matrix.
	Indicators: (Application							Problematic Hydric Soils ³ :
Histoso	I (A1)		Polyvalue Be	low Surfa	ce (S8) (L	.RR S. T. U) 1 cm Muc	k (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					k (A10) (LRR S)
	istic (A3)		Loamy Muck					Vertic (F18) (outside MLRA 150A,B)
Hydrog	en Sulfide (A4)		Loamy Gleye	ed Matrix (F2)		Piedmont	Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma	, ,				is Bright Loamy Soils (F20)
_	Bodies (A6) (LRR P		Redox Dark	•	,		(MLRA	
	ucky Mineral (A7) (LF		Depleted Da					nt Material (TF2)
	resence (A8) (LRR U)	Redox Depre		8)			low Dark Surface (TF12)
	uck (A9) (LRR P, T) d Below Dark Surface	o (A11)	Marl (F10) (L Depleted Oc		/MIDA 1	F4\	Other (Ex	plain in Remarks)
	ark Surface (A12)	C (A11)	Iron-Mangan				T) ³ Indicato	rs of hydrophytic vegetation and
	Prairie Redox (A16) (N	/ILRA 150A)			. , ,		•	d hydrology must be present,
	Mucky Mineral (S1) (L		Delta Ochric			, -,		disturbed or problematic.
-	Gleyed Matrix (S4)		Reduced Ve			0A, 150B)		·
Sandy I	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 149	9A)	
	d Matrix (S6)		Anomalous E	Bright Loar	my Soils (F20) (MLR	A 149A, 153C, 15	53D)
	ırface (S7) (LRR P, S						1	
Restrictive	Layer (if observed):							
Type:			<u>—</u>					.1
Depth (ir	iches):						Hydric Soil Pre	esent? Yes No
Remarks:								
Hydric soil pr	esent							



Photo 1
Wetland data point WSUC005f_w facing north



Photo 2
Wetland data point WSUC005f_w facing south

Project/Site: Atlantic Coast Pipel	ine		City/County: City of Suffolk Sampling Date: 11/16/2015					
Applicant/Owner: DOMINION		State: VA Sampling Point: wsuc005s_w						t: wsuc005s_w
Investigator(s): Team C			Section			o PLSS in this are		
Landform (hillslope, terrace, etc.)								one (%): 2
Subregion (LRR or MLRA): T Soil Map Unit Name: Rains fine s	sandy loam	Li	at:		Long:	NWI classific	PSS1/F0)atum:
				_				
Are climatic / hydrologic condition								
Are Vegetation, Soil	, or Hydrology	si	gnificantly distur	bed?	Are "Normal	Circumstances"	present? Yes _	No
Are Vegetation, Soil	, or Hydrology	n	aturally problema	atic? (If needed, e	explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS	5 - Attach si	te map s	showing sam	npling poi	nt locatio	ons, transects	s, important	features, etc.
Hydrophytic Vegetation Present	t? Yes	✓ No)					
Hydric Soil Present?		✓ No		Is the Samp		., ,		
Wetland Hydrology Present?		✓ No		within a We	etland?	Yes	No	
Remarks:								
Area clear-cut about five years a	igo							
HYDROLOGY								
Wetland Hydrology Indicators	3:					Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of						Surface Soil		
✓ Surface Water (A1)			Fauna (B13)			Sparsely Ve		e Surface (B8)
High Water Table (A2)			oosits (B15) (LRF			Drainage Pa		
Saturation (A3)			n Sulfide Odor (0			Moss Trim L		
Water Marks (B1)			Rhizospheres a		oots (C3)		Water Table (Ca	2)
Sediment Deposits (B2)			e of Reduced Iro		00)	Crayfish Bur		l (00)
Drift Deposits (B3)			ron Reduction in	Tillea Solls (C6)	_	isible on Aerial I	magery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)			ck Surface (C7) xplain in Remark	(c)		✓ Geomorphic Shallow Aqu		
Inundation Visible on Aeria		_ Other (L.	Apiaiii iii Reiliair	(3)		FAC-Neutral		
Water-Stained Leaves (B9)							moss (D8) (LRR	T. U)
Field Observations:								, -,
Surface Water Present?	Yes _ 🗸 No _	Dep	th (inches): 2					
	Yes No							
	Yes No				Wetland F	lydrology Presei	nt? Yes	No
(includes capillary fringe)					:\	ilahla.		
Describe Recorded Data (streat Spring peepers and other frogs peepers)		ring weii, a	eriai pnotos, pre	evious inspect	ions), if ava	illable:		
Remarks:								
Wetland hydrology indicators pro	esent							
3,								

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?	Status	Number of Dominant Species _
1				That Are OBL, FACW, or FAC:5 (A)
2				Total Number of Dominant
3				Species Across All Strata: 5 (B)
4.				
5.				Percent of Dominant Species That Are OBL FACIN or FAC: 100 (A/B)
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 = 20
0	0	= Total Cov		25 70
50% of total cover:0	20% of	total cover:	0	FACW species x 2 = 70 315
Sapling/Shrub Stratum (Plot size: 15)				FAC species $\frac{100}{0}$ x 3 = $\frac{313}{0}$
1. Pinus taeda	70	Yes	FAC	FACU species x 4 =
Magnolia virginiana	20	Yes	FACW	UPL species x 5 =
				Column Totals:(A)(B)
3				
4				Prevalence Index = B/A =2.53
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is ≤3.0 ¹
	90	= Total Cov	er	
50% of total cover: 45		total cover:	40	Problematic Hydrophytic Vegetation ¹ (Explain)
-	20 /0 01	total cover.		
Herb Stratum (Plot size:) Andropogon virginicus	25	Voo	FAC	¹ Indicators of hydric soil and wetland hydrology must
		Yes		be present, unless disturbed or problematic.
2. Eleocharis palustris	20	Yes	OBL	Definitions of Four Vegetation Strata:
3. Arundinaria gigantea	15	Yes	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Smilax rotundifolia	10	No	FAC	more in diameter at breast height (DBH), regardless of
5.				height.
6.				Canling/Church Wasdurplants such diagraphs
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than o in. BBH and greater than o.20 it (1 in) tail.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11.				height.
12.				
	70	= Total Cov		
50% of total cover: 35		total cover:		
50 % of total cover.	20% 01	total cover.		
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4.				
5				Hydrophytic
0		= Total Cov		Vegetation Present? Yes No
50% of total cover:0	20% of	total cover:		resent: resno
Remarks: (If observed, list morphological adaptations below	w).			

SOIL Sampling Point: wsuc005s_w

Profile Des	cription: (Describe	to the depth	needed to docur	ment the i	ndicator	or confirm	the absence of	indicators.)			
Depth	Matrix			x Features		12	Tautura				
(inches) 0-6	Color (moist) 10 YR 4/1	99	Color (moist) 10 YR 3/6	<u>%</u> 1	Type ¹ C	Loc ²	Texture SL	Remarks			
-				. ——							
6-10	10 YR 4/1	· —— -	10 YR 3/6	3	C	PL	SL				
10-18	2.5 Y 5/1	95 2	2.5 Y 5/6	5	С	PL/M	SL				
								_			
-		·									
		· —— -					<u> </u>				
1- 0.0							2, ,, ,,				
	concentration, D=Dep Indicators: (Applic					ains.		=Pore Lining, M=Matrix. Problematic Hydric Soils ³ :			
Histoso		able to all L	Polyvalue Be		•	DD C T II		k (A9) (LRR O)			
	pipedon (A2)		Thin Dark Su					k (A10) (LRR S)			
	istic (A3)		Loamy Muck					Vertic (F18) (outside MLRA 150A,B)			
Hydroge	en Sulfide (A4)		Loamy Gleye				Piedmont	Floodplain Soils (F19) (LRR P, S, T)			
	d Layers (A5)		Depleted Ma	. ,				s Bright Loamy Soils (F20)			
-	Bodies (A6) (LRR P		Redox Dark	•	,		(MLRA	153B) nt Material (TF2)			
	ucky Mineral (A7) (LF resence (A8) (LRR U		Depleted Date Redox Depre					low Dark Surface (TF12)			
	uck (A9) (LRR P, T)	,	Marl (F10) (L		3)			plain in Remarks)			
	d Below Dark Surfac	e (A11)	Depleted Ocl		(MLRA 1	51)		,			
	ark Surface (A12)		Iron-Mangan		. , .		•	rs of hydrophytic vegetation and			
	Prairie Redox (A16) (I					, U)		d hydrology must be present,			
-	Mucky Mineral (S1) (I Gleyed Matrix (S4)	-RR O, S)	Delta Ochric Reduced Ver			0Δ 150R)	uniess	disturbed or problematic.			
	Redox (S5)		Reduced Ver				9A)				
-	d Matrix (S6)						A 149A, 153C, 15	53D)			
Dark Su	urface (S7) (LRR P, S	s, T, U)									
Restrictive	Layer (if observed):										
Type:			<u>—</u>					.,			
	iches):		<u> </u>				Hydric Soil Pre	esent? Yes No			
Remarks:											
Hydric soil in	dicators present										



Photo 1 Wetland data point WSUC005s_w facing north



Photo 2
Wetland data point WSUC005s_w facing south

Project/Site: Atlantic Coast Pipeline	City/Co	ounty: City of Suffolk		Sampling Date:	11/17/2015	
Applicant/Owner: DOMINION	City/Co		State: VA	Sampling Point:	wsuc005e_w	
Investigator(s): Team C						
	Local r				pe (%): 2	
	Lat: 36.67413086					
Soil Map Unit Name: Rains fine sandy loam		Long				
Are climatic / hydrologic conditions on the site typica						
Are Vegetation, Soil, or Hydrology					No. V	
					NO	
Are Vegetation, Soil, or Hydrology _						
SUMMARY OF FINDINGS – Attach site	map showing sam	pling point locatio	ons, transects	s, important fo	eatures, etc.	
Hydrophytic Vegetation Present? Yes	No	Is the Sampled Area				
	No	within a Wetland?	Yes 🗸	, No		
Wetland Hydrology Present? Yes	No					
PEM section located withiin a powerline roght of wa						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indica		f two required)	
Primary Indicators (minimum of one is required; che			Surface Soil			
	Aquatic Fauna (B13)		Sparsely Ve		Surface (B8)	
	Marl Deposits (B15) (LRR		Drainage Pa			
	Hydrogen Sulfide Odor (C Oxidized Rhizospheres al		Moss Trim L	ines (B16) Water Table (C2)		
	Presence of Reduced Iron				1	
	Recent Iron Reduction in		Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)			
	Thin Muck Surface (C7)	(,	Geomorphic Position (D2)			
	Other (Explain in Remarks	3)	Shallow Aqu			
Inundation Visible on Aerial Imagery (B7)			FAC-Neutral	Test (D5)		
Water-Stained Leaves (B9)			Sphagnum n	noss (D8) (LRR 1	T, U)	
Field Observations:						
	Depth (inches):					
	Depth (inches): $\frac{4}{0}$					
Saturation Present? Yes No (includes capillary fringe)	Depth (inches): $\frac{0}{}$	Wetland H	lydrology Preser	nt? Yes <u> </u>	No	
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, prev	vious inspections), if ava	ilable:			
Remarks:						
Wetland hydrology indicators present						

20		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30) 1	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Dominant Species Across All Strata: 3 (B)
4				Species Across All Strata. (b)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species $0 x 1 = 0$
500/ 51/1		= Total Cov	^	FACW species 30 x 2 = 60
·	20% of	total cover:		FAC species 85 x 3 = 255
Sapling/Shrub Stratum (Plot size:) 1 Liquidambar styraciflua	5	Yes	FAC	FACU species 20 x 4 = 80
··			170	UPL species
2.				Column Totals: 135 (A) 395 (B)
3				
4				Prevalence Index = B/A =2.92
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8	5			3 - Prevalence Index is ≤3.0 ¹
25		= Total Cov	4	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 2.5	20% of	total cover:		
Herb Stratum (Plot size: 5) 1. Andropogon virginicus	60	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Arundinaria gigantea	30	Yes	FACW	Definitions of Four Vegetation Strata:
3. Pteridium aquilinum	20	No	FACU	Tree Meady plants evaluding vines 2 in (7.6 cm) or
4. Smilax rotundifolia	20	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
0-	130	= Total Cov		
50% of total cover: 65	20% of	total cover:	26	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:0	20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations below	v).			
	•			

SOIL Sampling Point: wsuc005e_w

Profile Des	cription: (Describe	to the dept	h needed to docu	ment the i	ndicator	or confirm	the absence of	of indicators.)			
Depth	Matrix			ox Feature:		1 - 2	Touture				
(inches) 0-6	Color (moist) 10 YR 3/1	<u>%</u> 100	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u> LS	Remarks			
			40.1/D.0/0								
6-16	10 YR 5/1	98	10 YR 3/6	2	C	PL	SL				
	-										
		. ———						·			
	oncentration, D=Dep					ains.		PL=Pore Lining, M=Matrix.			
-	Indicators: (Applic	able to all I			•			for Problematic Hydric Soils ³ :			
Histoso	l (A1) pipedon (A2)		Polyvalue Be Thin Dark St					uck (A9) (LRR O) uck (A10) (LRR S)			
	istic (A3)		Loamy Muck					d Vertic (F18) (outside MLRA 150A,B)			
	en Sulfide (A4)		Loamy Gley			. • ,		nt Floodplain Soils (F19) (LRR P, S, T)			
	d Layers (A5)		<u>✓</u> Depleted Ma		,			ous Bright Loamy Soils (F20)			
_	Bodies (A6) (LRR P		Redox Dark	•	,			A 153B)			
·	ucky Mineral (A7) (LF		Depleted Da					rent Material (TF2)			
·	resence (A8) (LRR U uck (A9) (LRR P, T)))	Redox Depression Marl (F10) (I		8)			nallow Dark Surface (TF12) Explain in Remarks)			
·	d Below Dark Surfac	e (A11)	Man (F10) (I		(MIRA 1	51)	Other (E	explain in Remarks)			
-	ark Surface (A12)	· (· · · ·)	Iron-Mangar	, ,	•	•	T) ³ Indica	ators of hydrophytic vegetation and			
Coast F	rairie Redox (A16) (I	MLRA 150A) Umbric Surfa	ace (F13) ((LRR P, T	, U)		and hydrology must be present,			
-	Mucky Mineral (S1) (I	_RR O, S)	Delta Ochric				unles	ss disturbed or problematic.			
	Gleyed Matrix (S4)		Reduced Ve								
-	Redox (S5)		Piedmont Flo				9A) A 149A, 153C, ¹	153D)			
	d Matrix (S6) urface (S7) (LRR P, S	S. T. U)	Anomalous i	Brigrit Loai	ily Solis (F20) (WILK)	A 149A, 153C,	1330)			
	Layer (if observed):										
Type:	,										
	ches):						Hydric Soil F	Present? Yes No			
Remarks:	,						1 -				
Hvdric sil ind	icators present										
	outere process.										



Photo 1 Wetland data point WSUC005e_w facing east



Photo 2
Wetland data point WSUC005e_w facing west

Project/Site: Atlantic Coast Pipeline		City/C	ounty: City of Suffolk		Sampling Date: 11/17/2015		
Applicant/Owner: DOMINION		City/County: City of Suffolk Sampling Date: 11/17/2015 State: VA Sampling Point: wsuc005_u					
Investigator(s): Team C			on, Township, Range: N				
Landform (hillslope, terrace, etc.): Slig					Slope (%): 2		
					Datum: WGS 198		
Soil Map Unit Name: Rains fine sandy			Long				
·		tion f 0 . V					
Are climatic / hydrologic conditions on							
Are Vegetation, Soil, c							
Are Vegetation, Soil, c	or Hydrologyna	turally problema	atic? (If needed, e	explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS -	Attach site map s	howing sam	pling point location	ons, transects	s, important features, etc		
Lludronhutia Vagatatian Bracant?	Vac No	<i>y</i>					
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes No Yes No		Is the Sampled Area		,		
Wetland Hydrology Present?	Yes No	<u> </u>	within a Wetland?	Yes	No		
Remarks:							
Data point within a fallowed field.							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one	is required; check all th	at apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	Aquatic F	auna (B13)		Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Marl Dep	osits (B15) (LRF	R U)	Drainage Pa	atterns (B10)		
Saturation (A3)	Hydroger	Sulfide Odor (0	C1)	Moss Trim L	ines (B16)		
Water Marks (B1)	Oxidized	Rhizospheres a	long Living Roots (C3)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	Presence	of Reduced Iro	n (C4)	Crayfish Burrows (C8)			
Drift Deposits (B3)	Recent In	on Reduction in	Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Thin Muc	k Surface (C7)		Geomorphic	Position (D2)		
Iron Deposits (B5)	Other (Ex	plain in Remark	s)	Shallow Aqu	ıitard (D3)		
Inundation Visible on Aerial Ima	gery (B7)			FAC-Neutra	l Test (D5)		
Water-Stained Leaves (B9)				Sphagnum r	moss (D8) (LRR T, U)		
Field Observations:							
	No 🖍 Dept						
	No 🖍 Dept						
	No 🖍 Dept	h (inches):	Wetland I	Hydrology Prese	nt? Yes No		
(includes capillary fringe) Describe Recorded Data (stream ga	uge, monitoring well, a	erial photos, pre	l vious inspections), if ava	ailable:			
, ,		, , ,	, ,,				
Remarks:							
No wetland hydrology indicators pres	sent						

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)
2.				
3.				Total Number of Dominant Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	 0			OBL species0 x 1 =0
0		= Total Cov		FACW species 0 x 2 = 0
50% of total cover:0	20% of	total cover:		FAC species 70 x 3 = 210
Sapling/Shrub Stratum (Plot size:)				FACU species 30 x 4 = 120
1				0 0
2				UPL species $0 \times 5 = 0$
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =3.3
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:0	20% of	total cover:	0	
Herb Stratum (Plot size: 5				¹ Indicators of hydric soil and wetland hydrology must
1. Panicum virgatum	70	Yes	FAC	be present, unless disturbed or problematic.
2. Trifolium pratense	25	Yes	FACU	Definitions of Four Vegetation Strata:
3. Plantago lanceolata	5	No	FACU	Tree Meady plants avaluation visco 2 in (7.0 am) an
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5.				height.
6.				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				. ,
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				
4.4				Woody vine – All woody vines greater than 3.28 ft in
				height.
12	100	= Total Cov		
50% of total cover: 50		total cover:		
50 % Of total cover.	20% 01	total cover:		
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				Hydrophytic
0		= Total Cov		Vegetation Present? Yes No
50% of total cover:0		total cover:		
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wsuc005_u

	cription: (Describe t	o the depth				or confirm	the absence of i	ndicators.)			
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	s Type ¹	Loc ²	Texture Remarks				
0-18	10 YR 3/1	100					LS				
18-22	2.5 Y 6/3	97	2.5 Y 6/8	3			SL -				
				- —							
			-	-							
				-							
				-							
	oncentration, D=Depl					ains.		=Pore Lining, M=Matrix.			
-	Indicators: (Applica	able to all L						Problematic Hydric Soils ³ :			
Histosol	• •		Polyvalue Be								
	pipedon (A2)		Thin Dark Su Loamy Muck					((A10) (LRR S) /ertic (F18) (outside MLRA 150A,B			
	istic (A3) en Sulfide (A4)		Loamy Gleye	-		(0)		Floodplain Soils (F19) (LRR P, S, T)			
	d Layers (A5)		Depleted Mar		.1 2)			s Bright Loamy Soils (F20)			
	Bodies (A6) (LRR P,	T, U)	Redox Dark		- 6)		(MLRA 1				
_	ucky Mineral (A7) (LR		Depleted Dar					nt Material (TF2)			
Muck Pi	resence (A8) (LRR U))	Redox Depre		8)		Very Shall	ow Dark Surface (TF12)			
	uck (A9) (LRR P, T)		Marl (F10) (L				Other (Exp	olain in Remarks)			
	d Below Dark Surface	e (A11)	Depleted Och				 3				
	ark Surface (A12)	U D A 450A)	Iron-Mangan					s of hydrophytic vegetation and			
	rairie Redox (A16) (N ⁄lucky Mineral (S1) (L		Umbric SurfaDelta Ochric			, 0)		I hydrology must be present, disturbed or problematic.			
	Gleyed Matrix (S4)	.KK 0, 3)	Reduced Ver			ΩΔ 150R)	uness	disturbed or problematic.			
	Redox (S5)		Piedmont Flo				9A)				
-	Matrix (S6)						A 149A, 153C, 15	3D)			
	rface (S7) (LRR P, S	, T, U)				, ,		·			
Restrictive	Layer (if observed):										
Type:											
Depth (in	ches):						Hydric Soil Pre	esent? Yes No			
Remarks:							l				
No hydric soi	I indicators present										
, ,	, p										
İ											
İ											



Photo 1 Upland data point WSUC005_u facing east



Photo 2 Upland data point WSUC005_u facing west

Project/Site: Atlantic Coast Pipeline	City/County: (City of Suffolk	Sampling Date: 11/17/2015				
Applicant/Owner: DOMINION		Sampling Point: wsuc006f_w					
• • • • • • • • • • • • • • • • • • • •	Section, Township, Range: No PLSS in this area						
Landform (hillslope, terrace, etc.): Depression							
Subregion (LRR or MLRA): T	26.67510615	Long: -76.76013282	Datum: WGS 1984				
Soil Map Unit Name: Lynchburg fine sandy loam	_ Lat	Long NWI classi	ification: PFO4A				
Are climatic / hydrologic conditions on the site typical for							
Are Vegetation, Soil, or Hydrology							
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any ansv	wers in Remarks.)				
SUMMARY OF FINDINGS – Attach site ma	p showing sampling	point locations, transec	ts, important features, etc.				
Hydrophytic Vegetation Present? Yes	No Is the S	Name 1 Ame					
	No.	Sampled Area a Wetland? Yes	✓ No				
	No	a wetiand? Tes	NO				
Remarks:							
Floodplain pool							
HYDROLOGY							
Wetland Hydrology Indicators:		<u></u>	icators (minimum of two required)				
Primary Indicators (minimum of one is required; check			Surface Soil Cracks (B6)				
	atic Fauna (B13)		/egetated Concave Surface (B8)				
	Deposits (B15) (LRR U) rogen Sulfide Odor (C1)		Patterns (B10) Lines (B16)				
	lized Rhizospheres along Livi						
	ence of Reduced Iron (C4)		Dry-Season Water Table (C2) Crayfish Burrows (C8)				
	ent Iron Reduction in Tilled So		Saturation Visible on Aerial Imagery (C9)				
	Muck Surface (C7)		nic Position (D2)				
	er (Explain in Remarks)		quitard (D3)				
Inundation Visible on Aerial Imagery (B7)		<u>✓</u> FAC-Neuti	FAC-Neutral Test (D5)				
Water-Stained Leaves (B9)		Sphagnum	n moss (D8) (LRR T, U)				
Field Observations:							
Surface Water Present? Yes No							
Water Table Present? Yes No			,				
Saturation Present? Yes No	Depth (inches):	Wetland Hydrology Pres	ent? Yes V No No				
Describe Recorded Data (stream gauge, monitoring we	ell, aerial photos, previous ins	spections), if available:					
Remarks:							
Wetland hydrology indicators present							

00	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?	Status	Number of Dominant Species _
1. Pinus taeda	60	Yes	FAC	That Are OBL, FACW, or FAC:7 (A)
2. Liquidambar styraciflua	20	Yes	FAC	Total Number of Dominant
3				Species Across All Strata: 7 (B)
4.				(=)
5.				Percent of Dominant Species That Are OBL FACW or FAC: 100
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species $0 \times 1 = 0$
40	80	= Total Cov		20
50% of total cover: 40	20% of	total cover:	<u>16</u>	FACW species x 2 = 60
Sapling/Shrub Stratum (Plot size: 15)				FAC species $\frac{120}{0}$ x 3 = $\frac{300}{0}$
1. Liquidambar styraciflua	15	Yes	FAC	FACU species x 4 =
Magnolia virginiana	15	Yes	FACW	UPL species x 5 =
3. Acer rubrum	15	Yes	FAC	Column Totals:150
4				Prevalence Index = B/A =2.8
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	45	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:22.5	20% of	total cover:	9	1 Toblematic Trydrophytic Vegetation (Explain)
Herb Stratum (Plot size:5)				1
1 Arundinaria gigantea	15	Yes	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Smilax rotundifolia	10	Yes		
			FAC	Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6.				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	25	= Total Cov	er	
50% of total cover: 12.5				
Woody Vine Stratum (Plot size: 30)				
/ / / / / / / / / / / / / / / / / / /				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov	er	Vegetation
50% of total cover:0				Present? Yes No
		total cover.		
Remarks: (If observed, list morphological adaptations below	W).			

SOIL Sampling Point: wsuc006f_w

	cription: (Describe	to the depth				or confirm	the absence of	indicators.)			
Depth (inches)	Matrix Color (moist)	%	Redo Color (moist)	ox Features %	Type ¹	Loc²	Texture Remarks				
0-8	10 YR 3/2		7.5 YR 2.5/3	2	C	PL	SL	remarks			
8-18	2.5 Y 5/1	98	10 YR 3/6			PL	SL -				
	2.0 1 0/1		10 11(0/0								
1			Name and Manager A		0		21	Dans Lining M. Matrix			
	Concentration, D=Dep Indicators: (Applic					ains.		=Pore Lining, M=Matrix. Problematic Hydric Soils ³ :			
Histoso		able to all L	Polyvalue Be		•	DD C T II		k (A9) (LRR O)			
	pipedon (A2)		Thin Dark S					k (A10) (LRR S)			
	listic (A3)		Loamy Muck					Vertic (F18) (outside MLRA 150A,B)			
	en Sulfide (A4)		Loamy Gley				Piedmont	Floodplain Soils (F19) (LRR P, S, T)			
	d Layers (A5)		✓ Depleted Ma	, ,				s Bright Loamy Soils (F20)			
_	Bodies (A6) (LRR P		Redox Dark	•	,		(MLRA				
	ucky Mineral (A7) (LI		Depleted Da					nt Material (TF2)			
	resence (A8) (LRR Uuck (A9) (LRR P, T)))	Redox Depression Marl (F10) (I		3)			low Dark Surface (TF12) plain in Remarks)			
	ed Below Dark Surfac	e (A11)	Depleted Oc		(MLRA 1	51)	Other (LX)	Jani III Nemarks)			
-	ark Surface (A12)	(,)	Iron-Mangar				T) ³ Indicato	rs of hydrophytic vegetation and			
	Prairie Redox (A16) (I	MLRA 150A)					•	d hydrology must be present,			
Sandy	Mucky Mineral (S1) (LRR O, S)	Delta Ochric	(F17) (ML	RA 151)		unless	disturbed or problematic.			
	Gleyed Matrix (S4)		Reduced Ve								
-	Redox (S5)		Piedmont Fl					(a.p.)			
	d Matrix (S6) urface (S7) (LRR P, \$. T III	Anomalous I	Bright Loan	ny Soils (F20) (MLR	A 149A, 153C, 15	(3D)			
	Layer (if observed)						T				
Type:	Layer (ii observea)	•									
	nches):		<u>—</u>				Hydric Soil Pre	esent? Yes V No No No			
Remarks:			<u> </u>				Trydric 30ii Fre	resNO			
	diaatara propont										
nyunc son in	dicators present										



Photo 1
Wetland data point WSUC006f_w facing west



Photo 2
Wetland data point WSUC006f_w facing east

Project/Site: Atlantic Coast Pipeline	City/County: City	of Suffolk	Sampling Date: 11/17/2015				
Applicant/Owner: DOMINION	City/County: City of Suffolk Sampling Date: 11/17/2 State: VA Sampling Point: wsuc00						
Landform (hillslope, terrace, etc.): slight slope							
Subregion (LRR or MLRA): T							
Soil Map Unit Name: Lynchburg fine sandy loam		NWI classifi					
Are climatic / hydrologic conditions on the site typical							
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	map showing sampling po	int locations, transect	s, important features, etc.				
Hydrophytic Vegetation Present? Yes	No Is the Sar						
Hydric Soil Present? Yes	No V	npled Area					
	No within a V	/etland? Yes	No				
Remarks:							
datapoint is located within a maintained powerline rig	ght of way. Vegetation and soils we	re disturbed.					
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)				
Primary Indicators (minimum of one is required; che	ck all that apply)	Surface Soi	l Cracks (B6)				
Surface Water (A1) Ad	quatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)					
	arl Deposits (B15) (LRR U)	Drainage Pa	atterns (B10)				
1	Hydrogen Sulfide Odor (C1) Moss Trir						
	xidized Rhizospheres along Living						
	resence of Reduced Iron (C4)	Crayfish Bu					
	ecent Iron Reduction in Tilled Soils						
	nin Muck Surface (C7)	Geomorphic Position (D2)					
	ther (Explain in Remarks)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)					
Water-Stained Leaves (B9)		Spnagnum	moss (D8) (LRR I, U)				
Field Observations: Surface Water Present? Yes No	Donth (inches):						
1	Depth (inches):	Wetland Hydrology Present? Yes No					
Saturation Present? Yes Ves No	Depth (inches):	wetiand Hydrology Prese	nt? Yes No				
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspe	ctions), if available:					
Remarks:							
Wetland hydrology indicators present							

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Descinant
3				Total Number of Dominant Species Across All Strata: 2 (B)
4.				(2)
				Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/R)
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
8				
	0	= Total Cove	er	OBL species X1 = 0
50% of total cover:0	20% of	total cover:	0	FACW species x 2 =
	2070 01	total oover.		FAC species120
				FACU species25 x 4 =100
1				UPL species
2				150 465
3				Column Totals: (A) 403 (B)
4				Prevalence Index = B/A = 3.1
5.				Trevalence index Birt
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	0	= Total Cove	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:0	20% of	total cover:	0	
Herb Stratum (Plot size:5			,	1
1 Panicum virgatum	70	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
**				
2. Andropogon virginicus	50	Yes	FAC	Definitions of Four Vegetation Strata:
3. Erigeron canadensis	15	<u>No</u>	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Sorghastrum nutans	10	No	FACU	more in diameter at breast height (DBH), regardless of
Rhynchospora cephalantha	5	No	OBL	height.
6				Octobra (Obstate Western Lands acceledition since Land
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 3 in. DBH and greater than 3.20 it (1 iii) tail.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Weedy vine All woody vines greater than 2.29 ft in
11.				Woody vine – All woody vines greater than 3.28 ft in height.
12.				noight.
12.	150			
75		= Total Cove	~~	
50% of total cover:75	20% of	total cover:	30	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cove	er	Vegetation
50% of total cover: 0	20% of	total cover:	0	Present? Yes No
Remarks: (If observed, list morphological adaptations below				
Tremarks. (II observed, list morphological adaptations belo-	w).			

SOIL Sampling Point: wsuc006e_w

Profile Des	cription: (Describe	to the dep	th needed to docur	ment the i	ndicator	or confirm	the absence of	indicators.)		
Depth										
(inches) 0-6	Color (moist) 10 YR 3/2	77	Color (moist)	%	Type ¹	Loc ²	Texture SL	Rem	arks	
	-		0.5.1/.0/0							
	2.5 Y 6/1	20	2.5 Y 6/8	3	C	PL_	SL			_
6-18	10 YR 3/2	57					SL			
	2.5 Y 6/1	40	2.5 Y 6/8	3	С	PL	SL			
										_
		·								
	-									
	oncentration, D=Dep					ains.		=Pore Lining, M		
	Indicators: (Applic	able to all			•	DD 0 T 11		Problematic H	yarıc sons :	
Histoso	pipedon (A2)		Polyvalue Be Thin Dark Su					k (A9) (LRR O) k (A10) (LRR S)		
	istic (A3)		Loamy Muck					Vertic (F18) (out	side MLRA 15	50A.B)
	en Sulfide (A4)		Loamy Gleye			-,		Floodplain Soils		
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)				s Bright Loamy		
-	Bodies (A6) (LRR P		Redox Dark				(MLRA			
	ucky Mineral (A7) (LF							nt Material (TF2)		
	resence (A8) (LRR U uck (A9) (LRR P, T))	Redox Depre Marl (F10) (L		3)			low Dark Surface plain in Remarks		
	d Below Dark Surfac	e (A11)	Nan (F10) (L		(MIRA 1	51)	Other (Ex	piaiii iii Reiliaiks	·)	
l — ·	ark Surface (A12)	0 (/ (/)	Iron-Mangan				r) ³ Indicato	rs of hydrophytic	vegetation an	ıd
	rairie Redox (A16) (I	MLRA 150						d hydrology mus	-	
-	Mucky Mineral (S1) (I	RR O, S)	Delta Ochric				unless	disturbed or pro	blematic.	
	Gleyed Matrix (S4)		Reduced Ver							
-	Redox (S5)		Piedmont Flo					:2D)		
	d Matrix (S6) urface (S7) (LRR P, S	S. T. U)	Anomalous E	origini Luai	ily Solis (-20) (IVILK)	A 149A, 155C, 18	130)		
	Layer (if observed):									
Type:	,									
	ches):						Hydric Soil Pro	esent? Yes	No	~
Remarks:	,									<u>-</u>
Wetland soil	is disturbed due to po	owerline co	nstruction.							
Trouding con	.o a.o.a. 200 aao to p									



Photo 1 Wetland data point WSUC006e_w facing west



Photo 2
Wetland data point WSUC006e_w facing east

Project/Site: Atlantic Coast Pipeline		City/C	County: City of Suffolk		_ Sampling Date:			
Applicant/Owner: DOMINION			Sampling Point: wsuc006_u					
Investigator(s): Team C								
Landform (hillslope, terrace, etc.): Sligh								
Subregion (LRR or MLRA): T								
Soil Map Unit Name: Lynchburg fine sa		_ Lat:						
				NWI classifi				
Are climatic / hydrologic conditions on the								
Are Vegetation, Soil, or	Hydrology	significantly distur	bed? Are "Norma	al Circumstances"	present? Yes No			
Are Vegetation, Soil, or	Hydrology	_ naturally problema	atic? (If needed,	explain any answe	ers in Remarks.)			
SUMMARY OF FINDINGS - A	ttach site ma	p showing san	npling point locati	ons, transects	s, important features, etc.			
Hydrophytic Vegetation Present?	Yes <u></u> ✓	No						
Hydric Soil Present?	Yes		Is the Sampled Area	.,	4			
Wetland Hydrology Present?	Yes	No 🔽	within a Wetland?	Yes	No			
Remarks:								
Data point near an agricultural field.								
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)			
Primary Indicators (minimum of one is	required; check a	all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)	Aqua	itic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Marl	Deposits (B15) (LRI	R U)	Drainage Patterns (B10)				
Saturation (A3)		ogen Sulfide Odor (Moss Trim Lines (B16)				
Water Marks (B1)			llong Living Roots (C3)					
Sediment Deposits (B2)		ence of Reduced Iro		Crayfish Burrows (C8)				
Drift Deposits (B3) Algal Mat or Crust (B4)		ent Iron Reduction in Muck Surface (C7)	Tilled Solls (Cb)					
Algai Mat of Clust (B4) Iron Deposits (B5)		r (Explain in Remark	(9)	Geomorphic Position (D2)Shallow Aquitard (D3)				
Inundation Visible on Aerial Image		(Explain in Remain	(0)	FAC-Neutral Test (D5)				
Water-Stained Leaves (B9)					moss (D8) (LRR T, U)			
Field Observations:								
Surface Water Present? Yes	No 🖍 I	Depth (inches):						
Water Table Present? Yes	No 🔽 I	Depth (inches):						
	No 🖍 I	Depth (inches):	Wetland	Wetland Hydrology Present? Yes No				
(includes capillary fringe) Describe Recorded Data (stream gauge	ne monitoring we	all aerial nhotos nre	vious inspections) if av	ailahle:				
Describe Necorded Data (Stream gade	je, monitoring we	iii, aeriai priotos, pre	vious inspections), ii av	allable.				
Remarks:								
No wetland hydrology indicators preser	nt							
,								