Project/Site: Atlantic Coast Pipeline	(	City/County: Randolph County Sampling Date: 3/14/2016					
Applicant/Owner: DOMINION		State: WV Sampling Po					
		Section, Township, Range: No PLSS ir					
Landform (hillslope, terrace, etc.): Slight							
			5 Datum: WGS 1984				
Soil Map Unit Name:		NW	/I classification: None				
Are climatic / hydrologic conditions on th							
			stances" present? Yes No				
Are Vegetation, Soil, or h							
			ansects, important features, etc.				
Hydrio Soil Brosent?	Yes No Yes No	Is the Sampled Area					
Hydric Soil Present? Wetland Hydrology Present?	Yes _ V No	within a Wetland?	es No				
Remarks:	163 _ 110						
HYDROLOGY							
Wetland Hydrology Indicators:		Second	ary Indicators (minimum of two required)				
Primary Indicators (minimum of one is	required: check all that apply)		face Soil Cracks (B6)				
Surface Water (A1)	True Aquatic Pla						
✓ High Water Table (A2)	Hydrogen Sulfid		<ul><li>Sparsely Vegetated Concave Surface (B8)</li><li>Drainage Patterns (B10)</li></ul>				
Saturation (A3)			ss Trim Lines (B16)				
Water Marks (B1)	Presence of Rec		r-Season Water Table (C2)				
Sediment Deposits (B2)			ayfish Burrows (C8)				
Drift Deposits (B3)	Thin Muck Surfa		turation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in	n Remarks) Stu	nted or Stressed Plants (D1)				
Iron Deposits (B5)		Geo	omorphic Position (D2)				
Inundation Visible on Aerial Image	ry (B7)	Sha	allow Aquitard (D3)				
Water-Stained Leaves (B9)			Microtopographic Relief (D4)				
Aquatic Fauna (B13)		FAG	C-Neutral Test (D5)				
Field Observations:	4						
	No Depth (inches):						
	No Depth (inches):		- · · · · · · · · · · · · · · · · · · ·				
Saturation Present? Yes (includes capillary fringe)	No Depth (inches):	Wetland Hydrolog	gy Present? Yes V No No				
Describe Recorded Data (stream gaug	e, monitoring well, aerial photos	s, previous inspections), if available:					
Daywell a							
Remarks: Wetland hydrology indicators present							
Wettaria Hydrology indicators present							

### **VEGETATION** (Four Strata)

		Absolute	Dominant	Indicator	Dominance Test	worksheet:			
ree Stratum (Plot size:			Species?	Status	Number of Domin		_	1	(A)
					Total Number of [				(^)
					Species Across A			2	(B)
			·		Percent of Domin			50	(
					That Are OBL, FA		· -		(A/B)
					Prevalence Index			L . L	
			= Total Cove	_	Total % Cove	0		oly by: 0	
	50% of total cover:	0 20% of	f total cover:	0	OBL species _	25	x 1 =		_
apling/Shrub Stratum (Plot siz	e:)				FACW species _		x 2 =	50	_
	-				FAC species _		x 3 =	0	_
					FACU species _		x 4 =	320	_
					UPL species _		x 5 =	50	_
			-		Column Totals:	115	(A)	420	– (B)
						Index = B/A	` ,	3 65	_ (-/
					Hydrophytic Veg				
					Hydrophytic Vec	indiation India			
					1 ' ' '				
					1 - Rapid Tes	st for Hydroph	hytic Vege	etation	
					1 - Rapid Tes	st for Hydroph ce Test is >50	hytic Vege 0%	etation	
					1 - Rapid Tes	st for Hydroph ce Test is >50	hytic Vege 0%	etation	
		0	= Total Cove	  er 0	1 - Rapid Tes	st for Hydroph ce Test is >50 ce Index is ≤3	nytic Vege 0% 3.0 <sup>1</sup>		porting
	50% of total cover:	0			1 - Rapid Tes 2 - Dominand 3 - Prevalend 4 - Morpholog	st for Hydroph ce Test is >50 ce Index is ≤3	hytic Vege 0% 3.0 <sup>1</sup> ions¹ (Pro	vide sup	porting
  l <u>erb Stratum</u> (Plot size:		0 0 20% of	= Total Cover:	0	1 - Rapid Tes 2 - Dominand 3 - Prevalend 4 - Morpholog	et for Hydroph ce Test is >50 ce Index is ≤3 gical Adaptati emarks or on	hytic Vege 0% 3.0 <sup>1</sup> ions <sup>1</sup> (Pro a separate	vide sup e sheet)	
erb Stratum (Plot size:	50% of total cover:	0 20% of	= Total Cover:_ f total cover:_ Yes	FACU	1 - Rapid Tes 2 - Dominand 3 - Prevalend 4 - Morpholog	et for Hydroph ce Test is >50 ce Index is ≤3 gical Adaptati emarks or on	hytic Vege 0% 3.0 <sup>1</sup> ions <sup>1</sup> (Pro a separate	vide sup e sheet)	
erb Stratum (Plot size: Poa pratensis Juncus effusus	50% of total cover:	0 20% of 60 25	= Total Cover: f total cover: Yes Yes	FACU FACW	1 - Rapid Tes 2 - Dominand 3 - Prevalend 4 - Morpholog data in Re Problematic H	est for Hydroph ce Test is >50 ce Index is ≤3 gical Adaptati emarks or on Hydrophytic \	nytic Vege 0% 3.0 <sup>1</sup> ions <sup>1</sup> (Pro a separati /egetation	vide sup e sheet) ¹ (Explai	in)
erb Stratum (Plot size:	50% of total cover:	0 20% of 60 25 20	= Total Cover:_ f total cover:_ Yes	FACU FACW FACU	1 - Rapid Tes 2 - Dominand 3 - Prevalend 4 - Morpholog	est for Hydroph ce Test is >50 ce Index is ≤3 gical Adaptati emarks or on Hydrophytic \ ric soil and w	nytic Vege 0% 3.0 <sup>1</sup> ions <sup>1</sup> (Pro a separate /egetation	vide sup e sheet) <sup>1</sup> (Explai drology r	in)
lerb Stratum (Plot size:	50% of total cover:	0 20% of 60 25	= Total Cover: f total cover: Yes Yes	FACU FACW	1 - Rapid Tes 2 - Dominand 3 - Prevalence 4 - Morpholog data in Re Problematic H	st for Hydroph ce Test is >50 ce Index is ≤3 gical Adaptati emarks or on Hydrophytic \ ric soil and w s disturbed o	nytic Vege 0% 8.0 <sup>1</sup> ions <sup>1</sup> (Pro a separate /egetation retland hyder r problema	vide sup e sheet) <sup>1</sup> (Explai drology r atic.	in)
lerb Stratum (Plot size:	50% of total cover:	0 20% of 60 25 20 10	= Total Cover:  Yes  Yes  No  No	FACU FACW FACU	1 - Rapid Tes 2 - Dominand 3 - Prevalend 4 - Morpholog data in Re Problematic H	st for Hydroph ce Test is >50 ce Index is ≤3 gical Adaptati emarks or on Hydrophytic \ ric soil and w s disturbed o	nytic Vege 0% 8.0 <sup>1</sup> ions <sup>1</sup> (Pro a separate /egetation retland hyder r problema	vide sup e sheet) <sup>1</sup> (Explai drology r atic.	in)
lerb Stratum (Plot size: Poa pratensis Juncus effusus Trifolium pratense Plantago lanceolata	50% of total cover:5	0 20% of 60 25 20 10	= Total Cover:  Yes  Yes  No  No	FACU FACW FACU	1 - Rapid Tes 2 - Dominanc 3 - Prevalenc 4 - Morpholog data in Re Problematic I  Indicators of hyd be present, unless  Definitions of Fo	st for Hydroph ce Test is >50 ce Index is ≤3 gical Adaptati emarks or on Hydrophytic \ ric soil and w s disturbed o pur Vegetatio	nytic Vege 0% 3.0 <sup>1</sup> ions <sup>1</sup> (Pro a separate /egetation /egtland hyder problemater on Strata:	vide sup e sheet) 1 (Explaid drology ratic.	in) nust cm) or
erb Stratum (Plot size:	50% of total cover:5	0 20% of 60 25 20 10	= Total Cover:  Yes  Yes  No  No	FACU FACW FACU	1 - Rapid Tes 2 - Dominand 3 - Prevalence 4 - Morpholog data in Re Problematic h  Indicators of hyd be present, unless  Definitions of Fo  Tree – Woody pla more in diameter	st for Hydroph ce Test is >50 ce Index is ≤3 gical Adaptati emarks or on Hydrophytic \ ric soil and w s disturbed o pur Vegetatio	nytic Vege 0% 3.0 <sup>1</sup> ions <sup>1</sup> (Pro a separate /egetation /egtland hyder problemater on Strata:	vide sup e sheet) 1 (Explaid drology ratic.	in) nust cm) or
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erb Stratum (Plot size: Poa pratensis Juncus effusus Trifolium pratense Plantago lanceolata	50% of total cover:	0 20% of 60 25 20 10	= Total Cover:  Yes Yes No No	FACU FACW FACU UPL	1 - Rapid Tes 2 - Dominand 3 - Prevalend 4 - Morpholog data in Re Problematic I  Indicators of hyd be present, unless  Definitions of Fo  Tree – Woody pla more in diameter height.  Sapling/Shrub –	et for Hydroph the Test is >50 the Index is ≤3 gical Adaptati the marks or on Hydrophytic N ric soil and w s disturbed o the Vegetation ants, excluding at breast heig	hytic Vege 10% 13.01 16ions <sup>1</sup> (Pro 2 a separate 2 degetation 2 vetland hyder 2 problem: 2 problem: 2 problem: 2 problem: 2 problem: 2 problem: 2 problem: 2 problem: 2 problem: 3 problem: 4 problem: 5 problem: 6 problem: 6 problem: 6 problem: 6 problem: 7 problem: 8 problem: 9 problem: 10 p	vide sup e sheet)  1 (Explain drology ratic.  in. (7.6 , regardl	cm) or ess of
lerb Stratum (Plot size:Poa pratensisJuncus effususTrifolium pratensePlantago lanceolata	50% of total cover:	0 20% of 60 25 20 10	= Total Cover:  Yes  Yes  No  No	FACU FACU UPL	1 - Rapid Tes 2 - Dominand 3 - Prevalend 4 - Morpholog data in Re Problematic F  Indicators of hyd be present, unless  Definitions of Fo  Tree – Woody pla more in diameter height.  Sapling/Shrub – than 3 in. DBH an	et for Hydroph the Test is >50 the Index is ≤3 gical Adaptati the marks or on Hydrophytic N ric soil and w s disturbed o the Vegetation ants, excluding at breast heig	hytic Vege 10% 13.01 16ions <sup>1</sup> (Pro 2 a separate 2 degetation 2 vetland hyder 2 problem: 2 problem: 2 problem: 2 problem: 2 problem: 2 problem: 2 problem: 2 problem: 2 problem: 3 problem: 4 problem: 5 problem: 6 problem: 6 problem: 6 problem: 6 problem: 7 problem: 8 problem: 9 problem: 10 p	vide sup e sheet)  1 (Explain drology ratic.  in. (7.6 , regardl	cm) or ess of
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erb Stratum (Plot size:	50% of total cover:	0 20% of 60 25 20 10	= Total Cover:  Yes Yes No No  = Total Cover:	FACU FACU UPL	1 - Rapid Tes 2 - Dominand 3 - Prevalend 4 - Morpholog data in Re Problematic H  Indicators of hyd be present, unless  Definitions of Fo  Tree – Woody pla more in diameter height.  Sapling/Shrub – than 3 in. DBH an m) tall.  Herb – All herbac of size, and wood	ts for Hydroph the Test is >50 the Index is ≤3 the Index is ≤4 the Index is ≤	nytic Vege 0% 3.0 <sup>1</sup> ions <sup>1</sup> (Pro a separate /egetation retland hyder retland or equal cody) plant than 3.28	vide sup e sheet)  1 (Explain drology ratic.  2 in. (7.6, regard)  ng vines all to 3.28  hts, regard  ft tall.	cm) or ess of ft (1
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lerb Stratum (Plot size:Poa pratensis	50% of total cover:	0 0 20% of 60 25 20 10 115 57.5 20% of	= Total Cover:  Yes Yes No No  Total Cover:  Total Cover:  Total Cover:  Total Cover:	FACU FACU UPL  23	1 - Rapid Tes 2 - Dominand 3 - Prevalend 4 - Morpholog data in Re Problematic h  Indicators of hyd be present, unless  Definitions of Fo  Tree – Woody pla more in diameter height.  Sapling/Shrub – than 3 in. DBH an m) tall.  Herb – All herbac of size, and wood  Woody vine – All height.  Hydrophytic Vegetation	st for Hydroph the Test is >50 the Index is ≤3 gical Adaptation the marks or on Hydrophytic \( \) tric soil and we the soil disturbed of the Vegetation that breast heigh Woody plant and greater that the greater that the second (non-weight) plants less I woody vines	nytic Vege 0% 3.0 <sup>1</sup> ions <sup>1</sup> (Pro a separate /egetation retland hyder r problem: on Strata: ag vines, 3 ght (DBH) as, excluding an or equal cody) plar than 3.28 s greater the	vide sup e sheet)  1 (Explain drology ratic.  1 in. (7.6, regard)  Ing vines it to 3.28  Ints, regard ft tall.  In the first tall in the f	cm) or ess of ft (1
Herb Stratum (Plot size: Poa pratensis Juncus effusus Trifolium pratense Plantago lanceolata   0	50% of total cover:	0 0 20% of 60 25 20 10 10 57.5 20% of 60 60 60 60 60 60 60 60 60 60 60 60 60	= Total Cover:  Yes Yes No No  Total Cover:  Yes Total Cover:  Total Cover:  Total Cover:	FACU FACU UPL  23	1 - Rapid Tes 2 - Dominand 3 - Prevalend 4 - Morpholog data in Re Problematic H  Indicators of hyd be present, unless  Definitions of Fo  Tree – Woody pla more in diameter height.  Sapling/Shrub – than 3 in. DBH an m) tall.  Herb – All herbad of size, and wood  Woody vine – All height.	the for Hydroph the Test is >50 the Index is ≤3 the Index is ≤3 the Index is ≤3 the Index is ≤3 the Index is considered and which is the Index is t	nytic Vege 0% 3.0 <sup>1</sup> ions <sup>1</sup> (Pro a separate /egetation retland hyder r problem: on Strata: ag vines, 3 ght (DBH) as, excluding an or equal cody) plar than 3.28 s greater the	vide sup e sheet)  1 (Explain drology ratic.  1 in. (7.6, regard)  Ing vines it to 3.28  Ints, regard ft tall.  In the first tall in the f	cm) or ess of ft (1

Sampling Point: wrac103e\_w

Profile Desc	cription: (Describe to	the dept	h needed to docur	nent the in	dicator	or confirm	the ab	sence of indicat	ors.)
Depth	Matrix			x Features					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		ture	Remarks
0-18	2.5 Y 6/2	97	10 YR 4/6	3	С	PL	S	CL	
				<del></del> ·					
								<del></del>	
			_						
	oncentration, D=Deple	tion, RM=	Reduced Matrix, M	S=Masked S	Sand Gra	ains.	<sup>2</sup> Loca	tion: PL=Pore Lin	
Hydric Soil	Indicators:							Indicators for P	roblematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	(S7)				2 cm Muck (	(A10) <b>(MLRA 147)</b>
	pipedon (A2)		Polyvalue Be	, ,	e (S8) (N	ILRA 147,	148)	Coast Prairie	
	istic (A3)		Thin Dark Su				•	(MLRA 14	
	en Sulfide (A4)		Loamy Gleye			•			oodplain Soils (F19)
	d Layers (A5)		✓ Depleted Ma		,			(MLRA 1	
	uck (A10) (LRR N)		Redox Dark		i)				w Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Da						ain in Remarks)
	ark Surface (A12)	` ,	Redox Depre					` ` '	,
	Mucky Mineral (S1) <b>(LF</b>	RR N,	Iron-Mangan			LRR N,			
	A 147, 148)	,	MLRA 13		,,,	,			
	Gleyed Matrix (S4)		Umbric Surfa	•	ILRA 13	6. 122)		<sup>3</sup> Indicators of h	ydrophytic vegetation and
	Redox (S5)		Piedmont Flo				.8)		ology must be present,
-	Matrix (S6)		Red Parent N					-	ped or problematic.
	Layer (if observed):			natorial (i Z	·		<del>,</del>	unicoo dictark	oca di problematio.
Type:									
Depth (in	ches):						Hydi	ric Soil Present?	Yes No
Remarks:									
Hydric soil ind	dicators present								



Photo 1
Wetland data point WRAC103e\_w facing north



Photo 2
Wetland data point WRAC103e\_w facing west

Project/Site: Atlantic Coast Pipeline	City/County: Randolph County Sampling Date: 3/14/2016					
Applicant/Owner: DOMINION		State: WV Sampling Point: wrac103_u				
	Section, Township, Range: No					
	Local relief (concave, convex, nor					
Subregion (LRR or MLRA): N L						
Soil Map Unit Name:		NWI classification: None				
Are climatic / hydrologic conditions on the site typica						
Are Vegetation, Soil, or Hydrology _						
Are Vegetation, Soil, or Hydrology _						
SUMMARY OF FINDINGS – Attach site						
		,, <b>p</b> o, o				
	No V Is the Sampled Area					
	No within a Wetland?	Yes No				
Remarks:	NO					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; ch		Surface Soil Cracks (B6)				
	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)				
	Hydrogen Sulfide Odor (C1)	Sparsely vegetated Concave Surface (B6) Drainage Patterns (B10)				
	0.111 1.011 1	Moss Trim Lines (B16)				
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)				
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)		Geomorphic Position (D2)				
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)				
Water-Stained Leaves (B9) Aquatic Fauna (B13)		Microtopographic Relief (D4) FAC-Neutral Test (D5)				
Field Observations:		i Ao Neutrai rest (55)				
	Depth (inches):					
	Depth (inches):					
		lydrology Present? Yes No				
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitorin		Table.				
Describe Recorded Data (stream gauge, monitorin	g weii, aeriai priotos, previous irispections), ii ava	liable.				
Remarks:						
No wetland hydrology indicators present						

## ٧

00	Absolute	Dominant I		Dominance Test worksheet:
ee Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
		· ———		That Are OBL, FACW, or FAC: (A)
				Total Number of Dominant Species Across All Strata: 2 (B)
				Species Across All Strata(b)
				Percent of Dominant Species That Are OBL FACW or FAC:  0 (A/I
				That Are OBL, FACW, or FAC: (A/E
				Prevalence Index worksheet:
	0	= Total Cove		Total % Cover of: Multiply by:
50% of total cover:		total cover:_	0	OBL species 0 x 1 = 0
apling/Shrub Stratum (Plot size: 15 )				FACW species x 2 = 0
				FAC species x 3 = 0
				FACU species x 4 = 440
				UPL species 20 x 5 = 100
				Column Totals:130 (A)540 (B
				Prevalence Index = B/A = 4.15
		· <u></u>		Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	0	= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:	20% of	total cover:_	0	data in Remarks or on a separate sheet)
erb Stratum (Plot size:5				Problematic Hydrophytic Vegetation¹ (Explain)
Poa pratensis	50	Yes	FACU	Problematic Hydrophytic Vegetation (Explain)
Trifolium pratense	30	Yes	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Andropogon virginicus	20	No	FACU	be present, unless disturbed or problematic.
Plantago lanceolata		No	UPL	Definitions of Four Vegetation Strata:
Prunella vulgaris	10	<u>No</u>	FACU	Tree Meady plants evaluating vince 2 in (7.6 cm)
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of
				height.
				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1
l <u> </u>				m) tall.
				Herb – All herbaceous (non-woody) plants, regardles
		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover:6	20% of	total cover:_	26	Woody vine – All woody vines greater than 3.28 ft in
oody Vine Stratum (Plot size:)				height.
		·		
		·		
		·		Hydrophytic
				Vegetation Present? Yes No
500/ ()			•	Present? Yes No
	-	total cover:_		
	0 20% of	= Total Cove total cover:_		0

Sampling Point: wrac103\_u

Profile Des	cription: (Describe t	o the depth	needed to document the indicate	or or confirm t	the absence	of indicators.)
Depth	Matrix		Redox Features			
(inches) 0-6	Color (moist) 2.5 Y 5/4	100	Color (moist)	e <sup>1</sup> Loc <sup>2</sup>	Texture SL	Remarks
6-18	2.5 Y 6/8	100			CL	
1T C. C			Dadward Matrix MC Marked Cond		21 tion . DI	Dana Lining M. Matrix
Hydric Soil		etion, RIVI=F	Reduced Matrix, MS=Masked Sand	Grains.		=Pore Lining, M=Matrix. tors for Problematic Hydric Soils <sup>3</sup> :
Histoso	I (A1)		Dark Surface (S7)		2	cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface (S8	) (MLRA 147, 1		past Prairie Redox (A16)
	istic (A3)		Thin Dark Surface (S9) (MLR			(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)	•		edmont Floodplain Soils (F19)
Stratifie	d Layers (A5)		Depleted Matrix (F3)			(MLRA 136, 147)
2 cm M	uck (A10) (LRR N)		Redox Dark Surface (F6)		Ve	ery Shallow Dark Surface (TF12)
Deplete	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)		O	ther (Explain in Remarks)
	ark Surface (A12)		Redox Depressions (F8)			
Sandy N	Mucky Mineral (S1) (L	RR N,	Iron-Manganese Masses (F1	2) <b>(LRR N</b> ,		
MLR	A 147, 148)		MLRA 136)			
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA			cators of hydrophytic vegetation and
Sandy F	Redox (S5)		Piedmont Floodplain Soils (F	19) <b>(MLRA 148</b> )	) wet	tland hydrology must be present,
	d Matrix (S6)		Red Parent Material (F21) (M	LRA 127, 147)	unl	ess disturbed or problematic.
Restrictive	Layer (if observed):					
Type:			<u></u>			
Depth (in	ches):		<u> </u>		Hydric Soil	Present? Yes No
Remarks:						
No hydric soi	l present					



Photo 1
Upland data point WRAC103\_u facing northeast



Photo 2
Upland data point WRAC103\_u facing northwest

Project/Site: Atlantic Coast Pipeline		City/County: Randolph County Sampling Date: 3/14/2016						
Applicant/Owner: DOMINION			Sampling Point: wrac102e_w					
Investigator(s): Team C			on, Township, Range: No					
Landform (hillslope, terrace, etc.): SI	ght slope	Local rel	ief (concave, convex, non	e): none	Slope (%): <sup>2</sup>			
Subregion (LRR or MLRA): N	Lat	38.86516663	Long: -79.8	8083131	Datum: WGS 1984			
Soil Map Unit Name: Pope-Atkins co	mplex			NWI classific	cation: None			
Are climatic / hydrologic conditions or								
Are Vegetation, Soil,								
Are Vegetation, Soil,								
SUMMARY OF FINDINGS -								
				•	<u>, , , , , , , , , , , , , , , , , , , </u>			
Hydrio Soil Broomt?		No No	Is the Sampled Area					
Hydric Soil Present? Wetland Hydrology Present?		No	within a Wetland?	Yes	No			
Remarks:	163							
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one	is required; chec	k all that apply)		Surface Soil				
Surface Water (A1)	-	True Aquatic Plants (						
✓ High Water Table (A2)		Hydrogen Sulfide Od		<ul><li>Sparsely Vegetated Concave Surface (B8)</li><li>Drainage Patterns (B10)</li></ul>				
Saturation (A3)				Moss Trim L				
Water Marks (B1)		Presence of Reduced			Water Table (C2)			
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Bur				
Drift Deposits (B3)		Thin Muck Surface (0		-	isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Other (Explain in Rer	marks)	Stunted or S	tressed Plants (D1)			
Iron Deposits (B5)				Geomorphic	Position (D2)			
Inundation Visible on Aerial Ima	agery (B7)			Shallow Aqu	itard (D3)			
Water-Stained Leaves (B9)				Microtopographic Relief (D4)				
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)			
Field Observations:								
		Depth (inches):	2					
	No							
Saturation Present? Yes (includes capillary fringe)	No	Depth (inches):	Wetland H	ydrology Preser	nt? Yes V No			
Describe Recorded Data (stream ga	auge, monitoring v	well, aerial photos, pre	evious inspections), if avai	lable:				
Remarks: Wetland hydrology indicators preser	nt .							
Wettaild Hydrology indicators preser								

#### **VEGETAT**

EGETATION (Four St			Absolute	Dominant I	ndicator	Sampling Point: wrac102e_w  Dominance Test worksheet:
ree Stratum (Plot size:	30	)		Species?		Number of Dominant Species
		,				That Are OBL, FACW, or FAC: 2 (A)
						Total Number of Dominant Species Across All Strata:  3 (B)
						Species Across Air Strata.
•						Percent of Dominant Species That Are ORL FACW or FAC: 66.6666666 (A/R)
•						That Are OBL, FACW, or FAC: 66.6666666 (A/B)
						Prevalence Index worksheet:
						Total % Cover of: Multiply by:
	E00/ of	f total cover:		= Total Cove		OBL species $0 \times 1 = 0$
andina/Ohmuh Otmatuma (Diat		15	20% 01	total cover		OBL species $\begin{array}{ccc} & 0 & x & 1 = & 0 \\ \hline FACW species & 25 & x & 2 = & 50 \\ \end{array}$
apling/Shrub Stratum (Plot						FAC species 30 x 3 = 90
						FACU species 50 x 4 = 200
•						UPL species 10 x 5 = 50
•			<u> </u>			115 300
						Column Totals: (A) (B)
•						Prevalence Index = B/A =3.39
						Hydrophytic Vegetation Indicators:
						1 - Rapid Test for Hydrophytic Vegetation
						2 - Dominance Test is >50%
						3 - Prevalence Index is ≤3.0 <sup>1</sup>
				= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
		f total cover:	0 20% of	total cover:_	0	
lerb Stratum (Plot size:	5	)				data in Remarks or on a separate sheet)
Setaria parviflora			30	Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Poa pratensis			30	Yes	FACU	4
Juncus effusus			25	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Trifolium pratense			20	No	FACU	
Plantago lanceolata			10	No	UPL	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
			<u> </u>			height.
						Sapling/Shrub – Woody plants, excluding vines, less
						than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
0			<del></del>			
1			115			Herb – All herbaceous (non-woody) plants, regardless
	500/			= Total Cove		of size, and woody plants less than 3.28 ft tall.
		f total cover: 5	20% of	total cover:_	23	Woody vine – All woody vines greater than 3.28 ft in
Voody Vine Stratum (Plot s	ize:	)				height.
•						
•						
•						
4						Hydrophytic
•						Vegetation
	·			= Total Cove		Present? Yes No
	50% of	f total cover:		total cover:_	_	
Remarks: (Include photo nu			<u> </u>	- ·-		1
		, or orra ocparat				
ternarks. (include prioto na						

Sampling Point: wrac102e\_w

Depth		'					the absence	o or mandatoroly
	Matrix	0/	Redo	x Features		1 2	T	Demonstra
(inches) 0-6	Color (moist) 2.5 Y 5/2	<u>%</u> 97	Color (moist) 10 YR 5/8	3	Type <sup>1</sup> C	Loc <sup>2</sup> PL	<u>Texture</u> SL	Remarks
6-18	2.5 Y 5/4	95	10 YR 5/8	5	C	PL/M	SL	
								<u> </u>
	_							
					-	·		
					•	· ——	•	-
					-	· ——		
Type: C-C	oncentration D-Den	letion RM	=Reduced Matrix, MS	——— S-Maskad	Sand Gr	aine	<sup>2</sup> Location: I	- ————————————————————————————————————
	Indicators:	ielion, Kiv	i=Reduced Matrix, Mix	<u>3=iviaskeu</u>	Sand Gi	airis.		cators for Problematic Hydric Soils <sup>3</sup> :
Histosol	I (A1)		Dark Surface	e (S7)				2 cm Muck (A10) <b>(MLRA 147)</b>
	pipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	/ILRA 147,		Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Su			147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)			Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Ma					(MLRA 136, 147)
	uck (A10) (LRR N)	- (0.4.4)	Redox Dark		•			Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Date				_	Other (Explain in Remarks)
	ark Surface (A12) Mucky Mineral (S1) <b>(L</b>	RRN	Redox Depre Iron-Mangan			IRRN		
	A 147, 148)	-IXIX I <b>X</b> ,	MLRA 13		55 (1 12) <b>(</b>	LIXIX IV,		
	Gleyed Matrix (S4)		Umbric Surfa	-	MLRA 13	6. 122)	<sup>3</sup> ln	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					retland hydrology must be present,
	d Matrix (S6)		Red Parent N					nless disturbed or problematic.
Restrictive	Layer (if observed):							
Туре:								
	ches):						Hydric So	il Present? Yes No
Type: Depth (in	ches):						Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:	ches):dicators present						Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No
Type: Depth (in Remarks:							Hydric So	Il Present? Yes No



Photo 1
Wetland data point WRAC102e\_w facing southwest



**Photo 2**Wetland data point WRAC102e\_w facing northeast

Project/Site: Atlantic Coast Pipeline	City/County: Randolph County Sampling Date: 3/14/2016					
Applicant/Owner: DOMINION		State: WV Sampling Point: wrac102_u				
	Section, Township, Range: No					
Landform (hillslope, terrace, etc.): Slight slope						
	Lat: 38.86510655 Long: -79.					
Soil Map Unit Name:		NWI classification: None				
	oical for this time of year? Yes No	(If no, explain in Remarks.)				
	y significantly disturbed? Are "Norma					
	y naturally problematic? (If needed,					
		ons, transects, important features, etc.				
	No V Is the Sampled Area					
	No within a Wetland?	Yes No				
Wetland Hydrology Present? Yes _ Remarks:	No					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required;	check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)				
Saturation (A3)	<ul><li>Oxidized Rhizospheres on Living Roots (C3)</li></ul>					
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)				
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)		Geomorphic Position (D2)				
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)				
<ul><li>Water-Stained Leaves (B9)</li><li>Aquatic Fauna (B13)</li></ul>		Microtopographic Relief (D4) FAC-Neutral Test (D5)				
Field Observations:		PAC-Neutral Test (D3)				
	Depth (inches):					
	Depth (inches):					
		Hydrology Present? Yes No				
(includes capillary fringe)		· • — —				
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previous inspections), if ava	allable:				
Remarks:						
No wetland hydrology indicators present						

	Absolute	Dominant	Indicator	Dominance Test worksheet:
ree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
				Total Number of Dominant
				Species Across All Strata: (B)
				Percent of Dominant Species
·				That Are OBL, FACW, or FAC:0 (A/B
	•			Prevalence Index worksheet:
•	0	· <del></del>		Total % Cover of: Multiply by:
0		= Total Cove	er O	OBL species0 x 1 =0
50% of total cover: 0	20% of	total cover:		0
bapling/Snrub Stratum (Plot size:)				FACW species $\begin{array}{cccccccccccccccccccccccccccccccccccc$
·		· <u></u>		FAC species X 3 =
				FACU species X 4 =
l				UPL species $\frac{20}{130}$ x 5 = $\frac{100}{540}$
				Column Totals: (A) (B)
i <u> </u>				Prevalence Index - R/A - 4.15
)				Trevalence index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
	-	· <del></del>		2 - Dominance Test is >50%
l <u> </u>	0	T-1-1-0		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:		= Total Cover:	er O	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50 70 61 total 60 vol	20% 01	iolai cover.		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:) Poa pratensis	50	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Trifolium pratense	30	Yes	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Plantago lanceolata	20	No No	UPL	be present, unless disturbed or problematic.
Andropogon virginicus	20	No	FACU	Definitions of Four Vegetation Strata:
Prunella vulgaris	10	No	FACU	
S				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of
<b>7</b>				height.
3.				
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
0				m) tall.
1.	-			
	130	- Total Cov		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 65		= Total Cover:		or size, and woody plants less than 3.20 it tall.
30 % of total cover	20 /6 01	total cover.		Woody vine – All woody vines greater than 3.28 ft in
yoody vine Stratum (1 lot size)				height.
2	-	· <del></del>		
3				
l				Hydrophytic
5				Vegetation
	0	= Total Cove	er	Present? Yes No
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			1
(	,			

Sampling Point: wrac102\_u

Profile Des	cription: (Describe	to the dept				or confirm	the absen	nce of indicators.)
Depth	Matrix		Redo	x Feature	s	. 2	_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-6	2.5 Y 5/4	100					SL	
6-18	2.5 Y 6/8	100					CL	
	-							
		. <u></u>						
		· ——				· ——		<del></del>
		· ——			-	· ——		<del></del> -
		·			-			
	Concentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Inc	dicators for Problematic Hydric Soils <sup>3</sup> :
Histoso	l (A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ce (S8) (N	ILRA 147,	148)	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su				· <u>-</u>	(MLRA 147, 148)
Hydrog	en Sulfide (A4)		Loamy Gleye	d Matrix (	F2)			Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Mat		•			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S		<sup>-</sup> 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) <b>(</b>	LRR N,		
MLR	A 147, 148)		MLRA 13	6)				
Sandy	Gleyed Matrix (S4)		Umbric Surfa	ce (F13) (	MLRA 13	6, 122)	3	Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	l8)	wetland hydrology must be present,
Strippe	d Matrix (S6)		Red Parent N	laterial (F	21) <b>(MLR</b>	A 127, 147	7)	unless disturbed or problematic.
Restrictive	Layer (if observed):							
Type:								
Depth (ir	nches):						Hvdric S	Soil Present? Yes No
Remarks:							,	
lo hydric so	il procent							
io flydric 30	ii present							



Photo 1 Upland data point WRAC102\_u facing west



Photo 2
Upland data point WRAC102\_u facing south

Project/Site: Atlantic Coast Pipeline	City/0	City/County: Randolph County Sampling Date: 3/14/2016				
Applicant/Owner: DOMINION		State: WV Sampling Point: wrac105e_				
Landform (hillslope, terrace, etc.): Slight slope Local relief (concave, convex, none): none Slope (%): 2						
Subregion (LRR or MLRA): N						
Soil Map Unit Name: Gilpin-Dekalb stony	y complex, moist, 15 to 35 percent	slopes NWI classi	fication: PEM			
Are climatic / hydrologic conditions on the	e site typical for this time of year? `	Yes No (If no, explain in	Remarks.)			
Are Vegetation, Soil, or H	lydrology significantly distu	rbed? Are "Normal Circumstances"	"present? Yes No			
		natic? (If needed, explain any ansv				
		mpling point locations, transec				
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes No	Is the Sampled Area	, No			
Wetland Hydrology Present?	Yes No	within a Wetland? Yes	NO			
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indi	cators (minimum of two required)			
Primary Indicators (minimum of one is r	required; check all that apply)	Surface So				
Surface Water (A1)	True Aquatic Plants		egetated Concave Surface (B8)			
✓ High Water Table (A2)	Hydrogen Sulfide Oc		Patterns (B10)			
Saturation (A3)			Lines (B16)			
Water Marks (B1)	Presence of Reduce		n Water Table (C2)			
Sediment Deposits (B2)	Recent Iron Reduction	on in Tilled Soils (C6) Crayfish Bo	urrows (C8)			
Drift Deposits (B3)	Thin Muck Surface (	C7) Saturation	Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Other (Explain in Re	marks) Stunted or	Stressed Plants (D1)			
Iron Deposits (B5)			ic Position (D2)			
Inundation Visible on Aerial Imager	ry (B7)	Shallow Ac				
Water-Stained Leaves (B9)			graphic Relief (D4)			
Aquatic Fauna (B13)		FAC-Neutr	al Test (D5)			
Field Observations:	4					
	No Depth (inches):	6				
	No Depth (inches):					
Saturation Present? Yes (includes capillary fringe)	No Depth (inches):	Wetland Hydrology Pres	ent? Yes V No			
Describe Recorded Data (stream gauge	e, monitoring well, aerial photos, pre	evious inspections), if available:				
Remarks:						
Wetland hydrology indicators present						

## VE

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Free Stratum</u> (Plot size:30)  1. none		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
				Total Number of Dominant
<u>-</u>				Species Across All Strata: 2 (B)
·				Percent of Dominant Species
i		·		That Are OBL, FACW, or FAC: 50 (A/B
<u>.                                    </u>		. <u> </u>		Prevalence Index worksheet:
-		·		Total % Cover of: Multiply by:
		= Total Cov	^	OBL species 0 x 1 = 0
50% of total co	ver: <u> </u>	total cover:		FACW species 25 x 2 = 50
apiing/Snrub Stratum (Piot size:	)			
none		· <del></del>		FAC species $\frac{0}{80}$ x 3 = $\frac{0}{320}$
•				FACU species X 4 =
				UPL species
				Column Totals: (A) 420 (B)
·		<u> </u>		Prevalence Index = B/A = 3.65
·				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
		<del></del>		3 - Prevalence Index is ≤3.0¹
		= Total Cov		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total co	ver: 0 20% of	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)				Problematic Hydrophytic Vegetation¹ (Explain)
Poa pratensis	60	Yes	FACU	Problematic Hydrophytic Vegetation (Explain)
Juncus effusus	25	Yes	FACW	The Process of books and and on the dealers are the
Trifolium pratense	20	No	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Plantago lanceolata	10	No	UPL	Definitions of Four Vegetation Strata:
i <u> </u>				
i				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of
·				height.
l				
).				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
0.				m) tall.
1.				Have All have account (non-usedu) plants regardless
	445	= Total Cov	er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total co		total cover:		
Voody Vine Stratum (Plot size: 30	)			<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
none	0			noight.
2.	· ·			
		· <del></del>		
l		· <del></del>		Hydrophytic
	_			Vegetation Present? Yes No
EOV of total or		= Total Cov total cover:	_	100 NO
50% of total co	2070 0.	total cover:		
Remarks: (Include photo numbers here or on a	separate sheet.)			

Sampling Point: wrac105e\_w

Profile Description: (Describe to the d	epth needed to document the indicator or confirm	the absence	of indicators.)
Depth Matrix	Redox Features		
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
0-18 2.5 Y 5/2 97	10 YR 4/6 3 C PL	SCL	
	- <del> </del>		<del>-</del>
			·
	M=Reduced Matrix, MS=Masked Sand Grains.		L=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indic	ators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Dark Surface (S7)	2	cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA 147,		Coast Prairie Redox (A16)
Black Histic (A3)	Thin Dark Surface (S9) (MLRA 147, 148)	, `	(MLRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	F	Piedmont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F3)		(MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)	\	/ery Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)		Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Depressions (F8)		(=
Sandy Mucky Mineral (S1) (LRR N,	Iron-Manganese Masses (F12) (LRR N,		
MLRA 147, 148)	MLRA 136)		
Sandy Gleyed Matrix (S4)	Umbric Surface (F13) (MLRA 136, 122)	<sup>3</sup> Inc	licators of hydrophytic vegetation and
Sandy Gleyed Matrix (34) Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14)		etland hydrology must be present,
Stripped Matrix (S6)	Red Parent Material (F21) (MLRA 127, 147		lless disturbed or problematic.
Restrictive Layer (if observed):	Neu Falent Waterial (F21) (WERA 121, 141	) un	liess disturbed of problematic.
Type:	<u></u>		
Depth (inches):		Hydric Soil	Present? Yes No
Remarks:		•	
Hydric soil indicators present			



Wetland data point WRAC105e\_w facing northeast



Wetland data point WRAC105e\_w facing southwest

Project/Site: Atlantic Coast Pipeline	City/County: Randolph County Sampling Date: 3/14/2016				
Applicant/Owner: DOMINION	State: WV Sampling Point: wrac105_t				
	Section, Township, Range: No PLSS in this area				
Landform (hillslope, terrace, etc.): Slight slope Local relief (concave, convex, none): none Slope (%): 2					
Subregion (LRR or MLRA): N					
Soil Map Unit Name: Gilpin-Dekalb stony comple		NWI classif	ication: UPL		
Are climatic / hydrologic conditions on the site type	pical for this time of year? Yes No _	(If no, explain in	Remarks.)		
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are	"Normal Circumstances"	present? Yes No		
Are Vegetation, Soil, or Hydrolog					
SUMMARY OF FINDINGS – Attach s					
Hydrophytic Vegetation Present? Veg	No. W				
	No V Is the Sampled within a Wetlan		🗸		
	No v within a Wetlan	nd? Yes	No		
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary India	cators (minimum of two required)		
Primary Indicators (minimum of one is required	; check all that apply)	Surface So			
Surface Water (A1)	True Aquatic Plants (B14)		egetated Concave Surface (B8)		
High Water Table (A2)	Hydrogen Sulfide Odor (C1)		atterns (B10)		
Saturation (A3)	Oxidized Rhizospheres on Living Root	ts (C3) Moss Trim	Lines (B16)		
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Seasor	n Water Table (C2)		
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (	C6) Crayfish Bu	rrows (C8)		
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation \	Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or	Stressed Plants (D1)		
Iron Deposits (B5)			c Position (D2)		
Inundation Visible on Aerial Imagery (B7)		Shallow Aq			
Water-Stained Leaves (B9)			raphic Relief (D4)		
Aquatic Fauna (B13)		FAC-Neutra	al Test (D5)		
Field Observations:	<b></b>				
	Depth (inches):				
	Depth (inches):				
Saturation Present? Yes No (includes capillary fringe)	Depth (inches): We	etland Hydrology Prese	ent? Yes No		
Describe Recorded Data (stream gauge, monitor	oring well, aerial photos, previous inspections	s), if available:			
Demodia					
Remarks: No wetland hydrology indicators present					
We we that it is a reason of the second					

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

\_\_)

50% of total cover: \_\_\_

50% of total cover: \_\_\_0

50% of total cover: 65 20% of total cover: 26

30

Sapling/Shrub Stratum (Plot size: 15 )

Tree Stratum (Plot size: \_\_\_\_

1. none

1. none

Herb Stratum (Plot size: \_ 1. Poa pratensis

3. Andropogon virginicus

2. Trifolium pratense

4. Plantago lanceolata

5. Prunella vulgaris

mes of plants.		Sampling Point: wrac105_u					
Absolute Dominant Indi		Dominance Test worksheet:					
% Cover Species? St	tatus	Number of Dominant Species That Are OBL, FACW, or FAC:  0	(A)				
		Total Number of Dominant Species Across All Strata:  2	(B)				
		Percent of Dominant Species That Are OBL, FACW, or FAC:  0	(A/B)				
		Prevalence Index worksheet:					
0 = Total Cover		Total % Cover of: Multiply by:					
20% of total cover:	0	OBL species0 x 1 =0	_				
		FACW species0 x 2 =0	_				
0		FAC species0 x 3 =0					
	_	FACU species110 x 4 =440					
		UPL species 20 x 5 = 100					
		Column Totals: 130 (A) 540	(B)				
		Prevalence Index = B/A = 4.15	_				
		Hydrophytic Vegetation Indicators:					
		1 - Rapid Test for Hydrophytic Vegetation					
<del></del>		2 - Dominance Test is >50%					
0 Tatal Cause		3 - Prevalence Index is ≤3.0 <sup>1</sup>					
= Total Cover	0	4 - Morphological Adaptations <sup>1</sup> (Provide supporting					
_ 20% of total cover:		data in Remarks or on a separate sheet)					
50 Yes F	ACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain	n)				
30 Yes F	ACU						
20 No F	ACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology m	nust				
20 No	UPL	be present, unless disturbed or problematic.					
10 No F	ACU	Definitions of Four Vegetation Strata:					
		<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 of more in diameter at breast height (DBH), regardle height.					
		<b>Sapling/Shrub</b> – Woody plants, excluding vines, than 3 in. DBH and greater than or equal to 3.28 m) tall.					
130 = Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regar of size, and woody plants less than 3.28 ft tall.	dless				
	26						

Woody Vine Stratum (Plot size: \_\_\_\_\_\_) 1. none

0 = Total Cover 50% of total cover: \_\_\_0 20% of total cover:\_\_\_ Remarks: (Include photo numbers here or on a separate sheet.)

Hydrophytic Vegetation Present?

Yes \_\_\_\_\_ No \_\_\_

Sampling Point: wrac105\_u

Profile Des	cription: (Describe	to the dept				or confirm	the absen	nce of indicators.)
Depth	Matrix		Redo	x Feature	s	. 2	_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-6	2.5 Y 5/4	100					SL	
6-18	2.5 Y 6/8	100					CL	
	-							
		. <u></u>						
		· ——			-	· ——		<del></del>
		· ——			-	· ——		<del></del> -
		·			-			
	Concentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Inc	dicators for Problematic Hydric Soils <sup>3</sup> :
Histoso	l (A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ce (S8) (N	ILRA 147,	148)	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su				· <u>-</u>	(MLRA 147, 148)
Hydrog	en Sulfide (A4)		Loamy Gleye	d Matrix (	F2)			Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Mat		•			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S		<sup>-</sup> 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) <b>(</b>	LRR N,		
MLR	A 147, 148)		MLRA 13	6)				
Sandy	Gleyed Matrix (S4)		Umbric Surfa	ce (F13) (	MLRA 13	6, 122)	3	Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	l8)	wetland hydrology must be present,
Strippe	d Matrix (S6)		Red Parent N	laterial (F	21) <b>(MLR</b>	A 127, 147	7)	unless disturbed or problematic.
Restrictive	Layer (if observed):							
Type:								
Depth (ir	nches):						Hvdric S	Soil Present? Yes No
Remarks:							,	
lo hydric so	il procent							
io flydric 30	ii present							



Upland data point WRAC105\_u facing west



Upland data point WRAC105\_u facing south

Project/Site: SERP	Cit	y/County: Randolph		Sampling Date: 8/20/2014		
Applicant/Owner: Dominion			State: WV	Sampling Point: WRAB101e_w		
Investigator(s): TP	Se					
Landform (hillslope, terrace, etc.): drainage						
Subregion (LRR or MLRA): N	Lat: 38.78170999	Long: -80.0	9514295	Datum: WGS 1984		
Soil Map Unit Name: Buchanan and Erne	est stony soils, 15 to 35 percent	slopes	NWI classific	ation: None		
Are climatic / hydrologic conditions on the	site typical for this time of year?	? Yes <u>/</u> No (	If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hy	ydrology significantly dis	sturbed? Are "Normal	Circumstances" p	resent? Yes No		
Are Vegetation, Soil, or Hy						
SUMMARY OF FINDINGS – Atta						
Hydrophytic Vegetation Present?	Yes ✔ No					
Hydric Soil Present?	Yes No	Is the Sampled Area	V V	No		
Wetland Hydrology Present?	Yes V No	within a Wetland?	res	NO		
Remarks: Wetland is abutting SRAB102. Headwate	ers of Jenks Fork.					
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			
Surface Water (A1)	True Aquatic Plan			getated Concave Surface (B8)		
✓ High Water Table (A2)	Hydrogen Sulfide		Drainage Pat			
Saturation (A3)			Moss Trim Li			
Water Marks (B1)	Presence of Redu					
Sediment Deposits (B2)		ction in Tilled Soils (C6)	Dry-Season Water Table (C2) Crayfish Burrows (C8)			
Drift Deposits (B3)	Thin Muck Surface			sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Other (Explain in F			ressed Plants (D1)		
Iron Deposits (B5)		,	Geomorphic	, ,		
Inundation Visible on Aerial Imagery	v (B7)		Shallow Aqui	, ,		
Water-Stained Leaves (B9)			Microtopographic Relief (D4)			
Aquatic Fauna (B13)			FAC-Neutral			
Field Observations:						
Surface Water Present? Yes	No V Depth (inches):					
	No Depth (inches):_	1				
	No Depth (inches):	0 Wetland H	ydrology Presen	t? Yes 🗸 No		
(includes capillary fringe)						
Describe Recorded Data (stream gauge,	, monitoring well, aerial photos,	previous inspections), if avai	ilable:			
Remarks:						

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

Sampling Poi	nt: <u>WRAB101e_w</u>	
inance Test worksheet:		
ber of Dominant Species Are OBL, FACW, or FAC:	2	(A)
Number of Dominant sies Across All Strata:	2	(B)

•	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size:0 ) 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)
45				Percent of Dominant Species That Are OBL, FACW, or FAC:100	(A/B)
6				Prevalence Index worksheet:	
7					
		= Total Cove		Total % Cover of: Multiply by:	
	0 20% of	total cover:	0	OBL species X I =	_
Sapling/Shrub Stratum (Plot size: 0				FACW species X Z = 30	_
1				FAC species x 3 =	_
2				FACU species x 4 =	_
3				UPL species 0 x 5 = 0	_
4				Column Totals: (A) 40	(B)
<u></u> 5.					
6.				Prevalence Index = B/A =2	_
				Hydrophytic Vegetation Indicators:	
7				1 - Rapid Test for Hydrophytic Vegetation	
8				✓ 2 - Dominance Test is >50%	
9				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
	_	= Total Cove	er O	4 - Morphological Adaptations <sup>1</sup> (Provide su	porting
	0 20% of	total cover:		data in Remarks or on a separate sheet	
Herb Stratum (Plot size:0				Problematic Hydrophytic Vegetation¹ (Expla	
1. Athyrium asplenioides	10	Yes	FAC	Problematic Hydrophytic Vegetation (Expla	ali i <i>)</i>
<sub>2.</sub> Glyceria striata	10	Yes	OBL	1	
3.				<sup>1</sup> Indicators of hydric soil and wetland hydrology be present, unless disturbed or problematic.	must
4.					
<u></u> 5.				Definitions of Four Vegetation Strata:	
^				Tree – Woody plants, excluding vines, 3 in. (7.6	cm) or
	<u> </u>			more in diameter at breast height (DBH), regard	lless of
7				height.	
8				Sapling/Shrub - Woody plants, excluding vines	s, less
9				than 3 in. DBH and greater than or equal to 3.2	8 ft (1
10				m) tall.	
11				Herb – All herbaceous (non-woody) plants, rega	ardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.	
00 % of total 60 ver.	10 20% of	total cover:	4	<b>Woody vine</b> – All woody vines greater than 3.2	Q ft in
Woody Vine Stratum (Plot size: 0 )				height.	O IL III
1					
2.					
3.					
4					
				Hydrophytic	
5		T-1-1-0		Vegetation Present? Yes No	
F00/ -f1-1-1-		= Total Cove		1.003.11.	
50% of total cover:	<u>~</u> 20% of	total cover:			

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

Sampling Point: WRAB101e\_w

Depth	Matrix			Features	3	. 2	_	
inches) 0-12	Color (moist) 10YR 5/1	<u>%</u> 95	Color (moist) 10YR 4/6	<u>%</u> 5	Type <sup>1</sup> C	Loc <sup>2</sup>	Texture SL	Remarks
0-12	101K 3/1	95	101K 4/0					
		· ——						
	A Description D. D. D.	latina DN	L Darlored Market MC		010		21	N. Daniel Maria
	Concentration, D=Dep Indicators:	letion, RIV	I=Reduced Matrix, MS	=Masked	Sand Gr	ains.	Location: P	PL=Pore Lining, M=Matrix.
			5 . 6 .	(O-1)				ators for Problematic Hydric Soils <sup>3</sup> :
_ Histoso			Dark Surface		(OO) (B			2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Bel		. , .		148) (	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su Loamy Gleye			47, 148)	-	(MLRA 147, 148)
	en Sulfide (A4) d Layers (A5)		<u>✓</u> Depleted Mat		F2)			Piedmont Floodplain Soils (F19) (MLRA 136, 147)
	uck (A10) <b>(LRR N)</b>		Redox Dark S		6)		\	/ery Shallow Dark Surface (TF12)
	ed Below Dark Surface	e (A11)	Depleted Dar		,			Other (Explain in Remarks)
	ark Surface (A12)	C (7111)	Redox Depre				`	Stror (Explain in Romano)
	Mucky Mineral (S1) (L	RR N.	Iron-Mangane			LRR N.		
	A 147, 148)		MLRA 136		, , <b>(</b>	,		
	Gleyed Matrix (S4)		Umbric Surfa	-	MLRA 13	6. 122)	<sup>3</sup> Inc	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	d Matrix (S6)		Red Parent M					nless disturbed or problematic.
estrictive	Layer (if observed):							·
Type:								
Depth (in	iches):						Hydric Soil	l Present? Yes <u>✓</u> No
emarks:							1.7	
ciliains.								



Photo 1
Wetland data point WRAB101e\_w facing northwest



Photo 2
Wetland data point WRAB101e\_w facing south

Project/Site: SERP		City/C	county: Randolph		Sampling Date: 8/20/2014
Applicant/Owner: Dominion					Sampling Point: WRAB101_u
Investigator(s): TP					
Landform (hillslope, terrace, etc.): hills					
Subregion (LRR or MLRA): N					
Soil Map Unit Name: Buchanan and El	rnest stony soils	, 15 to 35 percent slop	pes	NWI classific	ation: None
Are climatic / hydrologic conditions on t					
Are Vegetation, Soil, or	· Hydrology	significantly distur	bed? Are "Normal	Circumstances" p	present? Yes V No
Are Vegetation, Soil, or					
SUMMARY OF FINDINGS – A			•		,
Lhidranhi tia Vagatatian Dragant?	Voc	No. 4			· · ·
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes	No	Is the Sampled Area		4
Wetland Hydrology Present?	Yes		within a Wetland?	Yes	No
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is	s required; check	k all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)		True Aquatic Plants (	B14)	Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Pa	tterns (B10)
Saturation (A3)			• ,	Moss Trim Li	ines (B16)
Water Marks (B1)		Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Bur	
Drift Deposits (B3)		Thin Muck Surface (0			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_	Other (Explain in Rer	narks)		tressed Plants (D1)
Iron Deposits (B5)					Position (D2)
Inundation Visible on Aerial Imag	ery (B7)			Shallow Aqu	
Water-Stained Leaves (B9)					aphic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)
Field Observations:	4				
		Depth (inches):			
		Depth (inches):			
Saturation Present? Yes _ (includes capillary fringe)	No	Depth (inches):	Wetland H	lydrology Preser	t? Yes No
Describe Recorded Data (stream gau	ge, monitoring v	vell, aerial photos, pre	vious inspections), if ava	ilable:	
Remarks:					

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

Sampling Point: WRAB101\_u

•	Absolute	Dominant I		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Acer saccharum	35	Yes	FACU	That Are OBL, FACW, or FAC:1 (A)
2. Prunus serotina	35	Yes	FACU	
3.				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:25 (A/B)
6				, , ,
7.		·		Prevalence Index worksheet:
·-	70	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 35			14	OBL species0 x 1 =0
0070 01 10101 00101.	20% 01	total cover:_		0 0
Sapling/Shrub Stratum (Plot size:)				10 20
1. Acer pensylvanicum	10	Yes	FACU	FAC species
2				FACU species80
				UPL species0 x 5 =0
3				Column Totals: 90 (A) 350 (B)
4				Column Totals (A) (B)
5				Prevalence Index = B/A =3.88
6				1 Tovalence Index = B/T(=
7			_	Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	10	= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:5	20% of	total cover:_	2	
Herb Stratum (Plot size:)				data in Remarks or on a separate sheet)
1 Athyrium asplenioides	10	Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
!! <u></u>				
2				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Definitions of Four Vegetation Strata.
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10		·		m) tall.
11	10			Herb – All herbaceous (non-woody) plants, regardless
_		= Total Cove	_	of size, and woody plants less than 3.28 ft tall.
50% of total cover:5	20% of	total cover:_	2	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
3				
4				Hydrophytic
5.				Vegetation
	0 .	= Total Cove		Present? Yes No
50% of total cover: 0		total cover:_	0	
30 % of total cover		total cover	-	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: WRAB101\_u

Depth	Matrix		Redox Features	<del>2</del> –	
inches)	Color (moist)	<u>%</u>	Color (moist) % Type <sup>1</sup> Loc		Remarks
0-2	10YR 2/1	100		SL	
2-12	10YR 4/4	100		SCL	
			<del></del>		_
				<u> </u>	<u> </u>
				<del></del>	
				<del></del>	
ype: C=C	concentration, D=Dep	oletion, RM=R	educed Matrix, MS=Masked Sand Grains.		PL=Pore Lining, M=Matrix.
dric Soil	Indicators:			Ind	licators for Problematic Hydric Soils <sup>3</sup> :
_ Histoso	l (A1)		Dark Surface (S7)		2 cm Muck (A10) (MLRA 147)
_ Histic E	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA	147, 148)	Coast Prairie Redox (A16)
_ Black H	listic (A3)		Thin Dark Surface (S9) (MLRA 147, 1	48)	(MLRA 147, 148)
_ Hydrog	en Sulfide (A4)		Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19)
_ Stratifie	d Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)
_ 2 cm M	uck (A10) (LRR N)		Redox Dark Surface (F6)		Very Shallow Dark Surface (TF12)
_ Deplete	ed Below Dark Surfac	ce (A11)	Depleted Dark Surface (F7)		Other (Explain in Remarks)
	ark Surface (A12)		Redox Depressions (F8)		
_ Sandy I	Mucky Mineral (S1) (	LRR N,	Iron-Manganese Masses (F12) (LRR I	٧,	
MLR	A 147, 148)		MLRA 136)		
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 123	2) <sup>3</sup> l	Indicators of hydrophytic vegetation and
_ Sandy I	Redox (S5)		Piedmont Floodplain Soils (F19) (MLR	A 148)	wetland hydrology must be present,
_ Stripped	d Matrix (S6)		Red Parent Material (F21) (MLRA 127	', 14 <b>7</b> )	unless disturbed or problematic.
estrictive	Layer (if observed)	:			
Туре:			_		
Depth (in	nches):		<u>_</u>	Hydric S	oil Present? Yes No 🗸
emarks:					



Photo 1 Upland data point WRAB101\_u facing north



Photo 2
Upland data point WRAB101\_u facing east

Project/Site: Atlantic Coast Pi	peline	City/C	County: Randolph County	<i>/</i> ;	Sampling Date: 10/20/2015			
Applicant/Owner: Dominion					_ Sampling Point: wraa104e_w			
Investigator(s): GB, SA Section, Township, Range: No PLSS in this area								
Landform (hillslope, terrace, etc.): depression								
Subregion (LRR or MLRA): N								
Soil Map Unit Name:								
Are climatic / hydrologic condi	tions on the site typ	pical for this time of year? Y	'es No	(If no, explain in Re	marks.)			
Are Vegetation, Soil	, or Hydrology	y significantly distur	bed? Are "Norma	l Circumstances" pr	esent? Yes No			
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)								
SUMMARY OF FINDIN	IGS – Attach si	ite map showing san	npling point location	ons, transects,	important features, etc.			
Hydrophytic Vegetation Pres	cent? Vec	✓ No						
Hydric Soil Present?	Yes	No	Is the Sampled Area	Yes_				
Wetland Hydrology Present?		✓ No	within a Wetland?	Yes	No			
Remarks:								
Wetland data point for a saturated PEM wetland located in a localized depression on a strip mined ridge line; receives run-off from adjacent gas facilities and roads.								
HYDROLOGY								
Wetland Hydrology Indicat	ors:			Secondary Indicate	ors (minimum of two required)			
Primary Indicators (minimum	of one is required;	; check all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)		True Aquatic Plants (	B14)	Sparsely Vege	etated Concave Surface (B8)			
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Patte	erns (B10)			
Saturation (A3)		Oxidized Rhizospher		Moss Trim Lin	es (B16)			
Water Marks (B1)		Presence of Reduced	d Iron (C4)	Dry-Season W	/ater Table (C2)			
Sediment Deposits (B2)		Recent Iron Reductio		C6) Crayfish Burrows (C8)				
Drift Deposits (B3)		Thin Muck Surface (0		ible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)				Geomorphic P	, ,			
Inundation Visible on Ae	• • • •			Shallow Aquitard (D3)				
Water-Stained Leaves (	B9)		<ul><li>Microtopographic Relief (D4)</li><li>FAC-Neutral Test (D5)</li></ul>					
Aquatic Fauna (B13)				FAC-Neutral I	est (D5)			
Field Observations:	V N-	Partle (Saabaa)						
Surface Water Present?		Depth (inches):						
Water Table Present?		Depth (inches):		d Hydrology Present? Yes ✓ No				
Saturation Present? (includes capillary fringe)	Yes No _	Depth (inches):	Wetland F	Hydrology Present	? Yes / No			
Describe Recorded Data (str	ream gauge, monito	oring well, aerial photos, pre	vious inspections), if ava	nilable:				
Remarks:								
pronounced sphagnum layer								

## ٧

30	Absolute	Dominant		Dominance Test worksheet:
ree Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species
·				That Are OBL, FACW, or FAC: (A)
				Total Number of Dominant
				Species Across All Strata: 9 (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 77.7777777 (A/B
				Prevalence Index worksheet:
	0	= Total Cove		Total % Cover of: Multiply by:
50% of total cover:0	20% of	total cover:	0	OBL species
apling/Shrub Stratum (Plot size:)				FACW species x 2 =
Oxydendrum arboreum	4	Yes	UPL	FAC species x 3 =
Fagus grandifolia	2	Yes	FACU	FACU species x 4 =
				UPL species 4 x 5 = 20
				Column Totals:108 (A) (B)
				Prevalence Index = B/Δ = 2.31
				1 Tevalence index = B/T(=
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
	6	= Total Cove		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 3		total cover:	1.2	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
lerb Stratum (Plot size:5 )				data in Remarks or on a separate sheet)
Scirpus cyperinus	25	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Osmundastrum cinnamomeum	20	Yes	FACW	
Dichanthelium scoparium	10	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Dichanthelium clandestinum	10	Yes	FAC	be present, unless disturbed or problematic.
Rubus hispidus	10	Yes	FACW	Definitions of Four Vegetation Strata:
Andropogon glomeratus	10	Yes	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
Juncus effusus	5	No	FACW	more in diameter at breast height (DBH), regardless o
Solidago gigantea	4	No	FACW	height.
			171011	Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
0				m) tan.
1	94			Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 47		= Total Cove		of size, and woody plants less than 3.28 ft tall.
00 /0 of total cover:	20% of	total cover:	10.0	Woody vine – All woody vines greater than 3.28 ft in
Voody Vine Stratum (Plot size:)  Smilax rotundifolia	8	Yes	FAC	height.
•			TAC	
·				
·				Hydrophytic
				Vegetation
		= Total Cove		Present? Yes No No
500/ -filelelesses A	20% of	total cover:	1.6	
50% of total cover: 4				

Sampling Point: wraa104e\_w

Profile Des	cription: (Describe t	o the depth	needed to document the ind	icator or confirm	the abser	nce of indicators.)
Depth	Matrix		Redox Features			
(inches) 0-8	Color (moist) 7.5YR 2.5/1	100	Color (moist) %	Type <sup>1</sup> Loc <sup>2</sup>	Texture SL	Remarks
8-16	7.5YR 3/1	100			SL	
16-25	7.5YR 4/1	100			SL	
		etion, RM=R	educed Matrix, MS=Masked Sa	and Grains.		PL=Pore Lining, M=Matrix.
Hydric Soil						dicators for Problematic Hydric Soils <sup>3</sup> :
Histoso	. ,		Dark Surface (S7)			_ 2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface		148)	Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Surface (S9) (N			(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2	)		Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)		_	_ Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dark Surface (F	7)	_	Other (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depressions (F8)	(E40) (LDD N		
	Mucky Mineral (S1) <b>(L</b>	KK N,	Iron-Manganese Masses	(F12) <b>(LRR N,</b>		
	<b>A 147, 148)</b> Gleyed Matrix (S4)		MLRA 136) Umbric Surface (F13) (MI	DA 126 122)	3	Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floodplain Soils			wetland hydrology must be present,
-			Red Parent Material (F21)			
	d Matrix (S6)  Layer (if observed):		Red Farent Material (F21)	) (IVILKA 127, 147)	<i>)</i>	unless disturbed or problematic.
Type: _nc						
	ches):		<del>_</del>		Hydric S	Soil Present? Yes No
Remarks:						



Photo 1 Wetland data point wraa104e\_w facing northwest



**Photo 2**Wetland data point wraa104e\_w facing southeast

Project/Site: Atlantic Coast Pipeline	City/County: Randolph County Sampling Date: 10/20/2015						
Applicant/Owner: Dominion	State: WV Sampling Point: wraa104_u						
	Section, Township, Range: No PLSS in this area						
Landform (hillslope, terrace, etc.): slope		f (concave, convex, none): none					
Subregion (LRR or MLRA): N	Lat: 38.77200071	Long: -80.09217117	Datum: WGS 1984				
Soil Map Unit Name:		NWI cla	assification: None				
Are climatic / hydrologic conditions on the site ty	pical for this time of year? Yes	s V No (If no. explair	n in Remarks.)				
Are Vegetation, Soil, or Hydrolog							
Are Vegetation, Soil, or Hydrolog							
SUMMARY OF FINDINGS – Attach							
			, <b>p</b> ,				
	No	Is the Sampled Area					
	No V	within a Wetland? Yes _	No				
Wetland Hydrology Present? Yes Remarks:	NO <u>▼</u>						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary	Indicators (minimum of two required)				
Primary Indicators (minimum of one is required	l: check all that apply)		e Soil Cracks (B6)				
Surface Water (A1)	True Aquatic Plants (B						
High Water Table (A2)	Hydrogen Sulfide Odor		<ul><li>Sparsely Vegetated Concave Surface (B8)</li><li>Drainage Patterns (B10)</li></ul>				
Saturation (A3)	Oxidized Rhizospheres		rim Lines (B16)				
Water Marks (B1)	Presence of Reduced I		Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Recent Iron Reduction		h Burrows (C8)				
Drift Deposits (B3)	Thin Muck Surface (C7		ion Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in Rema	arks) Stunted	d or Stressed Plants (D1)				
Iron Deposits (B5)		Geomo	orphic Position (D2)				
Inundation Visible on Aerial Imagery (B7)		Shallow	v Aquitard (D3)				
Water-Stained Leaves (B9)			ppographic Relief (D4)				
Aquatic Fauna (B13)		FAC-Ne	eutral Test (D5)				
Field Observations:							
	Depth (inches):						
	Depth (inches):						
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):	Wetland Hydrology P	resent? Yes No				
Describe Recorded Data (stream gauge, moni	oring well, aerial photos, previ	ous inspections), if available:					
Remarks: no hydrology indicators present							
The flydrology indicators present							

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	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:30)	% Cover	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)
· <del></del>				matric obe, raow, orrao.
				Total Number of Dominant
·				Species Across All Strata: 4 (B)
·				Percent of Dominant Species
·				That Are OBL, FACW, or FAC: 25 (A/B)
				Prevalence Index worksheet:
•	0			Total % Cover of: Multiply by:
0		= Total Cove	r 0	OBL species0 x 1 =0
50% of total cover:015	20% of	total cover:_		FACW species3 x 2 =6
bapiing/Shrub Stratum (Plot size:)	25	V	FACIL	EO 150
Fagus grandifolia	25	Yes	FACU	FAC species x 3 = 360
Acer pensylvanicum	20	Yes	FACU	FACU species x 4 =
Betula lenta	15	No	FACU	UPL species x 5 =
Magnolia acuminata	5	No	FACU	Column Totals: (A) (B)
. Prunus serotina	5	No	FACU	Prevalence Index = B/A = 3.65
Oxydendrum arboreum	5	No	UPL	Hydrophytic Vegetation Indicators:
Acer rubrum	5	No	FAC	
3.				1 - Rapid Test for Hydrophytic Vegetation
).				2 - Dominance Test is >50%
	80	= Total Cove		3 - Prevalence Index is ≤3.0¹
50% of total cover: 40		total cover:_	16	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5				data in Remarks or on a separate sheet)
Dennstaedtia punctilobula	20	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Dichanthelium clandestinum	5	No	FAC	
3 Osmundastrum cinnamomeum	3	No	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
k				Definitions of Four Vegetation Strata:
) S				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
J				more in diameter at breast height (DBH), regardless of
·				height.
3				Sapling/Shrub – Woody plants, excluding vines, less
)				than 3 in. DBH and greater than or equal to 3.28 ft (1
0				m) tall.
1				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover:14	20% of	total cover:_	5.6	Woody vine – All woody vines greater than 3.28 ft in
Noody Vine Stratum (Plot size: 30 )	40	V	E40	height.
Smilax rotundifolia	40	Yes	FAC	
<u>)</u>				
3				
l				Hydrophytic
5				Vegetation
	40	= Total Cove	r	Present? Yes No
		total cover:_	8	

Sampling Point: wraa104\_u

Profile Desc	ription: (Describe	to the depth	needed to documen	t the indicator or	confirm	the absence	e of indicators.)	
Depth	Matrix		Redox Fe					
(inches) 0-2	Color (moist) 7.5YR 2.5/1	100	Color (moist)		Loc <sup>2</sup>	Texture SL	Rema	arks
2-9	7.5YR 4/3	100			·	SL		
9-20	7.5YR 5/4	100				SCL		
	-							
							- <del></del>	
							<del>.</del>	_
1Type: C-C	oncontration D-Don		educed Matrix, MS=M	asked Sand Grain		<sup>2</sup> Location: [	 PL=Pore Lining, M=M	otrix
Hydric Soil		elion, Rivi=R	educed Matrix, MS=M	asked Sand Grain	15.		cators for Problemat	
Histosol	(A1)		Dark Surface (S7	<b>'</b> )		:	2 cm Muck (A10) <b>(ML</b>	RA 147)
	pipedon (A2)			Surface (S8) (ML	RA 147, 1		Coast Prairie Redox (	-
Black Hi	stic (A3)		Thin Dark Surfac	e (S9) <b>(MLRA 147</b>	7, 148)		(MLRA 147, 148)	
	en Sulfide (A4)		Loamy Gleyed M			!	Piedmont Floodplain	Soils (F19)
	d Layers (A5)		Depleted Matrix (	• •			(MLRA 136, 147)	
	uck (A10) (LRR N)		Redox Dark Surf				Very Shallow Dark Su	
	d Below Dark Surface	e (A11)	Depleted Dark St			(	Other (Explain in Rem	narks)
	ark Surface (A12) ⁄lucky Mineral (S1) <b>(L</b>	DD N	Redox Depression	ons (F8) Masses (F12) <b>(LR</b>	D N			
	A 147, 148)	.KK N,	MLRA 136)	Masses (F12) (LR	KK IN,			
	Gleyed Matrix (S4)		•	F13) <b>(MLRA 136,</b>	122)	<sup>3</sup> Inc	dicators of hydrophyti	c vegetation and
	Redox (S5)			lain Soils (F19) <b>(N</b>			retland hydrology mus	
-	Matrix (S6)			rial (F21) <b>(MLRA</b>			nless disturbed or pro	-
	Layer (if observed):		_	7,	, ,		· · ·	
Type: no	ne							
	ches):		<u> </u>			Hydric Soi	il Present? Yes _	No
Remarks:						•		



Photo 1 Upland data point wraa104\_u facing southwest



Photo 2
Upland data point wraa104\_u facing southeast

Project/Site: SERP	City/County: Randolp	h	Sampling Date: 8/20/2014			
Applicant/Owner: Dominion		State: WV	Sampling Point: WRAB102e_w			
Investigator(s): TP						
Landform (hillslope, terrace, etc.): drainageway						
Subregion (LRR or MLRA): N	Lat: 38.77200994 Lo	ong: -80.09359502	Datum: WGS 1984			
Soil Map Unit Name: Buchanan and Ernest ston	y soils, 15 to 35 percent slopes	NWI classific	ation: None			
Are climatic / hydrologic conditions on the site type	oical for this time of year? Yes No	(If no, explain in R	emarks.)			
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are	"Normal Circumstances" p	present? Yes No			
Are Vegetation, Soil, or Hydrolog						
SUMMARY OF FINDINGS – Attach s						
Hydrophytia Vagatation Proceed?	₩ No		<del>-</del>			
	No Is the Sample					
	within a Wetla	and? Yes	No			
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)			
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil	Cracks (B6)			
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Veç	Sparsely Vegetated Concave Surface (B8)			
✓ High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Pa	tterns (B10)			
✓ Saturation (A3)	Oxidized Rhizospheres on Living Ro	ots (C3) Moss Trim Li	ines (B16)			
Water Marks (B1)	Presence of Reduced Iron (C4)	·	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils					
Drift Deposits (B3)	Thin Muck Surface (C7)		sible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Other (Explain in Remarks)		tressed Plants (D1)			
Iron Deposits (B5)		Geomorphic				
Inundation Visible on Aerial Imagery (B7)		Shallow Aqui				
<ul><li>Water-Stained Leaves (B9)</li><li>Aquatic Fauna (B13)</li></ul>		✓ FAC-Neutral	aphic Relief (D4)			
Field Observations:		T AC-Neutral	1631 (D3)			
	Depth (inches):					
	Depth (inches): 4					
	4	Vetland Hydrology Presen	nt? Yes ✔ No			
(includes capillary fringe)		, ,,	103 <u></u> 110 <u></u>			
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previous inspection	ıs), if available:				
Remarks:						
Tremane.						

### VEG

•		Absolute			Dominance Test worksheet:
ree Stratum (Plot size: 0	)	% Cover	Species?	Status	Number of Dominant Species
•					That Are OBL, FACW, or FAC: 2 (A)
					Total Number of Dominant
					Species Across All Strata: 2 (B)
					Percent of Dominant Species
					That Are OBL, FACW, or FAC: 100 (A/B)
•					
<u>-</u>					Prevalence Index worksheet:
			= Total Cove	er	Total % Cover of: Multiply by:
50%	6 of total cover: 0	20% of	total cover:_	0	OBL species X I =
apling/Shrub Stratum (Plot size:	)				FACW species x 2 =
					FAC species x 3 =
					FACU species x 4 =
					UPL species 0 x 5 = 0
					Column Totals:65 (A)(B)
					Prevalence Index – R/A – 1.38
					Trevalence mack = B/A =
					Hydrophytic Vegetation Indicators:
					1 - Rapid Test for Hydrophytic Vegetation
	_		-		2 - Dominance Test is >50%
		0	= Total Cove		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50%	6 of total cover:		total cover:	0	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
lerb Stratum (Plot size: 0	)		_		data in Remarks or on a separate sheet)
Carex lupulina	/	40	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Eleocharis intermedia		15	Yes	FACW	
Juncus effusus		10	No	FACW	<sup>1</sup> 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) o
					more in diameter at breast height (DBH), regardless of
•					height.
<del>-</del>			-		Sapling/Shrub – Woody plants, excluding vines, less
•					than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
0					ini) tali.
1		65			Herb - All herbaceous (non-woody) plants, regardless
500	32 5		= Total Cove		of size, and woody plants less than 3.28 ft tall.
	6 of total cover: 32.5	20% of	total cover:_		Woody vine - All woody vines greater than 3.28 ft in
Voody Vine Stratum (Plot size:	0)				height.
•					
•					
•					Hydrophytic
·					Vegetation
			= Total Cove		Present? Yes No
50%	6 of total cover: 0	20% of	total cover:	0	
emarks: (Include photo numbers h	ere or on a separate s				I .
,,	5 - 5 p an an <b>0</b>	• /			

Sampling Point: WRAB102e\_w

SOIL

	cription: (Describe to	o the dep				or confirm	the absence	of indicators.)
Depth	Matrix	0′	Redox	K Feature	S T 1	1 2	Tandiim	Damedia
(inches) 0-12	Color (moist) 10YR 3/1	<u>%</u> 95	Color (moist) 10YR 4/6	<u>%</u> 5	Type <sup>1</sup> C	Loc <sup>2</sup>	<u>Texture</u> SL	Remarks
0-12	101K 3/1		10113 4/0			IVI		
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion, RM	=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indica	ators for Problematic Hydric Soils <sup>3</sup> :
Histoso	I (A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Bel	. ,	ice (S8) (N	ILRA 147,		Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Su				. —	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			. ,	. P	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat		` ,		<u> </u>	(MLRA 136, 147)
	uck (A10) (LRR N)		✓ Redox Dark S	Surface (F	<del>-</del> 6)		V	ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar	k Surface	e (F7)			Other (Explain in Remarks)
Thick D	ark Surface (A12)		Redox Depre	ssions (F	8)			
Sandy M	Mucky Mineral (S1) (L	RR N,	Iron-Mangane	ese Mass	es (F12) (	LRR N,		
MLR	A 147, 148)		MLRA 136	6)				
Sandy (	Gleyed Matrix (S4)		Umbric Surfa	ce (F13) (	(MLRA 13	6, 122)	<sup>3</sup> Ind	licators of hydrophytic vegetation and
Sandy F	Redox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 14	8) we	etland hydrology must be present,
Stripped	d Matrix (S6)		Red Parent M	1aterial (F	21) <b>(MLR</b>	A 127, 147	un	less disturbed or problematic.
Restrictive	Layer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:							1 -	
rtomanto.								



Photo 1 Wetland data point WRAB102e\_w facing north



Photo 2
Wetland data point WRAB102e\_w facing west

Project/Site: SERP		City/C	County: Randolph		Sampling Date: 8/20/2014		
Applicant/Owner: Dominion					Sampling Point: WRAB102_u		
Investigator(s): TP							
Landform (hillslope, terrace, etc.): hillslope							
Subregion (LRR or MLRA): N					Datum: WGS 1984		
Soil Map Unit Name: Buchanan and Ernest		15 to 35 percent slop	pes	NWI classific	cation: None		
Are climatic / hydrologic conditions on the s	ite typical fo	r this time of year? Y	′es No	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hyd	Irology	significantly distur	bed? Are "Normal	Circumstances" p	present? Yes V No		
Are Vegetation, Soil, or Hyd							
SUMMARY OF FINDINGS – Atta							
Hydrophytic Vegetation Present?	Yes	No. 🗸					
		No 🔽	Is the Sampled Area	V	No 🗸		
	Yes		within a Wetland?	Yes	No		
Remarks: upland point taken at edge of gas easeme	nt						
upiand point taken at edge of gas easeme	nit						
LIVERGLOOV							
HYDROLOGY				0	tone (all all and all all all and all all all and all all all all all all all all all al		
Wetland Hydrology Indicators:					ators (minimum of two required)		
Primary Indicators (minimum of one is req				Surface Soil			
Surface Water (A1)		True Aquatic Plants (		Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Pa			
Saturation (A3)		Oxidized Rnizospher Presence of Reduced	• ,	C3) Moss Trim Lines (B16) Dry-Season Water Table (C2)			
Water Marks (B1) Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Bur			
Orift Deposits (B3)		Thin Muck Surface (0		-	isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer			tressed Plants (D1)		
Iron Deposits (B5)		Other (Explain in Itel	nano,	· <del></del>	Position (D2)		
Inundation Visible on Aerial Imagery (	'B7)			Shallow Aqu			
Water-Stained Leaves (B9)	(51)				aphic Relief (D4)		
Aquatic Fauna (B13)				FAC-Neutral			
Field Observations:					( )		
	No 🗸	Depth (inches):					
		Depth (inches):					
		Depth (inches):		lydrology Preser	nt? Yes No		
(includes capillary fringe)  Describe Recorded Data (stream gauge, r							
Describe Necolded Data (stream gauge, i	nonitoning w	eli, aeriai priotos, pre	wious irispections), ii ava	illable.			
Remarks:							

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

Sampling Point: WRAB102\_u

	Absolute	Dominant I		Dominance Test worksheet:	
Tree Stratum (Plot size:0	% Cover 60	Species?	Status FACU	Number of Dominant Species	
1. Fagus grandifolia		Yes		That Are OBL, FACW, or FAC:	(A)
2. Quercus rubra	20	Yes	FACU	Total Number of Deminent	
3				Total Number of Dominant Species Across All Strata:  4	(B)
4					_ (-)
4				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC:	(A/B)
6				Prevalence Index worksheet:	
7					
		= Total Cove			
50% of total cover: 40	20% of	total cover:_	16	OBL species X I =	_
Sapling/Shrub Stratum (Plot size: 0				FACW species x 2 =	_
<sub>1.</sub> Fagus grandifolia	60	Yes	FACU	FAC species x 3 = 0	_
2. Acer pensylvanicum	20	Yes	FACU	FACU species 160 x 4 = 640	_
				UPL species0 x 5 =0	
3				Column Totals: 160 (A) 640	(B)
4				(/)	()
5				Prevalence Index = B/A =4	
6				Hydrophytic Vegetation Indicators:	
7				1 - Rapid Test for Hydrophytic Vegetation	
8					
9				2 - Dominance Test is >50%	
-	90	= Total Cove		3 - Prevalence Index is ≤3.0 <sup>1</sup>	
50% of total cover: 40		total cover:	´ 16	4 - Morphological Adaptations <sup>1</sup> (Provide su	pporting
Herb Stratum (Plot size:0 )				data in Remarks or on a separate sheet	)
i leib Stratum (i lot size)				Problematic Hydrophytic Vegetation <sup>1</sup> (Expl	ain)
1					
2				<sup>1</sup> Indicators of hydric soil and wetland hydrology	must
3				be present, unless disturbed or problematic.	muot
4				Definitions of Four Vegetation Strata:	
5					
6				Tree – Woody plants, excluding vines, 3 in. (7.6	
				more in diameter at breast height (DBH), regard height.	lless of
7				neight.	
8				Sapling/Shrub - Woody plants, excluding vine	s, less
9				than 3 in. DBH and greater than or equal to 3.2	8 ft (1
10				m) tall.	
11				Herb - All herbaceous (non-woody) plants, reg-	ardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.	
50% of total cover:0	20% of	total cover:_	0	Woody vine – All woody vines greater than 3.2	9 ft in
Woody Vine Stratum (Plot size:)				height.	0 11 111
1					
2					
3					
4				Hydrophytic	
5	_			Vegetation Present? Yes No	
0		= Total Cove	^	rieseiit? ies No	
50% of total cover:0	20% of	total cover:_			
Remarks: (Include photo numbers here or on a separate s	heet.)				

Sampling Point: WRAB102\_u

Depth	Matrix		Redox Features		
inches)	Color (moist)	<u>%</u>	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>		Remarks
0-2	10YR 2/1	100		SL	
2-12	10YR 4/4	100		SCL	
					- ·
					_
				_	
					-
	· -				_
	-				- · <u>-</u>
					_
vpe: C=C	Concentration, D=De	pletion, RM=R	educed Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
	Indicators:	,			cators for Problematic Hydric Soils <sup>3</sup> :
_ Histoso	l (A1)		Dark Surface (S7)		2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA 1		Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Surface (S9) (MLRA 147, 148		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)		Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	ce (A11)	Depleted Dark Surface (F7)		Other (Explain in Remarks)
	ark Surface (A12)	,	Redox Depressions (F8)		
	Mucky Mineral (S1)	LRR N.	Iron-Manganese Masses (F12) (LRR N		
	A 147, 148)	,,	MLRA 136)		
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122)	<sup>3</sup> In	ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA		vetland hydrology must be present,
	d Matrix (S6)		Red Parent Material (F21) (MLRA 127,		inless disturbed or problematic.
	Layer (if observed)	):		Í	
Туре:					
	nches):		_	Hydric So	oil Present? Yes No
emarks:	,		_		
omano.					



Photo 1 Upland data point WRAB102\_u facing south



Photo 2 Upland data point WRAB102\_u facing east

Project/Site: SERP		City/C	county: Randolph		Sampling Date: 8/20/2014
Applicant/Owner: Dominion				State: WV	Sampling Point: WRAB103e_w
Investigator(s): TP					
Landform (hillslope, terrace, etc.): dra					
Subregion (LRR or MLRA): N					
Soil Map Unit Name: Dekalb extreme	ly stony loam, 35	to 70 percent slopes		NWI classifi	cation: None
Are climatic / hydrologic conditions on	the site typical fo	r this time of year? Y	res No	(If no, explain in F	Remarks.)
Are Vegetation, Soil,	or Hydrology	significantly distur	bed? Are "Normal	Circumstances"	present? Yes No
Are Vegetation, Soil,					
SUMMARY OF FINDINGS -					
Hydrophytic Vegetation Present?	Yes 🗸	No			
Hydric Soil Present?		 No	Is the Sampled Area	v V	No
Wetland Hydrology Present?		No	within a Wetland?	Yes	NO
Remarks:	·				
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one	is required; check	all that apply)		Surface Soi	Cracks (B6)
Surface Water (A1)	·	True Aquatic Plants (	B14)	Sparsely Ve	getated Concave Surface (B8)
✓ High Water Table (A2)		Hydrogen Sulfide Od		Drainage Pa	atterns (B10)
Saturation (A3)			• , ,	Moss Trim L	
Water Marks (B1)		Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Bu	
Drift Deposits (B3)		Thin Muck Surface (C			/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	'	Other (Explain in Rer	narks)	· <del></del>	Stressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Aerial Ima	gery (B7)			Shallow Aqu	Position (D2)
Water-Stained Leaves (B9)	gery ( <i>Dr</i> )				aphic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutra	
Field Observations:					. ,
Surface Water Present? Yes	No 🗸	Depth (inches):			
	<b>✓</b> No		1		
	<b>✓</b> No		0 Wetland F	lydrology Prese	nt? Yes V No
(includes capillary fringe)		all assistants and	· i · · · · i · · · · · · · · · · · · ·	Slabla.	
Describe Recorded Data (stream ga	uge, monitoring w	reii, aeriai priotos, pre	vious inspections), ii ava	iliable.	
Remarks:					

		Absolute	Dominant	Indicator	Dominance Test worksheet:		
ree Stratum (Plot size:	0)		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:	1 (	(A)
					Total Number of Dominant Species Across All Strata:	1 (	(B)
		<u> </u>			Percent of Dominant Species That Are OBL, FACW, or FAC:	100 (	(A/E
					Prevalence Index worksheet:		
			= Total Cove			Multiply by:	
	50% of total cover:		total cover:	0	OBL species 0 x 1 =		
apling/Shrub Stratum (Plot size	Λ				FACW species x 2 =	30	
					FAC species x 3 =		
					FACU species X 4 =		
					UPL species x 5 = 90	190	(5
					Column Totals: (A)		(B
•					Prevalence Index = B/A =	2.11	
					Hydrophytic Vegetation Indicator	s:	
•					1 - Rapid Test for Hydrophytic \	/egetation	
					2 - Dominance Test is >50%		
					✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>		
	50% of total cover:		= Total Cove total cover:	er 0	4 - Morphological Adaptations <sup>1</sup>	(Provide suppo	ortir
lerb Stratum (Plot size:	0	2070 01	total cover		data in Remarks or on a sep	arate sheet)	
Osmundastrum cinnamomeui		80	Yes	FACW	Problematic Hydrophytic Vegeta	ation <sup>1</sup> (Explain)	)
Dichanthelium clandestinum		10	No	FAC			
					<sup>1</sup> Indicators of hydric soil and wetland		ust
					be present, unless disturbed or prob Definitions of Four Vegetation Str		
					_		
					Tree – Woody plants, excluding vine		
					more in diameter at breast height (Dieght.	юп), regardles	3S C
•					Openition of Others to All Manufacture and	alau Parau Zara a I	
•					Sapling/Shrub – Woody plants, exc than 3 in. DBH and greater than or e	cluding vines, le	ess t (1
0					m) tall.		. (
1					Herb – All herbaceous (non-woody)	plants, regard	lles
			= Total Cove		of size, and woody plants less than		
	0070 01 total 00VC1.	45 20% of	total cover:_	18	Woody vine – All woody vines grea	iter than 3 28 ft	t in
Voody Vine Stratum (Plot size:	)				height.		•
•							
•							
•					Hydrophytic		
·					Vegetation		
			= Total Cove	_	Present? Yes !	40 <u> </u>	
			total cover:				
Remarks: (Include photo numbe	50% of total cover:ers here or on a separate		total cover:	0			

Sampling Point: WRAB103e\_w

Profile Desc	cription: (Describe t	o the dep				or confirm	the absence	of indicators.)
Depth	Matrix		Redox	<u> Feature</u>	s	. 2		
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-12	10YR 3/	95	10YR 4/6	5	C	M	SL	
·	-							
						· <u></u>		
					-			
1 <sub>Turnou</sub> C C	anaentration D. Donl	otion DM	Dadwaad Matrix MC	Maakaa	4 Cond Cr		<sup>2</sup> l section. D	L=Pore Lining, M=Matrix.
Hydric Soil	oncentration, D=Deple	elion, Rivi	=Reduced Matrix, MS	=iviaskec	sand Gr	ams.		ators for Problematic Hydric Soils <sup>3</sup> :
-			5 1 6 7	(07)				
Histosol			Dark Surface	. ,	(00) (1			cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Bel				148) (	Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Su			47, 148)	_	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)		P	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat	. ,				(MLRA 136, 147)
	uck (A10) (LRR N)		<u>✓</u> Redox Dark S					Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar		. ,		c	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangane		es (F12) <b>(</b>	LRR N,		
	A 147, 148)		MLRA 136	-			3.	
	Gleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	d Matrix (S6)		Red Parent M	1aterial (F	21) <b>(MLR</b>	A 127, 147	<u>')</u> un	less disturbed or problematic.
Restrictive	Layer (if observed):							
Type:			<u></u>					
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:							1	



Photo 1 Wetland data point WRAB103e\_w facing southeast



**Photo 2**Wetland data point WRAB103e\_w facing southwest

Project/Site: SERP		City/C	County: Randolph		Sampling Date: 8/20/2014	
Applicant/Owner: Dominion					Sampling Point: WRAB103_u	
Investigator(s): TP						
Landform (hillslope, terrace, etc.): hillsl						
Subregion (LRR or MLRA): N						
Soil Map Unit Name: Dekalb extremely	stony loam, 35	to 70 percent slopes	2511g1	NWI classific	eation: None	
Are climatic / hydrologic conditions on t	he site typical fo	or this time of year? Y	′es No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or	Hydrology	significantly distur	bed? Are "Normal	Circumstances" p	present? Yes No	
Are Vegetation, Soil, or						
SUMMARY OF FINDINGS – A						
Hydrophytic Vegetation Present?	Yes	No. 🗸				
Hydric Soil Present?		No	Is the Sampled Area	.,	🗸	
Wetland Hydrology Present?	Yes		within a Wetland?	Yes	No	
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indica	tors (minimum of two required)	
Primary Indicators (minimum of one is	required; check	call that apply)		Surface Soil	Cracks (B6)	
Surface Water (A1)		True Aquatic Plants (	B14)	<ul><li>Sparsely Vegetated Concave Surface (B8)</li><li>Drainage Patterns (B10)</li></ul>		
High Water Table (A2)		Hydrogen Sulfide Od				
Saturation (A3)			• ,	Moss Trim L	ines (B16)	
Water Marks (B1)		Presence of Reduced			Water Table (C2)	
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Bur		
Drift Deposits (B3)		Thin Muck Surface (C			sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	_	Other (Explain in Rer	narks)	· <del></del>	tressed Plants (D1)	
Iron Deposits (B5)	(DZ)				Position (D2)	
Inundation Visible on Aerial Imag	ery (b/)			Shallow Aqu		
<ul><li>Water-Stained Leaves (B9)</li><li>Aquatic Fauna (B13)</li></ul>				FAC-Neutral	aphic Relief (D4)	
Field Observations:				I AC-Neullai	1631 (03)	
	No.	Depth (inches):				
		Depth (inches):				
		Depth (inches):		lydrology Preser	nt? Yes No	
(includes capillary fringe)					10	
Describe Recorded Data (stream gau	ge, monitoring v	vell, aerial photos, pre	vious inspections), if ava	ıllable:		
Remarks:						

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

Sampling Point: WRAB103\_u

	Absolute	Dominant In		Dominance Test worksheet:		
Tree Stratum (Plot size:)	<u>% Cover</u> 40	Species?	Status FACU	Number of Dominant Species		
1. Quercus rubra		Yes		That Are OBL, FACW, or FAC:	1	(A)
2. Acer saccharum	30	Yes	FACU	Total Newhork of Descions		
3		·		Total Number of Dominant Species Across All Strata:	4	(B)
				Species Acioss Ali Stiata.		(D)
4				Percent of Dominant Species		
5				That Are OBL, FACW, or FAC:	25	(A/B)
6						
7				Prevalence Index worksheet:		
	70	= Total Cove			lultiply by:	
50% of total cover: 35		total cover:	14	OBL species0 x 1 =	0	_
0	20 /0 01	total cover		FACW species 0 x 2 =	0	_
Sapling/Shrub Stratum (Plot size:)	40	V	FACIL	. 40	20	-
1. Hamamelis virginiana	10	Yes	FACU	FAC species x 3 = 80 x 4	320	-
2				FACU species x 4 =		-
3				UPL species x 5 =		_
				Column Totals: 90 (A)	350	(B)
4						_ ` ,
5				Prevalence Index = B/A =	3.88	_
6				Hydrophytic Vegetation Indicators		
7						
8				1 - Rapid Test for Hydrophytic V	regetation	
				2 - Dominance Test is >50%		
9	10			3 - Prevalence Index is ≤3.0 <sup>1</sup>		
	=	= Total Cove	r 2	4 - Morphological Adaptations <sup>1</sup>	(Provide sup	porting
50% of total cover:5	20% of	total cover:		data in Remarks or on a sep		
Herb Stratum (Plot size:)				· ·	,	- \
1. Athyrium asplenioides	10	Yes	FAC	Problematic Hydrophytic Vegeta	ation (Explai	n)
2						
				<sup>1</sup> Indicators of hydric soil and wetland		nust
3				be present, unless disturbed or prob	lematic.	
4				Definitions of Four Vegetation Str	ata:	
5						
6				Tree – Woody plants, excluding vine		
				more in diameter at breast height (D height.	BH), regardi	ess of
7				neignt.		
8				Sapling/Shrub - Woody plants, exc	luding vines	less
9				than 3 in. DBH and greater than or e	equal to 3.28	ft (1
10				m) tall.		
11.				Horb All harbanasia (non woody)	nlanta raga	rdlaga
	10	= Total Cove		<b>Herb</b> – All herbaceous (non-woody) of size, and woody plants less than 3		aless
50% of total cover: 5		total cover:_		or size, and woody plants less than t	3.20 It tail.	
0070011010100101.	20% 01	total cover		Woody vine - All woody vines great	ter than 3.28	ft in
Woody Vine Stratum (Plot size:)				height.		
1						
2						
3						
4		-		Hydrophytic		
5				Vegetation	. ,	
	0 _	= Total Cove		Present? Yes N	10 <u> </u>	
50% of total cover:0	20% of	total cover:_	0			
Remarks: (Include photo numbers here or on a separate s	heet.)					

Sampling Point: WRAB103\_u

Depth	Matrix		Redox Features	1 , 2		ъ .
(inches)	Color (moist)	<u>%</u>	Color (moist) % Type	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-1	10YR 2/1	100			SL	
2-12	10YR 4/4	100			SCL	
				<del></del>		
		<del></del>		<del></del>		
		<del></del>		<del></del>		
ype: C=C	concentration, D=Dep	oletion, RM=R	educed Matrix, MS=Masked Sand	Grains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
ydric Soil	Indicators:				Indica	ators for Problematic Hydric Soils <sup>3</sup> :
Histoso	I (A1)		Dark Surface (S7)		2	cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface (S8)	(MLRA 147,		Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Surface (S9) (MLR	•	,	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)	. ,	Р	Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Matrix (F3)		<del></del>	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)		V	/ery Shallow Dark Surface (TF12)
	ed Below Dark Surface	ce (A11)	Depleted Dark Surface (F7)		<u> </u>	Other (Explain in Remarks)
Thick D	ark Surface (A12)		Redox Depressions (F8)			
Sandy I	Mucky Mineral (S1) (	LRR N,	Iron-Manganese Masses (F12	) <b>(LRR N,</b>		
	A 147, 148)		MLRA 136)			
Sandy (	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA	136, 122)	<sup>3</sup> Ind	licators of hydrophytic vegetation and
Sandy F	Redox (S5)		Piedmont Floodplain Soils (F1	9) <b>(MLRA 14</b>	<b>8)</b> we	etland hydrology must be present,
Stripped	d Matrix (S6)		Red Parent Material (F21) (MI	RA 127, 147	) un	less disturbed or problematic.
estrictive	Layer (if observed)	:				
Type:						
Depth (in	nches):		<del>-</del>		Hydric Soil	Present? Yes No
emarks:					, , , , , , ,	
Ciliains.						



Photo 1 Upland data point WRAB103\_u facing southwest



Photo 2
Upland data point WRAB103\_u facing southeast

Project/Site: Atlantic Coast Pipe	line	City/C	County: Randolph County		Sampling Date: 12/3/2015			
Applicant/Owner: Dominion		State: WV Sampling Point: wraf001e_v						
Investigator(s): SH, AS Section, Township, Range: No PLSS in this area								
Landform (hillslope, terrace, etc.								
Subregion (LRR or MLRA): N								
Soil Map Unit Name: Dekalb cha	annery loam, mo	ist, 8 to 15 percent slopes		NWI classific	cation: None			
Are climatic / hydrologic conditio	ns on the site typ	pical for this time of year? Y	′es <u> </u>	If no, explain in F	Remarks.)			
Are Vegetation, Soil	<u>′</u> , or Hydrolog	y significantly distur	bed? Are "Normal	Circumstances"	present? Yes No			
Are Vegetation, Soil								
					s, important features, etc.			
Hydrophytic Vegetation Presen	nt? Yes	✓ No						
Hydric Soil Present?	Yes	V No	Is the Sampled Area	Voc. V	No			
Wetland Hydrology Present?		✓ No	within a Wetland?	res	NO			
HYDROLOGY								
Wetland Hydrology Indicator					ators (minimum of two required)			
Primary Indicators (minimum of	f one is required;			Surface Soil				
Surface Water (A1)		True Aquatic Plants (		Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)		Hydrogen Sulfide Od		=	atterns (B10)			
Saturation (A3) Water Marks (B1)		<ul><li>Oxidized Rhizospher</li><li>Presence of Reduced</li></ul>		Moss Trim L	Water Table (C2)			
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Bur				
Drift Deposits (B3)		Thin Muck Surface (0		-	isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Other (Explain in Rer			Stressed Plants (D1)			
Iron Deposits (B5)			,	<b>C</b> Geomorphic				
Inundation Visible on Aeria	al Imagery (B7)			Shallow Aqu	itard (D3)			
Water-Stained Leaves (B9	·)			Microtopographic Relief (D4)				
Aquatic Fauna (B13)				FAC-Neutra	l Test (D5)			
Field Observations:			2					
Surface Water Present?		Depth (inches):	2 0					
Water Table Present?		Depth (inches):	-		.,			
Saturation Present? (includes capillary fringe)	Yes No	Depth (inches):	Wetland H	ydrology Prese	nt? Yes V No			
Describe Recorded Data (stream	ım gauge, monito	oring well, aerial photos, pre	vious inspections), if avai	ilable:				
Domorko								
Remarks:								

Number of Dominant Species   That Are OBL FACW. or FAC: 2 (A)		20		Absolute	Dominant Ir		Dominance Test worksheet:
Total Number of Dominant   2   (B)   Species Arrows All Stratate   2   (B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That Are OBL, FACW, or FAC:   100   (A/B)   Percent of Dominant Species   That I Cover   That	Г <u>ree Stratum</u> (Plot size: I	30	_)	% Cover	Species?	Status	· · · · · ·
Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)  Provalence Index worksheet: Total '& Cover of: Multiply by:  Sapling/Shrub Stratum (Plot size: 15 )  Sapling/Shrub Stratum (Plot size: 16 )  Sapling/Shrub Stratum (Plot size: 17 )  Sapling/Shrub Stratum (Plot size: 18 )							2
Prevalence Index worksheet:   Total 's, Cover of.   Multiply by:	1			·			Percent of Dominant Species
Total Cover   Total Cover   Total Cover   Solve   Total Cover							That Ale OBE, FACW, OF FAC.
Solidation   Stratum   Solidation   Stratum   Solidation   Stratum   Solidation   Stratum   Solidation   Stratum   Solidation   Solid	7						
Solidation   Sol				:			
FACW species				20% of	total cover:	0	OBL species X1 = S
FAC species	Sapling/Shrub Stratum (Plot s	ize:	)				FACW species x 2 =
PACU species   X 4 = 0   VPL species   0   X 5 = 0   X 5	1						FAC species x 3 =
UPL species	2						FACU species X 4 =
Column Totals: 40 (A) 120 (B)  Prevalence Index = B/A = 3  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is \$3.0¹  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  2 Athyrium asplenioides  10 Yes FAC  Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Four Vegetation Stratas:  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 (in m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30 )  1 - Rapid Test for Hydrophytic Vegetation  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetations  1 - Rapid Test for Hydrophytic Vegetation  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetations  1 - Rapid Test for Hydrophytic Vegetation  2 - Definitions of Four Vegetation Hotals for Hydrophytic Vegetation  2 - Definitions of Four Vegetation  3 - Definitions o							UPL species x 5 =
Prevalence Index = B/A = 3  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index = B/A = 3  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index = B/A = 3  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index = B/A = 3  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  **Tree - Woody plants, excluding vines, 3 in. (7.6 cm) 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) half.  **Woody Vine Stratum** (Plot size: 30 )  **Moody Vine Stratum** (Plot size: 30 )  **Owedy Vine Stratum** (Plot size: 30 )  **Owedy Vine - All woody vines greater than 3.28 ft in height.  **Hydrophytic Vegetation Tree - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) half.  **Woody Vine - All woody vines greater than 3.28 ft in height.  **Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft in height.  **Hydrophytic Vegetation Tree - Woody plants less than 3.28 ft in height.	_						Column Totals:(A)(E
Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is 33.0*  3 - Total Cover 50% of total cover: 5 - Definitions of Fact  4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation (Explain)  Athyrium asplenioides  10 Yes FAC  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.  Moody Vine Stratum (Plot size: 30 )  Moody Vine Stratum (Plot size: 30 )  0 = Total Cover 20% of total cover: 20 20% of total cover: 30   4 Hydrophytic Vegetation Indicators: 4 - A Hydrophytic Vegetation (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation functions: 4 - Memory Less than 1 wetland hydrology must be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Provided Screen of Screen Present?  Yes No							
Hydrophytic Vegetation Indicators:  1. Agaid Test for Hydrophytic Vegetation  50% of total cover:  50% of total co							
3.							Hydrophytic Vegetation Indicators:
3 - Prevalence Index is \$3.0°    1 - Herb Stratum (Plot size: 5    1 - Panicum virgatum    2 - Athyrium asplenioides    3 - Prevalence Index is \$3.0°    4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)    2 - Problematic Hydrophytic Vegetation¹ (Explain)    3 - Prevalence Index is \$3.0°    4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)    3 - Providence Index is \$3.0°    4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)    4 - Problematic Hydrophytic Vegetation¹ (Explain)    5 - Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  5 - 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.  5 - Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine - All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation    4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)    - Problematic Hydrophytic Vegetation of the present; excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of size, and woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation    Hydrophytic Vegetation    Yes No							1 - Rapid Test for Hydrophytic Vegetation
Solidation   Sol							✓ 2 - Dominance Test is >50%
Solve of total cover:   0   20% of total c	9						✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
Solve of total cover: 5   20% of total cover: 5   30   Yes   FAC			. 0				4 - Morphological Adaptations <sup>1</sup> (Provide supporti
Stratum (Plot size:		_	tal cover:	20% of	total cover:		
2 Athyrium asplenioides  10 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.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30 )  1.		5	_)	00			
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.   Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   Woody vine — All woody vines greater than 3.28 ft in height.   Woody vine — All woody vines greater than 3.28 ft in height.   Hydrophytic Vegetation   Vege	·			· ———			I Toblematic Hydrophytic Vegetation (Explain)
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.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30 )  Moody Vine Stratum (Plot siz	2. Athyrium asplenioides			10	Yes	FAC	1 Indicators of hydric coil and watland hydrology must
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.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30 )  1	3						
Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30 )  1.	4						
Tree — Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub — Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30 )  1	5.						benintions of Four Vegetation Strata.
7	8						
Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.    Moody Vine Stratum (Plot size: 30 )   1.							
Saping/shrub – woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30 )  1	_						neight.
10				·			
11							
40   = Total Cover   50% of total cover:   20   20% of total cover:   8     Woody Vine Stratum (Plot size:   30   )				· <del></del>			m) tall.
Woody Vine Stratum (Plot size:	11			40	= Total Cover		
No		20					Woody vine – All woody vines greater than 3.28 ft in
2	Woody Vine Stratum (Plot size	e:	))				
3	1						
4	2						
5	3						
5	4						Hydrophytic
0 = Total Cover   Present? Yes No   No	5.						
50% of total cover: 0 20% of total cover: 0				0 ;	= Total Cover		
		50% of to	tal cover: 0				
	Remarks: (Include photo num		'				1

Sampling Point: wraf001e\_w

Profile Desc	ription: (Describe t	o the de	oth needed to docun	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	K Features		- 3	_	
(inches) 0-9	Color (moist) 10 YR 4/1	<u>%</u> 15	Color (moist) 7.5 YR 4/6	<u>%</u> 10	Type <sup>1</sup> C	Loc <sup>2</sup>	<u>Texture</u> CL	Remarks
<u> </u>			7.5 TR 4/0					
	10 YR 4/2	75					CL	
					-			
-					-			
			-					
	-							
-								
		etion, RM	=Reduced Matrix, MS	S=Masked	Sand Gra	ains.		L=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indic	ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface					2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148) (	Coast Prairie Redox (A16)
Black Hi			Thin Dark Su	,	•	47, 148)	_	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		F2)		F	Piedmont Floodplain Soils (F19)
	Layers (A5) ck (A10) <b>(LRR N)</b>		✓ Depleted Mat		.c)		,	(MLRA 136, 147) /ery Shallow Dark Surface (TF12)
	i Below Dark Surface	(Δ11)	Redox Dark S Depleted Dar	,	,			Other (Explain in Remarks)
	ark Surface (A12)	(7(1)	Redox Depre				_ `	oner (Explain in Remarks)
	lucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangane			LRR N,		
	147, 148)	,	MLRA 136		` , `	•		
Sandy G	leyed Matrix (S4)		Umbric Surfa	ce (F13) <b>(</b>	MLRA 13	6, 122)	<sup>3</sup> Inc	dicators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent M	1aterial (F	21) <b>(MLR</b>	A 127, 147	<b>')</b> ur	lless disturbed or problematic.
Restrictive L	ayer (if observed):							
Type: Ro	CK							
Depth (inc	ches): 9						Hydric Soi	I Present? Yes No
Remarks:								



Photo 1
Wetland data point wraf001e\_w facing south



Photo 2
Wetland data point wraf001e\_w facing east

Project/Site: Atlantic Coast Pi	ipeline	City/C	County: Randolph County		Sampling Date: 12/3/2015	
Applicant/Owner: Dominion	eline City/County: Randolph County Sampling Date: 12/3/2015  State: WV Sampling Point: wraf001					
Investigator(s): SH, AS Section, Township, Range: No PLSS in this area						
Landform (hillslope, terrace, e						
Subragion (LDD or MLDA): N	l	1 at: 38.75720222	Lange -80.0	9727901	Clope (76):	
Ocil Mara Hair Mara and Dekalb (	channery loam moi:	st 8 to 15 percent slopes	Long	NDA/L-1'C'-	Datum: WGS 1984 ation: None	
Are climatic / hydrologic condi		· · · · · · · · · · · · · · · · · · ·				
Are Vegetation, Soil _	, or Hydrology	/ significantly distur	bed? Are "Normal	Circumstances" p	resent? Yes No	
Are Vegetation, Soil _	, or Hydrology	/ naturally problema	atic? (If needed, e	xplain any answe	rs in Remarks.)	
SUMMARY OF FINDIN	IGS – Attach si	te map showing san	npling point locatio	ns, transects	, important features, etc.	
Hydrophytic Vegetation Pres	cent? Vec	No_ 🗸				
Hydric Soil Present?	Yes	No	Is the Sampled Area	.,	No	
Wetland Hydrology Present?	? Yes _	No 🗸	within a Wetland?	Yes	NO	
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicat	ors:			Secondary Indica	tors (minimum of two required)	
Primary Indicators (minimum	of one is required;		<u> </u>	Surface Soil	, ,	
Surface Water (A1)		True Aquatic Plants (			getated Concave Surface (B8)	
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Pat		
Saturation (A3)		Oxidized Rhizospher		Moss Trim Li		
Water Marks (B1)		Presence of Reduced			Water Table (C2)	
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Burn		
Drift Deposits (B3)		Thin Muck Surface (C			sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)		tressed Plants (D1)	
Iron Deposits (B5)	orial Images (DZ)			Geomorphic		
Inundation Visible on Ac				Shallow Aqui		
<ul><li>Water-Stained Leaves (</li><li>Aquatic Fauna (B13)</li></ul>	D9)			FAC-Neutral	phic Relief (D4)	
				FAC-Neutral	Test (D5)	
Field Observations: Surface Water Present?	Voc. No.	✓ Depth (inches):				
Water Table Present?		Depth (inches):				
Saturation Present?		Depth (inches):		vdrology Broson	t? Yes No	
(includes capillary fringe)					t? Yes No	
Describe Recorded Data (st	ream gauge, monito	ring well, aerial photos, pre	vious inspections), if avai	lable:		
No hydrology present.						
Remarks:						

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

50% of total cover: 27.5

50% of total cover: \_\_\_2.5

50% of total cover:

30

Tree Stratum (Plot size:

Sapling/Shrub Stratum (Plot size: 15

1. Acer rubrum

2. Betula lenta

1. Acer saccharum

Herb Stratum (Plot size:

1. Rubus allegheniensis

3. Athyrium asplenioides

2. Dichanthelium clandestinum

10.\_\_\_\_

Sampling Point: wraf001_u	
Dominance Test worksheet:	_
Number of Dominant Species	

That Are OBL, FACW, or FAC:		(A)
Total Number of Dominant Species Across All Strata:	6	(B)

Percent of Dominant Species		
That Are OBL, FACW, or FAC:	50	(A/B)

# Prevalence Index worksheet:

Dominant Indicator

FACU

% Cover Species? Status
30 Yes FAC

25

Yes

Yes

= Total Cover

20% of total cover:\_

5 = Total Cover

Yes

= Total Cover

25 20% of total cover: 10

0 = Total Cover

**FACU** 

FAC

FAC

20% of total cover:

15

Total % Cov	er of:	Mu	Multiply by:			
OBL species	0	x 1 =	0	_		
FACW species	0	x 2 =	0			
FAC species	55	x 3 =	165	_		
FACU species	55	x 4 =	220			
UPL species	0	x 5 =	0			
Column Totals:	110	(A)	385	_ _ (B)		
Prevalence	e Index = B/	A =	3.5	_		

### **Hydrophytic Vegetation Indicators:**

- \_\_\_ 1 Rapid Test for Hydrophytic Vegetation
- \_\_\_ 2 Dominance Test is >50%
- \_\_ 3 Prevalence Index is ≤3.0¹
- \_\_\_ 4 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>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.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present?

Yes \_\_\_\_ No \_\_\_

	50% of total cover:	0	20% of total cover:
Remarks:	(Include photo numbers here or on a separ	ate shee	et.)

Woody Vine <u>Stratum</u> (Plot size: \_\_\_\_\_\_)

Sampling Point: wraf001\_u

SOIL

Depth	cription: (Describe f			x Feature:		· · · · ·		
(inches)	Color (moist)	%	Color (moist)	% <u>realule:</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-7	10YR 4/3	100					L	
7-18	10 YR 4/2	95	7.5 YR 4/4		C		CL	
7-10	10 TR 4/2	95	7.5 1R 4/4			IVI		· -
						· ——		
					-	<del></del>		
1- 0.0						<del> </del>	2	
	Concentration, D=Dep	letion, RM	I=Reduced Matrix, MS	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
-	Indicators:							cators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface					2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148) (	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su			147, 148)	_	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)		F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Mat		\			(MLRA 136, 147)
	uck (A10) (LRR N)	(4.4.4)	Redox Dark S	•				Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	e (A11)	Depleted Dar				(	Other (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre			I DD N		
	Mucky Mineral (S1) (L	KK N,	Iron-Mangane		es (F12) <b>(</b>	LKK N,		
	A 147, 148)		MLRA 130	•	MIDA 43	)C 422\	3100	disators of budraphytic vacatation and
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	d Matrix (S6)		Red Parent N	riateriai (F	21) (IVILK	A 127, 14	r) ur	nless disturbed or problematic.
	Layer (if observed):							
Type:								
Depth (ir	nches):						Hydric Soi	Il Present? Yes No
Remarks:								



Photo 1 Upland data point wraf001\_u facing south



Photo 2 Upland data point wraf001\_u facing west

Project/Site: Atlantic Coast Pipeline		City/C	County: Randolph County	1	Sampling Date: 12/3/2015			
Applicant/Owner: Dominion				State: WV	Sampling Point: wraf002e_w			
Investigator(s): SH, AS			on, Township, Range: No					
Landform (hillslope, terrace, etc.): dep								
Subregion (LRR or MLRA): N								
Soil Map Unit Name: Gilpin-Dekalb sto	ny complex, mo	ist, 15 to 35 percent s	slopes	NWI classifi	cation: None			
Are climatic / hydrologic conditions on	the site typical fo	or this time of year?	/es No	(If no, explain in F	Remarks.)			
Are Vegetation, Soil, or	Hydrology	significantly distur	rbed? Are "Normal	Circumstances"	present? Yes No			
Are Vegetation, Soil, or								
SUMMARY OF FINDINGS – A								
Hydrophytic Vegetation Present?	Yes 🗸	No						
Hydric Soil Present?	Yes 🗸	No	Is the Sampled Area	V V	No			
Wetland Hydrology Present?		No	within a Wetland?	Yes	No			
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)			
Primary Indicators (minimum of one is	s required; checl	k all that apply)		Surface Soil				
Surface Water (A1)		True Aquatic Plants		Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)				
High Water Table (A2)		Hydrogen Sulfide Od						
Saturation (A3)		Oxidized Rhizospher	es on Living Roots (C3)	Moss Trim L	ines (B16)			
Water Marks (B1)		Presence of Reduce	d Iron (C4)	Dry-Season	Water Table (C2)			
Sediment Deposits (B2)		Recent Iron Reduction	on in Tilled Soils (C6)	Crayfish Bu	rrows (C8)			
Drift Deposits (B3)		Thin Muck Surface (		Saturation V	on Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	_	Other (Explain in Rei	marks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)					Position (D2)			
Inundation Visible on Aerial Imag	ery (B7)			Shallow Aquitard (D3)				
Water-Stained Leaves (B9)				<del></del>	raphic Relief (D4)			
Aquatic Fauna (B13)				FAC-Neutra	Test (D5)			
Field Observations: Surface Water Present? Yes	No. V	Donath (in all an)						
		Depth (inches):	8					
		Depth (inches):	0					
Saturation Present? Yes _ (includes capillary fringe)	No	Depth (inches):	Wetland H	lydrology Prese	nt? Yes No			
Describe Recorded Data (stream gau	ge, monitoring v	vell, aerial photos, pre	evious inspections), if ava	ilable:				
Demorto								
Remarks:								

EGETATION (Four Strata) – Use scientific na	ames of	plants.		Sampling Point: wraf002e_w
	Absolute	Dominant Ir		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1		- ——		That Are OBL, FACW, or FAC:3 (A)
2		<u> </u>		Total Number of Dominant
3		<u> </u>		Species Across All Strata: 3 (B)
4				Descent of Dominant Chaolina
5		<u> </u>		Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
	0	= Total Cover	<del></del>	Total % Cover of: Multiply by:
50% of total cover:		f total cover:	0	OBL species 25 x 1 = 25
Sapling/Shrub Stratum (Plot size: 15 )	_			FACW species x 2 =40
1				FAC species 20
1				FACU species0 x 4 =0
2				UPL species
3				Column Totals: 65 (A) 125 (B)
4		<u> </u>		Column Totals (A) (5)
5				Prevalence Index = B/A =1.92
6		- ——		Hydrophytic Vegetation Indicators:
7		<u> </u>		1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9		_		✓ 3 - Prevalence Index is ≤3.0¹
	0	= Total Cover	-	
50% of total cover:0		f total cover:	0	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5				data in Remarks or on a separate sheet)
1. Dichanthelium clandestinum	20	Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Juncus effusus	20	Yes	FACW	
3. Scirpus georgianus	20	Yes	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4 Carex lupulina	5	No	OBL	be present, unless disturbed or problematic.
"	-	. ——		Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7		<u> </u>		height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				<b>Herb</b> – All herbaceous (non-woody) plants, regardless
		= Total Cover	•	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 32.5	20% of	f total cover:	13	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				· · · · · · · · · · · · · · · · · · ·
2		·		
3				
4				
<del></del>				Hydrophytic
5	0	T-1-1 Course		Vegetation Present? Yes ✓ No
50% of total cover: 0	$\overline{}$	= Total Cover	0	1100
0070 01 total 00vc1:		f total cover:		_
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wraf002e\_w

Profile Des	scription: (Describe	to the de				or confirm	the absenc	e of indicators.)
Depth	Matrix		Redo	x Feature	es	. 2	_	
(inches)	Color (moist)	<u>%</u> 95	Color (moist) 7.5 YR 4/6		Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> CL	Remarks
0-8	10 YR 4/1	95	7.5 YR 4/0	3	C	PL/M	UL	
			10 YR 6/6	2	С	М		
8-20	2.5 Y 5/3	12	7.5 YR 5/6	3	С	PL	SIC	
	10 YR 5/6	85					SIC	-
		-			· -			-, , ,
					· <del></del>			
		-		-				
		-					-	
	_							
	Concentration, D=Depl	etion, RM	1=Reduced Matrix, M	S=Maske	d Sand Gr	ains.		PL=Pore Lining, M=Matrix.
Hydric Soi	I Indicators:						Indi	cators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface					2 cm Muck (A10) (MLRA 147)
<del></del> '	Epipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
	Histic (A3)		Thin Dark Su			147, 148)		(MLRA 147, 148)
	gen Sulfide (A4)		Loamy Gleye		(►2)			Piedmont Floodplain Soils (F19)
	ed Layers (A5)		<u>✓</u> Depleted Ma		<b>-0</b> )			(MLRA 136, 147)
	fuck (A10) (LRR N)	. (Δ11)	Redox Dark	,	,			Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
	ed Below Dark Surface Dark Surface (A12)	# (A11)	Depleted Da Redox Depre				_	Other (Explain in Remarks)
	Mucky Mineral (S1) <b>(L</b>	RR N	Iron-Mangan			I RR N		
	RA 147, 148)	,	MLRA 13		C3 (1 12) (	LIXIX IV,		
	Gleyed Matrix (S4)		Umbric Surfa	•	(MLRA 13	36. 122)	<sup>3</sup> lr	ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					vetland hydrology must be present,
	ed Matrix (S6)		Red Parent N					inless disturbed or problematic.
Restrictive	Layer (if observed):							•
Type:								
	nches):						Hydric So	oil Present? Yes No
Remarks:	,						1 -	
rtornarto.								



Photo 1 Wetland data point wraf002e facing east



Photo 2
Wetland data point wraf002e facing west

Project/Site: Atlantic Coast Pi	peline	City/C	County: Randolph County		Sampling Date: 12/3/2015		
Applicant/Owner: Dominion					Sampling Point: wraf002_u		
Investigator(s): SH, AS		Secti	on, Township, Range: No				
Landform (hillslope, terrace, et							
Subregion (LRR or MLRA): N					Datum: WGS 1984		
Soil Map Unit Name: Gilpin-Do		x moist 15 to 35 percent s	slopes	NDA/L-1'C'-	Datum		
Are climatic / hydrologic condit							
Are Vegetation, Soil	, or Hydrology	significantly distu	bed? Are "Normal	Circumstances" p	resent? Yes No		
Are Vegetation, Soil	, or Hydrology	naturally problem	atic? (If needed, e.	xplain any answe	rs in Remarks.)		
SUMMARY OF FINDIN	GS – Attach si	te map showing san	npling point locatio	ns, transects	, important features, etc.		
Hydrophytic Vegetation Pres	ont? Vos	No_ <b>✓</b>					
Hydric Soil Present?		No <b>✓</b>	Is the Sampled Area	.,	🗸		
Wetland Hydrology Present?		No	within a Wetland?	Yes	No		
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicat	ors:			Secondary Indica	tors (minimum of two required)		
Primary Indicators (minimum	of one is required;	check all that apply)		Surface Soil	Cracks (B6)		
Surface Water (A1)		True Aquatic Plants (	(B14)	Sparsely Veg	getated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Od	lor (C1)	Drainage Pat	rainage Patterns (B10)		
Saturation (A3)		Oxidized Rhizospher	es on Living Roots (C3)	Moss Trim Li	nes (B16)		
Water Marks (B1)		Presence of Reduce	d Iron (C4)	Dry-Season \	Water Table (C2)		
Sediment Deposits (B2)		Recent Iron Reduction	on in Tilled Soils (C6)	Crayfish Burr	rows (C8)		
Drift Deposits (B3)		Thin Muck Surface (0	C7)	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Other (Explain in Rei	marks)	Stunted or St	tressed Plants (D1)		
Iron Deposits (B5)				Geomorphic			
Inundation Visible on Ae	rial Imagery (B7)			Shallow Aqui	tard (D3)		
Water-Stained Leaves (E	39)			Microtopogra	oographic Relief (D4)		
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)		
Field Observations:							
Surface Water Present?		Depth (inches):					
Water Table Present?		Depth (inches):					
Saturation Present?	Yes No _	Depth (inches):	Wetland H	ydrology Presen	t? Yes No		
(includes capillary fringe)  Describe Recorded Data (str	eam gauge, monito	ring well, aerial photos, pre	evious inspections), if avai	lable:			
No hydrology present	gg-,	р	,,,				
Remarks:							

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

50% of total cover: \_\_\_22.5

50% of total cover: \_\_\_10

15

% Cover Species? Status

= Total Cover

20% of total cover:\_

= Total Cover

20% of total cover:

10

5

65

50% of total cover: 32.5 20% of total cover: 13

= Total Cover

0 = Total Cover

20% of total cover:

20

15

5

5

10

10

30

Tree Stratum (Plot size: \_

Sapling/Shrub Stratum (Plot size:\_

Quercus rubra

4. Acer saccharum

1 Prunus serotina

Herb Stratum (Plot size: \_ 1. Athyrium asplenioides

3. Dichanthelium clandestinum

2. Smilax glauca

2. Quercus rubra

2. Acer rubrum

3. Betula lenta

plants.		Sampling Point: wraf002_u								
Dominant I	ndicator	Dominance Test worksheet:								
Species? Yes	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC: 2	(A)							
Yes	FAC		` '							
No	FACU	Total Number of Dominant Species Across All Strata:  5	(B)							
No	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC: 40	(A/B)							
	-	Prevalence Index worksheet:								
		Total % Cover of: Multiply by:								
= Total Cove total cover:	r 9	OBL species $0 \times 1 = 0$								
total cover		FACW species0 x 2 =0	_							
Yes	FACU	FAC species 70 x 3 = 210	_							
Yes	FACU	FACU species 60 x 4 = 240	_							
		UPL species0 x 5 =0	_							
		Column Totals: 130 (A) 450	_ (B)							
		Prevalence Index = B/A =3.46	_							
		Hydrophytic Vegetation Indicators:								
		1 - Rapid Test for Hydrophytic Vegetation								
		2 - Dominance Test is >50%								
Tatal Caus		3 - Prevalence Index is ≤3.0 <sup>1</sup>								
= Total Cove total cover:	4	4 - Morphological Adaptations <sup>1</sup> (Provide supp	oorting							
		data in Remarks or on a separate sheet)								
Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explai	n)							
No	FACU									
No	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology n be present, unless disturbed or problematic.	nust							
		Definitions of Four Vegetation Strata:								
		_	\							
		<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 of more in diameter at breast height (DBH), regardle height.								
		Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than or equal to 3.28 m) tall.								
= Total Cove	 r 13	Herb – All herbaceous (non-woody) plants, regar of size, and woody plants less than 3.28 ft tall.	dless							
total cover:_		Woody vine – All woody vines greater than 3.28 height.	ft in							
		Hydrophytic Vegetation								
= Total Cove	r	Present? Yes No								

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

50% of total cover: \_\_\_ 0

Woody Vine Stratum (Plot size: 30

Sampling Point: wraf002\_u

SOIL

	cription: (Describe	to the depth				or confirm	the absence	of indicat	iors.)				
Depth	Matrix		Redox	K Feature:	S1	. 2	<b>-</b> .		-				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>		Remar	ks			
0-4	10 YR 3/1	100					SIL						
4-16	10 YR 4/4	100					CL						
			_		-								
							-						
¹Type: C=C	Concentration, D=Dep	letion RM-F	Reduced Matrix MS		I Sand Gr	ains	<sup>2</sup> Location: F	Pl =Pore Lir	ning M-Mat	riy			
	Indicators:	iction, rtivi–i	Toddood Matrix, Mc	J-Masket	oana On				Problematic		oils³:		
Histoso			Dark Surface	(97)					(A10) <b>(MLR</b>	-			
	pipedon (A2)		Polyvalue Be	. ,	oo (S9) <b>(N</b>	II D A 1 <i>1</i> 7			ie Redox (A	•			
	listic (A3)		Thin Dark Su				146) (		,	10)			
	en Sulfide (A4)					47, 140)		(MLRA 1	Toodplain So	oilo (E10)			
			Loamy Gleye		F2)		— '			)118 (F 19)			
	d Layers (A5)		Depleted Matrix (F3) (MLRA 136, 147)										
	uck (A10) <b>(LRR N)</b> ed Below Dark Surface	· (A11)	Redox Dark Surface (F6) Very Shallow Dark Surface (TF12)										
		# (A11)	Depleted Dark Surface (F7) Other (Explain in Remarks)										
	ark Surface (A12)	DD N	Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N,										
	Mucky Mineral (S1) (L	.KK N,			es (F12) (	LKK N,							
	A 147, 148)		MLRA 130	•	(BAL D.A. 40	0 400\	3, .		harabara barita				
	Gleyed Matrix (S4)		Umbric Surfa						hydrophytic	-			
	Redox (S5)		Piedmont Flo					-	ology must		,		
	d Matrix (S6)		Red Parent M	faterial (F	21) <b>(MLR</b>	A 127, 147	<b>')</b> ur	iless distur	bed or probl	iematic.			
	Layer (if observed):												
Туре:											.,		
Depth (ir	nches):		<del></del>				Hydric Soi	I Present?	Yes	No _			
Remarks:													



Photo 1 Upland data point wraf002\_u facing north



Photo 2 Upland data point wraf002\_u facing west

Project/Site: Atlantic Coast Pipeline		City/C	County: Randolph County	1	Sampling Date: 12/4/2015	
Applicant/Owner: DOMINION				State: WV	Sampling Point: wrac099e_w	
Investigator(s): Team C			on, Township, Range: No			
Landform (hillslope, terrace, etc.): Description						
Subregion (LRR or MLRA): N		38.74571404	Long: -80.1	10164625	Datum: WGS 1984	
Soil Map Unit Name: Gilpin-Dekalb s	tony complex, mo	oist, 15 to 35 percent s	slopes	NWI classifi	cation: None	
Are climatic / hydrologic conditions o	n the site typical fo	or this time of year? \	res No (	(If no, explain in I	Remarks.)	
Are Vegetation, Soil,	or Hydrology	significantly distu	rbed? Are "Normal	Circumstances"	present? Yes No	
Are Vegetation, Soil,						
SUMMARY OF FINDINGS -						
Hydrophytic Vegetation Present?	Yes V	No				
Hydric Soil Present?	Yes 🗸	No	Is the Sampled Area within a Wetland?	Vac V	No	
Wetland Hydrology Present?		No	within a wetland?	res	NO	
HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)	
Primary Indicators (minimum of one	is required; chec	k all that apply)		Surface Soi		
Surface Water (A1)		True Aquatic Plants			egetated Concave Surface (B8)	
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Patterns (B10)		
✓ Saturation (A3)		Oxidized Rhizospher	es on Living Roots (C3)	Moss Trim I	_ines (B16)	
Water Marks (B1)		Presence of Reduce	d Iron (C4)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)		Recent Iron Reduction	on in Tilled Soils (C6)	Crayfish Bu	rrows (C8)	
Drift Deposits (B3)		Thin Muck Surface (			/isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	_	Other (Explain in Rei	marks)	<del></del>	Stressed Plants (D1)	
Iron Deposits (B5)					Position (D2)	
Inundation Visible on Aerial Ima	agery (B7)			Shallow Aqu		
Water-Stained Leaves (B9)					raphic Relief (D4)	
Aquatic Fauna (B13)				FAC-Neutra	II Test (D5)	
Field Observations: Surface Water Present? Yes	No. V	Danth (inch as)				
		Depth (inches):	0			
	No		0			
Saturation Present? Yes (includes capillary fringe)	No	Depth (inches):	Wetland H	lydrology Prese	nt? Yes No	
Describe Recorded Data (stream ga	auge, monitoring v	well, aerial photos, pre	evious inspections), if ava	ilable:		
Remarks: Wetland hydrology indicators preser	<b>^</b>					
Wettand Hydrology indicators preser						

#### ٧

20	Absolute	Dominant		Dominance Test worksheet:	
ree Stratum (Plot size:30)	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	2 (
				Total Number of Dominant Species Across All Strata:	2 (E
	_			Percent of Dominant Species	,
				That Are OBL, FACW, or FAC:	100 (A
				Prevalence Index worksheet:  Total % Cover of:  N	Multiply by:
	. ——	= Total Cove	0	OBL species 40 x 1 =	
50% of total cover:	20% of	total cover:		25	<b>F</b> 0
apling/Shrub Stratum (Plot size:)				FACW species $\frac{25}{50}$ x 2 =	150
·				FAC species X 3 =	
				FACU species0 x 4 =	0
				UPL species0 x 5 =	. 0
·				Column Totals: 115 (A)	240
	_			Prevalence Index = B/A =	2.08
•				Hydrophytic Vegetation Indicator	s:
				1 - Rapid Test for Hydrophytic \	
				2 - Dominance Test is >50%	
				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
	0	= Total Cove		4 - Morphological Adaptations <sup>1</sup>	(Provide suppo
50% of total cover:	) 20% of	total cover:	0	data in Remarks or on a sep	
lerb Stratum (Plot size:5				· ·	
_ Carex lupulina	40	Yes	OBL	Problematic Hydrophytic Vegeta	ation (Explain)
Juncus effusus	25	Yes	FACW		
Panicum virgatum	20	No	FAC	<sup>1</sup> Indicators of hydric soil and wetland	
Solidago rugosa	20	No	FAC	be present, unless disturbed or prob	
Dichanthelium clandestinum	10	No	FAC	Definitions of Four Vegetation Str	rata:
·				Tree - Woody plants, excluding vine	es, 3 in. (7.6 cm
·				more in diameter at breast height (D	)BH), regardless
•				height.	
				Sapling/Shrub – Woody plants, exc	cluding vines, le
				than 3 in. DBH and greater than or e	
0				m) tall.	
1	115			Herb - All herbaceous (non-woody)	
500/ /		= Total Cove		of size, and woody plants less than	3.28 ft tall.
50% of total cover: 57  Voody Vine Stratum (Plot size: 30 )	.5 20% of	total cover:		Woody vine – All woody vines greatheight.	iter than 3.28 ft
				noight.	
`				Hydrophytic	
				Vegetation	
		= Total Cove	_	Present? Yes	No
50% of total cover:	) 20% of	total cover:			
Remarks: (Include photo numbers here or on a separate	sheet.)			1	

Sampling Point: wrac099e\_w

Depth							the absen	
(:l \	Matrix	0/	Redox	K Features	T 1	1 2	T	Demonto
(inches) 0-8	Color (moist) 10 YR 4/2	<u>%</u> 93	Color (moist) 10YR 4/6	<u>%</u> 7	Type <sup>1</sup> C	Loc <sup>2</sup> PL/M	Texture SCL	Remarks
		· <del></del>	1011( 4/0					
8-18	2.5Y 4/2	100					SCL	<u> </u>
		-			•			<del>-</del> .
					-			
	· -							
	-							
	<del>-</del>				-			<del>-</del>
	- \							
Tuno: C C	Concentration D. Don	lotion DN	1 Dadwood Motrix MC	· Maakad	Cond Cr		2l continu	DI Doro Lining M Motrix
	Indicators:	letion, Riv	1=Reduced Matrix, MS	=iviasked	Sand Gr	ains.		PL=Pore Lining, M=Matrix. icators for Problematic Hydric Soils <sup>3</sup> :
•			Dorle Curfoso	(07)			iliu	
Histoso			Dark Surface		oo (CO) <b>/</b> N	U D A 447	440\	2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be Thin Dark Su				140)	Coast Prairie Redox (A16)
	listic (A3) en Sulfide (A4)		Inin Dark Su Loamy Gleye			71, 140)		(MLRA 147, 148) Piedmont Floodplain Soils (F19)
	ed Layers (A5)		<u>✓</u> Depleted Mat		(2)		_	(MLRA 136, 147)
	uck (A10) <b>(LRR N)</b>		Redox Dark S	, ,	6)			Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	e (A11)	Depleted Dar	•	,			Other (Explain in Remarks)
	Park Surface (A12)	5 (7111)	Redox Depre					Curer (Explain in Termanie)
	Mucky Mineral (S1) <b>(L</b>	.RR N.	Iron-Mangane			LRR N.		
	A 147, 148)	,	MLRA 136		, ,	,		
	Gleyed Matrix (S4)		Umbric Surfa	•	MLRA 13	6, 122)	<sup>3</sup>	ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					wetland hydrology must be present,
	d Matrix (S6)		Red Parent M					unless disturbed or problematic.
	Layer (if observed):							·
Type:								<b>.</b> /
Type:	oches).						Hydric S	nil Prasant? Vas 🔻 No
Depth (in	nches):						Hydric S	oil Present? Yes No
Depth (ir Remarks:	<u> </u>		<u> </u>				Hydric So	oil Present? Yes No
Depth (ir Remarks:	<u> </u>						Hydric So	oil Present? Yes No
Depth (ir Remarks:	<u> </u>						Hydric So	oil Present? Yes No
Depth (ir Remarks:	<u> </u>						Hydric So	oil Present? Yes No
Depth (ir Remarks:	<u> </u>						Hydric So	oil Present? Yes No
Depth (ir Remarks:	<u> </u>						Hydric Se	oil Present? Yes No
Depth (ir Remarks:	<u> </u>						Hydric Se	oil Present? Yes <u> </u>
Depth (ir Remarks:	<u> </u>						Hydric Se	oil Present? Yes <u> </u>
Depth (ir Remarks:	<u> </u>						Hydric So	oil Present? Yes <u> </u>
Depth (ir Remarks:	<u> </u>						Hydric So	oil Present? Yes <u> </u>
Depth (ir	<u> </u>						Hydric So	oil Present? Yes <u> </u>
Depth (ir	<u> </u>						Hydric Se	oil Present? Yes No
Depth (ir	<u> </u>						Hydric Se	oil Present? Yes No
Depth (ir	<u> </u>						Hydric Se	oil Present? Yes No
Depth (ir	<u> </u>						Hydric Se	oil Present? Yes <u> </u>
Depth (ir Remarks:	<u> </u>						Hydric Se	oil Present? Yes V No
Depth (ir Remarks:	<u> </u>						Hydric Se	oil Present? Yes V No
	<u> </u>						Hydric Se	oil Present? Yes V No
Depth (ir Remarks:	<u> </u>						Hydric Se	oil Present? Yes No
Depth (ir Remarks:	<u> </u>						Hydric Se	oil Present? Yes No
Depth (ir Remarks:	<u> </u>						Hydric Se	oil Present? Yes No
Depth (ir	<u> </u>						Hydric Se	oil Present? Yes No
Depth (ir	<u> </u>						Hydric Se	oil Present? Yes No



Photo 1 Wetland data point WRAC099e\_w facing southwest



Photo 2
Wetland data point WRAC099e\_w facing northwest

Project/Site: Atlantic Coast Pipeline		City/C	County: Randolph County	/	Sampling Date: 12/4/2015
Applicant/Owner: DOMINION				State: WV	Sampling Point: wrac099_u
			on, Township, Range: No		
Landform (hillslope, terrace, etc.): Slight slo					
Subregion (LRR or MLRA): N					Datum: WGS 1984
Soil Map Unit Name: Gilpin-Dekalb stony c	omplex, moist, 1	15 to 35 percent s	slopes	NWI classific	ation: None
Are climatic / hydrologic conditions on the s	ite typical for thi	s time of year? Y	′es No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hyd	Irologys	significantly distur	bed? Are "Normal	Circumstances" p	present? Yes No
Are Vegetation, Soil, or Hyd					
SUMMARY OF FINDINGS – Atta					
Hydrophytic Vagatation Present?	Voc. N	lo V			
	Yes N Yes N		Is the Sampled Area	v	🗸
	Yes N		within a Wetland?	Yes	No
Remarks:	<u> </u>				
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is reg	uired: check all	that apply)		Surface Soil	
			(P14)		getated Concave Surface (B8)
Surface Water (A1) High Water Table (A2)		e Aquatic Plants ( Irogen Sulfide Od		Sparsely veg	
Saturation (A3)	-	-		Moss Trim Li	
Water Marks (B1)		sence of Reduce	-		Water Table (C2)
Sediment Deposits (B2)			on in Tilled Soils (C6)	Crayfish Bur	
Drift Deposits (B3)		n Muck Surface (0			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		er (Explain in Rer			tressed Plants (D1)
Iron Deposits (B5)	•	o. (=/.p.a	ao,	· <del></del>	Position (D2)
Inundation Visible on Aerial Imagery (	B7)			Shallow Aqu	
Water-Stained Leaves (B9)	,				aphic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	
Field Observations:					· /
	No 🗸 De	pth (inches):			
		pth (inches):			
		pth (inches):		lydrology Preser	nt? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, r	monitoring well	aerial photos, pre	wious inspections) if ava	ilable:	
Beschibe Recorded Bala (stream gauge, i	normoning wen,	acriai priotos, pre	vious inspections), ii ava	madic.	
Remarks:					
No wetland hydrology indicators present					

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

50% of total cover: 12.5

50% of total cover: 40

50% of total cover:

50% of total cover:

30

Tree Stratum (Plot size:

Sapling/Shrub Stratum (Plot size: 15

Herb Stratum (Plot size: \_\_\_\_\_\_5

1. Prunus serotina

2. Acer rubrum

1. Acer rubrum

2 Prunus serotina

3. Quercus rubra

	mes of	Dominant	Indiantor	Sampling Point: wrac099_u  Dominance Test worksheet:
	Absolute <u>% Cover</u> 15	Species? Yes	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
	10	Yes	FAC	Total Number of Dominant Species Across All Strata: 4 (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)
				Prevalence Index worksheet:
	25	= Total Cove		Total % Cover of: Multiply by:
5		total cover:		OBL species0 x 1 =0
	_ 2070 0.			FACW species0 x 2 =0
	50	Yes	FAC	FAC species 60 x 3 = 180
	20	Yes	FACU	FACU species45
-	10	No	FACU	UPL species0 x 5 =0
				Column Totals: (A) (B)
-				Prevalence Index = B/A =3.42
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
-	80	= Total Cove		3 - Prevalence Index is ≤3.0¹
		total cover:	´ 16	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
		-		data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
 			<u> </u>	<b>Tree</b> – 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.
		= Total Cove	_	<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	_ 20% of	total cover:	0	<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
		= Total Cove	er 0	Hydrophytic Vegetation Present?  Yes No
	_ ∠∪% 0⊺	total cover:		

Woody Vine Stratum (Plot size: \_\_\_\_\_\_)

Sampling Point: wrac099\_u

Depth (inches)	KS
0-6 10YR 4/3 100 L 6-18 10YR 6/8 100 CL	
6-18 10YR 6/8 100 CL	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix, MS=Masked Sand Grains.	
Hydric Soil Indicators: Indicators for Problematic	
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLR/	
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A1	6)
Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148)	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain So	ils (F19)
Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147)	
2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface	, ,
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remai	'KS)
Thick Dark Surface (A12) Redox Depressions (F8)	
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, NI DA 136)	
MLRA 147, 148)  MLRA 136)  Specify Cloved Matrix (S4)  Limbria Surface (E42) (MLRA 136 132)  3 Indicators of hydrophytics	ranatation and
Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122)   Sandy Baday (S5) Umbric Surface (F13) (MLRA 136, 122)   Sandy Baday (S5) Umbric Surface (F13) (MLRA 136, 122)   Sandy Baday (S5) Umbric Surface (F13) (MLRA 136, 122)   **Indicators of hydrophytic value of the sandy Baday (S5)    Sandy Baday (S5) Umbric Surface (F13) (MLRA 136, 122)   **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of the sandy Baday (S5)    **Indicators of hydrophytic value of hydroph	-
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problem.	
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or proble Restrictive Layer (if observed):	
Type:	./
Depth (inches): Hydric Soil Present? Yes	No
Remarks:	
lo hydric soil present	



Photo 1 Upland data point WRAC099\_u facing east



Photo 2
Upland data point WRAC099\_u facing north

Project/Site: Atlantic Coast Pipelin	ie	City/C	County: Randolph County	/	Sampling Date: 1/12/2016	
Applicant/Owner: DOMINION				State: WV	Sampling Point: wrac100e_w	
Investigator(s): Team C			on, Township, Range: No			
Landform (hillslope, terrace, etc.):	Toe of slope	Local rel	ief (concave, convex, no	ne): none	Slope (%): <sup>5</sup>	
Subregion (LRR or MLRA): N	La	at: 38.72221705	Lona: -80.	10942225	Datum: WGS 1984	
Soil Map Unit Name: Udorthents,	mudstone, high bas	se		NWI classifi	cation: None	
Are climatic / hydrologic conditions	on the site typical	for this time of year? Y	′es No	(If no, explain in I	Remarks.)	
Are Vegetation, Soil	_, or Hydrology	significantly distur	bed? Are "Normal	I Circumstances"	present? Yes No	
Are Vegetation, Soil						
					s, important features, etc.	
Hydrophytic Vegetation Present?	Yes 🗸	No				
Hydric Soil Present?	Yes V	No	Is the Sampled Area within a Wetland?	Voc. V	No	
Wetland Hydrology Present?		No	within a wetland?	res	NO	
Remarks: Wetland is associated with an inte	ermittent stream an	d a spring.				
		. 0				
HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)	
Primary Indicators (minimum of c	ne is required; che	ck all that apply)		Surface Soi	l Cracks (B6)	
Surface Water (A1)	_	_ True Aquatic Plants (	(B14)	Sparsely Ve	egetated Concave Surface (B8)	
✓ High Water Table (A2)	_	_ Hydrogen Sulfide Od	or (C1)	✓ Drainage Patterns (B10)		
✓ Saturation (A3)	_	_ Oxidized Rhizospher	es on Living Roots (C3)	Moss Trim I	_ines (B16)	
Water Marks (B1)	_	_ Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	_	_ Recent Iron Reduction	on in Tilled Soils (C6)	Crayfish Bu	rrows (C8)	
Drift Deposits (B3)	_	_ Thin Muck Surface (0	C7)	Saturation \	/isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	<del>_</del>	Other (Explain in Rer	marks)	Stunted or S	Stressed Plants (D1)	
Iron Deposits (B5)				Geomorphic	Position (D2)	
Inundation Visible on Aerial	magery (B7)			Shallow Aqu	uitard (D3)	
Water-Stained Leaves (B9)					aphic Relief (D4)	
Aquatic Fauna (B13)				✓ FAC-Neutra	I Test (D5)	
Field Observations:						
		Depth (inches):				
		Depth (inches):	0			
	′es No	Depth (inches):	0 Wetland H	Hydrology Prese	nt? Yes / No	
(includes capillary fringe)  Describe Recorded Data (stream	gauge, monitoring	well, aerial photos, pre	evious inspections), if ava	nilable:		
,			, ,,			
Remarks:						
Wetland hydrology indicatorspres	ent					

#### VEGE1

	Absolute	Dominant I	ndicator	Dominance Test worksheet:	
Free Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species	
				That Are OBL, FACW, or FAC: 3	(A)
				Total Number of Deminant	
l				Total Number of Dominant Species Across All Strata:  3	(B)
					_ ( /
5				Percent of Dominant Species That Are ORL FACW or FAC: 100	(A/B)
5				That Are OBL, FACW, or FAC:	(A/b)
	<del></del> , <del></del>			Prevalence Index worksheet:	
· <u> </u>	0	= Total Cove		Total % Cover of: Multiply by:	
50% of total cover:		total cover:_	0	OBL species60 x 1 =60	
15	20 /0 01	total cover		FACW species 17 x 2 = 34	
Sapling/Shrub Stratum (Plot size:)  Alnus serrulata	10	Yes	OBL	FAC species 60 x 3 = 180	
•				FACU species x 4 = 0	
				UPL species 0 x 5 = 0	
J				137 274	/D\
l				Column Totals:(A)	(B)
j				Prevalence Index = B/A =2	
5	<u> </u>			Hydrophytic Vegetation Indicators:	
7				1 - Rapid Test for Hydrophytic Vegetation	
ß				✓ 2 - Dominance Test is >50%	
)				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
	10	= Total Cove	r		
50% of total cover:	5 20% of	total cover:_	2	4 - Morphological Adaptations <sup>1</sup> (Provide s	-
Herb Stratum (Plot size:5				data in Remarks or on a separate shee	,
Scirpus georgianus	50	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	olain)
Solidago rugosa	40	Yes	FAC		
Dichanthelium clandestinum	20	No	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrolog	y must
Juncus effusus	10	No	FACW	be present, unless disturbed or problematic.	
Onoclea sensibilis	7	No	FACW	Definitions of Four Vegetation Strata:	
*				Tree - Woody plants, excluding vines, 3 in. (7	.6 cm) or
•				more in diameter at breast height (DBH), rega	rdless of
7.	<del></del>			height.	
3	<del></del>			Sapling/Shrub - Woody plants, excluding vin	es, less
)	<u> </u>			than 3 in. DBH and greater than or equal to 3.	
10				m) tall.	
1				Herb - All herbaceous (non-woody) plants, re	gardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.	
	33.5 20% of	total cover:_	25.4	Woody vine – All woody vines greater than 3.	28 ft in
Voody Vine Stratum (Plot size:30)				height.	20 11 111
2					
3					
l				Harten wheets	
5.				Hydrophytic Vegetation	
·	0	= Total Cove		Present? Yes No No	_
		total cover:	^		_
50% of total cover:					

Sampling Point: wrac100e\_w

		to the de	pth needed to docur			or confirm	the absenc	e of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	<u>Type</u> 1	Loc <sup>2</sup>	Texture	Remarks
0-8	10 YR 4/2	98	10 YR 4/6	2	C	PL	SL	Kemana
	· -		· <u> </u>				-	_
8-18	10 YR 5/2	93	10 YR 4/6	7	C	PL/M	SL	
		· ———			<del></del>			
					<u> </u>			
		·			· -			-
	-	· ——	· -		· ——			_
		letion, RN	M=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indi	cators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface					2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su			147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)			Piedmont Floodplain Soils (F19)
	ed Layers (A5)		<u>✓</u> Depleted Ma		<b>5</b> 0)			(MLRA 136, 147)
	uck (A10) (LRR N)	o (A11)	Redox Dark	•	,			Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
	ed Below Dark Surface Park Surface (A12)	e (ATT)	Depleted Date Redox Depre				_	Other (Explain in Remarks)
	Mucky Mineral (S1) <b>(L</b>	RR N	Iron-Mangan			(I RR N		
	A 147, 148)	-1111 14,	MLRA 13		5C3 (1 12) (	(LIXIX 14,		
	Gleyed Matrix (S4)		Umbric Surfa	•	(MLRA 1	36, 122)	<sup>3</sup> In	ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					vetland hydrology must be present,
	d Matrix (S6)		Red Parent N					inless disturbed or problematic.
Restrictive	Layer (if observed):							•
Type:								
Depth (ir	nches):						Hydric So	oil Present? Yes No
Remarks:							1.7	
lydric soil p	resent							
iyanc son pi	Cocin							



Photo 1 Wetland data point WRAC100e\_w facing north



Photo 2
Wetland data point WRAC100e\_w facing west

Project/Site: Atlantic Coast Pipeline		City/County: Randolph County	<u>,                                      </u>	Sampling Date: 1/12/2016	
Applicant/Owner: DOMINION			State: WV	Sampling Point: wrac100_u	
		Section, Township, Range: No			
Landform (hillslope, terrace, etc.): Hill slope					
Subregion (LRR or MLRA): N					
Soil Map Unit Name: Udorthents, mudstone	e, high base		NWI classific	ation: None	
Are climatic / hydrologic conditions on the s					
Are Vegetation, Soil, or Hyd	drology significantly	disturbed? Are "Normal	Circumstances" p	resent? Yes No	
Are Vegetation, Soil, or Hyd					
SUMMARY OF FINDINGS – Atta					
Hydrophytic Vegetation Present?	Yes <u></u> No				
	Yes No	Is the Sampled Area within a Wetland?	Vac	No	
	Yes No	within a wetland?	res	NO	
HYDROLOGY					
Wetland Hydrology Indicators:				tors (minimum of two required)	
Primary Indicators (minimum of one is req	uired; check all that apply)		Surface Soil		
Surface Water (A1)	True Aquatic F			getated Concave Surface (B8)	
High Water Table (A2)	Hydrogen Sulf		Drainage Pat		
Saturation (A3)		,	Moss Trim Li		
Water Marks (B1) Sediment Deposits (B2)	Presence of R	educed Iron (C4) eduction in Tilled Soils (C6)	Dry-Season \	Water Table (C2)	
Orift Deposits (B3)	Thin Muck Sur			sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Other (Explain			ressed Plants (D1)	
Iron Deposits (B5)	<u> </u>	,	Geomorphic	, ,	
Inundation Visible on Aerial Imagery (	(B7)		Shallow Aqui		
Water-Stained Leaves (B9)			Microtopogra	phic Relief (D4)	
Aquatic Fauna (B13)			FAC-Neutral	Test (D5)	
Field Observations:					
	No V Depth (inches				
	No V Depth (inches				
Saturation Present? Yes (includes capillary fringe)	No V Depth (inches	S): Wetland H	Wetland Hydrology Present? Yes No ✓		
Describe Recorded Data (stream gauge, r	monitoring well, aerial phot	os, previous inspections), if ava	ilable:		
Remarks:					
No wetland hydrology indicators present					
, , ,					

#### VEG

EGETATION (Four Strat			-	ndicator	Sampling Point: wrac100_u  Dominance Test worksheet:
ree Stratum (Plot size:Quercus rubra	30)	Absolute <u>% Cover</u> 30	Dominant I Species? Yes		Number of Dominant Species
					That Are OBL, FACW, or FAC: 2 (A)
					Total Number of Dominant
		· -			Species Across All Strata: 3 (B)
					Percent of Dominant Species
•					That Are OBL, FACW, or FAC: 66.6666666 (A/B)
			. <u></u>		Prevalence Index worksheet:
		30	= Total Cove	r	Total % Cover of: Multiply by:
	50% of total cover:15	20% of	total cover:_	6	OBL species
apling/Shrub Stratum (Plot siz	re:)				FACW species x 2 =
					FAC species x 3 =
					FACU species x 4 = 160
					UPL species x 5 =
					Column Totals:115 (A)385 (B)
					Prevalence Index = B/A =3.34
		•			Hydrophytic Vegetation Indicators:
•		· -			1 - Rapid Test for Hydrophytic Vegetation
•			·		✓ 2 - Dominance Test is >50%
		0			3 - Prevalence Index is ≤3.0 <sup>1</sup>
	0		= Total Cove	^	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
		20% of	total cover:_		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:	5)	50			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Solidago rugosa		50	Yes	FAC	
Dichanthelium clandestinum		25	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Asclepias syriaca		10	No	FACU	be present, unless disturbed or problematic.
					Definitions of Four Vegetation Strata:
,			. <u></u>		~
<u> </u>					Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
					more in diameter at breast height (DBH), regardless of height.
·					Sapling/Shrub – Woody plants, excluding vines, less
0. <u> </u>					than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
0 1.					
1		85	Tatal Caus		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	50% of total cover: 42.5		= Total Cover:		of size, and woody plants less than 3.20 ft tail.
Voody Vine Stratum (Plot size:		2070 01	total cover		Woody vine – All woody vines greater than 3.28 ft in
	/				height.
l					
k			· <del></del>		Hydrophytic
i		· <del></del>			Vegetation
	-		= Total Cove	_	Present? Yes No
	50% of total cover: 0	20% of	total cover:_	0	
	00 /0 01 total 00 vel.				
Remarks: (Include photo numbe		sheet.)			
emarks: (Include photo numbe		sheet.)			

Sampling Point: wrac100\_u

Profile Desc	cription: (Describe to	the depth	needed to docur	nent the in	dicator	or confirm	the ab	sence of indicato	ers.)
Depth	Matrix			x Features					
(inches) 0-18	Color (moist) 10 YR 4/2	% 98 1	Color (moist) 0 YR 4/6	2	Type <sup>1</sup> C	Loc <sup>2</sup>		ture CL	Remarks
			_						
	-								
			_						
1Typo: C-C	concentration, D=Deple		oducod Matrix MS	S-Maskad S	Sand Gr		<sup>2</sup> l occ	tion: PL=Pore Linir	og M-Matrix
Hydric Soil		elion, Rivi=R	educed Matrix, Mi	S=IVIaskeu	Sand Gra	airis.	Loca		oblematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(97)				2 cm Muck (A	•
	pipedon (A2)		Polyvalue Be		- (S8) <b>(N</b>	II RΔ 147	148)	Coast Prairie	
	istic (A3)		Thin Dark Su				140)	(MLRA 14	
	en Sulfide (A4)		Loamy Gleye			, ,			odplain Soils (F19)
	d Layers (A5)		Depleted Ma		,			(MLRA 13	
2 cm Mu	uck (A10) (LRR N)		Redox Dark	Surface (F6	5)			Very Shallow	Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Da					Other (Explai	n in Remarks)
	ark Surface (A12)		Redox Depre						
	Mucky Mineral (S1) (LI	RR N,	Iron-Mangan		s (F12) <b>(</b> I	LRR N,			
	A 147, 148)		MLRA 13	-	#L D A 40	C 400\		31	
	Gleyed Matrix (S4) Redox (S5)		Umbric Surfa Piedmont Flo				0\		drophytic vegetation and logy must be present,
-	d Matrix (S6)		Red Parent N					-	ed or problematic.
	Layer (if observed):		Red r archi r	naterial (i Z	i) (IVILIX	A 127, 147	<del>,</del>	unicss disturbe	cu oi problematic.
Type:									
• • • • • • • • • • • • • • • • • • • •	ches):						Hydr	ric Soil Present?	Yes No
			_				riyui	ic son r resent:	163 110
Remarks:	Lindicatora procent								
NO HYUHC SOI	I indicators present								



Photo 1 Upland data point WRAC100\_u facing west



Photo 2
Upland data point WRAC100\_u facing north

Project/Site: Atlantic Coast Pipeline		City/C	County: Randolph County	/	Sampling Date: 1/12/2016			
Applicant/Owner: DOMINION			State: WV Sampling Point: wrac101e_w					
Investigator(s): Team C Section, Township, Range: No PLSS in this area								
Landform (hillslope, terrace, etc.): Seep Local relief (concave, convex, none): none Slope (%): 2								
Subregion (LRR or MLRA): N		Datum: WGS 1984						
Soil Map Unit Name: Gilpin-Dekalb sto	ny complex, mo	ist, 15 to 35 percent s	slopes	NWI classifi	cation: None			
Are climatic / hydrologic conditions on	the site typical fo	or this time of year?	′es No	(If no, explain in F	Remarks.)			
Are Vegetation, Soil, or	Hydrology	significantly distur	bed? Are "Normal	Circumstances"	present? Yes No			
Are Vegetation, Soil, or								
SUMMARY OF FINDINGS – A								
Hydrophytic Vegetation Present?	Yes 🗸	No						
Hydric Soil Present?	Yes 🔽	No	Is the Sampled Area within a Wetland?	Vos V	No			
Wetland Hydrology Present?		No	within a Wetland:	165				
HADBOLOCA								
HYDROLOGY				0	-1 (			
Wetland Hydrology Indicators:		all that and A			ators (minimum of two required)			
Primary Indicators (minimum of one is			(D4.4)		Surface Soil Cracks (B6)			
Surface Water (A1) ✓ High Water Table (A2)		True Aquatic Plants ( Hydrogen Sulfide Od		Sparsely ve	egetated Concave Surface (B8)			
Saturation (A3)			es on Living Roots (C3)	=				
Water Marks (B1)		Presence of Reduce		Iron (C4) Dry-Season Water Table (C2)				
Sediment Deposits (B2)		Recent Iron Reduction						
Drift Deposits (B3)		Thin Muck Surface (0		-	/isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Other (Explain in Rei	marks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)					Position (D2)			
Inundation Visible on Aerial Imag	ery (B7)			Shallow Aqu				
Water-Stained Leaves (B9)					opographic Relief (D4)			
Aquatic Fauna (B13)				FAC-Neutra	I Test (D5)			
Field Observations: Surface Water Present? Yes	No V	Depth (inches):						
		Depth (inches):	0					
		Depth (inches): 0 Wetland Hydrology Present? Yes V No.						
(includes capillary fringe)					110 100			
Describe Recorded Data (stream gau	ge, monitoring w	vell, aerial photos, pre	evious inspections), if ava	iilable:				
Remarks:	_							
İ								

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

50% of total cover: \_\_\_

50% of total cover: \_\_\_0

50% of total cover: \_\_\_10 \_\_\_20% of total cover: \_\_\_4

50% of total cover: 0 20% of total cover: 0

Tree Stratum (Plot size: \_\_\_\_\_)

Sapling/Shrub Stratum (Plot size: 15 )

2. Juncus effusus

Herb Stratum (Plot size: \_\_\_ 1. Solidago rugosa

mes of plants.	Sampling Point: wrac101e_w						
bsolute Dominant Indica							
% Cover Species? Stati	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)						
	Total Number of Dominant Species Across All Strata:  2 (B)						
	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B						
	Prevalence Index worksheet:						
0 Tatal Oassa	Total % Cover of: Multiply by:						
= Total Cover 20% of total cover:	OBL species $0 \times 1 = 0$						
_ 20% of total cover	FACW species 10 x 2 = 20						
	FAC species $\frac{10}{x^3} = \frac{30}{x^3}$						
	FACU species 0 x 4 = 0						
	UPL species 0 x 5 = 0						
	Column Totals: (A) (B)						
	Prevalence Index = B/A =2.5						
	Hydrophytic Vegetation Indicators:						
	1 - Rapid Test for Hydrophytic Vegetation						
<u> </u>	2 - Dominance Test is >50%						
0 = Total Cover	3 - Prevalence Index is ≤3.0¹						
20% of total cover:	4 - Morphological Adaptations (Provide supportin						
	data in Remarks or on a separate sheet)						
10 Yes FA	<del></del>						
10 Yes FAC	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) o 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.						
20 = Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.						
_ 20% of total cover:4_	Woody vine – All woody vines greater than 3.28 ft in height.						
0 = Total Cover 20% of total cover: 0	Hydrophytic Vegetation Present?  Yes No						

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

Woody Vine Stratum (Plot size: \_\_\_\_\_)

Sampling Point: wrac101e\_w

Profile Desc	ription: (Describe t	o the de	pth needed to docun	nent the i	indicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redox	x Feature	S	. 2		
(inches) 0-8	Color (moist) 10 YR 4/2	<u>%</u> 97	Color (moist) 10 YR 4/6	3	Type <sup>1</sup> C	Loc <sup>2</sup> PL/M	Texture SC	Remarks
8-18	10 YR 3/2	98	10 YR 4/6	2	C	PL/M	SC	
		-						
		-						-
<sup>1</sup> Type: C=Co	oncentration, D=Depl	etion, RM	1=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						India	cators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	(S7)			:	2 cm Muck (A10) (MLRA 147)
Histic Ep	oipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
Black Hi			Thin Dark Su		. •	147, 148)		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		(F2)			Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Mat					(MLRA 136, 147)
	ick (A10) <b>(LRR N)</b>	(044)	Redox Dark S	•	,			Very Shallow Dark Surface (TF12)
	d Below Dark Surface ark Surface (A12)	e (A11)	Depleted Dar Redox Depre				_	Other (Explain in Remarks)
	fik Sulface (A12) fucky Mineral (S1) <b>(L</b>	RR N	Iron-Mangane			I RR N		
	147, 148)	ixix i <b>v</b> ,	MLRA 13		C3 (1 12 <i>)</i> (	LIXIX IV,		
	Gleyed Matrix (S4)		Umbric Surfa		(MLRA 13	36, 122)	<sup>3</sup> ln	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					retland hydrology must be present,
	Matrix (S6)		Red Parent M					nless disturbed or problematic.
	Layer (if observed):			`		<u> </u>	<u> </u>	·
Type:								
Depth (inc	ches):						Hydric So	il Present? Yes No
Remarks:							11,	
Hydric soil pre	esent							
Tryano son pro	330110							



Photo 1
Wetland data point WRAC101e\_w facing east



Photo 2
Wetland data point WRAC101e\_w facing north

Project/Site: Atlantic Coast Pipeline		City/County: Randolph County			Sampling Date:_1/12/2016		
Applicant/Owner: DOMINION			State: WV Sampling Point: wrac101_u				
Investigator(s): Team C Section, Township, Range: No PLSS in this area							
• ',			convex, none): none Slope (%): 1				
Subregion (LRR or MLRA): N					Datum: WGS 1984		
Soil Map Unit Name: Gilpin-Dekalb stor	y complex, mo	ist, 15 to 35 percent s	slopes	NWI classific	cation: None		
Are climatic / hydrologic conditions on the	ne site typical fo	or this time of year? Y	′es No	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or I	Hydrology	significantly distur	bed? Are "Normal	Circumstances" p	present? Yes No		
Are Vegetation, Soil, or I							
SUMMARY OF FINDINGS – A							
Hydrophytic Vegetation Present?							
Hydric Soil Present?	Yes Yes	No	Is the Sampled Area	Vaa	No 🗸		
Wetland Hydrology Present?	Yes		within a Wetland?	Yes	No		
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is	required: check	( all that apply)		Surface Soil			
Surface Water (A1)		True Aquatic Plants (	(B14)				
High Water Table (A2)		Hydrogen Sulfide Od		<ul><li>Sparsely Vegetated Concave Surface (B8)</li><li>Drainage Patterns (B10)</li></ul>			
Saturation (A3)		-		- ' '			
Water Marks (B1)		Presence of Reduced	-	Dry-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	marks)	Stunted or Stressed Plants (D1)			
Iron Deposits (B5)				Geomorphic	Position (D2)		
Inundation Visible on Aerial Image	ry (B7)			Shallow Aquitard (D3)			
Water-Stained Leaves (B9)		Microtopographic Relief (D4)					
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)		
Field Observations:							
		Depth (inches):					
		Depth (inches):		,			
Saturation Present? Yes (includes capillary fringe)	No	Depth (inches):	Wetland H	Wetland Hydrology Present? Yes No			
Describe Recorded Data (stream gaug	e, monitoring w	vell, aerial photos, pre	evious inspections), if ava	ilable:			
Remarks:							

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

\_ )

50% of total cover: \_\_\_

50% of total cover: \_\_\_\_

30

Sapling/Shrub Stratum (Plot size: 15 )

Tree Stratum (Plot size:

1 Acer pensylvanicum

Herb Stratum (Plot size:

1. Polystichum acrostichoides

1. Acer rubrum

2. Quercus rubra

Absolute Dominant Indicator

% Cover Species? Status 40 Yes FAC

30

Yes

Yes

= Total Cover

20% of total cover:\_

10\_\_\_ = Total Cover

20% of total cover:

5 Yes FACU

5 = Total Cover

0 = Total Cover

20% of total cover:

50% of total cover: 2.5 20% of total cover: 1

Species Across All Strata:

**FACU** 

Sampling Poi	int: <u>wrac101_u</u>	
Dominance Test worksheet:		
Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A
Total Number of Dominant		

(B)

Percent of Dominant Species That Are OBL, FACW, or FAC:	25	(A/E
, ,		`

# B)

Frevalence index worksneet.							
Total % Cov	er of:	Mu					
OBL species	0	x 1 = _	0	_			
FACW species	0	x 2 =	0				
FAC species	40	x 3 =	120	<del></del>			
FACU species	45	x 4 =	180	_			
UPL species	0	x 5 =	0	_			
Column Totals:	85	_ (A) _	300	(B)			
Broyolonos	aladov – P	/Λ _	3 52				

Hydrophytic	Vegetation	Indicators:
-------------	------------	-------------

- \_\_\_ 1 Rapid Test for Hydrophytic Vegetation
- \_\_\_ 2 Dominance Test is >50%
- \_\_\_ 3 Prevalence Index is ≤3.0<sup>1</sup>
- \_\_\_ 4 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>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.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Yes \_\_\_\_ No \_\_\_ Present?

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

50% of total cover: 0

Woody Vine <u>Stratum</u> (Plot size: \_\_\_\_\_\_)

Sampling Point: wrac101\_u

Profile Desc	cription: (Describe t	o the depth				or confirm	the absence	of indicat	ors.)		
Depth	Matrix		Redo	k Features		. 2	_				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>		Remark	KS	
0-18	10 YR 4/3	100					SCL	-			
								-			
	-				-						
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion RM=R	educed Matrix MS	=Masked	Sand Gra	ains	<sup>2</sup> Location: P	I =Pore I in	ing M=Mat	rix	
Hydric Soil		50011, 1001—10	oddood WidthX, Wie	<del>-Maonoa</del>	Cana Cit				roblematic		oils³:
Histosol			Dark Surface	(\$7)					(A10) <b>(MLR</b>	-	
	pipedon (A2)		Polyvalue Be	. ,	ce (S8) <b>(N</b>	II RA 147			e Redox (A1	-	
	istic (A3)		Thin Dark Su				. +0,	MLRA 14)		. 5,	
	en Sulfide (A4)		Loamy Gleye	, ,	•	-1, 1 <del>4</del> 0)	_		oodplain Sc	ils (F10)	
	d Layers (A5)		Depleted Mat		· <i>L</i> )		'	(MLRA 1		113 (1 13)	
	uck (A10) (LRR N)		Redox Dark \$		(6)		\	•	w Dark Surfa	ace (TF12)	
	d Below Dark Surface	(A11)	Depleted Dar					•	ain in Rema	, ,	
	ark Surface (A12)	(, )	Redox Depre				_ `	74.101 (= Apic			
	Mucky Mineral (S1) <b>(L</b>	RR N.	Iron-Mangane			LRR N.					
	A 147, 148)	,	MLRA 130			<b>,</b>					
	Gleyed Matrix (S4)		Umbric Surfa	•	MLRA 13	6. 122)	<sup>3</sup> Inc	licators of h	ydrophytic	vegetation	and
	Redox (S5)		Piedmont Flo						ology must b	-	
	Matrix (S6)		Red Parent M						ed or probl		
	Layer (if observed):			(-	, (	, , , , , , ,	,				
Type:	,										
	ches):		<del>_</del>				Hydric Soil	Present?	Yes	No	~
Remarks:			_				,				
Remarks.											



Photo 1 Upland data point WRAC101\_u facing east



Photo 2 Upland data point WRAC101\_u facing north

Project/Site: Atlantic Coast Pipeline	<b>;</b>	City/C	County: Randolph County	1	Sampling Date: 8/22/2016		
Applicant/Owner: Dominion			Sampling Point: wraa450f_w				
Investigator(s): GB, AS Section, Township, Range: No PLSS in this area							
• ',			e, convex, none): concave Slope (%):2				
Subregion (LRR or MLRA): N					Datum: WGS 1984		
Soil Map Unit Name: Gilpin-Dekalb		ist, 15 to 35 percent s	lopes	NWI classifi	cation: PFO		
Are climatic / hydrologic conditions	on the site typical fo	or this time of year? Y	′es No	(If no, explain in I	Remarks.)		
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal	Circumstances"	present? Yes No		
Are Vegetation, Soil							
SUMMARY OF FINDINGS							
Hydrophytic Vegetation Present?	Yes 🗸	No					
Hydric Soil Present?		No	Is the Sampled Area within a Wetland?	Vos V	No		
Wetland Hydrology Present?		No	within a welland:	1es			
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)		
Primary Indicators (minimum of or	ne is required; check	call that apply)		Surface Soi	l Cracks (B6)		
✓ Surface Water (A1)	<u> </u>	True Aquatic Plants (	B14)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)		Hydrogen Sulfide Od	or (C1)	Drainage Pa	atterns (B10)		
Saturation (A3)		Oxidized Rhizospher	eres on Living Roots (C3) Moss Trim Lines (B16)				
Water Marks (B1)	_	Presence of Reduced	d Iron (C4)	Dry-Season Water Table (C2)			
Sediment Deposits (B2)		Recent Iron Reduction	on in Tilled Soils (C6)	Crayfish Bu	_ Crayfish Burrows (C8)		
Drift Deposits (B3)		Thin Muck Surface (0			/isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)		Stressed Plants (D1)		
Iron Deposits (B5)	(07)				Position (D2)		
Inundation Visible on Aerial In	nagery (B7)				uitard (D3)		
Water-Stained Leaves (B9) Aquatic Fauna (B13)					aphic Relief (D4) Il Test (D5)		
Field Observations:				TAO Neutre	1031 (03)		
	es 🗸 No	Depth (inches):	3				
		Depth (inches):					
	es No		0 Wetland H	Hydrology Present? Yes <u>✓</u> No			
(includes capillary fringe)							
Describe Recorded Data (stream	gauge, monitoring w	vell, aerial photos, pre	evious inspections), if ava	illable:			
Remarks:							

'EGETATION (Four Strata) – Use scientific na	ames of	plants.		Sampling Point: wraa450f_w
	Absolute	Dominant I	ndicator	Dominance Test worksheet:
		Species?		Number of Dominant Species
1. Salix nigra	30	Yes	OBL	That Are OBL, FACW, or FAC:5 (A)
2				
3				Total Number of Dominant Species Across All Strata: 5 (B)
				Opecies Across Air Strata.
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:100 (A/B)
6				Prevalence Index worksheet:
7				
	30	= Total Cove		Total % Cover of: Multiply by:  ORL species 95 v.1 = 95
50% of total cover: 15	20% of	total cover:_	6	OBL species X I =
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
1. Alnus glutinosa	15	Yes	FACW	FAC species0 x 3 =0
2. Salix nigra	15	Yes	OBL	FACU species0 x 4 =0
3 Fraxinus pennsylvanica		No	FACW	UPL species 0 x 5 = 0
o				160 225
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =1.4
6				Hydrophytic Vegetation Indicators:
7.				
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
9	35	<del></del>		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
500/ 1/ 17 5		= Total Cove	er 7	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:	20% of	total cover:_		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Leersia oryzoides	35	Yes	OBL	1 Toblematic Trydrophytic Vegetation (Explain)
2. Solidago gigantea	35	Yes	FACW	1
3. Lycopus americanus	15	No	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4 Alnus glutinosa	10	No	FACW	
· <del>·</del>				Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Horb All bank account (non use of a) planta manuallaca
	95	= Total Cove		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover:47.5		total cover:_		or size, and woody plants loss than 5.25 it tall.
2	2070 01	total cover		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)  1 none	0			height.
1. 1011e				
2				
3				
4.				
5.				Hydrophytic Vegetation
<u>.                                    </u>	0 -	Total Cava		Present? Yes No
50% of total cover:		= Total Cove total cover:	^	
0070 01 total 00701.		lotal cover.	_	
Remarks: (Include photo numbers here or on a separate shape of the separate shape).	neet.)			

Sampling Point: wraa450f\_w

Profile Des	cription: (Describe t	to the de	pth needed to docur	nent the i	ndicator	or confirm	the absence	e of indicators.)			
Depth	Matrix		Redo	x Feature	s	. 2					
(inches) 0-3	Color (moist) 10YR 3/1	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> CL	Remarks			
3-13	10YR 5/1	85	10YR 5/8	15	С	PL/M	CL	rock at 13"			
						·		•			
	·					·	-	· -			
							-				
		-									
	·					·	-	· -			
					-						
1		-C DN	Deduced Matrix M		1010-		21	D. Bara Lisian M. Matrix			
	Concentration, D=Depl Indicators:	etion, RIV	I=Reduced Matrix, MS	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils <sup>3</sup> :			
-			5 . 6 .	(07)							
Histoso			Dark Surface		(00) (5	AL DA 445		2 cm Muck (A10) (MLRA 147)			
	pipedon (A2)		Polyvalue Be				148)(	Coast Prairie Redox (A16)			
	listic (A3)		Thin Dark Su			147, 148)		(MLRA 147, 148)			
	en Sulfide (A4)		Loamy Gleye	,	F2)		<u> </u>	Piedmont Floodplain Soils (F19)			
	d Layers (A5)		<u>✓</u> Depleted Ma		-0)		,	(MLRA 136, 147)			
	uck (A10) (LRR N)	. (111)	Redox Dark	,	,			Very Shallow Dark Surface (TF12) Other (Explain in Remarks)			
	ed Below Dark Surface	÷ (A11)	Depleted Date				_ `	Other (Explain in Remarks)			
	ark Surface (A12)	DD N	Redox Depressions (F8)								
	Mucky Mineral (S1) <b>(L</b>	.KK N,	Iron-Manganese Masses (F12) (LRR N,								
	A 147, 148)		MLRA 136)  Umbric Surface (F13) (MLRA 136, 122)  Indicators of hydrophytic vegetation and								
	Gleyed Matrix (S4) Redox (S5)		Piedmont Flo	etland hydrology must be present,							
	d Matrix (S6)		Red Parent N								
	Layer (if observed):		Neu Faieiil ii	nateriai (i	ZI) (IVILIN	A 121, 141	) ui	nless disturbed or problematic.			
Type: ro	ck										
Type:	12										
Depth (ir	nches): <u>13</u>						Hydric Soi	I Present? Yes No			
Remarks:											



Wetland data point wraa450f\_w facing southwest



Wetland data point wraa450f\_w facing southeast



Wetland data point wraa450f\_w road crossing facing southwest

Project/Site: Atlantic Coast Pip	peline	City/C	county: Randolph County		Sampling Date: 8/22/2016	
Applicant/Owner: Dominion					Sampling Point: wraa450_u	
Investigator(s): GB, AS		Section	on, Township, Range: No			
Landform (hillslope, terrace, et						
Subragion (LDD or MLDA): N	J.	at: 38.71949885	Lang: -80.1	0899177	Datum: WGS 1984	
Sail Man Linit Name: Buchana	ـــــــــــــــــــــــــــــــــــــ	oils. 3 to 15 percent slope	Long es	NIV/I alogoific	Datum: WGS 1984 Cation: UPLAND	
Are climatic / hydrologic condit		-				
Are Vegetation, Soil				Circumstances" ¡	present? Yes V No No	
Are Vegetation, Soil	, or Hydrology _	naturally problema	atic? (If needed, e.	xplain any answe	ers in Remarks.)	
SUMMARY OF FINDIN	GS – Attach site	map showing sam	npling point locatio	ns, transects	s, important features, etc.	
Hydrophytic Vegetation Pres	ent? Ves	No <b>✓</b>				
Hydric Soil Present?		No <b>✓</b>	Is the Sampled Area	Vaa	No 🗸	
Wetland Hydrology Present?	Yes	No <b>✓</b>	within a Wetland?	res	NO	
Remarks:						
Upland data point taken on a	siope above a satural	ed to semi permanently	ilooded 11 0 welland look	ned in a depression	on on a surp nime benon.	
HYDROLOGY						
Wetland Hydrology Indicate	ors:			Secondary Indica	ators (minimum of two required)	
Primary Indicators (minimum	of one is required; ch	eck all that apply)		Surface Soil	Cracks (B6)	
Surface Water (A1)	=	True Aquatic Plants (	B14)	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	-	Hydrogen Sulfide Od		Drainage Pa	itterns (B10)	
Saturation (A3)	-		es on Living Roots (C3)	Moss Trim L		
Water Marks (B1)		Presence of Reduced		-	Water Table (C2)	
Sediment Deposits (B2)	-	n in Tilled Soils (C6)				
Drift Deposits (B3)	_	C7)	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	_	Other (Explain in Rer	narks)		itressed Plants (D1)	
Iron Deposits (B5) Inundation Visible on Ae	rial Imagery (R7)			Geomorphic Shallow Aqu	Position (D2)	
Water-Stained Leaves (E				<del></del>	aphic Relief (D4)	
Aquatic Fauna (B13)	20)			FAC-Neutral	• • • • • • • • • • • • • • • • • • • •	
Field Observations:						
Surface Water Present?	Yes No	Depth (inches):				
Water Table Present?		Depth (inches):				
Saturation Present?		Depth (inches):		vdrology Preser	nt? Yes No	
(includes capillary fringe)		_ , , , ,				
Describe Recorded Data (stre	eam gauge, monitorin	ig well, aerial photos, pre	vious inspections), if avai	lable:		
Remarks:						
no hydrology indicators prese	nt					

/EGETATION (Four Strata) – Use scientific na	ames of	plants.		Sampling Point: wraa450_u
	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:30)  1 Acer saccharum	% Cover 35	Species? Yes	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)
2. Prunus serotina	15	Yes	FACU	That Are OBL, FACW, or FAC(A)
3. Liriodendron tulipifera	15	Yes	FACU	Total Number of Dominant
4. Robinia pseudoacacia	10	No	FACU	Species Across All Strata: (B)
·· <del>·</del>				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 11.1111111 (A/B)
6				Prevalence Index worksheet:
<i>1</i>	75			Total % Cover of: Multiply by:
50% of total cover:37.5		= Total Cove total cover:	r 15	OBL species 0 x 1 = 0
15	20 /6 01	total cover		FACW species0
Sapling/Shrub Stratum (Plot size:)  1. Acer saccharum	10	Yes	FACU	FAC species 8 x 3 = 24
2. Amelanchier canadensis	5	Yes	FAC	FACU species 112 x 4 = 448
3. Acer pensylvanicum		Yes	FACU	UPL species0 x 5 =0
3.71007 periodynamicani				Column Totals: 120 (A) 472 (B)
4				(b)
5				Prevalence Index = B/A =3.93
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
10		= Total Cove	r 4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:10	20% of	total cover:_		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 )	10		E4011	Problematic Hydrophytic Vegetation¹ (Explain)
1. Dennstaedtia punctilobula	10	Yes	FACU	
2. Ageratina altissima	7	Yes	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Viola rotundifolia	3	No	FAC	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree Meady plants avaluding vines 2 in (7.6 cm) or
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	20	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover:10	20% of	total cover:_	4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1. Smilax bona-nox	5	Yes	FACU	
2				
3				
4				Hydrophytic
5				Vegetation
	5	= Total Cove	r	Present? Yes No
50% of total cover: 2.5	20% of	total cover:_	1	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wraa450\_u

Profile Des	cription: (Describe t	o the depth	needed to document the indicator o	r confirm	the absence	ce of indicators.)				
Depth	Matrix		Redox Features							
(inches) 0-2	Color (moist) 10YR 3/2	100	Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> L	Remarks				
2-8	10YR 4/4	100			CL					
8-18	10YR 4/6	100			SCL					
		etion, RM=R	leduced Matrix, MS=Masked Sand Gra	ins.		PL=Pore Lining, M=Matrix.				
Hydric Soil	Indicators:				Indi	cators for Problematic Hydric Soils <sup>3</sup> :				
Histosol			Dark Surface (S7)			2 cm Muck (A10) (MLRA 147)				
	pipedon (A2)		Polyvalue Below Surface (S8) (MI		148)	Coast Prairie Redox (A16)				
Black H	istic (A3)		Thin Dark Surface (S9) (MLRA 14	l7, 148)		(MLRA 147, 148)				
Hydroge	en Sulfide (A4)		Loamy Gleyed Matrix (F2)			Piedmont Floodplain Soils (F19)				
Stratifie	d Layers (A5)		Depleted Matrix (F3)			(MLRA 136, 147)				
2 cm Mi	uck (A10) <b>(LRR N)</b>		Redox Dark Surface (F6)			Very Shallow Dark Surface (TF12)				
	d Below Dark Surface	(A11)	Depleted Dark Surface (F7)		_	Other (Explain in Remarks)				
	ark Surface (A12)		Redox Depressions (F8)							
	Mucky Mineral (S1) <b>(L</b>	RR N,	Iron-Manganese Masses (F12) (L	RR N,						
	A 147, 148)		MLRA 136)							
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122) <sup>3</sup> Indicators of hydrophytic vegetation and							
-	Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present,							
	d Matrix (S6)		Red Parent Material (F21) (MLRA	127, 147)	) ι	unless disturbed or problematic.				
	Layer (if observed):									
Type:			<del>_</del>							
	ches):		_		Hydric Sc	oil Present? Yes No				
Remarks:										



Upland data point wraa450\_u facing northwest



Upland data point wraa450\_u facing northeast

Project/Site: Atlantic Coast Pip	peline	City/C	ounty: Randolph County	1	Sampling Date: 8/22/2016	
Applicant/Owner: Dominion					Sampling Point: wraa449e_w	
Investigator(s): GB, AS		Section	on, Township, Range: No			
Landform (hillslope, terrace, et						
					Datum: WGS 1984	
Soil Map Unit Name: Buchana	n and Ernest stony soils,	15 to 35 percent slop	es	NIM/L classific	nation: PEM	
Are climatic / hydrologic condit						
·		-				
					present? Yes No	
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If needed, e	explain any answe	rs in Remarks.)	
SUMMARY OF FINDING	GS – Attach site ma	ap showing sam	pling point location	ons, transects	, important features, etc.	
Hydrophytic Vegetation Prese	ent? Yes <u></u>	No				
Hydric Soil Present?	Yes 🗸	No	Is the Sampled Area within a Wetland?	Vos V	No	
Wetland Hydrology Present?	Yes	No	within a Wetland:	163	_ 110	
Remarks:		-				
Saturated to semi-permanentl polygons connected via culver			e confluence of intermitte	ent streams sraa4	26 and sraa427. Taken as two	
polygons connected via culver	it crossing for existing gra	averroad.				
HYDROLOGY						
Wetland Hydrology Indicate	ors:			Secondary Indica	ators (minimum of two required)	
Primary Indicators (minimum	of one is required; check	all that apply)		Surface Soil	` '	
Surface Water (A1)		True Aquatic Plants (		Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Ode		✓ Drainage Pa		
Saturation (A3)			es on Living Roots (C3)	Moss Trim L		
Water Marks (B1)		Presence of Reduced Recent Iron Reductio			Water Table (C2)	
Sediment Deposits (B2)		Crayfish Burrows (C8)				
Drift Deposits (B3)	<u> </u>	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	<del>-</del> '	narks)	<ul><li>Stunted or Stressed Plants (D1)</li><li>Geomorphic Position (D2)</li></ul>			
Iron Deposits (B5)	(57)				` '	
Inundation Visible on Aer				Shallow Aqu	` '	
Water-Stained Leaves (E	39)				aphic Relief (D4)	
Aquatic Fauna (B13)				✓ FAC-Neutral	Test (D5)	
Field Observations:	Vac No V	Donth (inches)				
Surface Water Present?	Yes No		1			
Water Table Present?	Yes No		0			
Saturation Present? (includes capillary fringe)	Yes No	Depth (inches):	Wetland F	lydrology Preser	nt? Yes No	
Describe Recorded Data (stre	eam gauge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ilable:		
Demode						
Remarks:						

		Absolute	Dominant In	dicator	Dominance Test worksheet:
Tree Stratum (Plot size:			Species?		Number of Dominant Species
none		0			That Are OBL, FACW, or FAC: 4 (A)
3					Total Number of Dominant Species Across All Strata:  4 (B)
 5				-	Percent of Dominant Species That Are ORL FACW or FAC: 100 (A)
S					That Are OBL, FACW, or FAC: (A/
					Prevalence Index worksheet:
·		0	Total Cover		Total % Cover of: Multiply by:
	50% of total cover:		= Total Cover total cover:	0	OBL species45
Sapling/Shrub Stratum (Plot siz	0	2070 01	total 00 vol		FACW species55
none		0			FAC species5 x 3 =15
•					FACU species0 x 4 =0
					UPL species
J					Column Totals: 105 (A) 170 (E
h					Column rotals (A) (E
i					Prevalence Index = B/A =1.61
). <u> </u>					Hydrophytic Vegetation Indicators:
·					1 - Rapid Test for Hydrophytic Vegetation
3					2 - Dominance Test is >50%
)					✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
			= Total Cover		4 - Morphological Adaptations <sup>1</sup> (Provide supporti
	50% of total cover:	20% of	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:	)				Problematic Hydrophytic Vegetation¹ (Explain)
1. Glyceria striata		25	Yes	OBL	1 Toblematic Trydrophytic Vegetation (Explain)
Solidago gigantea		25	Yes	FACW	Indicators of hydric coil and watland hydrology must
3. Impatiens capensis		20	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<sub>I.</sub> Chelone glabra		20	Yes	OBL	Definitions of Four Vegetation Strata:
Carex scoparia		10	No	FACW	_
<sub>S.</sub> Monarda didyma		5	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm)
7					more in diameter at breast height (DBH), regardless of height.
3.	_				
 ).					Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.					m) tall.
11.					Heat. All heat account for a constant and a feet account of the second o
		105	= Total Cover	-	Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.
	50% of total cover: 52.5		total cover:		
Woody Vine Stratum (Plot size:	30				<b>Woody vine</b> – All woody vines greater than 3.28 ft in
none		0			height.
· 2.					
<u></u> 3					
1 5.					Hydrophytic
)		0	T-1-1-0		Vegetation Present? Yes No
	0		= Total Cover total cover:	0	
	50% of total cover: 0				

Sampling Point: wraa449e\_w

Profile Des	cription: (Describe	to the de				or confirm	the absenc	e of indicators.)			
Depth	Matrix (assist)	0/	Redo	x Feature	S1	1 2	T	Decreal o			
(inches) 0-5	Color (moist) 10YR 3/1	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> SIL	Remarks			
	· -		· <u></u>				-				
5-18	10YR 4/1	96	10YR 4/6	4	C	PL/M	SICL				
		•					-				
			<u> </u>								
		-			-	-					
		-	·					-			
	- <u> </u>										
	-	-									
1- 0.0						·	2,				
	Concentration, D=Deplindicators:	letion, RM	1=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.		PL=Pore Lining, M=Matrix.			
•				·				cators for Problematic Hydric Soils <sup>3</sup> :			
Histoso			Dark Surface	. ,				2 cm Muck (A10) (MLRA 147)			
	pipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)			
	listic (A3)		Thin Dark Su			147, 148)		(MLRA 147, 148)			
	en Sulfide (A4)		Loamy Gleye		(F2)			Piedmont Floodplain Soils (F19)			
	ed Layers (A5)		<u>✓</u> Depleted Ma		-c)			(MLRA 136, 147)			
	uck (A10) <b>(LRR N)</b> ed Below Dark Surface	· (A11)	Redox Dark Surface (F6) Very Shallow Dark Surface (TF12)								
	oark Surface (A12)	= (A11)	Depleted Dark Surface (F7) Other (Explain in Remarks)								
	Mucky Mineral (S1) <b>(L</b>	DD N	Redox Depressions (F8)								
	A 147, 148)	.1111 14,	Iron-Manganese Masses (F12) (LRR N, MLRA 136)								
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122)  3Indicators of hydrophytic vegetation a								
	Redox (S5)		Piedmont Flo					vetland hydrology must be present,			
	d Matrix (S6)		Red Parent N					inless disturbed or problematic.			
	Layer (if observed):		1100 1 0101111	natorial (i			1	miles distance of presidentiale.			
Type:											
	L \						11	11 Burnando - Van - V - Na			
	nches):						Hydric So	oil Present? Yes No			
Remarks:											



Wetland data point wraa449e\_w facing east



Wetland data point wraa449e\_w facing north

Project/Site: Atlantic Coast Pi	peline	City/C	county: Randolph County		Sampling Date: 8/22/2016
Applicant/Owner: Dominion					Sampling Point: wraa449_u
Investigator(s): GB, AS		Section	on, Township, Range: No F		
Landform (hillslope, terrace, et					
Subragion (LDD or MLDA): N	.0.).	at. 38.71525941	80.10	713558	Glope (70)
Subregion (LRR of MLRA):	L and Ernest stony sc	oils 15 to 35 percent slor	nes		Datum: WGS 1984 cation: UPLAND
Are climatic / hydrologic condit		-			
Are Vegetation, Soil	, or Hydrology _	significantly distur	bed? Are "Normal C	Circumstances" p	present? Yes No
Are Vegetation, Soil	, or Hydrology _	naturally problema	atic? (If needed, exp	plain any answe	rs in Remarks.)
SUMMARY OF FINDIN	GS – Attach site	map showing sam	pling point location	s, transects	, important features, etc.
Hadronke da Wanatada a Dara		No. of			
Hydrophytic Vegetation Pres Hydric Soil Present?		No 🗸	Is the Sampled Area		
Wetland Hydrology Present?	Yes	No✓	within a Wetland?	Yes	No
Remarks:		110			
Upland data point taken abov	e toe or stope for a sai	turated to Semi-permane	ently nooded F Livi Welland	localeu III a ura	w.
HYDROLOGY					
Wetland Hydrology Indicate	ors:		<u>S</u>	Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum	of one is required; ch	eck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	_	True Aquatic Plants (	B14)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)	_	Hydrogen Sulfide Od		Drainage Pa	tterns (B10)
Saturation (A3)	_		es on Living Roots (C3) _	Moss Trim Li	
Water Marks (B1)		Presence of Reduced		-	Water Table (C2)
Sediment Deposits (B2)	_	Recent Iron Reductio		Crayfish Buri	
Drift Deposits (B3)	-	Thin Muck Surface (C			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)	_	Other (Explain in Rer	narks) _		tressed Plants (D1) Position (D2)
Inundation Visible on Ae	rial Imagery (B7)		_	Geomorphic Shallow Aqui	
Water-Stained Leaves (F			_		aphic Relief (D4)
Aquatic Fauna (B13)			_	FAC-Neutral	. , ,
Field Observations:			_		· /
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?		Depth (inches):			
Saturation Present?		Depth (inches):		drology Presen	nt? Yes No
(includes capillary fringe)		_			
Describe Recorded Data (str	eam gauge, monitoring	g weil, aeriai photos, pre	vious inspections), if availa	able:	
Remarks:					
no hydrology indicators prese	:nt				

/EGETATION (Four Strata) – Use scientific	names of	piants.		Sampling Point: wiaa445_u
Tree Stratum (Plot size: 30 )	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)  Acer saccharum)	<u>% Cover</u> 45	Species? Yes	Status FACU	Number of Dominant Species
••		Yes	FACU	That Are OBL, FACW, or FAC: 1 (A)
2. Liriodendron tulipifera	15		FACU	Total Number of Dominant
3. Prunus serotina		Yes	FACU	Species Across All Strata: 8 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 12.5 (A/B)
6				- , ,
7				Prevalence Index worksheet:
	75	= Total Cove	er er	Total % Cover of: Multiply by:
50% of total cover:37		total cover:	15	OBL species x 1 = 0
Sapling/Shrub Stratum (Plot size: 15 )		_		FACW species0 x 2 =0
1. Acer saccharum	10	Yes	FACU	FAC species8 x 3 =24
2. Acer pensylvanicum		Yes	FACU	FACU species 120 x 4 = 480
3 Amelanchier canadensis		Yes	FAC	UPL species0 x 5 =0
v				Column Totals: 128 (A) 504 (B)
4				Column Totals (A) (B)
5				Prevalence Index = B/A =3.93
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				
	20	= Total Cove	er	3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 1		total cover:	4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5 )	<u></u>	_		data in Remarks or on a separate sheet)
1 Dennstaedtia punctilobula	20	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Ageratina altissima		No	FACU	
3. Viola rotundifolia		No	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Viola votarianona				be present, unless disturbed or problematic.
4	_			Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Harb All barbassaus (non woody) plants, regardless
	28	= Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 1		total cover:		
Woody Vine Stratum (Plot size: 30 )		_		<b>Woody vine</b> – All woody vines greater than 3.28 ft in
1 Smilax bona-nox	5	Yes	FACU	height.
·-	_			
2				
3	_			
4				Hydrophytic
5				Vegetation
		= Total Cove		Present? Yes No
50% of total cover: 2	.5 20% of	total cover:	1	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Sampling Point: wraa449\_u

Profile Des	cription: (Describe t	o the depth	needed to document the indicator or co	nfirm the	absence of indicators.)
Depth	Matrix		Redox Features		
(inches) 0-2	Color (moist) 10YR 3/2	100	Color (moist) % Type <sup>1</sup> Loc	<u>2 T</u>	<u>Remarks</u> L
2-8	10YR 4/4	100			CL
8-18	10YR 4/6	100			SCL
					<del></del>
		etion, RM=R	Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Lo	cation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:				Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface (S7)		2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA		Coast Prairie Redox (A16)
Black H	istic (A3)		Thin Dark Surface (S9) (MLRA 147, 14	48)	(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19)
Stratifie	d Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)
2 cm Mi	uck (A10) <b>(LRR N)</b>		Redox Dark Surface (F6)		Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dark Surface (F7)		Other (Explain in Remarks)
	ark Surface (A12)		Redox Depressions (F8)		
	Mucky Mineral (S1) <b>(L</b>	RR N,	Iron-Manganese Masses (F12) (LRR I	٧,	
	A 147, 148)		MLRA 136)		3
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122		<sup>3</sup> Indicators of hydrophytic vegetation and
-	Redox (S5)		Piedmont Floodplain Soils (F19) (MLR		wetland hydrology must be present,
	d Matrix (S6)		Red Parent Material (F21) (MLRA 127	', 147)	unless disturbed or problematic.
	Layer (if observed):				
Type:			<del>_</del>		
	ches):		<u> </u>	Ну	ydric Soil Present? Yes No
Remarks:					



Upland data point wraa449\_u facing south



Upland data point wraa449\_u facing east

Project/Site: Atlantic Coast Pipe	line	City/C	county: Randolph County	<u>,                                      </u>	Sampling Date: 3/1/2016			
Applicant/Owner: Dominion					Sampling Point: wraa401f_w			
		Section, Township, Range: No PLSS in this area						
Landform (hillslope, terrace, etc.): swale Local relief (concave, convex, none): concave Slope (%): 5								
Subregion (LRR or MLRA): N					Datum: WGS 1984			
Soil Map Unit Name: Gilpin-Dek	alb stony complex, moi	st, 15 to 35 percent sl	lopes	NWI classific	ation: None			
Are climatic / hydrologic conditio								
Are Vegetation, Soil								
Are Vegetation, Soil								
					, important features, etc.			
					, ,			
Hydrophytic Vegetation Preser Hydric Soil Present?	Poli Drocent?							
Wetland Hydrology Present?		 No	within a Wetland?	Yes	No			
Remarks:	100							
HYDROLOGY	_							
Wetland Hydrology Indicator					tors (minimum of two required)			
Primary Indicators (minimum o	•			Surface Soil	, ,			
Surface Water (A1)		True Aquatic Plants (I			getated Concave Surface (B8)			
High Water Table (A2) ✓ Saturation (A3)		Hydrogen Sulfide Odd	or (C1) es on Living Roots (C3)	✓ Drainage Pat				
Water Marks (B1)		Presence of Reduced		Moss Trim Li	Water Table (C2)			
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Burr				
Drift Deposits (B3)		Thin Muck Surface (C		-	sible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Other (Explain in Ren			ressed Plants (D1)			
Iron Deposits (B5)				✓ Geomorphic	Position (D2)			
Inundation Visible on Aeria	al Imagery (B7)			Shallow Aqui	tard (D3)			
Water-Stained Leaves (B9	))				phic Relief (D4)			
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)			
Field Observations:			4					
Surface Water Present?	Yes No		<u> </u>					
Water Table Present?	Yes No		^					
Saturation Present? (includes capillary fringe)	Yes No	Depth (inches):	Wetland H	lydrology Presen	t? Yes V No			
Describe Recorded Data (stream	m gauge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ilable:				
Remarks:								
Remarks.								

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

/EGETATION (Four Strata) – Use scientific na	ames of	plants.		Sampling Point: wraa401f_w
	Absolute	Dominant I	ndicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30)  1 Liriodendron tulipifera	% Cover 10	Species? Yes	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC:5 (A)
2. Betula alleghaniensis	8	Yes	FAC	(i)
3. Fagus grandifolia	7	Yes	FACU	Total Number of Dominant
3 3 3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 62.5 (A/B)
6				Prevalence Index worksheet:
7	25			Total % Cover of: Multiply by:
10.5		= Total Cove	r 5	OBL species 7 x 1 = 7
50% of total cover: 12.5	20% of	total cover:_		14 20
Sapiing/Snrub Stratum (Plot size:)	45	V	<b>540</b>	40 444
1. Betula alleghaniensis	15	Yes	FAC	FAC species
2. Fagus grandifolia	15	Yes	FACU	FACU species x 4 =
3. Acer rubrum	10	Yes	FAC	UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A = 3.03
6				Trevalence maex = B/TC =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
<u>ə.</u>	40	= Total Cove		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 20		total cover:_	8	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50 70 01 total 00 vol	2070 01	total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 )  1 Symphyotrichum dumosum	10	Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Juncus effusus	8	Yes	FACW	
	7			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Carex lupulina		No No	OBL	be present, unless disturbed or problematic.
4. Osmundastrum cinnamomeum	6	No	FACW	Definitions of Four Vegetation Strata:
5. Dryopteris carthusiana	5	No	FAC	The Manthalanta and Januara O'a (70 an)
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
9.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				
	36	= Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 18		total cover:_		or oles, and woody plants loss than oles it tall.
Woody Vine Stratum (Plot size: 30 )			•	<b>Woody vine</b> – All woody vines greater than 3.28 ft in
· · · · · · · · · · · · · · · · · · ·				height.
1				
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove	_	Present? Yes No
50% of total cover:0	20% of	total cover:_	0	
Remarks: (Include photo numbers here or on a separate sh	neet.)			

Sampling Point: wraa401f\_w

Profile Desc	ription: (Describe to	o the dep	th needed to docur	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix			x Features	3			
(inches) 0-3	Color (moist) 10YR 3/1	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SIL	<u>Remarks</u>
3-13	10YR 4/1	95	10YR 5/6	5	С	M	SIL	rock at 13"
					-			
						· ——		
					-			
<sup>1</sup> Type: C=Co	oncentration, D=Deple	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		L=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(\$7)				cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	ILRA 147,		Coast Prairie Redox (A16)
Black Hi			Thin Dark Su				· ,	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)		F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Ma		·O)		,	(MLRA 136, 147)
	ick (A10) <b>(LRR N)</b> d Below Dark Surface	(A11)	Redox Dark : Depleted Dark :					/ery Shallow Dark Surface (TF12) Other (Explain in Remarks)
	ark Surface (A12)	(/ ( ) / )	Redox Depre				_ `	one (Explain in Nemano)
	lucky Mineral (S1) <b>(L</b> l	RR N,	Iron-Mangan			LRR N,		
	\ 147, 148)		MLRA 13	•			3	
	Gleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	Redox (S5) Matrix (S6)		Piedmont Floor Red Parent N					etland hydrology must be present, lless disturbed or problematic.
	Layer (if observed):			ratorial (17		,		need distance of presidentation
Type: roo	ck `							
Depth (inc							Hydric Soi	Present? Yes No
Remarks:							•	



Photo 1
Wetland data point WRAA401f\_w facing west



Photo 2
Wetland data point WRAA401f\_w facing north

Project/Site: Atlantic Coast Pipeline		City/C	ounty: Randolph County		Sampling Date: 3/1/2016		
Applicant/Owner: Dominion		-	•		Sampling Point: wraa401_u		
		Section, Township, Range: No PLSS in this area					
Landform (hillslope, terrace, etc.): slop							
Subregion (LRR or MLRA): N					Datum: WGS 1984		
Soil Map Unit Name: Gilpin-Dekalb sto	ny complex, moist	, 15 to 35 percent sl	opes	NWI classifica	tion: None		
Are climatic / hydrologic conditions on t							
Are Vegetation, Soil, or							
Are Vegetation, Soil, or							
SUMMARY OF FINDINGS – A							
			pinig ponit recuire				
Hydrophytic Vegetation Present?	Yes		Is the Sampled Area		,		
Hydric Soil Present?	Yes Yes	No	within a Wetland?	Yes	No		
Wetland Hydrology Present?  Remarks:	res	NO					
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indicate	ors (minimum of two required)		
Primary Indicators (minimum of one is	roquirod: chock s	all that apply)					
				Surface Soil C	etated Concave Surface (B8)		
Surface Water (A1) High Water Table (A2)		rue Aquatic Plants (E ydrogen Sulfide Odd		Sparsely vege Drainage Patte			
Saturation (A3)		-	es on Living Roots (C3)	Moss Trim Lin			
Water Marks (B1)		resence of Reduced	-		/ater Table (C2)		
Sediment Deposits (B2)			n in Tilled Soils (C6)	Crayfish Burro			
Drift Deposits (B3)	Tł	hin Muck Surface (C	7)	Saturation Vis	ible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	O	ther (Explain in Rem	narks)	Stunted or Str	essed Plants (D1)		
Iron Deposits (B5)				Geomorphic F			
Inundation Visible on Aerial Imag	ery (B7)			Shallow Aquita			
Water-Stained Leaves (B9)					phic Relief (D4)		
Aquatic Fauna (B13)				FAC-Neutral T	est (D5)		
Field Observations: Surface Water Present? Yes	No V F	Depth (inches):					
		Depth (inches): Depth (inches):					
		Depth (inches): Depth (inches):		vdrology Procent	? Yes No ✔		
(includes capillary fringe)	NO L	Depth (inches)	wetiand n	ydrology Present	r res No		
Describe Recorded Data (stream gau	ge, monitoring wel	II, aerial photos, prev	vious inspections), if avai	lable:			
Remarks:							
no hydrology indicators present							
l l l l l l l l l l l l l l l l l l l							

Samo	lina	Point:	wraa401_	u

00	Absolute	Dominant I		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Acer saccharum	15	Yes	FACU	That Are OBL, FACW, or FAC:0 (A)
2. Fagus grandifolia	15	Yes	FACU	Total Number of Dominant
3. Liriodendron tulipifera	15	Yes	FACU	Species Across All Strata: 8 (B)
4. Betula alleghaniensis	10	No	FAC	
5. Betula lenta	10	No	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
6 Tilia americana	5	No	FACU	That Are OBL, FACW, OF FAC.
7				Prevalence Index worksheet:
1	70	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 35		total cover:_	er 14	OBL species $0 \times 1 = 0$
15	20 /6 01	iolai covei		FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 13 )  1 Acer pensylvanicum	15	Yes	FACU	FAC species 16 x 3 = 48
••	15	Yes	FACU	FACU species 109 x 4 = 436
2. Betula lenta	12			0 40
3. Fagus grandifolia	12	Yes	FACU	UPL species
4				Column Totals: (A) (B)
5				Prevalence Index = B/A = 3.93
6				1 Tevalence mack = B/TC =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
<u></u>	42	= Total Cove		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 21		total cover:	8.4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5)				data in Remarks or on a separate sheet)
1 Dryopteris carthusiana	4	No	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Carex blanda	2	No	FAC	
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree Woody plants evaluding vines 2 in (7.6 cm) or
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				Senting/Shrub Weeds plants evaluding since less
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Hart Allbart and Archael Archael and Archa
	6	= Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 16.5	. —	total cover:	6.6	of size, and weekly plante less than size it tail.
Woody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in
1 Smilax pumila	8	Yes	UPL	height.
2 Rubus allegheniensis	7	Yes	FACU	
<u></u>				
3				
4				Hydrophytic
5				Vegetation
	15	= Total Cove		Present? Yes No
50% of total cover: 7.5	20% of	total cover:_	3	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wraa401\_u

Profile Desc	ription: (Describe	to the depth	needed to docum	nent the i	ndicator	or confirm	the abser	nce of indicate	ors.)	
Depth	Matrix		Redo	x Features	S					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-3	10YR 3/3	100					SICL			_
3-10	10YR 4/6	100					SICL			
10-18	10YR 5/8	100					SICL			
·	-									
								_		
-										
	-									
	-									
								<u> </u>		
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM=R	Reduced Matrix, MS	S=Masked	Sand Gra	ains.		PL=Pore Lini		
Hydric Soil I	ndicators:						Ind	dicators for P	roblematic Hydri	ic Soils³:
Histosol			Dark Surface					- ,	A10) <b>(MLRA 147</b> )	)
	pipedon (A2)		Polyvalue Be				148)	_	e Redox (A16)	
Black Hi			Thin Dark Su	. ,	•	47, 148)		(MLRA 14		
	n Sulfide (A4)		Loamy Gleye		F2)			_	oodplain Soils (F1	19)
	d Layers (A5) ick (A10) <b>(LRR N)</b>		Depleted Mar		.0)			(MLRA 13		·[40)
	d Below Dark Surface	_ (Δ11)	Redox Dark S Depleted Dar				_		v Dark Surface (T iin in Remarks)	F12)
	ark Surface (A12)	<i>(</i> A11)	Redox Depre				_	_ Other (Expla	iii iii remarks)	
	lucky Mineral (S1) <b>(L</b>	.RR N,	Iron-Mangan			_RR N,				
	\ 147, 148)	•	MLRA 13		( )(	,				
Sandy G	leyed Matrix (S4)		Umbric Surfa	ce (F13) (	MLRA 13	6, 122)	3	Indicators of h	ydrophytic vegeta	ation and
	edox (S5)		Piedmont Flo					wetland hydro	ology must be pre	sent,
	Matrix (S6)		Red Parent N	/laterial (F	21) <b>(MLR</b>	A 127, 147	7)	unless disturb	ed or problemation	Э.
	_ayer (if observed):									
Type: no	ne 		<u>—</u>							_
Depth (inc	ches):		<u></u>				Hydric S	oil Present?	Yes	No
Remarks:										



**Photo 1**Upland data point WRAA401\_u facing southeast



Photo 2
Upland data point WRAA401\_u facing southwest

Project/Site: Atlantic Coast Pipeline		City/C	County: Randolph County	/	Sampling Date: 3/1/2016		
Applicant/Owner: Dominion		State: WV Sampling Point: wraa400f_w					
Investigator(s): GB, AS, CG							
Landform (hillslope, terrace, etc.): swale Local relief (concave, convex, none): concave S							
					Datum: WGS 1984		
Soil Map Unit Name: Gilpin-Dekalb	stony complex, moi	st, 15 to 35 percent s	lopes	NWI classific	cation: None		
Are climatic / hydrologic conditions of	on the site typical fo	r this time of year? Y	′es No	(If no, explain in F	Remarks.)		
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal	Circumstances"	present? Yes No		
Are Vegetation, Soil							
SUMMARY OF FINDINGS -	-						
Hydrophytic Vegetation Present?							
Hydric Soil Present?	Soil Dreagnt?			V V	No		
Wetland Hydrology Present?		No	within a Wetland?	res	NO		
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of on	e is required: check	all that apply)		Surface Soil			
✓ Surface Water (A1)	•	True Aquatic Plants (	B14)		getated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Pa			
Saturation (A3)				Moss Trim L			
Water Marks (B1)		Presence of Reduced		Dry-Season	Water Table (C2)		
Sediment Deposits (B2)		Recent Iron Reduction	n in Tilled Soils (C6)	Crayfish Bui	rrows (C8)		
Drift Deposits (B3)		Thin Muck Surface (0	C7)	Saturation V	isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer	marks)		Stressed Plants (D1)		
Iron Deposits (B5)				✓ Geomorphic			
Inundation Visible on Aerial Im	nagery (B7)			Shallow Aqu			
Water-Stained Leaves (B9)					aphic Relief (D4)		
Aquatic Fauna (B13)				FAC-Neutra	I Test (D5)		
Field Observations:	. <b>V</b> Na	Depth (inches):	1				
		Depth (inches):	<u>·</u>				
	s No		0 Wetland I	lydrology Prese	nt? Yes 🗸 No		
(includes capillary fringe)	5 <u> </u>	Depth (inches)	wetland r	iyurology Frese	iit! Tes No		
Describe Recorded Data (stream g	gauge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ilable:			
Domada							
Remarks:							

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

1. Liriodendron tulipifera       10         2. Betula alleghaniensis       8         3. Fagus grandifolia       7         4.       55.         6.       25         7.       25         Sapling/Shrub Stratum (Plot size: 15       15	Yer         Species?           Yes         Yes           Yes         Yes	Indicator Status FACU FAC FACU	Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  9 (B)  Percent of Dominant Species
1. Liriodendron tulipifera   10   10   2. Betula alleghaniensis   8   3. Fagus grandifolia   7   4.     5.	Yes Yes Yes	FACU FAC	That Are OBL, FACW, or FAC:6 (A)  Total Number of Dominant Species Across All Strata:9 (B)
2. Betula alleghaniensis       8         3. Fagus grandifolia       7         4.       5         6.       25         7.       25         Sapling/Shrub Stratum (Plot size: 15       )	Yes		Total Number of Dominant Species Across All Strata:  9 (B)
3. Fagus grandifolia 7  4		FACU	Species Across All Strata: 9 (B)
4			Species Across Air Strata.
6			Percent of Dominant Species
6			
7	= Total Cov		That Are OBL, FACW, or FAC: 66.6666666 (A/B)
25 50% of total cover: 12.5 20% Sapling/Shrub Stratum (Plot size: 15 )	= Total Cov		Prevalence Index worksheet:
50% of total cover: 12.5 20% Sapling/Shrub Stratum (Plot size: 15 )	= Total Cov		
Sapling/Shrub Stratum (Plot size: 15 )		_	Total % Cover of: Multiply by:  ORL species 0 v.1 = 0
Sapling/Shrub Stratum (Plot size:)	of total cover:	5	OBL species
1. Fagus grandifolia 15			FACW species x 2 =
··-	Yes	FACU	FAC species X3 =
2. Betula alleghaniensis 15	Yes	FAC	FACU species x 4 = 128
3. Acer rubrum 10	Yes	FAC	UPL species x 5 =
4			Column Totals:94 (A)300 (B)
_			.,
			Prevalence Index = B/A =3.19
6			Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
8			✓ 2 - Dominance Test is >50%
9			3 - Prevalence Index is ≤3.0 <sup>1</sup>
20 40	= Total Cov	^	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
F	of total cover:	8	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Symphyotrichum dumosum 10	Yes	FAC	Floblematic Hydrophytic vegetation (Explain)
2. Juncus effusus 8	Yes	FACW	1
3. Osmundastrum cinnamomeum 6	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Dryopteris carthusiana 5	No	FAC	Definitions of Four Vegetation Strata:
5.			Definitions of Four vegetation Strata.
6.			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
-			more in diameter at breast height (DBH), regardless of
<i>1</i>			height.
8			Sapling/Shrub – Woody plants, excluding vines, less
9			than 3 in. DBH and greater than or equal to 3.28 ft (1
10			m) tall.
11			Herb – All herbaceous (non-woody) plants, regardless
	= Total Cov		of size, and woody plants less than 3.28 ft tall.
	of total cover:	5.8	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)			height.
1			
2			
3			
4			
5.			Hydrophytic
J	— Tatal Cau		Vegetation Present? Yes No
	= Total Cov	0	
2070 of total 00vol 2070	of total cover:		
Remarks: (Include photo numbers here or on a separate sheet.)			

Sampling Point: wraa400f\_w

SOIL

Profile Desc	ription: (Describe t	o the dep	th needed to docur	nent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix			x Features				
(inches) 0-3	Color (moist) 10YR 3/1	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SIL	Remarks
3-9	10YR 4/1	95	10YR 5/6	5	С	M	SIL	rock at 9"
<sup>1</sup> Type: C=Co	oncentration, D=Deple	etion, RM	=Reduced Matrix, MS	S=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(S7)				2 cm Muck (A10) <b>(MLRA 147)</b>
	pipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	ILRA 147,		Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su				<i>'</i> —	(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleye	ed Matrix (I	F2)		[	Piedmont Floodplain Soils (F19)
Stratified	d Layers (A5)		Depleted Ma	trix (F3)				(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark					Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Da		. ,		(	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangan		es (F12) <b>(</b>	LRR N,		
	A 147, 148) Gleyed Matrix (S4)		MLRA 13 Umbric Surfa	-	MI D A 12	6 122\	3In	dicators of hydrophytic vegetation and
	ledox (S5)		Piedmont Flo					etland hydrology must be present,
-	Matrix (S6)		Red Parent N					nless disturbed or problematic.
	_ayer (if observed):		1100 1 010111	natorial (17	Z I / (IIIIZIX	7. 127, 147	, ui	noss distarsed of prosicinatio.
Type: no								
Depth (in	ches):						Hydric Soi	Il Present? Yes No
Remarks:								



**Photo 1**Wetland data point WRAA400f\_w facing northeast



Photo 2
Wetland data point WRAA400f\_w facing south

Project/Site: Atlantic Coast Pipeline		City/C	ounty: Randolph County	,	Sampling Date: 3/1/2016	
Applicant/Owner: Dominion				State: WV	Sampling Point: wraa400_u	
			on, Township, Range: No			
Landform (hillslope, terrace, etc.): slope					Slope (%): <u>15</u>	
Subregion (LRR or MLRA): N					Datum: WGS 1984	
Soil Map Unit Name: Gilpin-Dekalb stony	y complex, moist	t, 15 to 35 percent s	lopes	NWI classific	ation: None	
Are climatic / hydrologic conditions on the	e site typical for	this time of year? Y	es No (	If no, explain in R	emarks.)	
Are Vegetation, Soil, or H	lydrology	_ significantly disturl	bed? Are "Normal	Circumstances" p	resent? Yes No	
Are Vegetation, Soil, or F						
SUMMARY OF FINDINGS – At						
Hydrophytic Vegetation Present?	Yes	No. 🗸				
Hydric Soil Present?	Yes		Is the Sampled Area	Vaa	No	
Wetland Hydrology Present?	Yes		within a Wetland?	res	NO	
Remarks: Upland data point taken on a slope for a						
HYDROLOGY						
Wetland Hydrology Indicators:					tors (minimum of two required)	
Primary Indicators (minimum of one is r	•			Surface Soil		
Surface Water (A1)		rue Aquatic Plants (l			getated Concave Surface (B8)	
High Water Table (A2)		ydrogen Sulfide Odd		Drainage Pat		
Saturation (A3)			• , ,	Moss Trim Li	, ,	
Water Marks (B1)	· · · · · · · · · · · · · · · · · · ·	resence of Reduced	, ,		Water Table (C2)	
Sediment Deposits (B2)			n in Tilled Soils (C6)	Crayfish Burn		
Drift Deposits (B3) Algal Mat or Crust (B4)		hin Muck Surface (C ther (Explain in Ren			sible on Aerial Imagery (C9) tressed Plants (D1)	
Algal Mat of Crust (B4) Iron Deposits (B5)	_ 0	mei (Explain in Ken	ilains)	Geomorphic	, ,	
Inundation Visible on Aerial Image	rv (B7)			Shallow Aqui		
Water-Stained Leaves (B9)	, (=. )				phic Relief (D4)	
Aquatic Fauna (B13)				FAC-Neutral		
Field Observations:						
Surface Water Present? Yes	No 🗸 [	Depth (inches):				
		Depth (inches):				
Saturation Present? Yes		Depth (inches):		Wetland Hydrology Present? Yes No		
(includes capillary fringe)  Describe Recorded Data (stream gauge	e. monitoring we	II. aerial photos, pre	vious inspections), if avai	ilable:		
gang	,,g	., ,	,,,			
Remarks:						
no hydrology indicators present						

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

50% of total cover: \_\_\_32.5

15

50% of total cover:

50% of total cover: 30

50% of total cover: 7.5

% Cover Species?

= Total Cover

20% of total cover:\_

42\_\_\_ = Total Cover 20% of total cover: 8.4

= Total Cover

= Total Cover

20% of total cover:

16.5 20% of total cover: 6.6

15

15

15

15

10

10

15

15

12

30

Tree Stratum (Plot size:

1. Liriodendron tulipifera

5. Betula alleghaniensis

Sapling/Shrub Stratum (Plot size:

2. Fagus grandifolia

3. Acer saccharum

4. Betula lenta

1. Betula lenta

2. Acer pensylvanicum

Herb Stratum (Plot size: 1. Dryopteris carthusiana

Woody Vine Stratum (Plot size:

1. Smilax pumila

2. Rubus allegheniensis

2. Carex blanda

3. Fagus grandifolia

olants.		S	ampling	Point·W	raa400_u				
Dominant	Indicator	Dominance Test							
Species?	Status	Number of Domin							
Yes	FACU	That Are OBL, FA	0	(A)					
Yes	FACU	Total Number of F	Ominant						
Yes	FACU	Total Number of Dominant Species Across All Strata:  8 (							
No	FACU								
No	FAC	Percent of Domina That Are OBL, FA		0	(A/B)				
		Prevalence Index	workshee	et:					
Total Cove		Total % Cove	Mu	Itiply by:					
total cover:	13	OBL species _	0	x 1 = _	0				
.o.a. oo vo		FACW species _	0	x 2 = _	0	<u> </u>			
Yes	FACU	FAC species	16	x 3 =	48	<u> </u>			
Yes	FACU	FACU species	104	x 4 =	416				
Yes	FACU	UPL species	8	x 5 =	40				
		Column Totals:	128	(A)	504	(B)			
		_		( ) _		(-)			
		Prevalence I			3.93				
		Hydrophytic Veg							
		1 - Rapid Tes	ohytic Ve	getation					
		2 - Dominance Test is >50%							
Total Cove		3 - Prevalence	e Index is ≤	3.0 <sup>1</sup>					
⊧ Total Cove total cover:	er 8.4	4 - Morpholog	jical Adapta	ations¹ (F	Provide sup	porting			
iotal cover		data in Re	marks or or	n a sepai	rate sheet)	)			
No	FAC	Problematic H	lydrophytic	Vegetat	ion¹ (Expla	ain)			
No	FAC								
		<sup>1</sup> Indicators of hydr be present, unless				must			
		Definitions of Fo	ur Vegetat	ion Stra	ta:				
		Tree – Woody pla more in diameter a height.							
		Sapling/Shrub – than 3 in. DBH an m) tall.							
Total Cove	0.0	<b>Herb</b> – All herbactor of size, and woody				ardless			
_		<b>Woody vine</b> – All height.	woody vine	es greate	er than 3.28	8 ft in			
Yes	UPL								
Yes	FACU								
Total Cove		Hydrophytic Vegetation Present?	Yes	No	, <u> </u>				

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

Sampling Point: wraa400\_u

Profile Desc	cription: (Describe t	o the depth	needed to document the in	dicator or confirm	the absenc	e of indicators.)
Depth	Matrix		Redox Features			
(inches) 0-3	Color (moist) 10YR 3/3	100	Color (moist) %	Type <sup>1</sup> Loc <sup>2</sup>	Texture SICL	Remarks
3-10	10YR 4/6	100			SICL	
10-18	10YR 5/8	100			SICL	
		etion, RM=R	educed Matrix, MS=Masked	Sand Grains.		PL=Pore Lining, M=Matrix.
Hydric Soil						cators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface (S7)			2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface		148)	Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Surface (S9) (			(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F	2)	_	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)	`		(MLRA 136, 147) Very Shallow Dark Surface (TF12)
	uck (A10) <b>(LRR N)</b> d Below Dark Surface	(Δ11)	<ul><li>Redox Dark Surface (F6</li><li>Depleted Dark Surface (</li></ul>			Other (Explain in Remarks)
	ark Surface (A12)	(// (/ (/ (/ (/ (/ (/ (/ (/ (/ (/ (/ (/	Redox Depressions (F8)			Other (Explain in Remarks)
	Mucky Mineral (S1) <b>(L</b>	RR N.	Iron-Manganese Masses			
	A 147, 148)	,	MLRA 136)	) (1 12) <b>(2</b> 1111 14)		
	Gleyed Matrix (S4)		Umbric Surface (F13) (N	ILRA 136, 122)	<sup>3</sup> ln	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floodplain So			vetland hydrology must be present,
-	d Matrix (S6)		Red Parent Material (F2			nless disturbed or problematic.
	Layer (if observed):					
Type: no	one		_			
Depth (in	ches):		_		Hydric So	il Present? Yes No
Remarks:						



**Photo 1**Upland data point WRAA400\_u facing west



Photo 2
Upland data point WRAA400\_u facing north

Project/Site: Atlantic Coast Pipelin	е	City/C	County: Randolph County	/	Sampling Date: 3/1/2016
Applicant/Owner: Dominion				State: WV	Sampling Point: wraa402f_w
			on, Township, Range: No		
Landform (hillslope, terrace, etc.):					
Subregion (LRR or MLRA): N		38.71302593	Long: -80.	11418657	Datum: WGS 1984
Soil Map Unit Name: Gilpin-Dekalt	stony complex, mo	sist, 15 to 35 percent s	slopes	NWI classifi	cation: None
Are climatic / hydrologic conditions	on the site typical for	or this time of year? Y	′es No	(If no, explain in I	Remarks.)
Are Vegetation, Soil	_, or Hydrology	significantly distur	bed? Are "Norma	I Circumstances"	present? Yes No
Are Vegetation, Soil					
SUMMARY OF FINDINGS	-				
Hydrophytic Vegetation Present?	Yes V	No			
Hydric Soil Present?	Yes 🗸	No	Is the Sampled Area	V V	No
Wetland Hydrology Present?		No	within a Wetland?	res	NO
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of o	ne is required; chec	k all that apply)		Surface Soi	l Cracks (B6)
✓ Surface Water (A1)		True Aquatic Plants (	(B14)	Sparsely Ve	egetated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od	or (C1)	✓ Drainage Pa	atterns (B10)
Saturation (A3)	_	Oxidized Rhizospher	es on Living Roots (C3)	Moss Trim I	_ines (B16)
Water Marks (B1)		Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reduction	on in Tilled Soils (C6)	Crayfish Bu	rrows (C8)
Drift Deposits (B3)		Thin Muck Surface (0			/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rer	marks)		Stressed Plants (D1)
Iron Deposits (B5)	(57)			Geomorphic	
Inundation Visible on Aerial I	magery (B7)			Shallow Aqu	
Water-Stained Leaves (B9) Aquatic Fauna (B13)				FAC-Neutra	raphic Relief (D4)
Field Observations:				170-110000	1031 (03)
	es 🗸 No	Depth (inches):	1		
		Depth (inches):			
	es <u> </u>		0 Wetland h	Hydrology Prese	nt? Yes ✓ No
(includes capillary fringe)					165 <u></u> 146 <u></u>
Describe Recorded Data (stream	gauge, monitoring v	well, aerial photos, pre	evious inspections), if ava	ailable:	
Remarks:					
Nemara.					

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

/EGETATION (Four Strata) – Use scientifi	c names or	ριαιτιο.		Sampling Point: wraa402f_w
	Absolute	Dominant I	ndicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30)  1. Liriodendron tulipifera	% Cover 10	Species? Yes	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC:  8 (A)
2. Betula alleghaniensis		Yes	FAC	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum		Yes	FAC	Total Number of Dominant
3. Acer rubrum				Species Across All Strata: 9 (B)
<del>4</del> 5				Percent of Dominant Species That Are OBL FACW or FAC: 88.88888888 (A/B
6				That Are OBL, FACW, or FAC: 88.88888888 (A/B
7				Prevalence Index worksheet:
	25	= Total Cove	r	Total % Cover of: Multiply by:
50% of total cover:	12.5 20% of	total cover:_	5	OBL species 20 x 1 = 20
Sapling/Shrub Stratum (Plot size: 15 )				FACW species x 2 =
<sub>1.</sub> Sambucus nigra	25	Yes	FAC	FAC species 68 x 3 =
2. Betula alleghaniensis	8	Yes	FAC	FACU species x 4 = 68
3. Betula lenta	3	No	FACU	UPL species $0 \times 5 = 0$
<sub>4.</sub> Fagus grandifolia	2	No	FACU	Column Totals:15 (A)(B)
5. Liriodendron tulipifera	2	No	FACU	Prevalence Index = B/A = 2.71
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cove	r	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:	20 20% of	total cover:_	8	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				Problematic Hydrophytic Vegetation¹ (Explain)
1. Carex prasina	20	Yes	OBL	1 Toblematic Hydrophytic Vegetation (Explain)
2. Symphyotrichum dumosum	10	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Solidago gigantea		Yes	FACW	be present, unless disturbed or problematic.
4. Dichanthelium clandestinum	10	Yes	FAC	Definitions of Four Vegetation Strata:
5				Tree Westerlands and the reines Ois (7.0 as)
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover:	25 20% of	total cover:_	10	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
4				Hydrophytic
5				Vegetation No.
		= Total Cove	0	Present? fes No No
		total cover:_		
2	0 20% of		0	

Sampling Point: wraa402f\_w

Profile Des	cription: (Describe	to the de	oth needed to docum	ent the	indicator	or confirm	the absenc	e of indicators.)
Depth	Matrix		Redox	c Feature	S1			
(inches)	Color (moist) 10YR 3/2	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> SIL	Remarks
0-3		100						
3-6	10YR 3/1	100					SIL	
6-18	10YR 4/1	92	10YR 5/6	8	С	PL/M	SICL	
				-			-	-
	· -				·	· ——		-
				-			-	
					· <del></del>	· ——		
	<u> </u>							
Type: C=0	Concentration, D=Dec	oletion. RM	=Reduced Matrix, MS	=Masked	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
	Indicators:	71011011, 1111	-reduced matrix, me	-Macro	a cana cr	uo.		cators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	Epipedon (A2)		Polyvalue Bel	. ,	ice (S8) (N	ILRA 147		Coast Prairie Redox (A16)
	Histic (A3)		Tolyvalde Bel				,	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			,,		Piedmont Floodplain Soils (F19)
	ed Layers (A5)		<u>✓</u> Depleted Mat		(- –)			(MLRA 136, 147)
	luck (A10) <b>(LRR N)</b>		Redox Dark S		<del>-</del> 6)			Very Shallow Dark Surface (TF12)
	ed Below Dark Surfac	e (A11)	Depleted Dar	,	,			Other (Explain in Remarks)
	Oark Surface (A12)	,	Redox Depre					,
	Mucky Mineral (S1) (	LRR N,	Iron-Mangane			LRR N,		
	A 147, 148)		MLRA 136		, , ,			
	Gleyed Matrix (S4)		Umbric Surfa		(MLRA 13	6, 122)	<sup>3</sup> lr	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo				. <b>8)</b> v	vetland hydrology must be present,
Strippe	d Matrix (S6)		Red Parent M	laterial (F	21) <b>(MLR</b>	A 127, 147	<b>')</b> u	nless disturbed or problematic.
Restrictive	Layer (if observed)	:						
Type: n	one							
	nches):						Hydric So	il Present? Yes No
Remarks:	,						1	
rtomanto.								



Photo 1 Wetland data point WRAA402f\_w facing west



Photo 2
Wetland data point WRAA402f\_w facing north

Project/Site: Atlantic Coast Pipeline	City/County: Randolph Cou	nty	Sampling Date: 3/1/2016
Applicant/Owner: Dominion		State: WV	_ Sampling Point: wraa402_u
Investigator(s): GB, AS, CG	Section, Township, Range:		
	Local relief (concave, convex,		
Subregion (LRR or MLRA): N	Lat: 38.71297603 Long: -		Datum: WGS 1984
Soil Map Unit Name: Gilpin-Dekalb stony complex,	moist, 15 to 35 percent slopes	NWI classifica	None None
Are climatic / hydrologic conditions on the site typic	al for this time of year? Yes No	_ (If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology _	significantly disturbed? Are "Norm	nal Circumstances" pr	resent? Yes V No No
Are Vegetation, Soil, or Hydrology _			
SUMMARY OF FINDINGS – Attach site			
Hydrophytia Vagatation Process? Vag	No. W		
	No Is the Sampled Are within a Wetland?		🗸
Wetland Hydrology Present? Yes	within a Wetland?	Yes	_ No
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is required; cl	neck all that apply)	Surface Soil C	
Surface Water (A1)	True Aquatic Plants (B14)		etated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patt	
Saturation (A3)	Oxidized Rhizospheres on Living Roots (C	-	
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season W	Vater Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burro	ows (C8)
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Vis	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Remarks)	· · · · · · · · · · · · · · · · · · ·	ressed Plants (D1)
Iron Deposits (B5)		Geomorphic F	• •
Inundation Visible on Aerial Imagery (B7)		Shallow Aquit	
Water-Stained Leaves (B9)			phic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral 1	Test (D5)
Field Observations:	<b>7</b> 5 4 6 1 3		
	Depth (inches):		
	Depth (inches):		
Saturation Present? Yes No (includes capillary fringe)	Depth (inches): Wetlan	d Hydrology Present	? Yes No
Describe Recorded Data (stream gauge, monitoring	ng well, aerial photos, previous inspections), if	available:	
Remarks:			
no hydrology indicators present			

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

50% of total cover: \_\_ 15

50% of total cover:

50% of total cover: 30

50% of total cover: 7.5

% Cover Species?

= Total Cover 20% of total cover:\_

42\_\_\_ = Total Cover 20% of total cover: 8.4

= Total Cover

= Total Cover

20% of total cover:

16.5 20% of total cover: 6.6

15

15

15

15

10

10

5

15

15

12

30

Tree Stratum (Plot size:

1. Liriodendron tulipifera

5. Betula alleghaniensis 6. Tilia americana

Sapling/Shrub Stratum (Plot size:

2. Fagus grandifolia

3. Acer saccharum

4. Betula lenta

1. Betula lenta

2. Acer pensylvanicum

Herb Stratum (Plot size: 1. Dryopteris carthusiana

Woody Vine Stratum (Plot size:

1. Smilax pumila

2. Rubus allegheniensis

2. Carex blanda

3. Fagus grandifolia

plants.		5	Sampling	Point: W	raa402_u		
Dominant	_	Dominance Test	workshee	t:			
Species? Yes	Status FACU	Number of Domir			0	(A)	
Yes	FACU	That Are OBL, FACW, or FAC:					
Yes	FACU	Total Number of			8	<b>(5</b> )	
No	FACU	Species Across A	III Strata:			(B)	
No	FAC	Percent of Domin			0		
No	FACU	That Are OBL, FA	ACW, or FA	C:		(A/B)	
		Prevalence Inde	x workshee	et:			
Total Cove		Total % Cove	er of:	Mu	Itiply by:		
total cover:	1/	OBL species	0	x 1 = _	0		
		FACW species	0	x 2 = _	0	_	
Yes	FACU	FAC species	16	x 3 = _	48	_	
Yes	FACU	FACU species	109	x 4 = _	436	_	
Yes	FACU	UPL species _	8	x 5 =	40	_	
		Column Totals: _	133	(A)	524	(B)	
		Drovolonos	Indox D/	^	3.93		
		Prevalence				_	
		Hydrophytic Veg 1 - Rapid Tes					
		2 - Dominan	,	' '	getation		
		3 - Prevalenc					
= Total Cove		4 - Morpholo			Provide sur	norting	
total cover:	8.4	-	emarks or o				
		Problematic		•	,		
No No	FAC	1 1001011141101	, iyaropiiya	Vogotat	ion (Explo	,	
No	FAC	<sup>1</sup> Indicators of hyd				must	
		be present, unles					
		Definitions of Fo	our vegetat	ion Stra	ta:		
		Tree – Woody pla more in diameter height.					
		Sapling/Shrub – than 3 in. DBH ar m) tall.					
Total Cove	0.0	<b>Herb</b> – All herbacon of size, and wood				ardless	
		Woody vine – Al height.	l woody vine	es greate	er than 3.28	3 ft in	
Yes	UPL						
Yes	FACU						
		Hydrophytic					
<del></del>		Vegetation Present?	Yes	No			

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

Sampling Point: wraa402\_u

Profile Desc	ription: (Describe	to the depth	needed to docum	nent the i	ndicator	or confirm	n the absence	e of indicators.)	
Depth	Matrix		Redo	x Features	5	-			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks	3
0-3	10YR 3/3	100					SIL	_	
3-11	10YR 4/6	100					SICL		
11-18	10YR 5/8	100					SICL		_
		· <del></del>						_	
	-	<del></del>						_	
		· —— -							
							-		
		· ——— –						_	
1							2		
	oncentration, D=Dep	letion, RM=R	Reduced Matrix, MS	S=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matri	
Hydric Soil I			5 10 (	(07)				cators for Problematic I	-
Histosol	(A1) pipedon (A2)		Dark Surface Polyvalue Be		oo (SO) /#/	II DA 447		2 cm Muck (A10) (MLRA Coast Prairie Redox (A16	•
Black Hi	. , ,		Polyvalue Be				140)	(MLRA 147, 148)	9)
	n Sulfide (A4)		Loamy Gleye	. ,	•	, 1-0)		Piedmont Floodplain Soil	s (F19)
	Layers (A5)		Depleted Mar		-,			(MLRA 136, 147)	- \/
	ick (A10) (LRR N)		Redox Dark		6)			Very Shallow Dark Surface	ce (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar					Other (Explain in Remark	(s)
	ark Surface (A12)		Redox Depre						
	lucky Mineral (S1) (L	.RR N,	Iron-Mangan		es (F12) <b>(</b> I	LRR N,			
	147, 148)		MLRA 13		MI DA 40	C 400\	31		
	edox (S5)		Umbric Surfa Piedmont Flo					ndicators of hydrophytic ve vetland hydrology must be	-
	Matrix (S6)		Red Parent N					inless disturbed or proble	•
	_ayer (if observed):		Red r drene n	iatoriai (i	Z I / (III Z IX	127, 147		anicoo distance of proble	matio.
Type: no									
Depth (inc			_				Hydric Sc	oil Present? Yes	No 🗸
Remarks:							11,741.10 00		
ixemaiks.									



**Photo 1**Upland data point WRAA402\_u facing west



Photo 2
Upland data point WRAA402\_u facing south

Project/Site: Atlantic Coast Pipeline	City/C	County: Randolph County	Sampling Date: 3/1/2016
Applicant/Owner: Dominion		State	: WV Sampling Point: wraa403e_w
		on, Township, Range: No PLSS	
Landform (hillslope, terrace, etc.): swale			
Subregion (LRR or MLRA): N	Lat: 38.71121979	Long: -80.1135639	9 Datum: WGS 1984
Soil Map Unit Name: Buchanan and Ernest sto	ony soils, 15 to 35 percent slop	pes N	VI classification: None
Are climatic / hydrologic conditions on the site	typical for this time of year? Y	′es No (If no, e	xplain in Remarks.)
Are Vegetation, Soil, or Hydrold	ogy significantly distur	bed? Are "Normal Circum	nstances" present? Yes V
Are Vegetation, Soil, or Hydrok			
SUMMARY OF FINDINGS – Attach			
Hydrophytic Vegetation Present? Yes	s_ <b>/</b> No		
Hydric Soil Present? Yes	No	Is the Sampled Area	
	No	within a Wetland?	res No
Remarks:	·		
HYDROLOGY			
Wetland Hydrology Indicators:		Secon	dary Indicators (minimum of two required)
Primary Indicators (minimum of one is require	ed: check all that apply)		urface Soil Cracks (B6)
Surface Water (A1)	True Aquatic Plants (		parsely Vegetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Od		rainage Patterns (B10)
Saturation (A3)	Oxidized Rhizospher		oss Trim Lines (B16)
Water Marks (B1)	Presence of Reduced		y-Season Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reductio		ayfish Burrows (C8)
Drift Deposits (B3)	Thin Muck Surface (0	Sa	aturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Rer	marks) St	unted or Stressed Plants (D1)
Iron Deposits (B5)			eomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)			nallow Aquitard (D3)
Water-Stained Leaves (B9)		· ·	crotopographic Relief (D4)
Aquatic Fauna (B13)		<u>•</u> FA	AC-Neutral Test (D5)
Field Observations:	4		
<u> </u>	o Depth (inches):		
	o Depth (inches):	0	
Saturation Present? Yes N (includes capillary fringe)	o Depth (inches):	Wetland Hydrolo	gy Present? Yes No
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, pre	evious inspections), if available:	
Remarks:			

		Absolute	Dominant I	ndicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 1	30)	% Cover	Species?		Number of Dominant Species That Are OBL, FACW, or FAC:3 (A)
2					Total Number of Dominant Species Across All Strata:  4 (B)
<u>.                                    </u>		_			Percent of Dominant Species
5 5					That Ale OBE, FACW, OF FAC (A/B
7					Prevalence Index worksheet:
			= Total Cove		
	50% of total cover: 0	20% of	total cover:_	0	20 40
Sapling/Shrub Stratum (Plot siz	re:)	0	V	E40	FACW species $\frac{20}{3}$ $\times 2 = \frac{40}{9}$
Betula alleghaniensis		3	Yes	FAC	FAC species $\frac{3}{2}$ $\times 3 = \frac{9}{8}$
		2	Yes	FACU	FACU species 2
3			· ——		UPL species
4					Column Totals: (A) (B)
5		_			Prevalence Index = B/A =1.4
6		-			Hydrophytic Vegetation Indicators:
7					1 - Rapid Test for Hydrophytic Vegetation
3			. <u></u>		2 - Dominance Test is >50%
9			. <u></u>		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
			= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
	50% of total cover: 2.5	20% of	total cover:_	1	
Herb Stratum (Plot size:	)				data in Remarks or on a separate sheet)
1. Typha latifolia		35	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Carex prasina		20	Yes	OBL	1
<sub>3.</sub> Packera aurea		10	No	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Juncus effusus		10	No	FACW	Definitions of Four Vegetation Strata:
5					Definitions of Four Vegetation offata.
<b>3</b> .					Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
 7.					more in diameter at breast height (DBH), regardless of height.
 3.					
<u></u> 9.					Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
					m) tall.
11.					
· · · · <u> </u>		75	= Total Cove	-	<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	50% of total cover: 37.		total cover:_		or size, and woody plants loss than size it tall.
Woody Vine Stratum (Plot size:	00				<b>Woody vine</b> – All woody vines greater than 3.28 ft in
	-				height.
-					
3					
4 -					Hydrophytic
5					Vegetation Present? Yes No
	500/ of total course. 0		= Total Cove	er O	11636HC: 163 NO
	50% of total cover: 0		total cover:_		
Remarks: (Include photo number	ers here or on a separate	sheet.)			

Sampling Point: wraa403e\_w

Profile Des	cription: (Describe	to the de	•			or confirm	the absence	ce of indicators.)
Depth	Matrix (assist)	0/	Redo	x Feature	S1	1 2	T t	Demonto
(inches) 0-3	Color (moist) 10YR 2/1	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> SIL	Remarks
	· -		· -				-	_
3-18	10YR 4/1	90	10YR 5/6	10	C	PL/M	SICL	_
		•						
			·					
								_
			-					
		-						
	- <u> </u>		· -					
		-	-					
1							2, .,	
	Concentration, D=Dep	letion, RM	1=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.		PL=Pore Lining, M=Matrix.
-	Indicators:							cators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface					2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su	•	. •	147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)		_	Piedmont Floodplain Soils (F19)
	ed Layers (A5)		<u>✓</u> Depleted Ma		>			(MLRA 136, 147)
	uck (A10) (LRR N)	(4.4.4)	Redox Dark				_	Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	e (A11)	Depleted Da				_	Other (Explain in Remarks)
	Park Surface (A12)	DD 11	Redox Depre			(I DD N		
	Mucky Mineral (S1) (L	.KK N,	Iron-Mangan		es (F12) (	LKK N,		
	A 147, 148)		MLRA 13	•	/MI DA 44	00 400)	31	adiantana af haadanahatin anatatina and
	Gleyed Matrix (S4)		Umbric Surfa					ndicators of hydrophytic vegetation and
	Redox (S5) d Matrix (S6)		Piedmont Flo					vetland hydrology must be present,
	Layer (if observed):		Neu Faieiil i	viateriai (i	ZI) (IVILIN	A 121, 141	1	unless disturbed or problematic.
Type:	one							
								.,
Depth (ir	nches):						Hydric Sc	oil Present? Yes No
Remarks:								



Photo 1 Wetland data point WRAA403e\_w facing east



**Photo 2**Wetland data point WRAA403e\_w facing west

Project/Site: Atlantic Coast Pipeline	City/County: Randolph Count	y Sampling Date: 3/1/2016						
Applicant/Owner: Dominion		State: WV Sampling Point: wraa403_u						
Investigator(s): GB, AS, CG Section, Township, Range: No PLSS in this area								
	Local relief (concave, convex, no							
Subregion (LRR or MLRA): N La		11348794 Datum: WGS 1984						
Soil Map Unit Name: Buchanan and Ernest stony soil		NWI classification: None						
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 answers in Remarks.)								
SUMMARY OF FINDINGS – Attach site								
	No ✓ Is the Sampled Area within a Wetland?	.,						
	within a Wetland?	Yes No						
Remarks:	140							
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; che	eck all that apply)	Surface Soil Cracks (B6)						
	_ True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)						
	_ Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)						
	Oxidized Rhizospheres on Living Roots (C3)							
	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)						
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)						
Drift Deposits (B3)	_ Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)						
Algal Mat or Crust (B4)	_ Other (Explain in Remarks)	Stunted or Stressed Plants (D1)						
Iron Deposits (B5)		Geomorphic Position (D2)						
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)						
Water-Stained Leaves (B9)		Microtopographic Relief (D4)						
Aquatic Fauna (B13)		FAC-Neutral Test (D5)						
Field Observations:								
	Depth (inches):							
	Depth (inches):							
Saturation Present? Yes No   (includes capillary fringe)	Depth (inches): Wetland	Wetland Hydrology Present? Yes No						
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if ava	ailable:						
Remarks:								
no hydrology indicators present								

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

Tree Stratum (Plot size:

3. Liriodendron tulipifera

4. Betula alleghaniensis

1. Acer pensylvanicum

Herb Stratum (Plot size: \_ 1. Dryopteris carthusiana

1. Smilax pumila

2. Rubus allegheniensis

3. Fagus grandifolia

2. Betula lenta

Sapling/Shrub Stratum (Plot size: 15

1 Acer saccharum

2. Fagus grandifolia

5. Betula lenta 6. Tilia americana

	names of plants.  Absolute Dominant Indicator			Dominance Test worksheet:					
)		Species? Yes	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)					
	15	Yes	FACU						
	15	Yes	FACU	Total Number of Dominant Species Across All Strata:  8 (B)					
	10	No	FAC						
	10	No	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)					
	5	No	FACU	· · · · · · · · · · · · · · · · · · ·					
				Prevalence Index worksheet:					
	70 = Total Cover			Total % Cover of: Multiply by:					
0% of total cover: 35	20% of total cover:		14	OBL species X I = 0					
)				FACW species x 2 =					
	15	Yes	FACU	FAC species X 3 =					
	15	Yes	FACU	FACU species x 4 =					
	12	Yes	FACU	UPL species					
				Column Totals: (A) (B)					
				Prevalence Index = B/A =3.93					
				Hydrophytic Vegetation Indicators:					
				1 - Rapid Test for Hydrophytic Vegetation					
				2 - Dominance Test is >50%					
	42			3 - Prevalence Index is ≤3.0 <sup>1</sup>					
0% of total cover: 21	= Total Cover			4 - Morphological Adaptations <sup>1</sup> (Provide supporting					
5 )				data in Remarks or on a separate sheet)					
/	4	No	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)					
	2	No	FAC						
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					
				Definitions of Four Vegetation Strata:					
			<u> </u>	<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height.					
			<u> </u>	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.					
	6 = Total Cover		 er	<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.					
0% of total cover: 16.5	20% of	total cover:	6.6	Woody vine – All woody vines greater than 3.28 ft in					
30)	_			height.					
	8	Yes	UPL						
	7	Yes	FACU						
				Hydrophytic					
				Vegetation					
	15			Present? Yes No					

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

Woody Vine Stratum (Plot size: \_\_\_\_\_30

2. Carex blanda

Sampling Point: wraa403\_u

Profile Desc	ription: (Describe t	o the depth	needed to document the inc	licator or confirm	the absence	e of indicators.)	
Depth	Matrix		Redox Features				
(inches) 0-3	Color (moist) 10YR 3/3	<u>%</u> 100	Color (moist) %	Type <sup>1</sup> Loc <sup>2</sup>	Texture SIL	rock at 13"	Remarks
3-9	10YR 4/6	100			SICL		
9-13	10YR 5/8	100			SICL		
						-	
		etion, RM=R	educed Matrix, MS=Masked S	and Grains.		PL=Pore Lining, I	M=Matrix. ematic Hydric Soils <sup>3</sup> :
Hydric Soil							=
Histosol			Dark Surface (S7)	(00) (11) DA 447		2 cm Muck (A10)	= = = = = = = = = = = = = = = = = = = =
	oipedon (A2)		Polyvalue Below Surface		148) (	Coast Prairie Re	
	stic (A3)		Thin Dark Surface (S9) (I			(MLRA 147, 1	-
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)	2)	'	Piedmont Floodp	The state of the s
	d Layers (A5)		Depleted Matrix (F3)		,	(MLRA 136, 1	
	ick (A10) <b>(LRR N)</b> d Below Dark Surface	(//11)	<ul><li>Redox Dark Surface (F6)</li><li>Depleted Dark Surface (F6)</li></ul>			other (Explain in	rk Surface (TF12)
	ark Surface (A12)	(Д11)	Redox Depressions (F8)	")	_ `	otilei (Explaiii III	itemarks)
	lucky Mineral (S1) <b>(L</b>	RR N	Iron-Manganese Masses	(F12) (I RR N			
	A 147, 148)	,	MLRA 136)	(i iz) <b>(z</b> ititit,			
	Gleyed Matrix (S4)		Umbric Surface (F13) (M	LRA 136. 122)	<sup>3</sup> Inc	dicators of hydro	phytic vegetation and
	Redox (S5)		Piedmont Floodplain Soil				must be present,
-	Matrix (S6)		Red Parent Material (F21			nless disturbed o	
	Layer (if observed):			, ,	-		,
Type: roo							
	ches): <u>13</u>		_ _		Hydric Soi	l Present? Ye	es No
Remarks:					•		



Photo 1 Upland data point WRAA403\_u facing north



**Photo 2** Upland data point WRAA403\_u facing east

Project/Site: Atlantic Coast Pip	eline	City/C	ounty: Randolph County	/	Sampling Date: 3/3/2016
Applicant/Owner: Dominion					Sampling Point: wrae001e_w
		Section	on, Township, Range: No		
Landform (hillslope, terrace, etc					
Subregion (LRR or MLRA): N		2660i 76iii	Lang80.	11339845	Datum: WGS 1984
Soil Map Unit Name: Gilpin-De	La	noist 15 to 35 percent si	Long:		. None
Are climatic / hydrologic conditi	* *	•			
Are Vegetation, Soil	, or Hydrology	significantly disturb	bed? Are "Normal	Circumstances" p	resent? Yes No
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If needed, e	explain any answei	rs in Remarks.)
SUMMARY OF FINDING	GS – Attach site	map showing sam	pling point location	ons, transects	, important features, etc.
Hadranda Ca Vanata Cas Brass	- 10 Yes 4	N			
Hydrophytic Vegetation Prese Hydric Soil Present?	ent? Yes Vos	No No <b>✓</b>	Is the Sampled Area	.,	
Wetland Hydrology Present?		No	within a Wetland?	Yes	No
Remarks:	103				
Area is within maintained pow	erline ROW. Wet cond	litions are actively formin	ng due to disturbed hydro	ology from constru	ction.
HYDROLOGY					
Wetland Hydrology Indicato	ors:			Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum	of one is required; che	eck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	_	_ True Aquatic Plants (F	B14)	Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)		_ Hydrogen Sulfide Odd		Drainage Pat	terns (B10)
Saturation (A3)		Oxidized Rhizosphere		Moss Trim Li	
Water Marks (B1)		Presence of Reduced			Nater Table (C2)
Sediment Deposits (B2)	<del>-</del>	Recent Iron Reduction		Crayfish Burr	
Drift Deposits (B3)	_	_ Thin Muck Surface (C			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_	_ Other (Explain in Rem	narks)		ressed Plants (D1)
Iron Deposits (B5)	i al Ima a ma m. (DZ)			Geomorphic	, ,
Inundation Visible on Aer				Shallow Aqui	
Water-Stained Leaves (B Aquatic Fauna (B13)	·9)			✓ FAC-Neutral	phic Relief (D4)
				FAC-Neutiai	Test (D3)
Field Observations: Surface Water Present?	Voc. No. V	Depth (inches):			
Water Table Present?		Depth (inches):			
		Depth (inches):	^	lydrology Presen	42 Van V Na
Saturation Present? (includes capillary fringe)	res_+_ No	Depth (inches):	wetland F	iyarology Presen	t? Yes V No
Describe Recorded Data (stre	am gauge, monitoring	well, aerial photos, pre	vious inspections), if ava	ilable:	
Remarks:					
Saturation in organic peat to s	urface Peat underlair	n by boulder which preve	ented the observance of	water table	
Catalana III organio pour to o		. 2) 200.00			

	ta) – Use scientific na	Absolute	Dominant In	dicator	Dominance Test worksheet:
Tree Stratum (Plot size:	30 )		Species?		Number of Dominant Species
1					That Are OBL, FACW, or FAC: (A)
2					Total Number of Dominant
3					Species Across All Strata: 2 (B)
4					Develop of Deminent Charles
5					Percent of Dominant Species That Are OBL, FACW, or FAC:100 (A/B)
6					
7					Prevalence Index worksheet:
			= Total Cover	_	Total % Cover of: Multiply by:  ORL species 60 v.1 = 60
	50% of total cover: 0	20% of	total cover:	0	OBL species X I =
Sapling/Shrub Stratum (Plot si	ze:)				FACW species x z =
1					FAC species X3 =
2					FACU species
3					UPL species x 5 =
4					Column Totals: (A) (B)
5					Prevalence Index = B/A =1.29
6					Hydrophytic Vegetation Indicators:
7				<u>.</u>	1 - Rapid Test for Hydrophytic Vegetation
3					✓ 2 - Dominance Test is >50%
9					✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	0		= Total Cover	_	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
	50% of total cover: 0	20% of	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:	5)	50	NI-		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Sphagnum sp.		30	No Yes	OBL	
2. Carex lupulina		30	Yes	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Carex prasina		25	Yes	OBL	be present, unless disturbed or problematic.
4. Juncus effusus			No	FACW	Definitions of Four Vegetation Strata:
5					Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
					more in diameter at breast height (DBH), regardless of
7					height.
					Sapling/Shrub – Woody plants, excluding vines, less
9					than 3 in. DBH and greater than or equal to 3.28 ft (1
					m) tall.
11		85			Herb - All herbaceous (non-woody) plants, regardless
	50% of total cover: 67.5		= Total Cover total cover:		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size	20	20 /6 01	total cover		Woody vine – All woody vines greater than 3.28 ft in
<u> </u>	j)				height.
-					
2 3.					
T.					Hydrophytic Vegetation
		0	= Total Cover	-	Present? Yes No
5					
	50% of total cover:		total cover:	0	· · · · · · · · · · · · · · · · · · ·

Sampling Point: wrae001e\_w

Profile Desc	cription: (Describe t	o the deptl	n needed to docur	nent the i	ndicator	or confirn	the ab	osence of indicators.)
Depth	Matrix			x Feature				
(inches)	Color (moist)	<u></u> %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture Remarks
								<del></del>
	-		_					
	•						-	
								·
Type: C=C	oncentration, D=Deple	etion, RM=I	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	<sup>2</sup> Loca	tion: PL=Pore Lining, M=Matrix.
	Indicators:	-						Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be	. ,	ce (S8) <b>(N</b>	ILRA 147.	148)	Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su				,	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			., <b>.,</b>		Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma		. –,			(MLRA 136, 147)
	uck (A10) <b>(LRR N)</b>		Redox Dark		-6)			Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Da	•	•			Other (Explain in Remarks)
	ark Surface (A12)	` '	Redox Depre					
	Mucky Mineral (S1) <b>(L</b>	RR N.	Iron-Mangan			LRR N.		
	A 147, 148)	,	MLRA 13		(/ (	<b>,</b>		
	Gleyed Matrix (S4)		Umbric Surfa		MLRA 13	6. 122)		<sup>3</sup> Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo				18)	wetland hydrology must be present,
-	Matrix (S6)		Red Parent N					unless disturbed or problematic.
	Layer (if observed):				_ · / <b>(</b>	,	<del>,</del>	amose distance of prosicination
Type: <u>6</u>								
Depth (in	ahaa).		<u>—</u>				Llarata	ric Soil Present? Yes No
	unes)						пуш	iic Soil Fleselit? Tes No
Remarks:	underlain by boulder	:	- DOW Area is bis	مامر بالمعالم والما	ad Dags	(0.0	:l	1000/
· gama paar				,			,	,



Photo 1 Wetland data point wrae001e\_w facing east



Photo 2
Wetland data point wrae001e\_w facing west

Project/Site: Atlantic Coast Pipeline	City/County: Randolp	h County	Sampling Date: 3/3/2016				
Applicant/Owner: Dominion		State: WV	Sampling Point: wrae001_u				
	Section, Township, Range: No PLSS in this area						
Landform (hillslope, terrace, etc.): slope							
Subregion (LRR or MLRA): N			Datum: WGS 1984				
Soil Map Unit Name: Gilpin-Dekalb stony comple	cation: None						
Are climatic / hydrologic conditions on the site ty	pical for this time of year? Yes No_	(If no, explain in F	Remarks.)				
Are Vegetation, Soil, or Hydrolog	y significantly disturbed? Are	"Normal Circumstances"	present? Yes No				
Are Vegetation, Soil, or Hydrolog							
SUMMARY OF FINDINGS – Attach s							
Hydrophytic Vegetation Present? Yes	rophytic Vegetation Present? Yes No Is the Sampled Area						
	No / Is the Sample within a Wetla		No				
	No No	iliu: les	NO				
Remarks: Soil disturbed due to road construction and pow	verline ROW.						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)				
Primary Indicators (minimum of one is required	; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)					
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Pa	Drainage Patterns (B10)				
Saturation (A3)	Oxidized Rhizospheres on Living Roo	ots (C3) Moss Trim L	ines (B16)				
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season	Saturation Visible on Aerial Imagery (C9)				
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils	(C6) Crayfish Bur					
Drift Deposits (B3)	Thin Muck Surface (C7)						
Algal Mat or Crust (B4)	Other (Explain in Remarks)		Stressed Plants (D1)				
Iron Deposits (B5)		Geomorphic Position (D2)					
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)					
Water-Stained Leaves (B9)			aphic Relief (D4)				
Aquatic Fauna (B13)		FAC-Neutral	Trest (D5)				
Field Observations: Surface Water Present? Yes No	Depth (inches):						
	Depth (inches):						
		etland Hydrology Prese	-42 Vaa Na V				
(includes capillary fringe)	Depth (inches)	etiand nydrology Presei	nt? Yes No				
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspection	s), if available:					
Demode							
Remarks: no hydrology							
The Hydrology							

EGETATION (Four Strata) – Use scientific r	names of	piants.		Sampling Point: wrae001_u
Tree Stratum (Plot size:30)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Fagus grandifolia	15	Yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)
Prunus serotina	10	Yes	FACU	
3.		<u> </u>		Total Number of Dominant Species Across All Strata:  5 (B)
4		<u> </u>		、,
5		<u></u>		Percent of Dominant Species That Are OBL, FACW, or FAC:  20 (A/B)
6				That Are OBE, FACW, OF FAC (A/B)
7				Prevalence Index worksheet:
	25	= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover: 12.	.5 20% of	total cover:	5	OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15 )				FACW species x 2 =
<sub>1.</sub> Fagus grandifolia	30	Yes	FACU	FAC species 25 x 3 = 75
2. Betula lenta	10	Yes	FACU	FACU species x 4 =
3. Acer pensylvanicum	2	No	FACU	UPL species x 5 = 0
4				Column Totals: 92 (A) 343 (B)
5				3.72
6.				Prevalence Index = B/A = 3.72
7				Hydrophytic Vegetation Indicators:
B				1 - Rapid Test for Hydrophytic Vegetation
9.	-			2 - Dominance Test is >50%
v	42	= Total Cov		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 21		f total cover:	0.4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5 )				data in Remarks or on a separate sheet)
1 Smilax rotundifolia	25	Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2				
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5.				Definitions of Four Vegetation Strata:
_				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of height.
	_			neight.
8 9.		·		Sapling/Shrub – Woody plants, excluding vines, less
5		·		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
		·		
11	25	Tatal Cau		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover:12.		= Total Cover:		
Woody Vine Stratum (Plot size: 30 )	2070 01	total oover.		<b>Woody vine</b> – All woody vines greater than 3.28 ft in
				height.
1		·		
		·		
3		·		
4	-			Hydrophytic
5	0			Vegetation Present? Yes No
50% of total cover:		= Total Cover:	0	1.000
0070 01 total 00V01:		i lolai covei.		
Remarks: (Include photo numbers here or on a separate :	sheet.)			

Sampling Point: wrae001\_u

Profile Desc	ription: (Describe to	the depth n	eeded to docun	nent the in	ndicator o	r confirm	the ab	osence of indicators.)
Depth	Matrix			K Features	1			
(inches) 0-6	Color (moist) 10YR 3/2	100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		ttureRemarks CL
			_					
					-			
	oncentration, D=Deplet	ion, RM=Red	duced Matrix, MS	S=Masked	Sand Gra	ins.	<sup>2</sup> Locat	tion: PL=Pore Lining, M=Matrix.
Hydric Soil								Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol		_	Dark Surface					2 cm Muck (A10) (MLRA 147)
	pipedon (A2)	_	Polyvalue Be				148)	Coast Prairie Redox (A16)
	stic (A3)	-	Thin Dark Su			47, 148)		(MLRA 147, 148)
	n Sulfide (A4) d Layers (A5)	_	Loamy Gleye Depleted Mat		-2)			Piedmont Floodplain Soils (F19) (MLRA 136, 147)
	ick (A10) <b>(LRR N)</b>	_	Redox Dark S		3)			Very Shallow Dark Surface (TF12)
	d Below Dark Surface (	A11)	Negleted Dar					Other (Explain in Remarks)
	ark Surface (A12)	_	Redox Depre					
	lucky Mineral (S1) (LR	RN,	Iron-Mangan			.RR N,		
	\ 147, 148)		MLRA 13					
Sandy G	Gleyed Matrix (S4)	_	Umbric Surfa	ce (F13) <b>(N</b>	MLRA 136	5, 122)		<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy R	tedox (S5)	_	_ Piedmont Flo	odplain So	oils (F19) (	(MLRA 14	8)	wetland hydrology must be present,
	Matrix (S6)	_	Red Parent N	1aterial (F2	21) <b>(MLR</b>	127, 147	<u>')</u>	unless disturbed or problematic.
	_ayer (if observed):							
Type: <u></u> 6								
Depth (in	ches):						Hydr	ric Soil Present? Yes No
Remarks:								
Roadbed and	powerline ROW. Soil p	orofile disturb	ed by boulder.					



Photo 1 Upland data point wrae001\_u facing east



Photo 2 Upland data point wrae001\_u facing west

Project/Site: Atlantic Coast Pipe	ine	City/County: Randolph County Sampling Date: 3/1/201						
Applicant/Owner: Dominion			State: WV					
		Section, Township, Range: No PLSS in this area						
		Local relief (concave, convex, none): concave Slope						
Subregion (LRR or MLRA): N		Lat: 38.71013353	Long: -80.	11282706	Datum: WGS 1984			
Soil Map Unit Name: Buchanan	ation: None							
Are climatic / hydrologic condition	ns on the site typic	cal for this time of year? Y	res No	(If no, explain in R	emarks.)			
Are Vegetation, Soil								
Are Vegetation, Soil								
-					, important features, etc.			
		_	<b>3</b> p		, <b>,</b>			
Hydrophytic Vegetation Presen	t? Yes	<ul><li>✓ No</li><li>✓ No</li></ul>	Is the Sampled Area					
Hydric Soil Present? Wetland Hydrology Present?		✓ No No	within a Wetland?	Yes	No			
Remarks:	163	110						
within wetland								
HYDROLOGY								
Wetland Hydrology Indicators	s:			Secondary Indica	tors (minimum of two required)			
Primary Indicators (minimum of	one is required; o	heck all that apply)		Surface Soil	Cracks (B6)			
✓ Surface Water (A1)		True Aquatic Plants (	B14)	Sparsely Veg	etated Concave Surface (B8)			
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Pat				
Saturation (A3)		Oxidized Rhizospher	-	Moss Trim Li				
Water Marks (B1)		Presence of Reduced			Vater Table (C2)			
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burr				
Drift Deposits (B3)		Thin Muck Surface (C			sible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)	Geomorphic	ressed Plants (D1)			
Iron Deposits (B5) Inundation Visible on Aeria	I Imagery (B7)							
Water-Stained Leaves (B9				<ul><li>Shallow Aquitard (D3)</li><li>Microtopographic Relief (D4)</li></ul>				
Aquatic Fauna (B13)	,			FAC-Neutral	, , ,			
Field Observations:					( – . )			
	Yes V No	Depth (inches):	1					
		Depth (inches):						
			^	lydrology Presen	t? Yes 🗸 No			
(includes capillary fringe)								
Describe Recorded Data (strea	m gauge, monitor	ing well, aerial photos, pre	vious inspections), if ava	iilable:				
Remarks:								
Nomano.								

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

/EGETATION (Four Strata) – Use scientific na	ames of	plants.		Sampling Point: wraa404f_w
· · · · · · · · · · · · · · · · · · ·	Absolute	Dominant Ir	ndicator	Dominance Test worksheet:
			Status FAC	Number of Dominant Species
2. Liriodendron tulipifera	10	Yes	FACU	That Are OBL, FACW, or FAC: (A)
3. Acer rubrum	5	Yes	FAC	Total Number of Dominant
4.				Species Across All Strata:9 (B)
5.				Percent of Dominant Species That Are OBL FACW or FAC: 88.8888888 (A/B)
6		·		That Are OBL, FACW, or FAC:
7				Prevalence Index worksheet:
1	25	= Total Cove		Total % Cover of: Multiply by:
50% of total cover:12.5		total cover:	5	OBL species 20 x 1 = 20
Sapling/Shrub Stratum (Plot size: 15 )	2070 01	total cover		FACW species10
1. Sambucus nigra	25	Yes	FAC	FAC species 68 x 3 = 204
2. Betula alleghaniensis	8	Yes	FAC	FACU species17
3. Betula lenta	3	No	FACU	UPL species0 x 5 =0
		No	FACU	Column Totals: 115 (A) 312 (B)
4. Liriodendron tulipifera	2	No	FACU	(F) (B)
5. Fagus grandifolia			1 ACU	Prevalence Index = B/A =2.71
6		· <del></del>		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
22		= Total Cover		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 20	20% of	total cover:_	8	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				Problematic Hydrophytic Vegetation¹ (Explain)
1. Carex prasina	20	Yes	OBL	1 Toblematic Hydrophytic Vegetation (Explain)
2. Dichanthelium clandestinum	10	Yes	FAC	The disease of hydric acil and westered hydrology reves
3. Solidago gigantea	10	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Symphyotrichum dumosum	10	Yes	FAC	Definitions of Four Vegetation Strata:
5				
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7.				more in diameter at breast height (DBH), regardless of height.
8.				
9.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11.				
	50	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 25		total cover:		
Woody Vine Stratum (Plot size: 30 )	_		_	<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1				neight.
2.				
3.				
		·		Hydrophytic
5	0	T-1-1-0		Vegetation   Present?   Yes No
50% of total cover:		= Total Cover total cover:	^	
0070 01 total 00701.		total cover		
Remarks: (Include photo numbers here or on a separate sh	ieet.)			

Sampling Point: wraa404f\_w

Profile Desc	ription: (Describe t	o the dep	th needed to docum	ent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix			Features	3			
(inches) 0-2	Color (moist) 10YR 3/2	100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SIL	Remarks
2-5	10YR 3/1	100				·	SIL	
6-9	10YR 4/1	92	10YR 5/6	8	С	PL/M	SICL	rock at 9"
						·		
-					-			
						· ——		
1 <sub>Tyrney</sub> C. C.			Dadwood Motrix MC	Maakad	Cond Cr	·	21 cootion: F	N. Doro Lining M. Matrix
Hydric Soil		etion, RIVI	=Reduced Matrix, MS	=IVIasked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.  cators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(\$7)				2 cm Muck (A10) <b>(MLRA 147)</b>
	oipedon (A2)		Polyvalue Bel	. ,	ce (S8) <b>(N</b>	/II RA 147.		Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Sur					(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed			147, 140)	F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Mati	,	· <del>-</del> )		'	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S		6)		\	/ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dark					Other (Explain in Remarks)
	ark Surface (A12)	()	Redox Depres					(=
	Mucky Mineral (S1) <b>(L</b>	RR N.	Iron-Mangane			LRR N,		
	A 147, 148)	,	MLRA 136		, ,	,		
	Gleyed Matrix (S4)		Umbric Surfac		MLRA 13	6, 122)	<sup>3</sup> Inc	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floo					etland hydrology must be present,
-	Matrix (S6)		Red Parent M					nless disturbed or problematic.
	Layer (if observed):							· ·
Type: ro	ck							
Depth (in			<u> </u>				Hydric Soi	I Present? Yes No
Remarks:							11	



Photo 1 Wetland data point WRAA404f\_w facing east



Photo 2
Wetland data point WRAA404f\_w facing south

Project/Site: Atlantic Coast Pipeline		City/C	County: Randolph County	/	Sampling Date: 3/1/2016		
Applicant/Owner: Dominion				State: WV	Sampling Point: wraa404e_w		
			on, Township, Range: No				
Landform (hillslope, terrace, etc.):		Local reli	ief (concave, convex, no	ne): microtopogra	aphy Slope (%): <sup>3</sup>		
Subregion (LRR or MLRA). N	Lat:	38.70963359	Long: -80.	11311628	Datum: WGS 1984		
Soil Map Unit Name: Gilpin-Dekalb	stony complex, mois	st, 15 to 35 percent s	lopes	NWI classific	cation: PUBHx		
Are climatic / hydrologic conditions of	on the site typical for	r this time of year? Y	′es No	(If no, explain in F	Remarks.)		
Are Vegetation, Soil,	or Hydrology	significantly distur	bed? Are "Norma	I Circumstances"	present? Yes No		
Are Vegetation, Soil,							
SUMMARY OF FINDINGS -							
Hydrophytic Vegetation Present?	Yes 🗸	No					
Hydric Soil Present?		No	Is the Sampled Area	V V	No		
Wetland Hydrology Present?		No	within a Wetland?	res	NO		
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one	e is required; check	all that apply)		Surface Soil Cracks (B6)			
✓ Surface Water (A1)	<u> </u>	True Aquatic Plants (	B14)		getated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Pa			
✓ Saturation (A3)	(	Oxidized Rhizosphere	es on Living Roots (C3)	Moss Trim L	ines (B16)		
Water Marks (B1)	!	Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	!	Recent Iron Reductio	n in Tilled Soils (C6)	Crayfish Bu	rrows (C8)		
Drift Deposits (B3)		Thin Muck Surface (C			isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer	marks)		Stressed Plants (D1)		
Iron Deposits (B5)	( <del>-</del> -)			Geomorphic Position (D2)			
Inundation Visible on Aerial Im	agery (B7)			Shallow Aquitard (D3)			
Water-Stained Leaves (B9)				<ul><li>Microtopographic Relief (D4)</li><li>FAC-Neutral Test (D5)</li></ul>			
Aquatic Fauna (B13)			1	FAC-Neutra	Trest (D5)		
Field Observations: Surface Water Present? Yes	s V No	Depth (inches):	1				
		Depth (inches):					
	s / No		0 Wetland I	Hydrology Prese	nt? Yes 🗸 No		
(includes capillary fringe)					NC 103 NO		
Describe Recorded Data (stream g	auge, monitoring w	ell, aerial photos, pre	evious inspections), if ava	ilable:			
Remarks:							
Remarks.							

/EGETATION (Four Strata) – Use scier	ntific names of pla	nts.	Sampling Point: wraa404e_w
		minant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	<u>% Cover</u> Sp	ecies? 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			Percent of Dominant Species
5			That Are OBL, FACW, or FAC: 100 (A/B)
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
	=10	tal Cover	OBL species 40 x 1 = 40
50% of total cove	r: 0 20% of tota	cover:	27 54
Sapling/Shrub Stratum (Plot size:	)		
1			FAC species
2			FACU species
3			UPL species x 5 =
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =1.4
6			
7			Hydrophytic Vegetation Indicators:
8.			1 - Rapid Test for Hydrophytic Vegetation
9.			2 - Dominance Test is >50%
		tal Cover	✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cove	r:020% of tota		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5)			data in Remarks or on a separate sheet)
1 Juncus effusus	25	Yes FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Scirpus atrovirens	25	Yes OBL	
3. Carex prasina		Yes OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
A Packera aurea		No FACW	be present, unless disturbed or problematic.
<u>-</u>		<u> </u>	Definitions of Four Vegetation Strata:
-			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6			more in diameter at breast height (DBH), regardless of
7			height.
8			Sapling/Shrub – Woody plants, excluding vines, less
9			than 3 in. DBH and greater than or equal to 3.28 ft (1
10			m) tall.
11			Herb – All herbaceous (non-woody) plants, regardless
		tal Cover	of size, and woody plants less than 3.28 ft tall.
50% of total cove	r:33.5 20% of tota	l cover: 13.4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:30	_)		height.
1			
2			
3			
4			Hydrophytic
5			Vegetation
	0 = To	tal Cover	Present? Yes No
50% of total cove	r:0 20% of tota	l cover:0	
Remarks: (Include photo numbers here or on a se	eparate sheet.)		

Sampling Point: wraa404e\_w

Depth	Matrix			x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 2/1	100					SIL	
3-10	10YR 4/1	90	10YR 5/6	10	С	PL/M	SICL	
10-18	10YR 4/1	88	10YR 5/8	12	С	PL/M	SIC	-
						· ——		
1T C. C			L Dadwaad Matrix MC		CI C	-:	21 tion . D	N. Dave Linia v. M. Matrix
Hydric Soil		pletion, Riv	I=Reduced Matrix, MS	5=IVIasked	Sand Gr	ains.		L=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :
-			Dorle Curtoso	(07)				
Histosol	pipedon (A2)		Dark Surface Polyvalue Be	. ,	o (S9) <b>(N</b>	NI DA 147		2 cm Muck (A10) <b>(MLRA 147)</b> Coast Prairie Redox (A16)
	listic (A3)		Polyvalue Be				1 <del>7</del> 0) (	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			147, 140)	P	Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Ma		_,		<u> </u>	(MLRA 136, 147)
	uck (A10) <b>(LRR N)</b>		Redox Dark	, ,	6)		V	/ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	ce (A11)	Depleted Dar	•				Other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depre	ssions (F8	)			
Sandy N	Mucky Mineral (S1) (	LRR N,	Iron-Mangan	ese Masse	s (F12) <b>(</b>	LRR N,		
	A 147, 148)		MLRA 13	•				
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	d Matrix (S6)		Red Parent N	Material (F2	(1) <b>(MLR</b>	A 127, 147	') un	less disturbed or problematic.
Restrictive	Layer (if observed)	):						
Type: sil								
Depth (in	iches): 10						Hydric Soil	Present? Yes No
Remarks:								



Photo 1 Wetland data point WRAA404e\_w facing southeast



**Photo 2**Wetland data point WRAA404e\_w facing southwest

Project/Site: Atlantic Coast Pip	peline	City/C	county: Randolph County		Sampling Date: 3/1/2016
Applicant/Owner: Dominion					Sampling Point: wraa404_u
Investigator(s): GB, AS, CG		Section	on, Township, Range: No PL		
Landform (hillslope, terrace, et					
Subregion (LRR or MLRA): $\frac{N}{N}$ Soil Map Unit Name: $\frac{N}{N}$	ເ an and Frnest stony s	oils 15 to 35 percent slor	Long	NA// 1 '6'	None
Are climatic / hydrologic condit		-			
Are Vegetation, Soil	, or Hydrology _	significantly distur	bed? Are "Normal Ci	rcumstances" pi	resent? Yes No
Are Vegetation, Soil	, or Hydrology _	naturally problema	atic? (If needed, exp	lain any answer	s in Remarks.)
SUMMARY OF FINDIN	GS – Attach site	map showing sam	pling point locations	s, transects,	important features, etc.
Lludraphytic Variation Dres	ont? Voc	No. 4			
Hydrophytic Vegetation President Hydric Soil Present?		No <b>✓</b> No_ <b>✓</b>	Is the Sampled Area		
Wetland Hydrology Present?	Yes	No	within a Wetland?	Yes	_ No
Remarks:					
Upland data point taken on a				o aata point aig.	
HYDROLOGY					
Wetland Hydrology Indicate	ors:		<u>Se</u>	econdary Indicat	ors (minimum of two required)
Primary Indicators (minimum	of one is required; ch	neck all that apply)		_ Surface Soil (	Cracks (B6)
Surface Water (A1)	_	True Aquatic Plants (	B14)	_ Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2)	_	Hydrogen Sulfide Od		_ Drainage Patt	terns (B10)
Saturation (A3)	_		es on Living Roots (C3)	_ Moss Trim Lir	
Water Marks (B1)		Presence of Reduced		-	Vater Table (C2)
Sediment Deposits (B2)	-	Recent Iron Reductio		_ Crayfish Burro	
Drift Deposits (B3)	-	Thin Muck Surface (C			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	-	Other (Explain in Rer	narks)		ressed Plants (D1)
Iron Deposits (B5)	rial Imagary (P7)		_	<ul><li>Geomorphic I</li><li>Shallow Aquit</li></ul>	
Inundation Visible on Ae Water-Stained Leaves (E			_	_	ohic Relief (D4)
Aquatic Fauna (B13)	<i>)</i>		_	_ Microtopograp _ FAC-Neutral <sup>-</sup>	` '
Field Observations:				_ 17.0 1404141	1001 (100)
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?		Depth (inches):			
Saturation Present?		Depth (inches):		Irology Present	i? Yes No✓
(includes capillary fringe)	·				103 110
Describe Recorded Data (str	eam gauge, monitorin	ng well, aerial photos, pre	vious inspections), if availab	ole:	
Remarks:					
no hydrology indicators prese	nt				

Samo	lina	Point:	wraa404_u

00	Absolute	Dominant I		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Acer saccharum	15	Yes	FACU	That Are OBL, FACW, or FAC:0 (A)
2. Fagus grandifolia	15	Yes	FACU	Total Number of Dominant
3. Liriodendron tulipifera	15	Yes	FACU	Species Across All Strata: 8 (B)
4. Betula alleghaniensis	10	No	FAC	
5. Betula lenta	10	No	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
6 Tilia americana	5	No	FACU	That Are OBL, FACW, OF FAC.
7				Prevalence Index worksheet:
1	70	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 35		total cover:_	er 14	OBL species $0 \times 1 = 0$
15	20 /6 01	iolai covei		FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 13 )  1 Acer pensylvanicum	15	Yes	FACU	FAC species 16 x 3 = 48
••	15	Yes	FACU	FACU species 109 x 4 = 436
2. Betula lenta	12			0 40
3. Fagus grandifolia	12	Yes	FACU	UPL species
4				Column Totals: (A) (B)
5				Prevalence Index = B/A = 3.93
6				1 Tevalence mack = B/TC =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
<u></u>	42	= Total Cove		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 21		total cover:	8.4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5)				data in Remarks or on a separate sheet)
1 Dryopteris carthusiana	4	No	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Carex blanda	2	No	FAC	
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree Woody plants evaluding vines 2 in (7.6 cm) or
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				Senting/Shrub Weeds plants evaluding since less
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Hart Allbart and Archael Archael and Archael and Archael Archa
	6	= Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 16.5		total cover:	6.6	of size, and weekly plante less than size it tail.
Woody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in
1 Smilax pumila	8	Yes	UPL	height.
2 Rubus allegheniensis	7	Yes	FACU	
<u></u>				
3				
4				Hydrophytic
5				Vegetation
	15	= Total Cove		Present? Yes No
50% of total cover: 7.5	20% of	total cover:_	3	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wraa404\_u

Profile Desc	cription: (Describe t	o the depth	needed to document the indicator or co	nfirm the al	bsence of indicators.)
Depth	Matrix		Redox Features		
(inches) 0-3	Color (moist) 10YR 3/3	<u>%</u> 100	Color (moist) % Type <sup>1</sup> Lo		kture Remarks SIL
3-8	10YR 4/6	100			ICL
8-12	10YR 5/8	100		S	ICL rock at 12"
¹Type: C=C	oncentration D=Depl	etion RM=R	Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> l oca	ntion: PL=Pore Lining, M=Matrix.
Hydric Soil		ouon, ruvi–r	Reduced Matrix, Me-Macrea Sarra Grains.	2000	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface (S7)		2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Below Surface (S8) (MLRA	147, 148)	Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Surface (S9) (MLRA 147, 1		(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)
	ıck (A10) (LRR N)		Redox Dark Surface (F6)		Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)		Other (Explain in Remarks)
	ark Surface (A12) ⁄lucky Mineral (S1) <b>(L</b>	DD N	Redox Depressions (F8)	NI .	
	A 147, 148)	KK N,	Iron-Manganese Masses (F12) (LRR I MLRA 136)	IN,	
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 12)	2)	<sup>3</sup> Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floodplain Soils (F19) (MLR		wetland hydrology must be present,
-	Matrix (S6)		Red Parent Material (F21) (MLRA 127		unless disturbed or problematic.
	Layer (if observed):			<u>. , , , , , , , , , , , , , , , , , , ,</u>	'
Type: no					
	ches):		<del>-</del>	Hyd	ric Soil Present? Yes No
Remarks:				•	



**Photo 1**Upland data point WRAA404\_u facing east



Photo 2 Upland data point WRAA404\_u facing south

Project/Site: Atlantic Coast Pipeline	City/County: Randolph County	Sampling Date: 6/13/2016				
Applicant/Owner: Dominion		State: WV Sampling Point: wrae250e_w				
Investigator(s): CG, SA, KO	Section, Township, Range: No Pl					
	Local relief (concave, convex, none)					
Subregion (LRR or MLRA): N	at: 38.70928797 Long: -80.116	Datum: WGS 1984				
Soil Map Unit Name: Buchanan and Ernest stony s	oils, 15 to 35 percent slopes	NWI classification: PEM				
Are climatic / hydrologic conditions on the site typic	al for this time of year? Yes No (If	no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology _	significantly disturbed? Are "Normal Ci	rcumstances" present? Yes No				
	naturally problematic? (If needed, exp					
	map showing sampling point location					
Hydrophytic Vegetation Present? Yes	/ No					
Hydric Soil Present? Yes	Is the Sampled Area	Yes No				
	within a Wetland?	res No				
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:	S	econdary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; c		_ Surface Soil Cracks (B6)				
✓ Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)		Drainage Patterns (B10)				
Saturation (A3)		_ Moss Trim Lines (B16)				
Water Marks (B1)	Presence of Reduced Iron (C4)	_ Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)				
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)	<u> </u>	_ Geomorphic Position (D2)				
Inundation Visible on Aerial Imagery (B7)	_	Shallow Aquitard (D3)				
Water-Stained Leaves (B9)	_	Microtopographic Relief (D4)				
Aquatic Fauna (B13)	<u></u>	FAC-Neutral Test (D5)				
Field Observations:	4					
	Depth (inches):1					
	Depth (inches):	.,				
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):	Irology Present? Yes No				
	ng well, aerial photos, previous inspections), if availal	ble:				
Remarks:						

Sampling	Point: wrae250e_	W
Sambilliu	PUIII. """"-	

00	Absolute	Dominant I		Dominance Test worksheet:
Tree Stratum (Plot size: 30 )	% Cover	Species?	Status	Number of Dominant Species
1. none				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 OBL, FACW, or FAC:  100 (A/B)
6				mat Ald ODE, I AOW, OI I AO.
7.				Prevalence Index worksheet:
	0	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 0		total cover:_	^	OBL species40 x 1 =40
Sapling/Shrub Stratum (Plot size: 15 )	2070 01			FACW species 40 x 2 = 80
1 none	0			FAC species15
				FACU species 0 x 4 = 0
2				UPL species $0 \times 5 = 0$
3				05 165
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =1.73
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9		· ·		
	0	= Total Cove		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:		total cover:_	0	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5		_		data in Remarks or on a separate sheet)
1 Carex lurida	25	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Ranunculus acris	15	Yes	FAC	
3. Impatiens capensis	10	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Carex vulpinoidea	10	Yes	OBL	be present, unless disturbed or problematic.
Juncus effusus	10	Yes	FACW	Definitions of Four Vegetation Strata:
J	10		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Carex scoparia		Yes		more in diameter at breast height (DBH), regardless of
7. Poa palustris	5	No No	FACW	height.
8. Eupatorium perfoliatum	5	No	FACW	Sapling/Shrub – Woody plants, excluding vines, less
9 <sub>.</sub> Glyceria striata	5	No	OBL	than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	95	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 47.5	20% of	total cover:_	19	Was designed Allows during a section than 0.00 ft in
Woody Vine Stratum (Plot size:)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1. none	0			nogna
2				
3				
4				Hydrophytic
5				Vegetation Present? Yes No
50% of total cover: 0		= Total Cove	r O	resent: resNo
30 % of total cover		total cover:_		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wrae250e\_w

Profile Desc	cription: (Describe to	the depth	needed to docur	nent the inc	dicator	or confirm	the ab	sence of indicators.)	
Depth	Matrix			x Features					
(inches) 0-18	Color (moist) 10YR 3/2	% 85 1	Color (moist) 0YR 3/6	<u>%</u> 15	Type <sup>1</sup> C	Loc <sup>2</sup>		ture Remarks IC	
		<del></del> -							
					-				
			<del>-</del>			-			_
								<del></del> ' -	
1 <sub>T</sub> 0. 0		tion DM D	a de cara de Martinia. NAC	- Maalaad C	\ \		21	tions DI Dona Lining M Matrix	
Hydric Soil	oncentration, D=Deple	etion, RM=R	educed Matrix, Mi	S=Masked S	sand Gra	iins.	Locat	tion: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils	3.
-			Davis Courters	(07)				•	• .
Histosol	oipedon (A2)		Dark Surface Polyvalue Be	. ,	(S9) <b>(M</b>	I D A 147	1/10\	2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16)	
	istic (A3)		Thin Dark Su				140)	(MLRA 147, 148)	
	en Sulfide (A4)		Loamy Gleye			47, 140)		Piedmont Floodplain Soils (F19)	
	d Layers (A5)		Depleted Ma	,	-/			(MLRA 136, 147)	
	uck (A10) (LRR N)		Redox Dark		)			Very Shallow Dark Surface (TF12)	
	d Below Dark Surface	(A11)	Depleted Dai					Other (Explain in Remarks)	
	ark Surface (A12)		Redox Depre	ssions (F8)					
	Mucky Mineral (S1) (LF	RR N,	Iron-Mangan	ese Masses	(F12) <b>(I</b>	_RR N,			
	A 147, 148)		MLRA 13	•					
	Sleyed Matrix (S4)		Umbric Surfa					<sup>3</sup> Indicators of hydrophytic vegetation ar	ıd
-	Redox (S5)		Piedmont Flo					wetland hydrology must be present,	
	Matrix (S6)		Red Parent N	faterial (F2	1) <b>(ML</b> R	A 127, 147	<u>')</u>	unless disturbed or problematic.	
	Layer (if observed):								
Type:								.,	
Depth (in	ches):		_				Hydr	ric Soil Present? Yes No	
Remarks:									



Wetland data point wrae250e\_w facing west



Wetland data point wrae250e\_w facing east

Project/Site: Atlantic Coast Pipeline			City/County: Ran	Sampling Date: 6/13/2016			
Applicant/Owner: Dominion				State: WV	Sampling Point: wrae250_u		
Landform (hillslope, terrace, etc.): hillsl							
Subregion (LRR or MLRA): N							
Soil Map Unit Name: Buchanan and Er	nest stony soils,	15 to 35 perce	ent slopes		NWI classific	ation: UPLAND	
Are climatic / hydrologic conditions on the							
Are Vegetation, Soil, or							
Are Vegetation, Soil, or							
SUMMARY OF FINDINGS – A							
						, , , , , , , , , , , , , , , , , , ,	
Hydrio Soil Propert?	Yes	No		npled Area			
Hydric Soil Present? Wetland Hydrology Present?	Yes	No V	within a W	/etland?	Yes	No	
Remarks:	163	_ 110	-				
HYDROLOGY							
Wetland Hydrology Indicators:					Secondary Indica	tors (minimum of two required)	
Primary Indicators (minimum of one is	required: check	( all that apply)	)		Surface Soil		
Surface Water (A1)		True Aquatic F		Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)			fide Odor (C1)	•	Drainage Patterns (B10)		
Saturation (A3)			ospheres on Living	Roots (C3)			
Water Marks (B1)		Presence of R	Reduced Iron (C4)		Dry-Season Water Table (C2)		
Sediment Deposits (B2)		Recent Iron R	eduction in Tilled S	oils (C6)			
Drift Deposits (B3)		Thin Muck Sui				sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		Other (Explain	n in Remarks)	•		tressed Plants (D1)	
Iron Deposits (B5)	(DZ)				Geomorphic		
Inundation Visible on Aerial Image	ery (B7)			<ul><li>Shallow Aquitard (D3)</li><li>Microtopographic Relief (D4)</li></ul>			
Water-Stained Leaves (B9) Aquatic Fauna (B13)				•	Microtopogra		
Field Observations:					TAO Neutral	1031 (00)	
	No	Depth (inches	s):				
	No V						
	No V			Wetland H	vdrology Presen	nt? Yes No	
(includes capillary fringe)							
Describe Recorded Data (stream gauge	ge, monitoring w	/eii, aeriai pnot	tos, previous insped	ctions), if avail	iable:		
Remarks:							

		Absolute	Dominant In		Dominance Test worksheet:	
ree Stratum (Plot size:	30)	% Cover 0	Species?	Status	Number of Dominant Species	•
none					That Are OBL, FACW, or FAC:	0 (A)
					Total Number of Dominant	
					Species Across All Strata:	0 (B)
					Demonst of Deminent Consiss	
					Percent of Dominant Species That Are OBL, FACW, or FAC:	0 (A
					Prevalence Index worksheet:	
		0	= Total Cove		Total % Cover of:	Multiply by:
	50% of total cover:		total cover:	0	OBL species x ^	l =
apling/Shrub Stratum (Plot siz	15		_		FACW species x 2	2 =
none (* 101 012		0			FAC species x 3	
·					FACU species x 4	
					UPL species x 5	· · · · · · · · · · · · · · · · · · ·
					Column Totals: (A)	
•					Column Totals (A)	(
					Prevalence Index = B/A =	
•					Hydrophytic Vegetation Indicat	ors:
•					1 - Rapid Test for Hydrophyti	
					2 - Dominance Test is >50%	=
					3 - Prevalence Index is ≤3.0 <sup>1</sup>	
			= Total Cove	_	4 - Morphological Adaptation	
	50% of total cover:	0 20% of	total cover:	0	data in Remarks or on a s	
lerb Stratum (Plot size:	)					•
<u>none</u>		0			Problematic Hydrophytic Veg	jetation (Explain)
. <u> </u>					4	
					<sup>1</sup> Indicators of hydric soil and wetle be present, unless disturbed or p	
l						
					Definitions of Four Vegetation	Strata:
-					Tree - Woody plants, excluding v	
i.					more in diameter at breast height	(DBH), regardless
-					height.	
					Sapling/Shrub – Woody plants,	
l					than 3 in. DBH and greater than o	or equal to 3.28 ft (
0					m) tall.	
1					Herb - All herbaceous (non-wood	
			= Total Cove		of size, and woody plants less that	an 3.28 ft tall.
	50% of total cover:	0 20% of	total cover:_	0	Woody vine – All woody vines gr	reater than 3.28 ft ir
Voody Vine Stratum (Plot size:	30 )				height.	
none		0				
J						
l					Hydrophytic	
j.				_ <del>_</del>	Hydrophytic Vegetation	
		0 :	= Total Cove	<u> </u>	Present? Yes	No
	50% of total cover:		total cover:_	_		
Remarks: (Include photo numb		<u> </u>	<u>-</u>			
veg, gravel road	ers here or on a separa	ite sneet.)				

Sampling Point: wrae250\_u

Profile Desc	ription: (Describe to the	e depth needed to docum	ent the indicator or confirm	n the abse	ence of indicators.)
Depth	Matrix	Redox	Features		
(inches)	Color (moist) %		% Type <sup>1</sup> Loc <sup>2</sup>	Textur	e Remarks
				-	
				-	
				-	<u> </u>
	· · · · · · · · · · · · · · · · · · ·				
				-	
<sup>1</sup> Type: C=Co	oncentration, D=Depletion	, RM=Reduced Matrix, MS:	Masked Sand Grains.	<sup>2</sup> Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil I					ndicators for Problematic Hydric Soils <sup>3</sup> :
Histosol		Dark Surface	<b>97</b> )		2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		ow Surface (S8) (MLRA 147,	, 140) _	Coast Prairie Redox (A16)
Black Hi	` '		ace (S9) (MLRA 147, 148)		(MLRA 147, 148)
	n Sulfide (A4)	Loamy Gleyed	* *	_	Piedmont Floodplain Soils (F19)
Stratified	I Layers (A5)	Depleted Matr			(MLRA 136, 147)
2 cm Mu	ck (A10) (LRR N)	Redox Dark S	urface (F6)	_	Very Shallow Dark Surface (TF12)
Depleted	Below Dark Surface (A1	1) Depleted Dark	Surface (F7)	_	Other (Explain in Remarks)
Thick Da	ark Surface (A12)	Redox Depres			
	lucky Mineral (S1) (LRR N		se Masses (F12) (LRR N,		
	147, 148)	MLRA 136			
	leyed Matrix (S4)		e (F13) <b>(MLRA 136, 122)</b>		<sup>3</sup> Indicators of hydrophytic vegetation and
				40\	
-	edox (S5)		dplain Soils (F19) (MLRA 14		wetland hydrology must be present,
	Matrix (S6)	Red Parent Ma	aterial (F21) <b>(MLRA 127, 14</b> 7	/)	unless disturbed or problematic.
Restrictive I	ayer (if observed):				
Type:					
Depth (inc	ches):			Hydric	Soil Present? Yes No
				1,	
Remarks:					
no soil profile	due to compacted gravel	road.			



Upland data point wrae250\_u facing west



Upland data point wrae250\_u facing east

Project/Site: Atlantic Coast Pipe	ine	City/C	county: Randolph County	Sampling Date: 3/1/2016			
Applicant/Owner: Dominion					Sampling Point: wraa404f_w		
		Section, Township, Range: No PLSS in this area					
Landform (hillslope, terrace, etc.)		Local rel	ief (concave, convex, nor	ne): concave	Slope (%): 9		
Subregion (LRR or MLRA): N		Lat: 38.71013353	Long: -80.	11282706	Datum: WGS 1984		
Soil Map Unit Name: Buchanan	and Ernest stony	soils, 15 to 35 percent slop	oes	NWI classific	ation: None		
Are climatic / hydrologic condition	ns on the site typic	cal for this time of year? Y	res No	(If no, explain in R	emarks.)		
Are Vegetation, Soil							
Are Vegetation, Soil							
-					, important features, etc.		
		_	<b>3</b> p		, <b>,</b>		
Hydrophytic Vegetation Presen	t? Yes	<ul><li>✓ No</li><li>✓ No</li></ul>	Is the Sampled Area				
Hydric Soil Present? Wetland Hydrology Present?		✓ No No	within a Wetland?	Yes	No		
Remarks:	163	110					
within wetland							
HYDROLOGY							
Wetland Hydrology Indicators	s:			Secondary Indica	tors (minimum of two required)		
Primary Indicators (minimum of	one is required; o	heck all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)		True Aquatic Plants (	B14)	Sparsely Veg	etated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Pat			
Saturation (A3)		Oxidized Rhizospher	-	Moss Trim Li			
Water Marks (B1)		Presence of Reduced			Vater Table (C2)		
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burr			
Drift Deposits (B3)		Thin Muck Surface (C			sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)	Geomorphic	ressed Plants (D1)		
Iron Deposits (B5) Inundation Visible on Aeria	I Imagery (B7)						
Water-Stained Leaves (B9				Shallow Aquitard (D3) Microtopographic Relief (D4)			
Aquatic Fauna (B13)	,			FAC-Neutral Test (D5)			
Field Observations:					( – . )		
	Yes V No	Depth (inches):	1				
		Depth (inches):					
			^	lydrology Presen	t? Yes 🗸 No		
(includes capillary fringe)							
Describe Recorded Data (strea	m gauge, monitor	ing well, aerial photos, pre	vious inspections), if ava	iilable:			
Remarks:							
Nomano.							

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

/EGETATION (Four Strata) – Use scientific na	ames of	plants.		Sampling Point: wraa404f_w
	Absolute	Dominant Ir	ndicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)  1. Betula alleghaniensis	% Cover 10		Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC:8 (A)
2. Liriodendron tulipifera	10	Yes	FACU	That Are OBE, I ACW, OF I AC (A)
3. Acer rubrum		Yes	FAC	Total Number of Dominant
4.				Species Across All Strata:9 (B)
5.				Percent of Dominant Species That Are OBL, FACW, or FAC:  88.88888888 (A/B)
6				That Are OBL, FACW, or FAC:
7				Prevalence Index worksheet:
	25	= Total Cover		Total % Cover of: Multiply by:
50% of total cover:12.5		total cover:	5	OBL species 20 x 1 = 20
Sapling/Shrub Stratum (Plot size: 15 )	2070 01	total cover		FACW species10
1. Sambucus nigra	25	Yes	FAC	FAC species 68 x 3 = 204
2. Betula alleghaniensis	8	Yes	FAC	FACU species17 x 4 =68
3. Betula lenta	3	No	FACU	UPL species $0 \times 5 = 0$
		No	FACU	Column Totals: 115 (A) 312 (B)
4. Liriodendron tulipifera				Column Totals (A) (B)
5. Fagus grandifolia		No	FACU	Prevalence Index = B/A =2.71
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	40	= Total Cover	r	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 20	20% of	total cover:_	8	
Herb Stratum (Plot size:)				data in Remarks or on a separate sheet)
1. Carex prasina	20	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Dichanthelium clandestinum	10	Yes	FAC	
3. Solidago gigantea	10	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Symphyotrichum dumosum	10	Yes	FAC	
5.				Definitions of Four Vegetation Strata:
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of
0		·		height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9		<u> </u>		than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11		·		Herb – All herbaceous (non-woody) plants, regardless
50% of total cover 25		= Total Cover		of size, and woody plants less than 3.28 ft tall.
0070 01 total 00701.	20% of	total cover:	10	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1		. <del></del>		
2				
3				
4				Hydrophytic
5				Vegetation
	0	= Total Cover	r	Present? Yes No
50% of total cover:0	20% of	total cover:_	0	
Remarks: (Include photo numbers here or on a separate sl	neet.)			
·	,			

Sampling Point: wraa404f\_w

Profile Desc	ription: (Describe t	o the dep	th needed to docum	ent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix			Features	3			
(inches) 0-2	Color (moist) 10YR 3/2	100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SIL	Remarks
2-5	10YR 3/1	100				·	SIL	
6-9	10YR 4/1	92	10YR 5/6	8	С	PL/M	SICL	rock at 9"
					-			
								·
						·		
1Typo: C-C	oncontration D-Donle	otion PM	=Reduced Matrix, MS		Sand Gr		<sup>2</sup> Location: F	PL=Pore Lining, M=Matrix.
Hydric Soil		ellon, Rivi	=Reduced Matrix, MS	=iviaskeu	Sand Gr	airis.		rators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(97)				2 cm Muck (A10) <b>(MLRA 147)</b>
	oipedon (A2)		Polyvalue Bel	. ,	ce (S8) <b>(N</b>	/II RΔ 147		Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Sur				140) (	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed			147, 140)	F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Mati	,	· <del>-</del> )		'	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S		6)		\	/ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dark					Other (Explain in Remarks)
	ark Surface (A12)	,	Redox Depres				<u> </u>	, ,
	Mucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangane			LRR N,		
	A 147, 148)	,	MLRA 136		` , '	,		
	Gleyed Matrix (S4)		Umbric Surfac		MLRA 13	6, 122)	<sup>3</sup> Inc	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floo					etland hydrology must be present,
-	Matrix (S6)		Red Parent M					nless disturbed or problematic.
	Layer (if observed):							· ·
Type: ro	ck							
Depth (in			<u> </u>				Hydric Soi	I Present? Yes No
Remarks:								



Photo 1 Wetland data point WRAA404f\_w facing east



Photo 2
Wetland data point WRAA404f\_w facing south

Project/Site: Atlantic Coast Pipeline		City/C	county: Randolph County	y	Sampling Date: 3/1/2016
Applicant/Owner: Dominion				State: WV	Sampling Point: wraa404e_w
			on, Township, Range: No		
Landform (hillslope, terrace, etc.): st		Local reli	ief (concave, convex, no	ne): microtopogra	aphy Slope (%): <sup>3</sup>
Subregion (LRR or MLRA). N	Lat:	38.70963359	Long: -80.	11311628	Datum: WGS 1984
Soil Map Unit Name: Gilpin-Dekalb	stony complex, moi	st, 15 to 35 percent s	lopes	NWI classific	cation: PUBHx
Are climatic / hydrologic conditions o	n the site typical for	r this time of year? Y	res No	(If no, explain in F	Remarks.)
Are Vegetation, Soil,	or Hydrology	significantly distur	bed? Are "Norma	l Circumstances"	present? Yes No
Are Vegetation, Soil,					
SUMMARY OF FINDINGS -					
Hydrophytic Vegetation Present?	Yes 🗸	No			
Hydric Soil Present?		No	Is the Sampled Area within a Wetland?	Vac V	No
Wetland Hydrology Present?		No	within a wetiand?	res	NO
Remarks:					
HYDROLOGY	_				
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one	e is required; check	all that apply)		Surface Soil	Cracks (B6)
✓ Surface Water (A1)	<u> </u>	True Aquatic Plants (	B14)		getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Pa	
✓ Saturation (A3)		Oxidized Rhizosphere	es on Living Roots (C3)	Moss Trim L	ines (B16)
Water Marks (B1)	1	Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)	!	Recent Iron Reductio	n in Tilled Soils (C6)	Crayfish Bu	rrows (C8)
Drift Deposits (B3)		Thin Muck Surface (C			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	'	Other (Explain in Rer	narks)		Stressed Plants (D1)
Iron Deposits (B5)	(57)			<del></del> ·	Position (D2)
Inundation Visible on Aerial Im-	agery (B7)			Shallow Aqu	
Water-Stained Leaves (B9) Aquatic Fauna (B13)				✓ FAC-Neutra	aphic Relief (D4)
Field Observations:				T AC-Neulla	r rest (D3)
	, V No	Depth (inches):	1		
		Depth (inches):			
	No		0 Wetland h	Hydrology Prese	nt? Yes V No
(includes capillary fringe)					
Describe Recorded Data (stream g	auge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ailable:	
Remarks:					

/EGETATION (Four Strata) – Use scientific n	Sampling Point: wraa404e_w			
	Absolute	Dominant I		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?	Status	Number of Dominant Species That Are OBL FACW or FAC: 3
1				That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Dominant
3				Species Across All Strata:3 (B)
4				Percent of Dominant Species
5		·		That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7	0			Total % Cover of: Multiply by:
		= Total Cove	_	OBL species 40 x 1 = 40
50% of total cover: 0	20% of	total cover:_		27 54
Sapling/Shrub Stratum (Plot size:)				
1				FAC species $\frac{0}{0}$ $\times 3 = \frac{0}{0}$
2				FACU species
3	-			UPL species
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =1.4
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	0	= Total Cove	r	
50% of total cover:0	20% of	total cover:_	0	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:)				data in Remarks or on a separate sheet)
1. Juncus effusus	25	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Scirpus atrovirens	25	Yes	OBL	
3. Carex prasina	15	Yes	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Packera aurea	2	No	FACW	
5				Definitions of Four Vegetation Strata:
6				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
				neight.
8 9.				Sapling/Shrub – Woody plants, excluding vines, less
		·		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				m) tall.
11	67			Herb – All herbaceous (non-woody) plants, regardless
50% of total cover:33.5		= Total Cove total cover:_		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:	20 / 01	total cover		Woody vine - All woody vines greater than 3.28 ft in
· · · · · · · · · · · · · · · · · · ·				height.
1				
2				
3				
4				Hydrophytic
5				Vegetation Present? Yes ✓ No
0		= Total Cove		Present? Yes No
50% of total cover:0	20% of	total cover:_	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wraa404e\_w

Depth	Matrix			x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 2/1	100					SIL	
3-10	10YR 4/1	90	10YR 5/6	10	С	PL/M	SICL	
10-18	10YR 4/1	88	10YR 5/8	12	С	PL/M	SIC	-
								<del></del>
								-
						· ——		
	-							
								-
1 <sub>Tymov</sub> C C	anaontration D. Dan	olotion DM	Doduced Metrix MC	Maakad			<sup>2</sup> l continue D	N. Doro Lining M. Motriy
Hydric Soil		pietion, Riv	I=Reduced Matrix, MS	s=IVIasked	Sand Gr	ains.		L=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :
-			Dorle Curtons	(07)				
Histosol	pipedon (A2)		Dark Surface Polyvalue Be	. ,	o (S9) <b>(N</b>	NI DA 147		2 cm Muck (A10) <b>(MLRA 147)</b> Coast Prairie Redox (A16)
	pipedon (A2) istic (A3)		Polyvalue Be				. <del></del> 0) C	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			, 1 <del>-0</del> )	P	Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Mat		<del>-</del> ,		— '	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S	. ,	6)		V	/ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Dar	•				Other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depre	ssions (F8	)			
Sandy N	Mucky Mineral (S1) (I	LRR N,	Iron-Mangane	ese Masse	s (F12) <b>(</b>	LRR N,		
	A 147, 148)		MLRA 130	-				
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent M	faterial (F2	(1) <b>(MLR</b>	A 127, 147	') un	less disturbed or problematic.
Restrictive	Layer (if observed)	:						
Type: sil								
Depth (in	ches): <u>10</u>						Hydric Soil	Present? Yes No
Remarks:								



Photo 1 Wetland data point WRAA404e\_w facing southeast



**Photo 2**Wetland data point WRAA404e\_w facing southwest

Project/Site: Atlantic Coast Pip	peline	City/C	county: Randolph County		Sampling Date: 3/1/2016
Applicant/Owner: Dominion					Sampling Point: wraa404_u
Investigator(s): GB, AS, CG		Section	on, Township, Range: No PL		
Landform (hillslope, terrace, et					
Subregion (LRR or MLRA): $\frac{N}{N}$ Soil Map Unit Name: $\frac{N}{N}$	ເ an and Frnest stony s	oils 15 to 35 percent slor	Long	NA// 1 '6'	None
Are climatic / hydrologic condit		-			
Are Vegetation, Soil	, or Hydrology _	significantly distur	bed? Are "Normal Ci	rcumstances" pi	resent? Yes No
Are Vegetation, Soil	, or Hydrology _	naturally problema	atic? (If needed, exp	lain any answer	s in Remarks.)
SUMMARY OF FINDIN	GS – Attach site	map showing sam	pling point locations	s, transects,	important features, etc.
Lludraphytic Variation Dres	ont? Voc	No. 4			
Hydrophytic Vegetation President Hydric Soil Present?		No <b>✓</b> No <b>✓</b>	Is the Sampled Area		
Wetland Hydrology Present?	Yes	No	within a Wetland?	Yes	_ No
Remarks:					
Upland data point taken on a				o aata point aig.	
HYDROLOGY					
Wetland Hydrology Indicate	ors:		<u>Se</u>	econdary Indicat	ors (minimum of two required)
Primary Indicators (minimum	of one is required; ch	neck all that apply)		_ Surface Soil (	Cracks (B6)
Surface Water (A1)	_	True Aquatic Plants (	B14)	_ Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2)	_	Hydrogen Sulfide Od		_ Drainage Patt	terns (B10)
Saturation (A3)	_		es on Living Roots (C3)	_ Moss Trim Lir	
Water Marks (B1)		Presence of Reduced		-	Vater Table (C2)
Sediment Deposits (B2)	-	Recent Iron Reductio		_ Crayfish Burro	
Drift Deposits (B3)	-	Thin Muck Surface (C			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	-	Other (Explain in Rer	narks)		ressed Plants (D1)
Iron Deposits (B5)	rial Imagary (P7)		_	<ul><li>Geomorphic I</li><li>Shallow Aquit</li></ul>	
Inundation Visible on Ae Water-Stained Leaves (E			_	_	ohic Relief (D4)
Aquatic Fauna (B13)	<i>)</i>		_	_ Microtopograp _ FAC-Neutral <sup>-</sup>	` '
Field Observations:				_ 17.0 1404141	1001 (100)
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?		Depth (inches):			
Saturation Present?		Depth (inches):		Irology Present	i? Yes No✓
(includes capillary fringe)	·				103 110
Describe Recorded Data (str	eam gauge, monitorin	ng well, aerial photos, pre	vious inspections), if availab	ole:	
Remarks:					
no hydrology indicators prese	nt				

Samo	lina	Point:	wraa404_u

00	Absolute	Dominant I		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Acer saccharum	15	Yes	FACU	That Are OBL, FACW, or FAC:0 (A)
2. Fagus grandifolia	15	Yes	FACU	Total Number of Dominant
3. Liriodendron tulipifera	15	Yes	FACU	Species Across All Strata: 8 (B)
4. Betula alleghaniensis	10	No	FAC	
5. Betula lenta	10	No	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
6 Tilia americana	5	No	FACU	That Are OBL, FACW, OF FAC.
7				Prevalence Index worksheet:
1	70	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 35		total cover:_	er 14	OBL species $0 \times 1 = 0$
15	20 /6 01	iolai covei		FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size: 13 )  1 Acer pensylvanicum	15	Yes	FACU	FAC species 16 x 3 = 48
••	15	Yes	FACU	FACU species 109 x 4 = 436
2. Betula lenta	12			0 40
3. Fagus grandifolia	12	Yes	FACU	UPL species
4				Column Totals: (A) (B)
5				Prevalence Index = B/A = 3.93
6				1 Tevalence mack = B/TC =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
<u></u>	42	= Total Cove		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 21		total cover:	8.4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5)	20 /0 0.			data in Remarks or on a separate sheet)
1 Dryopteris carthusiana	4	No	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Carex blanda	2	No	FAC	
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree Woody plants evaluding vines 2 in (7.6 cm) or
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				Senting/Shrub Weeds plants evaluding since less
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Hart Allbart and Archael Archael and Archael
	6	= Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 16.5		total cover:	6.6	of size, and weekly plante less than size it tail.
Woody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in
1 Smilax pumila	8	Yes	UPL	height.
2 Rubus allegheniensis	7	Yes	FACU	
<u></u>				
3				
4				Hydrophytic
5				Vegetation
	15	= Total Cove		Present? Yes No
50% of total cover: 7.5	20% of	total cover:_	3	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wraa404\_u

Profile Desc	cription: (Describe t	o the depth	needed to document the indicator or co	nfirm the al	bsence of indicators.)
Depth	Matrix		Redox Features		
(inches) 0-3	Color (moist) 10YR 3/3	<u>%</u> 100	Color (moist) % Type <sup>1</sup> Lo		kture Remarks SIL
3-8	10YR 4/6	100			ICL
8-12	10YR 5/8	100		S	ICL rock at 12"
¹Type: C=C	oncentration D=Depl	etion RM=R	Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> l oca	ntion: PL=Pore Lining, M=Matrix.
Hydric Soil		ouon, ruvi–r	Reduced Matrix, Me-Macrea Sarra Grains.	2000	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface (S7)		2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Below Surface (S8) (MLRA	147, 148)	Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Surface (S9) (MLRA 147, 1		(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)
	ıck (A10) (LRR N)		Redox Dark Surface (F6)		Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)		Other (Explain in Remarks)
	ark Surface (A12) ⁄lucky Mineral (S1) <b>(L</b>	DD N	Redox Depressions (F8)	NI .	
	A 147, 148)	KK N,	Iron-Manganese Masses (F12) (LRR I MLRA 136)	IN,	
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 12)	2)	<sup>3</sup> Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floodplain Soils (F19) (MLR		wetland hydrology must be present,
-	Matrix (S6)		Red Parent Material (F21) (MLRA 127		unless disturbed or problematic.
	Layer (if observed):			<u>. , , , , , , , , , , , , , , , , , , ,</u>	'
Type: no					
	ches):		<del>-</del>	Hyd	ric Soil Present? Yes No
Remarks:				•	



**Photo 1**Upland data point WRAA404\_u facing east



Photo 2 Upland data point WRAA404\_u facing south

Project/Site: Atlantic Coast Pipe	eline	City/County: Randolph County Sampling Date: 3/3/2016					
Applicant/Owner: Dominion		State: WV Sampling Point: wrae002e_w					
Investigator(s): CG, AS Section, Township, Range: No PLSS in this area							
Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none Slope (%): 20							
Subregion (LRR or MLRA): N		Lat. 38.70790048	Long80.1	11187456	Datum: WGS 1984		
Soil Map Unit Name: Gilpin-Del	kalb stony comple	x, moist, 15 to 35 percent s	lopes	NWI classific	cation: None		
Are climatic / hydrologic condition	ons on the site typ	ical for this time of year? Y	′es No (	(If no, explain in R	Remarks.)		
Are Vegetation, Soil	, or Hydrology	/ significantly distur	bed? Are "Normal	Circumstances" p	oresent? Yes No		
Are Vegetation, Soil							
					s, important features, etc.		
Hydrophytic Vegetation Prese	nt? Yes _						
Hydric Soil Present?	Yes _	V No_	Is the Sampled Area within a Wetland?	Yes V	No		
Wetland Hydrology Present?		<b>✓</b> No	within a wetland:	163			
Remarks:							
No vegetation present. See no	tes.						
HYDROLOGY							
Wetland Hydrology Indicato	rs:			Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum o	of one is required;	check all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)		True Aquatic Plants (	B14)	Sparsely Ve	getated Concave Surface (B8)		
✓ High Water Table (A2)		Hydrogen Sulfide Od	or (C1)	Drainage Pa	itterns (B10)		
✓ Saturation (A3)		Oxidized Rhizospher	es on Living Roots (C3)	Moss Trim L	ines (B16)		
Water Marks (B1)		Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)		Recent Iron Reduction	n in Tilled Soils (C6)	Crayfish Bur	rows (C8)		
Drift Deposits (B3)		Thin Muck Surface (0	C7)	Saturation V	isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer	marks)	Stunted or Stressed Plants (D1)			
Iron Deposits (B5)				Geomorphic	Position (D2)		
Inundation Visible on Aeri	al Imagery (B7)			<ul><li>Shallow Aquitard (D3)</li><li>Microtopographic Relief (D4)</li></ul>			
Water-Stained Leaves (B	9)						
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)		
Field Observations:							
Surface Water Present?		Depth (inches):	1				
Water Table Present?	Yes V No	Depth (inches):	0				
Saturation Present?		Depth (inches):	0 Wetland H	lydrology Preser	nt? Yes <u>/</u> No		
(includes capillary fringe)  Describe Recorded Data (stre	am gauge, monito	ring well, aerial photos, pre	vious inspections), if avai	ilable:			
Describe Resorted Data (Sire	am gaage, monte	ming wen, dental photos, pre	wious inspections), ii uvui	ilabio.			
Remarks:							

### ٧

	20	Absolute	Dominant In		Dominance Test worksheet:
ree Stratum (Plot size:	)	% Cover	Species? S	Status	Number of Dominant Species
					That Are OBL, FACW, or FAC:0 (A)
	_				Total Number of Dominant
					Species Across All Strata: 0 (B)
					Percent of Dominant Species
					That Are OBL, FACW, or FAC:  (A/E
					Prevalence Index worksheet:
		0	= Total Cover		Total % Cover of: Multiply by:
	50% of total cover:0	20% of	total cover:	0	OBL species0 x 1 =0
apling/Shrub Stratum (Plot size	15				FACW species x 2 =
,					FAC species $0 \times 3 = 0$
					FACU species0 x 4 =0
					UPL species0 x 5 =0
					Column Totals: 0 (A) 0 (B
					Prevalence Index = B/A =0
					Hydrophytic Vegetation Indicators:
					1 - Rapid Test for Hydrophytic Vegetation
					2 - Dominance Test is >50%
					3 - Prevalence Index is ≤3.0 <sup>1</sup>
			= Total Cover	0	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
	50% of total cover:0	20% of	total cover:	0	data in Remarks or on a separate sheet)
lerb Stratum (Plot size:	)				Problematic Hydrophytic Vegetation¹ (Explain)
					Problematic Hydrophytic vegetation (Explain)
					1
					<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
					Definitions of Four Vegetation Strata:
					Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
					more in diameter at breast height (DBH), regardless of
					height.
					Sapling/Shrub – Woody plants, excluding vines, less
					than 3 in. DBH and greater than or equal to 3.28 ft (1
0					m) tall.
1					Herb – All herbaceous (non-woody) plants, regardless
		0	= Total Cover		of size, and woody plants less than 3.28 ft tall.
	50% of total cover:0	20% of	total cover:	0	Mandy vine All woods vines greater than 2.20 ft in
Voody Vine Stratum (Plot size:	)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
		-			
					Hydrophytic
					Vegetation Present? Yes No
	50% of total cover: 0		= Total Cover	0	103NO
			total cover:		
temarks: (Include photo numbe	•	,			presence of hydrophytes at some point in the year. Veg

US Army Corps of Engineers

Sampling Point: wrae002e\_w

Profile Des	cription: (Describe t	o the de				or confirm	the absence	e of indicators.)
Depth	Matrix	0/	Redo	x Feature		. 2	<b>-</b> .	<b>D</b>
(inches) 0-12	Color (moist) 10YR 5/2	<u>%</u> 70	Color (moist) 5YR 3/4	30	Type <sup>1</sup> C	Loc <sup>2</sup> PL/M	Texture SC	Remarks
0-12	1011 5/2		51K 3/4			FL/IVI		
			· <u></u>					
			· <del></del>			· <del></del>		
								-
		-			-	· ——		
			· -			<del></del>		
			·					•
								· -
	Concentration, D=Depl	etion, RM	1=Reduced Matrix, MS	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indic	ators for Problematic Hydric Soils <sup>3</sup> :
Histoso	l (A1)		Dark Surface	(S7)			2	2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be	low Surfa	ce (S8) <b>(N</b>	/ILRA 147,		Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su				_	(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (	F2)		F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Ma					(MLRA 136, 147)
2 cm M	uck (A10) (LRR N)		Redox Dark S	Surface (F	<sup>-</sup> 6)		\	Very Shallow Dark Surface (TF12)
Deplete	ed Below Dark Surface	(A11)	Depleted Dar	rk Surface	(F7)		(	Other (Explain in Remarks)
Thick D	ark Surface (A12)		Redox Depre	essions (F	8)			
Sandy I	Mucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Mass	es (F12) <b>(</b>	LRR N,		
MLR	A 147, 148)		MLRA 13	6)				
Sandy (	Gleyed Matrix (S4)		Umbric Surfa	ce (F13) (	MLRA 13	86, 122)	<sup>3</sup> Ind	dicators of hydrophytic vegetation and
Sandy F	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	8) w	etland hydrology must be present,
Stripped	d Matrix (S6)		Red Parent N	/laterial (F	21) <b>(MLR</b>	A 127, 147	) ur	nless disturbed or problematic.
Restrictive	Layer (if observed):							
Type:								
Depth (in	nches):						Hydric Soi	I Present? Yes No
Remarks:								
Nomano.								



Photo 1 Wetland data point wrae002e\_w facing north



Photo 2
Wetland data point wrae002e\_w facing east

Project/Site: Atlantic Coast Pip	eline	City/0	County: Randolph County		Sampling Date: 3/3/2016	
Applicant/Owner: Dominion			,		Sampling Point: wrae002_u	
Investigator(s): CG, AS Section, Township, Range: No PLSS in this area						
Landform (hillslope, terrace, etc						
					Datum: WGS 1984	
Soil Map Unit Name: Gilpin-De			slopes	NNAU -1 'C'-	Datum: Datum:	
Are climatic / hydrologic condition						
Are Vegetation, Soil	, or Hydrology	significantly distur	rbed? Are "Normal	Circumstances" p	oresent? Yes No	
Are Vegetation, Soil	, or Hydrology	naturally problem	atic? (If needed, e	xplain any answe	rs in Remarks.)	
SUMMARY OF FINDING	GS – Attach si	te map showing san	npling point locatio	ns, transects	, important features, etc.	
Hydrophytic Vegetation Prese	ont? Voc	No <b>✓</b>				
Hydric Soil Present?		No 🗸	Is the Sampled Area	.,	🗸	
Wetland Hydrology Present?		No	within a Wetland?	Yes	No	
Remarks:						
HADBOLOCA						
HYDROLOGY Wetland Hydrology Indicato	ors:			Secondary Indica	ators (minimum of two required)	
Primary Indicators (minimum		check all that apply)		Surface Soil		
Surface Water (A1)	or one is required,	True Aquatic Plants (	<u> </u>		getated Concave Surface (B8)	
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Pa		
Saturation (A3)		Oxidized Rhizospher		_		
Water Marks (B1)		Presence of Reduce		oots (C3) Moss Trim Lines (B16) Dry-Season Water Table (C2)		
Sediment Deposits (B2)		Recent Iron Reduction				
Drift Deposits (B3)		Thin Muck Surface (0		-	isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		Other (Explain in Rei			tressed Plants (D1)	
Iron Deposits (B5)				Geomorphic	Position (D2)	
Inundation Visible on Aer	rial Imagery (B7)			Shallow Aqu	itard (D3)	
Water-Stained Leaves (B	39)			Microtopogra	aphic Relief (D4)	
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)	
Field Observations:						
Surface Water Present?		Depth (inches):				
Water Table Present?	Yes No _	✓ Depth (inches):				
Saturation Present? (includes capillary fringe)	Yes No _	Depth (inches):	Wetland H	ydrology Preser	nt? Yes No	
Describe Recorded Data (stre	am gauge, monito	ring well, aerial photos, pre	evious inspections), if avai	lable:		
No hydrology present.						
Remarks:						

'EGETATION (Four Strata) – Use scientific na	ames of	plants.		Sampling Point: wrae002_u
	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Acer saccharum	25	Yes	FACU	That Are OBL, FACW, or FAC:0 (A)
2. Acer pensylvanicum	10	Yes	FACU	Total Number of Dominant
3. Quercus rubra	5	No	FACU	Species Across All Strata: 4 (B)
4. Betula alleghaniensis	3	No	FAC	
5				Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
6				That Are OBL, FACW, or FAC (A/B)
7.				Prevalence Index worksheet:
	43	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 21.5		total cover:	8.6	OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15 )	2070 01	total cover.		FACW species0 x 2 =0
1 Betula lenta	40	Yes	FACU	FAC species 3 x 3 = 9
2 Fagus grandifolia	10	Yes	FACU	FACU species 90 x 4 = 360
<del></del>			1700	UPL species $0 \times 5 = 0$
3		· <del></del> -		03 360
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =3.96
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9.				1 <del></del>
	50	= Total Cove	er	3 - Prevalence Index is ≤3.0¹
50% of total cover: 25		total cover:	10	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5	_	_		data in Remarks or on a separate sheet)
1				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2				
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	0	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover:0	20% of	total cover:	0	Manada da Allamanda da Angara da Ang
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.28 ft in height.
1				noight
2				
3				
·				
4				Hydrophytic
5				Vegetation Present? Yes No
		= Total Cove	^	riesent: iesNo
50% of total cover:0		total cover:		
Remarks: (Include photo numbers here or on a separate sl	neet.)			

Sampling Point: wrae002\_u

Profile Desc	cription: (Describe to	the depth n	eeded to docum	ent the indica	tor or confirm	the ab	sence of indicators.)
Depth	Matrix			Features			
(inches) 0-13	Color (moist) 10 YR 4/3	100	Color (moist)	<u>%</u> <u>Typ</u>	e <sup>1</sup> Loc <sup>2</sup>	<u>Text</u>	
			<u> </u>				
			,				
					<del></del>		
					<del></del>		
1			<del></del> -			2.	
'Type: C=C  Hydric Soil	oncentration, D=Deple	etion, RM=Re	duced Matrix, MS:	=Masked Sand	l Grains.	<sup>2</sup> Locat	ion: PL=Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :
-			Dark Surface	(07)			·
Histosol	pipedon (A2)	=	Polyvalue Beld	' '	R) (MI RA 147.	148)	2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16)
	istic (A3)	=	Thin Dark Sur			140)	(MLRA 147, 148)
	en Sulfide (A4)	=	Loamy Gleyed		, -,		Piedmont Floodplain Soils (F19)
Stratified	d Layers (A5)	<del>-</del>	Depleted Matr	ix (F3)			(MLRA 136, 147)
	uck (A10) (LRR N)	=	Redox Dark S				Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11) _	Depleted Dark				Other (Explain in Remarks)
	ark Surface (A12) ⁄lucky Mineral (S1) <b>(Lf</b>	_ DD N	Redox Depres Iron-Mangane		2) <b>(I DD N</b>		
	A 147, 148)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	MLRA 136		2) (LIXIX I <b>4</b> ,		
	Gleyed Matrix (S4)		Umbric Surfac		A 136, 122)		<sup>3</sup> Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floo			8)	wetland hydrology must be present,
	l Matrix (S6)	_	Red Parent Ma	aterial (F21) <b>(N</b>	ILRA 127, 147	<b>'</b> )	unless disturbed or problematic.
Restrictive	Layer (if observed):						
Type:			-				,
Depth (in	ches):		-			Hydr	ic Soil Present? Yes No
Remarks:							



Photo 1
Upland data point wrae002\_u facing northwest



Photo 2
Upland data point wrae002\_u facing southwest

Project/Site: Atlantic Coast Pipe	line	City/County: Randolph County Sampling Date: 3/3/2016					
Applicant/Owner: Dominion		State: WV Sampling Point: wrae003e_w					
Investigator(s): CG, AS Section, Township, Range: No PLSS in this area							
Landform (hillslope, terrace, etc.							
Subregion (LRR or MLRA): N		Lat: 38.70722527	Long: -80.	11188926	Datum: WGS 1984		
Soil Map Unit Name: Gilpin-Dek	alb stony comple	ex, moist, 15 to 35 percent s	slopes	NWI classifi	cation: None		
Are climatic / hydrologic conditio	ns on the site typ	pical for this time of year?	∕es <b>✓</b> _ No	(If no, explain in F	Remarks.)		
Are Vegetation, Soil	, or Hydrolog	y significantly distu	rbed? Are "Norma	l Circumstances"	present? Yes No		
Are Vegetation, Soil							
					s, important features, etc.		
Hydrophytic Vegetation Preser	nt? Ves						
Hydric Soil Present?	Yes	✓ No ✓ No	Is the Sampled Area	V V	No		
Wetland Hydrology Present?		✓ No_	within a Wetland?	Yes	NO		
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicator	s:			Secondary Indic	ators (minimum of two required)		
Primary Indicators (minimum o	f one is required	; check all that apply)		Surface Soi	Cracks (B6)		
✓ Surface Water (A1)		True Aquatic Plants		Sparsely Ve	getated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Od	lor (C1)	✓ Drainage Pa	atterns (B10)		
✓ Saturation (A3)		Oxidized Rhizospher	res on Living Roots (C3)	Moss Trim L	Lines (B16)		
Water Marks (B1)		Presence of Reduce	d Iron (C4)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)		Recent Iron Reduction	on in Tilled Soils (C6)	Crayfish Bu	rrows (C8)		
Drift Deposits (B3)		Thin Muck Surface (	C7)	Saturation \	isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Re	marks)	Stunted or S	Stressed Plants (D1)		
Iron Deposits (B5)				Geomorphic	Position (D2)		
Inundation Visible on Aeria	al Imagery (B7)			Shallow Aquitard (D3)			
Water-Stained Leaves (B9	<del>)</del> )			Microtopographic Relief (D4)			
Aquatic Fauna (B13)				FAC-Neutra	l Test (D5)		
Field Observations:							
Surface Water Present?		Depth (inches):	1				
Water Table Present?	Yes No	Depth (inches):	0				
Saturation Present?	Yes V No	Depth (inches):	0 Wetland I	Hydrology Prese	nt? Yes V No No		
(includes capillary fringe)  Describe Recorded Data (streat	am gauge, monit	oring well, aerial photos, pre	 evious inspections), if ava	ailable:			
Remarks:							

EGETATION (Four St	rata) – Use scientific n	ames of	plants.		Sampling Point: wrae003e_w
T 0: : (D) : :	30 ,	Absolute	Dominant In		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:1.			Species?	Status	Number of Dominant Species That Are ORL FACW or FAC: 2 (A)
					That Are OBL, FACW, or FAC: (A)
					Total Number of Dominant
Δ					Species Across All Strata: (B)
T					Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/R)
_					That Are OBL, FACW, or FAC:(A/B)
7					Prevalence Index worksheet:
		0	= Total Cover		Total % Cover of: Multiply by:
	50% of total cover:0		total cover:	^	OBL species x 1 = 0
Sapling/Shrub Stratum (Plot	size:)				FACW species x 2 =
1					FAC species $\frac{17}{0}$ $\times 3 = \frac{51}{0}$
2					FACU species x 4 =
_					UPL species x 5 =
4					Column Totals: (A) (B)
5					Prevalence Index = B/A =2.77
_					Hydrophytic Vegetation Indicators:
7					1 - Rapid Test for Hydrophytic Vegetation
8					2 - Dominance Test is >50%
9					✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	•		= Total Cover		4 - Morphological Adaptations¹ (Provide supporting
	50% of total cover:0	20% of	total cover:_	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:	)	45			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Betula alleghaniensis		15	Yes	FAC	Flobicinatio Hydrophytic Vogotation (Explain)
2. Juncus effusus		5	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Carex blanda		2	No No	FAC	be present, unless disturbed or problematic.
4					Definitions of Four Vegetation Strata:
5					Tree Woody plants evaluding vines 3 in (7.6 cm) or
6					Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7					height.
8					Sapling/Shrub – Woody plants, excluding vines, less
9					than 3 in. DBH and greater than or equal to 3.28 ft (1
10					m) tall.
11					Herb – All herbaceous (non-woody) plants, regardless
	50% of total cover: 11		= Total Cover		of size, and woody plants less than 3.28 ft tall.
	30 /0 01 total cover	20% or	total cover:	4.4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot si	,				height.
			. ——		
			. ——		
					Hydrophytic
5			. <del></del> .		Vegetation Present? Yes ✓ No
	50% of total cover: 0		= Total Cover	r 0	Flesent: 103 no
D. John W. Shinda whata will	0070 of total 60ver.		total cover:		
Remarks: (Include photo nur Other vegetation is dormant a	mbers here or on a separate s	sheet.)			
Other vegetation is domiant a	ind unidentinable.				

Sampling Point: wrae003e\_w

Profile Desc	ription: (Describe t	o the depth	needed to docur	nent the in	dicator	or confirm	the ab	sence of indicators.)
Depth	Matrix			x Features				
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>		ture Remarks
0-12	10YR 3/2	95 1	0YR 4/6	5	С	PL	SC	CL
			_					
							-	<del></del>
	-							
<sup>1</sup> Type: C=Ce	oncentration, D=Deple	etion. RM=R	educed Matrix. MS	S=Masked :	Sand Gra	ains.	<sup>2</sup> Locat	tion: PL=Pore Lining, M=Matrix.
Hydric Soil		,	,			-		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		e (S8) <b>(N</b>	ILRA 147.	148)	Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su				-,	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			, -,		Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma		,			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark		6)			Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Da					Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
Sandy M	Mucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Masse	s (F12) <b>(</b> I	LRR N,		
	A 147, 148)		MLRA 13	6)				
Sandy G	Bleyed Matrix (S4)		Umbric Surfa	ce (F13) (N	ILRA 13	6, 122)		<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy R	Redox (S5)		Piedmont Flo	odplain So	ils (F19)	(MLRA 14	8)	wetland hydrology must be present,
Stripped	l Matrix (S6)		Red Parent N	Naterial (F2	1) <b>(MLR</b> .	A 127, 147	7)	unless disturbed or problematic.
Restrictive I	Layer (if observed):							
Type:			<u> </u>					
Depth (in	ches):						Hydr	ic Soil Present? Yes No
Remarks:							1	
	oulder underneath							



Photo 1 Wetland data point wrae003e\_w facing north



Photo 2
Wetland data point wrae003e\_w facing east

Project/Site: Atlantic Coast Pipeline	oast Pipeline City/County: Randolph County Sampling Date: 3/3/201						
Applicant/Owner: Dominion		State: WV	Sampling Point: wrae003_u				
Investigator(s): CG, AS Section, Township, Range: No PLSS in this area							
Landform (hillslope, terrace, etc.): slope							
Subregion (LRR or MLRA): N					Datum: WGS 1984		
Soil Map Unit Name: Gilpin-Dekalb stor	y complex, mo	ist, 15 to 35 percent s	lopes	NWI classific	eation: None		
Are climatic / hydrologic conditions on the	ne site typical fo	or this time of year? Y	′es No	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or	Hydrology	, significantly distur	bed? Are "Normal	Circumstances" p	present? Yes No		
Are Vegetation, Soil, or							
SUMMARY OF FINDINGS – A							
Hydrophytic Vegetation Present?							
Hydric Soil Present?	Yes Yes	No_ ✓	Is the Sampled Area	Vaa	No		
Wetland Hydrology Present?	Yes		within a Wetland?	res	NO		
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	tors (minimum of two required)		
Primary Indicators (minimum of one is	required; check	k all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)		True Aquatic Plants (		Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)			
High Water Table (A2)		Hydrogen Sulfide Od					
Saturation (A3)			• ,				
Water Marks (B1)		Presence of Reduced		Dry-Season Water Table (C2)			
Sediment Deposits (B2) Drift Deposits (B3)		Recent Iron Reduction Thin Muck Surface (C					
Algal Mat or Crust (B4)		Other (Explain in Rer		Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)			
Iron Deposits (B5)	_	Caror (Explain in real	namoj	Geomorphic Position (D2)			
Inundation Visible on Aerial Image	ery (B7)			Shallow Aquitard (D3)			
Water-Stained Leaves (B9)				Microtopographic Relief (D4)			
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)		
Field Observations:							
		Depth (inches):					
Water Table Present? Yes	No	Depth (inches):					
(includes capillary fringe)		Depth (inches):		Wetland Hydrology Present? Yes No			
Describe Recorded Data (stream gaug	je, monitoring v	vell, aerial photos, pre	evious inspections), if ava	ilable:			
Remarks:							
roadbed, no hydrology							

/EGETATION (Four Strata) – Use scientific	names or	piants.		Sampling Point:	VI 40000_4	
Tree Stratum (Plot size: 30 )	Absolute	Dominant		Dominance Test worksheet:		
Tree Stratum (Plot size:30)  1 Acer saccharum	% Cover 15	Species? Yes	Status FACU	Number of Dominant Species	0	(4)
••		Yes	FACU	That Are OBL, FACW, or FAC:		(A)
2. Betula lenta		Yes	FACU	Total Number of Dominant		
3. Fagus grandifolia		162	TACO	Species Across All Strata:	4	(B)
4				Percent of Dominant Species		
5				That Are OBL, FACW, or FAC:	0	(A/B)
6						, ,
7				Prevalence Index worksheet:		
	40	= Total Cove	er		ultiply by:	
50% of total cover:	20 20% of	total cover:	8	OBL species x 1 =		-
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 = _		_
Betula lenta	60	Yes	FACU	FAC species0 x 3 =	0	_
Pagus grandifolia	10	No	FACU	FACU species110 x 4 = _	440	_
<del>-</del> -				UPL species 0 x 5 =	0	=
3				Column Totals: 110 (A)	440	_ (B)
4				Column rotals (A)		_ (D)
5				Prevalence Index = B/A =	4	_
6				Hydrophytic Vegetation Indicators		
7				1 - Rapid Test for Hydrophytic Ve		
8				2 - Dominance Test is >50%	2501011011	
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>		
	70	= Total Cove	er			
50% of total cover:		total cover:	11	4 - Morphological Adaptations <sup>1</sup> (F		porting
Herb Stratum (Plot size:5)				data in Remarks or on a sepa	rate sheet)	
,				Problematic Hydrophytic Vegetat	tion <sup>1</sup> (Explair	n)
1						
2				<sup>1</sup> Indicators of hydric soil and wetland	hvdrology m	nust
3				be present, unless disturbed or proble		
4				Definitions of Four Vegetation Stra	ata:	
5						
6				<b>Tree</b> – Woody plants, excluding vines more in diameter at breast height (DE		
7				height.	oi i), regardie	255 UI
8						
0				Sapling/Shrub – Woody plants, excl		
*				than 3 in. DBH and greater than or ed m) tall.	qual to 3.28	ft (1
10				iii) taii.		
11				Herb – All herbaceous (non-woody)		dless
		= Total Cove		of size, and woody plants less than 3	.28 ft tall.	
50% of total cover:	0 20% of	total cover:	0	Woody vine – All woody vines greate	er than 3.28	ft in
Woody Vine Stratum (Plot size:30)				height.		
1						
2						
3						
4						
-				Hydrophytic		
5	0	T-1-1-0		Vegetation Present? Yes No	o 🗸	
FOOV of total covers		= Total Cove	er O			
50% of total cover:	2070 01	total cover:				
Remarks: (Include photo numbers here or on a separat	te sheet.)					
Herb layer dormant						

Sampling Point: wrae003\_u

Profile Desc	ription: (Describe to	the depth	needed to docum	ent the indi	cator or confirm	the ab	sence of indicators.)
Depth	Matrix		Redox	Features			
(inches)	Color (moist)	%	Color (moist)		ype <sup>1</sup> Loc <sup>2</sup>		ture Remarks
0-12	10YR 4/3	100				SC	CL
			<del>.</del>				
			<del>.</del>				
						-	
			<del>.</del>			-	
<sup>1</sup> Type: C=Ce	oncentration, D=Deple	etion. RM=Re	educed Matrix. MS	=Masked Sa	nd Grains.	<sup>2</sup> Locat	tion: PL=Pore Lining, M=Matrix.
Hydric Soil		. ,					Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(S7)			2 cm Muck (A10) (MLRA 147)
	oipedon (A2)				S8) <b>(MLRA 147</b> ,	148)	Coast Prairie Redox (A16)
Black Hi					LRA 147, 148)	/	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed		, ,		Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matr	, ,			(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark S				Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dark		<b>'</b> )		Other (Explain in Remarks)
	ark Surface (A12)	, ,	Redox Depres				
	Mucky Mineral (S1) <b>(L</b> l	RR N,	Iron-Mangane		F12) <b>(LRR N,</b>		
	\ 147, 148)		MLRA 136	)			
Sandy G	Sleyed Matrix (S4)		Umbric Surfac	e (F13) <b>(ML</b>	RA 136, 122)		<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy R	Redox (S5)		Piedmont Floo	dplain Soils	(F19) <b>(MLRA 14</b>	l8)	wetland hydrology must be present,
Stripped	Matrix (S6)		Red Parent M	aterial (F21)	(MLRA 127, 147	7)	unless disturbed or problematic.
Restrictive I	Layer (if observed):						
Type:			_				
Depth (in	ches):					Hvdri	ric Soil Present? Yes No
Remarks:	,		_				
	cobble and boulder						
Orideriain by	cobbic and boulder						



Photo 1 Upland data point wrae003\_u facing south



Photo 2 Upland data point wrae003\_u facing west

Project/Site: Atlantic Coast Pipeline City/County: Randolph County Sampling Date							
Applicant/Owner: Dominion	State: WV	_ Sampling Point: wraa405f_w					
Investigator(s): GB, AS, CG Section, Township, Range: No PLSS in this area							
Landform (hillslope, terrace, etc.)					Slope (%): <u>8</u>		
Subregion (LRR or MLRA): N		11256114	Datum: WGS 1984				
Soil Map Unit Name: Gilpin-Dek		, moist, 15 to 35 percent s	lopes	NWI classifica	ation: None		
Are climatic / hydrologic condition							
Are Vegetation, Soil							
Are Vegetation, Soil							
-					important features, etc.		
	- Attaon Sit		ipinig point location	ons, transcots,	important reatures, etc.		
Hydrophytic Vegetation Presen		No	Is the Sampled Area				
Hydric Soil Present?		No	within a Wetland?	Yes	No		
Wetland Hydrology Present?  Remarks:	Yes	<b>✓</b> No					
numerous old road cuts in the a	ea, nydrology froi	пі ѕеерѕ ріаа405, 404, ап	u 405.				
HYDROLOGY							
Wetland Hydrology Indicators				·	tors (minimum of two required)		
Primary Indicators (minimum of	one is required; c			Surface Soil Cracks (B6)			
Surface Water (A1)		True Aquatic Plants (			etated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Odd		<u>✓</u> Drainage Patt			
Saturation (A3)		<ul><li>Oxidized Rhizosphere</li><li>Presence of Reduced</li></ul>	-	Moss Trim Lir			
Water Marks (B1) Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burro	Vater Table (C2)		
Drift Deposits (B3)		Thin Muck Surface (C			sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Ren			ressed Plants (D1)		
Iron Deposits (B5)			,	Geomorphic I	` '		
Inundation Visible on Aeria	I Imagery (B7)			Shallow Aquitard (D3)			
Water-Stained Leaves (B9	)			Microtopographic Relief (D4)			
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)		
Field Observations:							
		Deptil (illiches)	0.5				
Water Table Present?	Yes No _	✓ Depth (inches):					
	Yes No _	Depth (inches):	0 Wetland I	Hydrology Present	t? Yes <u>/</u> No		
(includes capillary fringe)  Describe Recorded Data (strea	m gauge, monitor	ing well, aerial photos, pre	vious inspections), if ava	ailable:			
(*****	33.,	3 - 7 7 7					
Remarks:							

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

			Sampling Point: wraa405f_w
Absolute	Dominant I	ndicator	Dominance Test worksheet:
% Cover 20	Species? Yes	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)
10	Yes	FAC	That Are OBE, I AGW, OFF AG.
5	No	FACU	Total Number of Dominant
3	No		Species Across All Strata: (B)
			Percent of Dominant Species
			That Are OBL, FACW, or FAC: 100 (A/B)
			Prevalence Index worksheet:
			Total % Cover of: Multiply by:
_ 20% of	total cover:_	7.0	OBL species
			FACW species
10	Yes	FAC	FAC species X3 =
10	Yes	FAC	FACU species $\frac{23}{0}$ x 4 = $\frac{92}{0}$
5	No	FACU	UPL species
5	No	FACU	Column Totals:83 (A)86 (B)
5	No	FACU	Prevalence Index = B/A = 3.22
			1 Tevalence index = B/TC =
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
35	- Total Covo	-	3 - Prevalence Index is ≤3.0 <sup>1</sup>
		7	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
_ 2070 01	total cover		data in Remarks or on a separate sheet)
4	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3			
			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	163	170	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.
			Harb All barbassaus (non woody) plants, regardless
10	= Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	total cover:_	2	
		_	
			<b>Woody vine</b> – All woody vines greater than 3.28 ft in
			Woody vine – All woody vines greater than 3.28 ft in height.
			, ,
			, ,
			, ,
			height.  Hydrophytic
			height.  Hydrophytic Vegetation
0 :			height.  Hydrophytic
	10 5 3 38 20% of 10 10 5 5 5 35 20% of 4 3 3	10	10

Sampling Point: wraa405f\_w

Profile Desc	ription: (Describe t	o the dep	h needed to docur	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix			x Features	S			
(inches) 0-3	Color (moist) 10YR 2/1	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SL	<u>Remarks</u>
3-9	10YR 4/2	95	10YR 5/6	5	С	PL/M	SL	rock at 9"
						· ——		
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion RM=	Reduced Matrix MS	S=Masked	Sand Gr	ains	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
Hydric Soil		Juon, ruivi-	reduced Matrix, Me	J-Masked	T Garia Gi	airis.		ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(S7)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	/ILRA 147.		Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su				, \	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye	, ,	•	, ,	F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Ma		,			(MLRA 136, 147)
2 cm Mu	ıck (A10) (LRR N)		Redox Dark	Surface (F	·6)		\	/ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar				(	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan		es (F12) <b>(</b>	LRR N,		
	A 147, 148)		MLRA 13	-	MI DA 40	0. 400)	3,	Parton of budger by Carrent Carrent
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and etland hydrology must be present,
	Redox (S5) I Matrix (S6)		Piedmont Floor Red Parent N					eliand hydrology must be present, lless disturbed or problematic.
	Layer (if observed):		Red r arent n	viateriai (i	21) (IVILIX	A 121, 171	) un	ness disturbed of problematic.
Type: roc	ck							
Depth (in							Hydric Soil	Present? Yes V No No
	Ci les).		,				riyuric 30ii	rresent: resNo
Remarks:								



Photo 1
Wetland data point WRAA405f\_w facing southwest



Photo 2
Wetland data point WRAA405f\_w facing northwest

Project/Site: Atlantic Coast Pipeline		City/County: Randolph County Sampling Date: 3/5/2016						
Applicant/Owner: Dominion		-		Sampling Point: wraa405_u				
vestigator(s): GB, AS, CG Section, Township, Range: No PLSS in this area								
Landform (hillslope, terrace, etc.):			ef (concave, convex, none		Slope (%): 20			
Subregion (LRR or MLRA): N		Datum: WGS 1984						
Soil Map Unit Name: Gilpin-Dekalb	stony complex, mois	st, 15 to 35 percent s	lopes	NWI classifica	tion: None			
Are climatic / hydrologic conditions c								
Are Vegetation, Soil,								
Are Vegetation, Soil,								
SUMMARY OF FINDINGS -								
			ipinig point location	, transcoto,	important reatures, etc.			
Hydrophytic Vegetation Present?	Yes		Is the Sampled Area					
Hydric Soil Present?	Yes	No 🗸	within a Wetland?	Yes	No			
Wetland Hydrology Present?  Remarks:	Yes	_ No						
HYDROLOGY								
Wetland Hydrology Indicators:			9	acondary Indicate	ors (minimum of two required)			
1	a ia raquirad: abaak	all that apply)						
Primary Indicators (minimum of one	-			Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)				
Surface Water (A1) High Water Table (A2)		True Aquatic Plants ( Hydrogen Sulfide Od		_ Sparsely vege _ Drainage Patte				
Saturation (A3)		-	es on Living Roots (C3)	Moss Trim Line				
Water Marks (B1)		Presence of Reduced			/ater Table (C2)			
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burro				
Drift Deposits (B3)		Thin Muck Surface (C		Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	(	Other (Explain in Ren	narks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)			<del>-</del>	Geomorphic Position (D2)				
Inundation Visible on Aerial Im	agery (B7)		_	Shallow Aquitard (D3)				
Water-Stained Leaves (B9)			_	Microtopographic Relief (D4)				
Aquatic Fauna (B13)			_	FAC-Neutral T	est (D5)			
Field Observations: Surface Water Present? Yes	. Na 🗸	Depth (inches):						
		Depth (inches):						
		Depth (inches):		drology Procent	? Yes No ✔			
(includes capillary fringe)	3 NO	Depth (inches)	wetland ny	drology Present	? res No			
Describe Recorded Data (stream g	jauge, monitoring w	ell, aerial photos, pre	vious inspections), if availa	able:				
Remarks:								
no hydrology indicators present								

Samo	lina	Point:	wraa405_u

	Absolute	Dominant In	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)			Status	Number of Dominant Species
1. Liriodendron tulipifera	15	Yes	FACU	That Are OBL, FACW, or FAC:2 (A)
2. Acer saccharum	15	Yes	FACU	Total Number of Dominant
3. Quercus rubra	10	Yes	FACU	Species Across All Strata: 10 (B)
4. Betula lenta	10	Yes	FACU	
5. Betula alleghaniensis	10	Yes	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:  20 (A/B)
6. Fagus grandifolia	5	No	FACU	That Are OBL, FACW, OF FAC (A/B)
7				Prevalence Index worksheet:
T	65	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 32.5		total cover:_	13	OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15 )	20 /0 01	total cover		FACW species 0 x 2 = 0
1 Betula lenta	15	Yes	FACU	FAC species 20 x 3 = 60
2. Acer pensylvanicum	10	Yes	FACU	FACU species 103 x 4 = 412
3, Fagus grandifolia	10	Yes	FACU	$\begin{array}{ccc}  & & & & & & & \\  & & & & & & \\  & & & &$
	5		FACU	123 472
4. Liriodendron tulipifera		No No		Column Totals: (A) (B)
5. Betula alleghaniensis	5	No	FAC	Prevalence Index = B/A = 3.83
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				_ , , , , ,
9.				2 - Dominance Test is >50%
	45	= Total Cove		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:22.5		total cover:_	9	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5 )				data in Remarks or on a separate sheet)
1 Smilax auriculata	8	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Dryopteris carthusiana	5	Yes	FAC	
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	13	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 6.5		total cover:		
Woody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1				neight.
2				
3				
4				Hydrophytic
5				Vegetation
0		= Total Cove	^	Present? Yes No
50% of total cover:0	20% of	total cover:_		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wraa405\_u

Profile Desc	ription: (Describe t	o the depth	needed to docur	nent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redo	x Features	S			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-5	10YR 3/3	100					SL	
5-11	10YR 4/6	100					SCL	rock at 11"
					-		-	· <del></del>
						-		
-								
							2	·
	oncentration, D=Depl	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil I			_					ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface					2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148) (	Coast Prairie Redox (A16)
Black Hi			Thin Dark Su	. ,	•	47, 148)		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		<b>⊦</b> 2)		<u> </u>	Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Ma		.0)			(MLRA 136, 147)
	ck (A10) (LRR N)	(444)	Redox Dark					/ery Shallow Dark Surface (TF12)
	l Below Dark Surface ark Surface (A12)	: (A11)	Depleted Date Redox Depre				_ `	Other (Explain in Remarks)
	lucky Mineral (S1) <b>(L</b>	DD N	Iron-Mangan			DDN		
	147, 148)	nn N,	MLRA 13		55 (F12 <i>)</i> (	LKK N,		
	eleyed Matrix (S4)		Umbric Surfa		MI RA 13	6 122\	3Inc	dicators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent N					nless disturbed or problematic.
	ayer (if observed):			inatorial (i	, <b>(</b>		<del>,</del>	noos alotaloss of proziomatici
Type: roc	k							
Depth (inc	haa). 11		<del></del>				Hydric Soi	I Present? Yes No
	nes):		<u> </u>				nyaric Soi	TPresent? fes No
Remarks:								



**Photo 1**Upland data point WRAA405\_u facing southeast



**Photo 2**Upland data point WRAA405\_u facing northeast

Project/Site: Atlantic Coast Pipeline		City/County: Randolph County Sampling Date: 6/22/2016						
Applicant/Owner: Dominion				Sampling Point: wrae262e_w				
Investigator(s): CG, SA Section, Township, Range: No PLSS in this area								
Landform (hillslope, terrace, etc.): Ditch					Slope (%):2			
Subregion (LRR or MLRA): N								
Soil Map Unit Name: Purdy silt loam	NWI classific	cation: PEM						
Are climatic / hydrologic conditions on the	site typical fo	or this time of year? Y	es V No					
Are Vegetation, Soil, or Hy								
Are Vegetation, Soil, or Hy								
SUMMARY OF FINDINGS – Atta								
					<u>, , , , , , , , , , , , , , , , , , , </u>			
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes	No _ No	Is the Sampled Area					
Wetland Hydrology Present?	Yes 🗸	 No	within a Wetland?	Yes	No			
Remarks:								
·								
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one is re-	<u>quired; check</u>	( all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)	B14)	Sparsely Vegetated Concave Surface (B8)						
High Water Table (A2)		Hydrogen Sulfide Ode	or (C1) es on Living Roots (C3)	✓ Drainage Pa				
Saturation (A3)	Moss Trim Li	, ,						
Water Marks (B1)	· <del></del>	Presence of Reduced	, ,	Dry-Season Water Table (C2)				
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Bur				
Drift Deposits (B3)		Thin Muck Surface (C		Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4) Iron Deposits (B5)		Other (Explain in Ren	narks)	<ul><li>Stunted or Stressed Plants (D1)</li><li>Geomorphic Position (D2)</li></ul>				
Inundation Visible on Aerial Imagery	(B7)		<u>✓</u> Geomorphic Position (D2)  Shallow Aquitard (D3)					
Water-Stained Leaves (B9)	(=.)	Microtopographic Relief (D4)						
Aquatic Fauna (B13)				FAC-Neutral Test (D5)				
Field Observations:					. ,			
Surface Water Present? Yes	No	Depth (inches):						
		Depth (inches):						
		Depth (inches):		lydrology Preser	nt? Yes 🗸 No			
(includes capillary fringe)  Describe Recorded Data (stream gauge,	monitoring w	vall parial photos pro	vious inspections) if ava	ilable:				
Describe Recorded Data (stream gauge,	mornioning w	reii, aeriai priotos, pre	vious irispections), ii ava	illable.				
Remarks:								

Sampling	Point: wrae262e_	W
Samulinu	FUILL	

00	Absolute	Dominant In		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1. <u>none</u>				That Are OBL, FACW, or FAC: (A)
2				Total Number of Deminent
3				Total Number of Dominant Species Across All Strata: 2 (B)
4		·		Openies / toress / till etrata.
		· · · · · · · · ·		Percent of Dominant Species
5				That Are OBL, FACW, or FAC:100 (A/B)
6		<del></del>		Prevalence Index worksheet:
7				
	0	= Total Cover		Total % Cover of: Multiply by:  ORL species 50 x 1 = 50
50% of total cover: 0	20% of	total cover:	0	OBL species X 1 =
Sapling/Shrub Stratum (Plot size: 15				FACW species
1 none	0			FAC species0 x 3 =0
2				FACU species 2 x 4 = 8
2				UPL species
3		<del></del>		87 128
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =1.47
6				1 Tevalence index = B/T(=
			-	Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8		<del></del>		✓ 2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0¹
	0	= Total Cover		4 - Morphological Adaptations¹ (Provide supporting
50% of total cover:0	20% of	total cover:	0	
Herb Stratum (Plot size:)				data in Remarks or on a separate sheet)
1 Carex lupulina	40	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Juncus effusus	30	Yes	FACW	
3. Carex canescens	10	No	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	5			be present, unless disturbed or problematic.
4. Poa palustris		No	FACW	Definitions of Four Vegetation Strata:
5. Rubus argutus	2	<u>No</u>	FACU	_ ,,, , , , , , , , , , , , , , , , , ,
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
0				no.g.m
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	87	= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover:43.5	20% of	total cover:	17.4	
				Woody vina = All woody vinas greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in
vvocay vine citatum (i lot size.	0			height.
1. none	0			
vvocay vine citatum (i lot size.	0			
1. none	0			
1. none 2.	0	·		height.
1. none 2	0			height.  Hydrophytic
1. none 2	0			height.
1. none 2	0	= Total Cover	0	Hydrophytic Vegetation
1. none 2	0 0 20% of			Hydrophytic Vegetation
1. none 2	0 0 20% of	= Total Cover		Hydrophytic Vegetation
1. none 2	0 0 20% of	= Total Cover		Hydrophytic Vegetation
1. none 2	0 0 20% of	= Total Cover		Hydrophytic Vegetation
1. none 2	0 0 20% of	= Total Cover		Hydrophytic Vegetation
1. none 2	0 0 20% of	= Total Cover		Hydrophytic Vegetation
1. none 2	0 0 20% of	= Total Cover		Hydrophytic Vegetation
1. none 2	0 0 20% of	= Total Cover		Hydrophytic Vegetation
1. none 2	0 0 20% of	= Total Cover		Hydrophytic Vegetation

Sampling Point: wrae262e\_w

Profile Desc	cription: (Describe to	the dept	h needed to docur	nent the ind	icator o	r confirm	the ab	bsence of indicators.)
Depth	Matrix			x Features				
(inches)	Color (moist)	%	Color (moist)		Γype <sup>1</sup>	Loc <sup>2</sup>		kture Remarks
0-16	10YR 5/1	70	5YR 3/4	30	С	M	SIC	ICL
			<del></del>					
							-	
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion, RM=	Reduced Matrix, MS	S=Masked Sa	and Gra	ins.	<sup>2</sup> Locat	tion: PL=Pore Lining, M=Matrix.
<b>Hydric Soil</b>	Indicators:							Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be	, ,	(S8) <b>(M</b> I	LRA 147.	148)	Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Su				,	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			,,		Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Ma	, ,	,			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark					Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dai		7)			Other (Explain in Remarks)
	ark Surface (A12)	()	Redox Depre	•	- /			
	/lucky Mineral (S1) <b>(Li</b>	RR N.	Iron-Mangan		(F12) <b>(L</b>	RR N.		
	A 147, 148)	,	MLRA 13		(· ·-/ <b>(-</b>	,		
	Gleyed Matrix (S4)		Umbric Surfa	-	RA 136	5. 122)		<sup>3</sup> Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo				.8)	wetland hydrology must be present,
-	Matrix (S6)		Red Parent N					unless disturbed or problematic.
	Layer (if observed):		Red r arent n	natorial (1 2 1	) (IIIILIX	1 127, 177	<del>′                                      </del>	unices disturbed of problematic.
Type:								<b>.</b> /
Depth (in	ches):		<u></u>				Hydri	ric Soil Present? Yes No
Remarks:								



Wetland data point wrae262e\_w facing south



Wetland data point wrae262e\_w facing north

Project/Site: Atlantic Coast Pipeline		City/County: Randolph County Sampling Date: 6/22/2016				
Applicant/Owner: Dominion		State: WV Sampling Poir			Sampling Point: wrae262_u	
			ion, Township, Range: No			
Landform (hillslope, terrace, etc.): Railroad						
Subregion (LRR or MLRA): N						
Soil Map Unit Name: Purdy silt loam			Long	NWI classific	ation: UPL	
Are climatic / hydrologic conditions on the si	te typical for					
Are Vegetation, Soil, or Hydr						
Are Vegetation, Soil, or Hydronic Soil						
SUMMARY OF FINDINGS – Attac						
COMMANT OF THE INCOME.	in Site ina	ip snowing sai		,	, important reatures, etc.	
	/es		Is the Sampled Area			
		No	within a Wetland?	Yes	No	
Wetland Hydrology Present?  Remarks:	/es	No				
HADBOLOGA						
HYDROLOGY  Wetland Hydrology Indicators:				Secondary Indica	tors (minimum of two required)	
Primary Indicators (minimum of one is requ	iirad: chack :	all that apply)				
Surface Water (A1)		rue Aquatic Plants	(R14)	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)		lydrogen Sulfide Od		Drainage Par		
Saturation (A3)				Moss Trim Li		
Water Marks (B1)		resence of Reduce	-		Water Table (C2)	
Sediment Deposits (B2)			on in Tilled Soils (C6)	Crayfish Buri		
Drift Deposits (B3)	T	hin Muck Surface (	C7)	Saturation Vi	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	c	Other (Explain in Re	marks)	Stunted or S	tressed Plants (D1)	
Iron Deposits (B5)				Geomorphic	` '	
Inundation Visible on Aerial Imagery (I	37)			Shallow Aqui		
Water-Stained Leaves (B9)					aphic Relief (D4)	
Aquatic Fauna (B13)			1	FAC-Neutral	Test (D5)	
Field Observations: Surface Water Present? Yes	No 🗸	Depth (inches):				
		Depth (inches):				
		Depth (inches):		lydrology Presen	t? Yes No	
(includes capillary fringe)						
Describe Recorded Data (stream gauge, n	nonitoring we	ell, aerial photos, pro	evious inspections), if ava	ulable:		
Remarks:						
No hydrology.						

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•	Absolute	Dominant	Indicator	Dominance Test worksheet:	
ree Stratum (Plot size: 30 )	% Cover 0	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:  0	(A)
·				Total Number of Dominant Species Across All Strata: 2	(B)
-		·		Percent of Dominant Species That Are OBL, FACW, or FAC:  0	(A/B
		·		Prevalence Index worksheet:	
	0	·		Total % Cover of: Multiply by	
		= Total Cove	er O	OBL species 0 x 1 = 0	-
50% of total cover:0	20% of	total cover:		0	
apiing/Snrub Stratum (Piot size:)	0			FACW species $\begin{array}{cccccccccccccccccccccccccccccccccccc$	
none				70 280	
<u>.                                    </u>				UPL species	
·				Column Totals:(A)	(B)
i <u>.                                    </u>		· ——		Prevalence Index = B/A =3.93	
		· ——		Hydrophytic Vegetation Indicators:	
				1 - Rapid Test for Hydrophytic Vegetation	1
i				2 - Dominance Test is >50%	
. <u> </u>				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
50% of total cover: 0		= Total Cove	er O	4 - Morphological Adaptations <sup>1</sup> (Provide s	supportin
50 % of total cover	20% of	total cover:		data in Remarks or on a separate she	et)
Herb Stratum (Plot size:5 ) Trifolium repens	30	Voo	FACIL	Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	plain)
Plantago major	20	Yes Yes	FACU FACU		
Taraxacum officinale	- <del>- 20</del> - 5	No	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrolog	y must
•	<u>5</u>			be present, unless disturbed or problematic.	
Medicago lupulina Poa pratensis	- <del> 5</del>	No No	FACU	Definitions of Four Vegetation Strata:	
		No No	FACU	Tree – Woody plants, excluding vines, 3 in. (7	7.6 cm) o
Juncus tenuis Dactylis glomerata	5 5	No No	FACU	more in diameter at breast height (DBH), rega	
	_ <del></del>		FACU	height.	
J		· <del></del>		Sapling/Shrub - Woody plants, excluding vir	nes, less
)				than 3 in. DBH and greater than or equal to 3	.28 ft (1
0				m) tall.	
1	75			Herb - All herbaceous (non-woody) plants, re	
50% - (1-1-1-1		= Total Cove		of size, and woody plants less than 3.28 ft tal	
50% of total cover: 37.	20% of	total cover:	10	Woody vine – All woody vines greater than 3	.28 ft in
Voody Vine Stratum (Plot size:30 ))	0			height.	
		· <del></del>			
J		·			
k <u>.                                    </u>				Hydrophytic	
i				Vegetation	
		= Total Cove	_	Present? Yes No	_
50% of total cover:0		total cover:			
Remarks: (Include photo numbers here or on a separate	sheet.)				

Sampling Point: wrae262\_u

Profile Description: (Describe to the dep	oth needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	<u>Texture</u> <u>Remarks</u>
· <del></del>		<u> </u>
· <del></del> ·		·
	=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Dark Surface (S7)	2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA 147,	148) Coast Prairie Redox (A16)
Black Histic (A3)	Thin Dark Surface (S9) (MLRA 147, 148)	(MLRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F3)	(MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Depressions (F8)	
Sandy Mucky Mineral (S1) (LRR N,	Iron-Manganese Masses (F12) (LRR N,	
MLRA 147, 148)	MLRA 136)	
Sandy Gleyed Matrix (S4)	Umbric Surface (F13) (MLRA 136, 122)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14	
Stripped Matrix (S6)	Red Parent Material (F21) (MLRA 127, 147	
Restrictive Layer (if observed):		
Type:		
**	<del></del>	Hudria Call Brasanta Van Na V
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
Relic railroad tracks.		



Upland data point wrae262\_u facing north



Upland data point wrae262\_u facing south

Project/Site: Atlantic Coast Pipelin	Coast Pipeline City/County: Randolph County Sampling Date: 6/22/2016							
Applicant/Owner: Dominion		State: WV Sampling Point: wrae263e_w						
Investigator(s): CG, SA Section, Township, Range: No PLSS in this area								
Landform (hillslope, terrace, etc.):					Slope (%):2			
Subregion (LRR or MLRA): N								
Soil Map Unit Name: Purdy silt loa	m			NWI classific	cation: PEM			
Are climatic / hydrologic conditions	on the site typical	I for this time of year? Y	∕es <b>✓</b> No	(If no, explain in F	Remarks.)			
Are Vegetation, Soil	_, or Hydrology	significantly distur	bed? Are "Norma	Circumstances"	present? Yes No			
Are Vegetation, Soil								
SUMMARY OF FINDINGS								
Lhydrophytic Vagatation Dracont?	Voc. V	' No						
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes V	No No	Is the Sampled Area					
Wetland Hydrology Present?		No_	within a Wetland?	Yes	No			
Remarks:		<u> </u>						
HYDROLOGY								
Wetland Hydrology Indicators:					ators (minimum of two required)			
Primary Indicators (minimum of o	-	eck all that apply) True Aquatic Plants (	(5.4.1)	Surface Soil				
Surface Water (A1)		Sparsely Ve  V Drainage Pa	getated Concave Surface (B8)					
<ul><li>✓ High Water Table (A2)</li><li>✓ Saturation (A3)</li></ul>	_	<u>▼</u> Drainage Pa						
Water Marks (B1)		es on Living Roots (C3) d Iron (C4)	· <del></del>	Water Table (C2)				
Sediment Deposits (B2)		on in Tilled Soils (C6)	Crayfish Burrows (C8)					
Drift Deposits (B3)	_	C7)	Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)	_	_ Other (Explain in Rer	marks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)				Geomorphic Position (D2)				
Inundation Visible on Aerial I	magery (B7)			Shallow Aquitard (D3)				
Water-Stained Leaves (B9)				Microtopographic Relief (D4) ✓ FAC-Neutral Test (D5)				
Aquatic Fauna (B13)			1	FAC-Neutra	Test (D5)			
Field Observations: Surface Water Present? Y	Na <b>V</b>	Danth (inches)						
		Depth (inches): Depth (inches):	2					
		Depth (inches):	0 Wotland b	lydrology Prese	nt? Yes 🗸 No			
(includes capillary fringe)					it: iesio			
Describe Recorded Data (stream	gauge, monitorino	g well, aerial photos, pre	evious inspections), if ava	iilable:				
Remarks:								
Tromane.								
I					ļ			

Sampling	Point: wrae263e_	w
Sambilliu	PUIIIL aszess-	

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?		Number of Dominant Species
1. none	0			That Are OBL, FACW, or FAC: 2 (A)
2				(,,
				Total Number of Dominant
3				Species Across All Strata:2 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:100 (A/B)
6				
7				Prevalence Index worksheet:
	0	= Total Cove	r	Total % Cover of: Multiply by:
50% of total cover: 0		total cover:	0	OBL species60 x 1 =60
Sapling/Shrub Stratum (Plot size: 15 )				FACW species35
1. none	0			FAC species 0 x 3 = 0
				FACU species 2 x 4 = 8
2				0
3				UPL species
4				Column Totals: (A) (B)
5				Prevalence Index = B/A = 1.42
6				1 Tevalence mack = B/Tt =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	0	= Total Cove		4 - Morphological Adaptations¹ (Provide supporting
50% of total cover:0	20% of	total cover:_	0	
Herb Stratum (Plot size: 5				data in Remarks or on a separate sheet)
1. Carex lupulina	40	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Juncus effusus	30	Yes	FACW	
3. Scirpus atrovirens	10	No	OBL	¹Indicators of hydric soil and wetland hydrology must
4 Carex canescens	10	No	OBL	be present, unless disturbed or problematic.
5. Poa palustris		No	FACW	Definitions of Four Vegetation Strata:
6. Rubus argutus	2	No	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
			17.00	more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	97	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover:48.5		total cover:_		
Woody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1 none	0			neight.
2				
3				
4				Hydrophytic
5				Vegetation
	0	= Total Cove	r	Present? Yes No
50% of total cover:0	20% of	total cover:_	0	
Remarks: (Include photo numbers here or on a separate sl	neet.)			
	·			

Sampling Point: wrae263e\_w

Profile Desc	cription: (Describe to	the dept	h needed to docur	nent the ind	icator o	r confirm	the ab	bsence of indicators.)
Depth	Matrix			x Features				
(inches)	Color (moist)	%	Color (moist)		Γype <sup>1</sup>	Loc <sup>2</sup>		kture Remarks
0-16	10YR 5/1	70	5YR 3/4	30	С	M	SIC	ICL
			<del></del>					
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion, RM=	Reduced Matrix, MS	S=Masked Sa	and Gra	ins.	<sup>2</sup> Locat	tion: PL=Pore Lining, M=Matrix.
<b>Hydric Soil</b>	Indicators:							Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be	, ,	(S8) <b>(M</b> I	LRA 147.	148)	Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Su				,	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			,,		Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Ma	, ,	,			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark					Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dai		7)			Other (Explain in Remarks)
	ark Surface (A12)	` ,	Redox Depre	•	,			
	Mucky Mineral (S1) <b>(Li</b>	RR N.	Iron-Mangan		(F12) <b>(L</b>	.RR N.		
	A 147, 148)	,	MLRA 13		(· · –/ <b>(</b> –	,		
	Gleyed Matrix (S4)		Umbric Surfa	-	RA 136	5. 122)		<sup>3</sup> Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo				.8)	wetland hydrology must be present,
-	Matrix (S6)		Red Parent N					unless disturbed or problematic.
	Layer (if observed):		Red r arent n	natorial (1 2 1	) (IIIILIX	1 127, 177	<del>′                                      </del>	unices disturbed of problematic.
Type:								<b>.</b> /
Depth (in	ches):		<u></u>				Hydri	ric Soil Present? Yes No
Remarks:								



Wetland data point wrae263e\_w facing north



Wetland data point wrae263e\_w facing south

Project/Site: Atlantic Coast Pipeline	City/County: Randolph County Sampling Date: 6/22/20						
Applicant/Owner: Dominion		State: WV Sampling Point: wrae263.					
Investigator(s): CG, SA Section, Township, Range: No PLSS in this area							
Landform (hillslope, terrace, etc.): Railroad							
Subregion (LRR or MLRA): N	Lat: 38	3.69246282	Long: -79.9	99239424	Datum: WGS 1984		
Soil Map Unit Name: Purdy silt loam				NWI classific	ation: UPL		
Are climatic / hydrologic conditions on the sit	te typical for th	nis time of vear?	Yes ✔ No	—— (If no. explain in R	emarks.)		
Are Vegetation, Soil, or Hydr							
Are Vegetation, Soil, or Hydr							
SUMMARY OF FINDINGS – Attac							
				,	, , , , , , , , , , , , , , , , , , , ,		
	'es		Is the Sampled Area				
	'es 'es		within a Wetland?	Yes	No		
Remarks:	<u></u>	110					
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is requ	ired; check al	I that apply)		Surface Soil			
Surface Water (A1)	Tro	(B14)		getated Concave Surface (B8)			
High Water Table (A2)	Ну	dor (C1)	Drainage Patterns (B10)				
Saturation (A3)	• , ,	Moss Trim Li	nes (B16)				
Water Marks (B1)		esence of Reduce		Dry-Season Water Table (C2)			
Sediment Deposits (B2)			on in Tilled Soils (C6)				
Drift Deposits (B3)		in Muck Surface (		<ul><li>Saturation Visible on Aerial Imagery (C9)</li><li>Stunted or Stressed Plants (D1)</li></ul>			
Algal Mat or Crust (B4) Iron Deposits (B5)	01	her (Explain in Re	marks)	· · · · · · · · · · · · · · · · · · ·	Position (D2)		
Inundation Visible on Aerial Imagery (B	37)			Shallow Aqui	` '		
Water-Stained Leaves (B9)	<i>31)</i>				aphic Relief (D4)		
Aquatic Fauna (B13)				FAC-Neutral			
Field Observations:							
Surface Water Present? Yes	No V D	epth (inches):					
Water Table Present? Yes	No 🔽 D	epth (inches):					
Saturation Present? Yes		epth (inches):		Wetland Hydrology Present? Yes No			
(includes capillary fringe)  Describe Recorded Data (stream gauge, m	nonitoring well	, aerial photos, pre	evious inspections), if ava	ilable:			
33.,	J J	,	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Remarks:							
No hydrology.							

Dominant Species?	Status  T 0	Dominance Test worksheet:           Number of Dominant Species         0         (A)           Total Number of Dominant Species Across All Strata:         2         (B)           Percent of Dominant Species         0         (A/B)           Percent of Dominant Species         0         (A/B)           That Are OBL, FACW, or FAC:         0         (A/B)           Prevalence Index worksheet:
= Total Cover:_	r 0	That Are OBL, FACW, or FAC:         0         (A)           Total Number of Dominant Species Across All Strata:         2         (B)           Percent of Dominant Species That Are OBL, FACW, or FAC:         0         (A/B)           Prevalence Index worksheet:         0         Multiply by:           OBL species         0         x 1 =         0           FACW species         0         x 2 =         0           FAC species         5         x 3 =         15           FACU species         70         x 4 =         280           UPL species         0         x 5 =         0           Column Totals:         75         (A)         295         (B)
= Total Cover:	r 0	Species Across All Strata:         2         (B)           Percent of Dominant Species That Are OBL, FACW, or FAC:         0         (A/B)           Prevalence Index worksheet:
= Total Cover:	r 0	Species Across All Strata:         2         (B)           Percent of Dominant Species That Are OBL, FACW, or FAC:         0         (A/B)           Prevalence Index worksheet:
f total cover:_	0	Percent of Dominant Species           That Are OBL, FACW, or FAC:         0         (A/B)           Prevalence Index worksheet:
f total cover:_	0	That Are OBL, FACW, or FAC:         0         (A/B)           Prevalence Index worksheet:
f total cover:_	0	Prevalence Index worksheet:           Total % Cover of:         Multiply by:           OBL species         0         x 1 =         0           FACW species         0         x 2 =         0           FAC species         5         x 3 =         15           FACU species         70         x 4 =         280           UPL species         0         x 5 =         0           Column Totals:         75         (A)         295         (B)
f total cover:_	0	$\begin{array}{c ccccc} \hline Total \% \ Cover \ of: & & \underline{Multiply \ by:} \\ \hline OBL \ species & 0 & & x \ 1 = & 0 \\ \hline FACW \ species & 0 & & x \ 2 = & 0 \\ \hline FAC \ species & 5 & & x \ 3 = & 15 \\ \hline FACU \ species & 70 & & x \ 4 = & 280 \\ \hline UPL \ species & 0 & & x \ 5 = & 0 \\ \hline Column \ Totals: & 75 & (A) & 295 & (B) \\ \hline \end{array}$
f total cover:_	0	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
f total cover:_	0	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
		FACW species $\begin{array}{c cccc} & 0 & & x & 2 = & 0 \\ \hline FAC & species & 5 & & x & 3 = & 15 \\ \hline FACU & species & 70 & & x & 4 = & 280 \\ \hline UPL & species & 0 & & x & 5 = & 0 \\ \hline Column & Totals: & 75 & (A) & 295 & (B) \\ \hline \end{array}$
		FAC species $\begin{array}{cccccccccccccccccccccccccccccccccccc$
		FAC species $\begin{array}{c} x & 3 = \\ \hline FACU \text{ species} & 70 & x & 4 = \\ \hline UPL \text{ species} & 0 & x & 5 = \\ \hline Column Totals: & 75 & (A) & 295 & (B) \\ \end{array}$
		UPL species $\begin{array}{c} x & 4 = \\ 0 & x & 5 = \\ 0$
		Column Totals: $\begin{array}{c}                                    $
		Column Totals: (A) (B)
		Prevalence Index = B/A =3.93
		Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
		2 - Dominance Test is >50%
		3 - Prevalence Index is ≤3.0 <sup>1</sup>
	_	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
f total cover:_		data in Remarks or on a separate sheet)
		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	$\overline{}$	1 Toblematio Trydrophytio Vogetation (Explain)
Yes	FACU	Indicators of hydric call and watland hydrology must
No	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
No	FAC	Definitions of Four Vegetation Strata:
No	FACU	Definitions of Four Vegetation Strata.
No	FACU	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
No	FACU	more in diameter at breast height (DBH), regardless of height.
		neight.
		Sapling/Shrub – Woody plants, excluding vines, less
		than 3 in. DBH and greater than or equal to 3.28 ft (1
		m) tall.
		<b>Herb</b> – All herbaceous (non-woody) plants, regardless
		of size, and woody plants less than 3.28 ft tall.
f total cover:	15	Woody vine – All woody vines greater than 3.28 ft in
		height.
		Hydrophytic Vegetation
Total Cove		Present? Yes No
	0	
i total cover		
	f total cover:_  Yes Yes No No No No Total Formula to the cover:_  Total Cover:_  Total cover:_	Yes         FACU           Yes         FACU           No         FACU           No         FACU           No         FACU           No         FACU    = Total Cover  f total cover: 15

Sampling Point: wrae263\_u

Profile Desc	ription: (Describe to	the depth ne	eded to docum	ent the indi	cator or confirm	n the al	osence of indicators.)
Depth	Matrix		Redox	Features			
(inches)	Color (moist)	% C	olor (moist)		ype <sup>1</sup> Loc <sup>2</sup>	Tex	ture Remarks
		<del></del>					
			_		· ·		
		<del></del>					
<sup>1</sup> Type: C=Co	oncentration, D=Depleti	on, RM=Red	uced Matrix, MS	=Masked Sa	and Grains.	<sup>2</sup> Loca	tion: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		_ Dark Surface	(S7)			2 cm Muck (A10) (MLRA 147)
	oipedon (A2)	_		. ,	(S8) <b>(MLRA 147</b>	. 148)	Coast Prairie Redox (A16)
Black His		_			ILRA 147, 148)	,,	(MLRA 147, 148)
	n Sulfide (A4)	<del></del>	_ Loamy Gleye				Piedmont Floodplain Soils (F19)
	I Layers (A5)	_	_ Loanly Gleyer _ Depleted Mat	, ,			(MLRA 136, 147)
	ck (A10) <b>(LRR N)</b>		_ Depleted Mat _ Redox Dark S				Very Shallow Dark Surface (TF12)
	d Below Dark Surface (/		_ Redox Dark S		7)		Other (Explain in Remarks)
	ark Surface (A12)		_ Depleted Dan		")		Other (Explain in Remarks)
					(E12) /I DD N		
	lucky Mineral (S1) (LRI	× Ν,	_ Iron-Mangane		(F12) (LKK N,		
	147, 148)		MLRA 136	•	D.A. 400, 400\		31. Parton of budge by Carry and Carry
	leyed Matrix (S4)		_ Umbric Surfac			40)	<sup>3</sup> Indicators of hydrophytic vegetation and
-	edox (S5)				(F19) (MLRA 14		wetland hydrology must be present,
	Matrix (S6)		_ Red Parent M	aterial (F21)	(MLRA 127, 14	7)	unless disturbed or problematic.
Restrictive L	ayer (if observed):						
Type:							
Depth (inc	ches):					Hydı	ric Soil Present? Yes No
Remarks:							



Upland data point wrae263\_u facing south



Upland data point wrae263\_u facing north

Project/Site: Atlantic Coast Pipe	ast Pipeline City/County: Randolph County Sampling Date: 6/22/2016							
Applicant/Owner: Dominion		State: WV Sampling Point: wrae264e_w						
Investigator(s): CG, SA Section, Township, Range: No PLSS in this area								
Landform (hillslope, terrace, etc.		Slope (%):2						
Subregion (LRR or MLRA): N								
Soil Map Unit Name: Purdy silt I	oam			NWI classific	cation: PEM			
Are climatic / hydrologic conditio	ns on the site tyr	pical for this time of year?	Yes No	(If no, explain in F	Remarks.)			
· · · · · ·		•			present? Yes No			
Are Vegetation, Soil								
					s, important features, etc.			
			T		, , , , , , , , , , , , , , , , , , ,			
Hydrophytic Vegetation Preser	it? Yes _	✓ No ✓ No	Is the Sampled Area					
Hydric Soil Present? Wetland Hydrology Present?		✓ No	within a Wetland?	Yes	No			
Remarks:		INO						
HYDROLOGY								
Wetland Hydrology Indicator	s:			Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum o	f one is required:	check all that apply)		Surface Soil	Cracks (B6)			
✓ Surface Water (A1)	Sparsely Ve	getated Concave Surface (B8)						
✓ High Water Table (A2)		dor (C1)	✓ Drainage Pa	atterns (B10)				
✓ Saturation (A3)		res on Living Roots (C3)	Moss Trim L	ines (B16)				
Water Marks (B1)		Presence of Reduce	d Iron (C4)	Dry-Season Water Table (C2)				
Sediment Deposits (B2)		on in Tilled Soils (C6)	✓ Crayfish Burrows (C8)					
Drift Deposits (B3)		Thin Muck Surface (		Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)		Other (Explain in Re	marks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)	(57)			Geomorphic Position (D2)				
Inundation Visible on Aeria				Shallow Aquitard (D3)				
Water-Stained Leaves (B9 Aquatic Fauna (B13)	')			Microtopographic Relief (D4) ✓ FAC-Neutral Test (D5)				
Field Observations:				T AC-Neutra	1 1631 (D0)			
Surface Water Present?	Yes V No	Depth (inches):	1					
Water Table Present?		Depth (inches):	0					
Saturation Present?		Depth (inches):	0 Wetland H	lydrology Presei	nt? Yes V No			
(includes capillary fringe)								
Describe Recorded Data (stream	am gauge, monito	oring well, aerial photos, pro	evious inspections), if ava	iilable:				
Remarks:								

Sampling Point waczotc_w	Sampling	Point: wrae264e_	w
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00	Absolute	Dominant Ir		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. <u>none</u>				That Are OBL, FACW, or FAC: (A)
2				Total Number of Demisses
3				Total Number of Dominant Species Across All Strata: 2 (B)
4				Operics / toross / till othata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:100 (A/B)
6				Prevalence Index worksheet:
7				
	0	= Total Cover	r	Total % Cover of: Multiply by:  ORL species 55 x 1 = 55
50% of total cover: 0	20% of	total cover:	0	OBL species X 1 =
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
1 none	0			FAC species0 x 3 =0
"		-		FACU species10 x 4 =40
2				UPL species0 x 5 =0
3				125 215
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =1.72
6			_	Trevalence mack = B/TC =
		-		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0¹
	0	= Total Cover		4 - Morphological Adaptations¹ (Provide supporting
50% of total cover:0	20% of	total cover:	0	
Herb Stratum (Plot size: 5				data in Remarks or on a separate sheet)
1 Carex lupulina	40	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Juncus effusus	40	Yes	FACW	
3. Eleocharis tenuis	20	No	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4. Sagittaria filiformis	15	No_	OBL	Definitions of Four Vegetation Strata:
5. Galium aparine	10	No	FACU	<b>-</b> W
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
•				Sapling/Shrub – Woody plants, excluding vines, less
·				than 3 in. DBH and greater than or equal to 3.28 ft (1
10		<del></del> ·		m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 62.5	20% of	total cover:	25	Was devided. All was devided a greater than 2.00 ft in
Woody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1. none	0			noight.
2				
3				
4				Hydrophytic
5				Vegetation
	0	= Total Cover	r	Present? Yes No
50% of total cover: 0		total cover:	0	
Remarks: (Include photo numbers here or on a separate s				
Remarks. (include prioto numbers here or on a separate s	neet.)			

Sampling Point: wrae264e\_w

Profile Des	cription: (Describe t	to the de				or confirm	the absenc	e of indicators.)
Depth	Matrix		Redo	x Feature		. 2	_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SIC	Remarks
0-10	10YR 6/1	80	10YR 5/8	20	C	M		
10-16	5GY 5/1	95	10YR 5/8	5	С	М	SIC	
	<u> </u>							
		-						_
						-		
			-			<del></del>		-
		-			-			
1- 00						· .	21	
	concentration, D=Depl Indicators:	etion, RIV	I=Reduced Matrix, M	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils <sup>3</sup> :
-			5 . 6 .	(07)				•
Histoso			Dark Surface	. ,	aa (CC) (T	AL D A 44-		2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Su			147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)		_	Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Ma		-c)			(MLRA 136, 147)
	uck (A10) <b>(LRR N)</b> d Below Dark Surface	. (Λ11)	Redox Dark Depleted Da	,	,			Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
	ark Surface (A12)	# (A11)	Redox Depre					Other (Explain in Remarks)
	Mucky Mineral (S1) <b>(L</b>	DD N	Iron-Mangan			IDDN		
	A 147, 148)	,	MLRA 13		63 (1 12 <i>)</i> (	LIXIX IV,		
	Gleyed Matrix (S4)		Umbric Surfa	•	(MIRA 13	86 122)	<sup>3</sup> In	ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					vetland hydrology must be present,
	d Matrix (S6)		Red Parent N					inless disturbed or problematic.
	Layer (if observed):		1100 1 010111	viatoriai (i	21) <b>(III 21</b> )		, <u> </u>	inios distarbed of problematic.
Type:								
	-h\-						Unadaia Ca	H Bussent 2 Van V Na
	iches):						Hydric So	il Present? Yes No
Remarks:								



Wetland data point wrae264e\_w facing south



Wetland data point wrae264e\_w facing north

Project/Site: Atlantic Coast Pipeline	City/County: Randolph County Sampling Date: 6/22/20						
Applicant/Owner: Dominion	State: WV Sampling Point: wrae264_						
Investigator(s): CG, SA Section, Township, Range: No PLSS in this area							
Landform (hillslope, terrace, etc.): pasture		concave, convex, none): convex					
Subregion (LRR or MLRA): N							
Soil Map Unit Name: Purdy silt loam		NWI cla	ssification: UPL				
Are climatic / hydrologic conditions on the site t							
Are Vegetation, Soil, or Hydrold							
Are Vegetation, Soil, or Hydrold							
SUMMARY OF FINDINGS – Attach							
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes	V No	the Sampled Area					
Wetland Hydrology Present? Yes	No wi	ithin a Wetland? Yes	No				
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary II	ndicators (minimum of two required)				
Primary Indicators (minimum of one is require	d; check all that apply)	Surface	Soil Cracks (B6)				
Surface Water (A1)	True Aquatic Plants (B14	) Sparsely	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	C1) Drainag	Drainage Patterns (B10)					
Saturation (A3)		rim Lines (B16)					
Water Marks (B1)		Dry-Season Water Table (C2)					
Sediment Deposits (B2)	Recent Iron Reduction in						
Drift Deposits (B3)	Thin Muck Surface (C7)		<ul><li>Saturation Visible on Aerial Imagery (C9)</li><li>Stunted or Stressed Plants (D1)</li></ul>				
Algal Mat or Crust (B4)	Other (Explain in Remark		, ,				
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)			rphic Position (D2) Aquitard (D3)				
Water-Stained Leaves (B9)			Microtopographic Relief (D4)				
Aquatic Fauna (B13)			eutral Test (D5)				
Field Observations:			. ,				
Surface Water Present? Yes N	Depth (inches):						
	Depth (inches):						
Saturation Present? Yes No	Depth (inches):		resent? Yes No				
(includes capillary fringe)  Describe Recorded Data (stream gauge, mon	itoring well serial photos previou	us inspections) if available:					
Describe Necorded Data (stream gauge, mon	noning well, aerial priotos, previot	is inspections), ii available.					
Remarks:							
No hydrology present.							

Sampling	Point: wrae264_u
Januaria	i Ollit. –

00	Absolute	Dominant In		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)  1 none	% Cover 0	Species?	<u>Status</u>	Number of Dominant Species That Are ORL FACW or FAC: 2 (A)
•				That Are OBL, FACW, or FAC:2 (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 33.33333333 (A/B)
6				Prevalence Index worksheet:
7	0			Total % Cover of: Multiply by:
50% of total cover:	:	= Total Cover total cover:	. 0	OBL species $10   x 1 = 10$
15	20% 01	total cover:		FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size:)  1 none	0			FAC species15 x 3 =45
-				FACU species 62 x 4 = 248
2				UPL species 5 x 5 = 25
3				Column Totals: 92 (A) 328 (B)
4				Coldilli Totals (A) (B)
5				Prevalence Index = B/A =3.56
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cover		4 - Morphological Adaptations¹ (Provide supporting
50% of total cover:0	20% of	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Trifolium repens	25	Yes	FACU	1 Toblematic Hydrophytic Vegetation (Explain)
2. Juncus tenuis	15	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Carex vulpinoidea	10	Yes	OBL	be present, unless disturbed or problematic.
4. Taraxacum officinale	10	Yes	FACU	Definitions of Four Vegetation Strata:
<sub>5.</sub> Poa pratensis	10	Yes	FACU	
6. Trifolium pratense	10	Yes	FACU	<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7. Plantago lanceolata	5	No	UPL	height.
8. Rosa multiflora	5	No	FACU	Sapling/Shrub – Woody plants, excluding vines, less
9. Ambrosia artemisiifolia	2	No	FACU	than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 46	20% of	total cover:	18.4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30 )				height.
1. none	0			
2				
3				
4				Undrankutia
5.				Hydrophytic Vegetation
	0 :	= Total Cover		Present? Yes No
50% of total cover:0		total cover:	0	
Remarks: (Include photo numbers here or on a separate si				
(	,			

Sampling Point: wrae264\_u

Depth	cription: (Describe t Matrix	.0 1.10 40		x Feature:		0. 00	450000	or maistacoroly
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-16	10YR 5/2	90	7.5YR 4/6	10	C	PL/M	SICL	
								-
					-			-
					-			-
						· <del></del>		
	Concentration, D=Depl	etion, RM	I=Reduced Matrix, MS	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
ydric Soil	Indicators:						Indic	ators for Problematic Hydric Soils <sup>3</sup> :
_ Histoso	I (A1)		Dark Surface	(S7)			2	2 cm Muck (A10) (MLRA 147)
_ Histic E	pipedon (A2)		Polyvalue Be	low Surfa	ce (S8) <b>(N</b>	/ILRA 147,	148) (	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su					(MLRA 147, 148)
Hydrog	en Sulfide (A4)		Loamy Gleye	d Matrix (	F2)		F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Ma					(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark		<del>-</del> 6)		\	/ery Shallow Dark Surface (TF12)
<del></del>	ed Below Dark Surface	(A11)	Depleted Dar	•	,			Other (Explain in Remarks)
	ark Surface (A12)	, ,	Redox Depre					, ,
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan			LRR N,		
	A 147, 148)	,	MLRA 13		( ) (			
	Gleyed Matrix (S4)		Umbric Surfa	•	MLRA 13	86. 122)	<sup>3</sup> Inc	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
-	d Matrix (S6)		Red Parent N					nless disturbed or problematic.
	Layer (if observed):			natorial (i	_ · / <b>(</b>		,	noce dictarged of programatic.
	Layer (ii observea).							
Type:								.,
Depth (ir	nches):						Hydric Soi	l Present? Yes No
Remarks:								
asea on als	turbances on site hyd	nc son lea	atures are assumed to	De Tello.				



Upland data point wrae264\_u facing south



Upland data point wrae264\_u facing north

Project/Site: Atlantic Coast Pig	peline	City/C	county: Randolph County		Sampling Date: 3/5/2016
Applicant/Owner: Dominion		,			_ Sampling Point: wraa406e_w
Investigator(s): GB, AS, CG		Section	on, Township, Range: No		
Landform (hillslope, terrace, et					
Subragion (LBB or MLBA): N	o.,	1 at: 38.70454328	ا.ang: -80.1	1374454	Glope (70)
Subregion (LRR or MLRA): N Soil Map Unit Name: Dekalb o	hannery loam mo	ist 8 to 15 percent slopes	Long	ADA(1 1 26	
Are climatic / hydrologic condit					
Are Vegetation, Soil	, or Hydrology	y significantly distur	bed? Are "Normal	Circumstances" pr	esent? Yes No
Are Vegetation, Soil	, or Hydrolog	y naturally problema	atic? (If needed, e	xplain any answers	s in Remarks.)
SUMMARY OF FINDIN	GS – Attach s	ite map showing sam	npling point locatio	ns, transects,	important features, etc.
Hydrophytic Vogotation Proc	ont? Vos	✓ No			
Hydrophytic Vegetation Present?	Yes Yes	✓ No ✓ No	Is the Sampled Area	🗸	
Wetland Hydrology Present?		_	within a Wetland?	Yes	No
Remarks:	100_	110			
Saturated PEM wetland locate	ed on an old road t	oed on nage top; clay as sna	allow aquitara; top of riage	e likely removed at	ining historic mining.
HYDROLOGY					
Wetland Hydrology Indicate	ors:			Secondary Indicat	ors (minimum of two required)
Primary Indicators (minimum	of one is required;	; check all that apply)		Surface Soil C	Cracks (B6)
Surface Water (A1)		True Aquatic Plants (	B14)	Sparsely Vege	etated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Patt	erns (B10)
Saturation (A3)		Oxidized Rhizosphere	=	Moss Trim Lin	
Water Marks (B1)		Presence of Reduced		-	Vater Table (C2)
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burro	
Drift Deposits (B3)		Thin Muck Surface (C			ible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)		essed Plants (D1)
Iron Deposits (B5)	(D.7)			Geomorphic F	
Inundation Visible on Ae	,			✓ Shallow Aquit	
Water-Stained Leaves (E	39)			✓ FAC-Neutral 3	phic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)
Field Observations:	Van Na	✓ Dandh (inahaa).			
Surface Water Present?		Depth (inches):			
Water Table Present?		Depth (inches):	^		• v • v
Saturation Present? (includes capillary fringe)	Yes _ No	Depth (inches):	Wetland H	ydrology Present	? Yes No
Describe Recorded Data (stre	eam gauge, monito	oring well, aerial photos, pre	vious inspections), if avai	ilable:	
Remarks:					
sphagnum pockets present					

/EGETATION (Four Strata) – Use scientific r	names of	plants.		Sampling Point: wraa406e_w
30	Absolute	Dominant In		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?	<u>Status</u>	Number of Dominant Species That Are ORL FACW or FAC: 4
1				That Are OBL, FACW, or FAC: 4 (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
50% of total cover:		= Total Cover	0	OBL species15 x 1 =15
15	20% of	total cover:		FACW species 30 x 2 = 60
Sapling/Shrub Stratum (Plot size:)				FAC species1545
1				FACU species 0 x 4 = 0
2				UPL species $\begin{array}{cccc} 0 & x = 5 & 0 \\ & x = 5 & 0 & 0 \\ & & x = 5 & 0 \\ & & & x = 5 & 0 \\ & & & & & & & & & & & & & & & & &$
3				Column Totals: 60 (A) 120 (B)
4				Column Totals (A) (B)
5				Prevalence Index = B/A = 2
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
(· · · · · · · · · · · · · · · · ·		= Total Cover	^	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:0	20% of	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 )  1 Dichanthelium scoparium	15	Vaa	EAC)4/	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
••	15	Yes Yes	FACW	
2. Juncus effusus	15		FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Dichanthelium clandestinum	15	Yes		be present, unless disturbed or problematic.
4. Carex prasina		Yes	OBL	Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
20		= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover:30	) 20% of	total cover:	12	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2				
3				
4				Hydrophytic
5				Vegetation
•		= Total Cover		Present? Yes No
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Sampling Point: wraa406e\_w

epth	Matrix		Redo	x Features	_ 1	. 2	_	
nches)	Color (moist)	<u>%</u>	Color (moist)	<u> </u>	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-3	10YR 3/2	100					L	
3-18	10YR 5/1	90	7.5YR 4/6	10	С	PL/M	С	
	-							
		- '						
	-							
	-							
		letion, RM	=Reduced Matrix, M	S=Masked S	Sand Gr	ains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
dric Soil	Indicators:						Indica	ators for Problematic Hydric Soils <sup>3</sup> :
_ Histosol			Dark Surface					cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		. , .		<b>148)</b> C	Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Su			47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		2)		P	riedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Ma	, ,				(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark	, ,				Very Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Da	,			<u> </u>	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1) (I	LRR N,	Iron-Mangan		(F12) <b>(</b>	LRR N,		
	A 147, 148)		MLRA 13	•		0 400)	31	Parton of hadronia for a control of a control
	Gleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	d Matrix (S6)  Layer (if observed):		Red Parent N	viateriai (FZ	i) (IVILR	A 127, 147	) un	less disturbed or problematic.
Type: cla	Layer (ii observed). 3V	•						
								- · · · · · · · · · · · · · · · · · · ·
Depth (in	ches): <u>3</u>		<del></del>				Hydric Soil	Present? Yes No
emarks:								



Photo 1 Wetland data point WRAA406e\_w facing northeast



**Photo 2**Wetland data point WRAA406e\_w facing southwest

Project/Site: Atlantic Coast Pi	peline		City/0	County: Randolph County	/	Sampling Date: 3/5/2016		
Applicant/Owner: Dominion				,		Sampling Point: wraa406_u		
Investigator(s): GB, AS, CG			Secti	on, Township, Range: No				
Landform (hillslope, terrace, e								
Subragion (LDD or MLDA): N	10.).	1 at: 38.70	<u> </u>	Long80.	11376376	Glope (70)		
Dekalb of MLRA): 11	channery loam mo	Lat: nist_8 to 15 ne	ercent slones	Long	NA41 1 10	Datum: WGS 1984 cation: None		
Are climatic / hydrologic condi								
Are Vegetation, Soil	, or Hydrolo(	gysig	nificantly distu	rbed? Are "Normal	Circumstances"	present? Yes 🔽 No		
Are Vegetation, Soil	, or Hydrolog	yy nat	urally problem	atic? (If needed, e	explain any answe	ers in Remarks.)		
SUMMARY OF FINDIN	GS – Attach s	site map sl	nowing san	npling point location	ons, transects	s, important features, etc.		
Hydrophytic Vegetation Pres	eont? Voc	No_	<u> </u>					
Hydric Soil Present?		No_		Is the Sampled Area	.,	🗸		
Wetland Hydrology Present?	Yes	No_	<b>✓</b>	within a Wetland?	Yes	No		
Remarks:								
Upland data point taken on a	distarbed ridge to	y ioi a saturai	leu r Livi Wella	nu locateu iii ali olu loau	beu.			
HYDROLOGY								
Wetland Hydrology Indicat	ors:				Secondary Indicate	ators (minimum of two required)		
Primary Indicators (minimum	of one is required	; check all tha	at apply)		Surface Soil	Cracks (B6)		
Surface Water (A1)		True A	quatic Plants	(B14)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)			gen Sulfide Od		_	_ Drainage Patterns (B10)		
Saturation (A3)					Moss Trim L			
Water Marks (B1)			nce of Reduce			Water Table (C2)		
Sediment Deposits (B2)				on in Tilled Soils (C6)	Crayfish Bu			
Drift Deposits (B3)			fuck Surface (			risible on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Iron Deposits (B5)		Other	(Explain in Re	marks)		Stressed Plants (D1) Position (D2)		
Inundation Visible on Ae	rial Imagery (B7)				Shallow Aqu			
Water-Stained Leaves (I						aphic Relief (D4)		
Aquatic Fauna (B13)	20)				FAC-Neutra			
Field Observations:						. ,		
Surface Water Present?	Yes No	✓ Depth	n (inches):					
Water Table Present?	Yes No							
Saturation Present?	Yes No				lydrology Prese	nt? Yes No		
(includes capillary fringe)	<u> </u>	•	, ,					
Describe Recorded Data (str	eam gauge, monit	oring well, ae	rial photos, pre	evious inspections), if ava	illable:			
Remarks:								
no hydrology indicators prese	ent							

EGETATION (Four Strata) – Use scientific na	ames of	plants.		Sampling Point: wraa406_u
Tree Stratum (Plot size: 30 )	Absolute	Dominant In		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30) 1. Betula lenta	<u>% Cover</u> 12	Species? Yes	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)
2. Acer saccharum	12	Yes	FACU	
3. Acer rubrum	10	Yes	FAC	Total Number of Dominant Species Across All Strata: 10 (B)
4. Fagus grandifolia	10	Yes	FACU	
5. Betula alleghaniensis	10	Yes	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)
6				That Are ODE, I AGW, OF I AC.
7.				Prevalence Index worksheet:
	54	= Total Cover		Total % Cover of: Multiply by:
50% of total cover: 27	20% of	total cover:	10.8	OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
<sub>1.</sub> Fagus grandifolia	20	Yes	FACU	FAC species 38 x 3 = 114
2. Acer pensylvanicum	10	Yes	FACU	FACU species x 4 = 336
3. Betula lenta	8	No	FACU	UPL species x 5 =
4. Acer saccharum	7	No	FACU	Column Totals: (A) (B)
5. Prunus serotina	5	No	FACU	Prevalence Index = B/Δ = 3.68
6		· · · · · · · · · · · · · · · · · · ·		1 Tevalence index = B/T(=
7		· · · · · · · · · · · · · · · · · · ·		Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
	50	= Total Cover		3 - Prevalence Index is ≤3.0¹
50% of total cover: 25		total cover:	10	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5			_	data in Remarks or on a separate sheet)
1. Carex blanda	7	Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Dichanthelium clandestinum	6	Yes	FAC	
3. Dryopteris carthusiana	5	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4.		· · · · · · · · · · · · · · · · · · ·		
5		· · · · · · · · · · · · · · · · · · ·		Definitions of Four Vegetation Strata:
6		· · · · · · · · · · · · · · · · · · ·		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7		· · · · · · · · · · · · · · · · · · ·		more in diameter at breast height (DBH), regardless of height.
8				
9.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Hark All harbassassa (non woods) planta regardless
	18	= Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 9		total cover:		
Woody Vine Stratum (Plot size:)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1				····g···i
2				
3				
4				Hydrophytic
5.				Hydrophytic Vegetation
	•	= Total Cover		Present? Yes No
50% of total cover:0		total cover:	^	
Remarks: (Include photo numbers here or on a separate s	heet.)			1
, ,	,			

Sampling Point: wraa406\_u

	cription: (Describe	to the dept				or confirm	the abser	ice of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Redo Color (moist)	x Features %	SType <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	e
0-5	10YR 3/2	100	Odioi (moist)		Турс		L		3
E 10		100					CL	<del>_</del>	
5-13	10YR 4/3	100							
13-18	10YR 4/2	100					CL		
	-								
							-	<del>_</del>	
	· ·								
						· ——	-	<del>_</del>	
	<del></del>								
	Concentration, D=De	pletion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		: PL=Pore Lining, M=Matri	
Hydric Soil	Indicators:						Inc	dicators for Problematic I	Hydric Soils <sup>3</sup> :
Histoso			Dark Surface					_ 2 cm Muck (A10) (MLRA	
	pipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16	6)
	listic (A3)		Thin Dark Su	. ,	•	47, 148)		(MLRA 147, 148)	(540)
	en Sulfide (A4)		Loamy Gleye		F2)		_	Piedmont Floodplain Soil	IS (F19)
	ed Layers (A5) uck (A10) (LRR N)		Depleted Mar		·c)			(MLRA 136, 147)  Very Shallow Dark Surface	oo (TE12)
<del></del>	ed Below Dark Surface	ce (A11)	Depleted Dar					Other (Explain in Remark	
	Park Surface (A12)	00 (7111)	Redox Depre				_	_ Other (Explain in Remain	(3)
	Mucky Mineral (S1)	(LRR N,	Iron-Mangan			LRR N,			
	A 147, 148)	`	MLRA 13		` / <b>`</b>	•			
Sandy	Gleyed Matrix (S4)		Umbric Surfa	ce (F13) (	MLRA 13	6, 122)	3	Indicators of hydrophytic ve	egetation and
Sandy	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	8)	wetland hydrology must be	e present,
	d Matrix (S6)		Red Parent N	1aterial (F	21) <b>(MLR</b>	A 127, 147	7)	unless disturbed or proble	matic.
Restrictive	Layer (if observed)	):							
Type: _n	one								
Depth (ir	nches):						Hydric S	Soil Present? Yes	No
Remarks:							1		



Photo 1
Upland data point WRAA406\_u facing northwest



Photo 2
Upland data point WRAA406\_u facing northeast

Project/Site: Atlantic Coast Pipel	ine	City/C	county: Randolph County	<u> </u>	Sampling Date: 3/5/2016		
Applicant/Owner: Dominion					Sampling Point: wraa407e_w		
			on, Township, Range: No				
Landform (hillslope, terrace, etc.)		Local reli	ef (concave, convex, nor	ne): concave	Slope (%):2		
Subregion (LRR or MLRA): N		at: 38.70430699	Long: -80.	11394429	Datum: WGS 1984		
Soil Map Unit Name: Dekalb ext	remely stony loam, r	noist, 35 to 70 percent s	slopes	NWI classific	ation: None		
Are climatic / hydrologic condition							
Are Vegetation, Soil							
Are Vegetation, Soil							
-	-				, important features, etc.		
			.p9 po	,	, <b>p</b> 0		
Hydrophytic Vegetation Present	t? Yes <u>/</u>	No	Is the Sampled Area				
Hydric Soil Present?		No No	within a Wetland?	Yes	No		
Wetland Hydrology Present?  Remarks:	Yes	NO					
HYDROLOGY							
Wetland Hydrology Indicators				Secondary Indica	tors (minimum of two required)		
Primary Indicators (minimum of		ock all that apply)					
Surface Water (A1)	-	_ True Aquatic Plants (	P14)	<ul><li>Surface Soil Cracks (B6)</li><li>Sparsely Vegetated Concave Surface (B8)</li><li>Drainage Patterns (B10)</li></ul>			
High Water Table (A2)		_ Hydrogen Sulfide Od					
Saturation (A3)			es on Living Roots (C3)	Moss Trim Li			
Water Marks (B1)		Presence of Reduced	=		Water Table (C2)		
Sediment Deposits (B2)	_	Recent Iron Reductio		Crayfish Burr			
Drift Deposits (B3)	_	_ Thin Muck Surface (C	27)	Saturation Vi	sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	_	_ Other (Explain in Rer	narks)	·	ressed Plants (D1)		
Iron Deposits (B5)				Geomorphic			
Inundation Visible on Aeria				Shallow Aqui			
Water-Stained Leaves (B9)	1				phic Relief (D4)		
Aquatic Fauna (B13)				✓ FAC-Neutral	Test (D5)		
Field Observations: Surface Water Present?	Vaa Na 🗸	Depth (inches):					
		Depth (inches):					
	Yes No		0 Wetland b	lydrology Presen	t? Yes ✔ No		
(includes capillary fringe)	res No	Deptit (inches)	wetland r	iyarology Fresen	tr res NO		
Describe Recorded Data (strea	m gauge, monitoring	y well, aerial photos, pre	vious inspections), if ava	ilable:			
Remarks:							
sphagnum pockets present							

Tree Stratum         (Plot size:         30         )         % Cover         Speci           1.	ant Indicator		
/ 100 0120	nant Indicator	Dominance Test worksheet:	
· ————————————————————————————————————	ies? Status	Number of Dominant Species	
2		That Are OBL, FACW, or FAC:3 (	(A)
		Total Number of Dominant	
3			(B)
4			
5		Percent of Dominant Species That Are OBL, FACW, or FAC:  100	(A/B)
6		markie obe, raow, or rao.	(7,0)
7		Prevalence Index worksheet:	
0 = Total	Cover	Total % Cover of: Multiply by:	
50% of total cover: 20% of total co	^	OBL species15 x 1 =15	
Sapling/Shrub Stratum (Plot size: 15 )	5VCI	FACW species 30	
		FAC species 15 x 3 = 45	
1		FACU species 0 x 4 = 0	
2		UPL species $0 \times 5 = 0$	
3		60 120	(D)
4		Column Totals: (A)	(B)
5		Prevalence Index = B/A =2	
6		Hydrophytic Vegetation Indicators:	
7		1 - Rapid Test for Hydrophytic Vegetation	
8		2 - Dominance Test is >50%	
9		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
0 = Total	Cover		
50% of total cover:020% of total co	over:0	4 - Morphological Adaptations <sup>1</sup> (Provide suppo	orting
Herb Stratum (Plot size: 5		data in Remarks or on a separate sheet)	
	es FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	)
2. Carex prasina 15 Ye	es OBL		
3. Dichanthelium clandestinum 15 Ye	es FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology mu	ust
Dichanthelium scoparium 10 N		be present, unless disturbed or problematic.	
<u> </u>		Definitions of Four Vegetation Strata:	
5		Tree – Woody plants, excluding vines, 3 in. (7.6 cn	m) or
6		more in diameter at breast height (DBH), regardles	
7		height.	
8		Sanling/Shrub - Woody plants, excluding vines, le	<b>6</b> 88
8		Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than or equal to 3.28 ft	
10		than 3 in. DBH and greater than or equal to 3.28 ft m) tall.	t (1
10	Cover	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard	t (1
10		than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.	t (1 lless
10		than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft height.	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft height.	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft height.	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft height.	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft height.	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft height.	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft height.	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft height.	t (1 lless
60	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft height.	t (1 lless
10	over: 12	than 3 in. DBH and greater than or equal to 3.28 ft m) tall.  Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft height.	t (1 lless

Sampling Point: wraa407e\_w

Profile Des	cription: (Describe	to the de				or confirm	the absence	e of indicators.)
Depth	Matrix (assist)	0/		x Feature	S1	1 2	T t	Damada
(inches) 0-4	Color (moist) 10YR 3/2	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> L	Remarks
	· -							
4-18	10YR 5/1	90	7.5YR 4/6	10	C	PL/M	C	
								-
	-							-
	-							-
1							2	
	Concentration, D=Dep	letion, RM	I=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.		PL=Pore Lining, M=Matrix.
•	Indicators:							cators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface					2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su			147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)			Piedmont Floodplain Soils (F19)
	ed Layers (A5)		<u>✓</u> Depleted Ma		>			(MLRA 136, 147)
	uck (A10) (LRR N)	(4.4.4)	Redox Dark	,	,			Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	e (A11)	Depleted Dai					Other (Explain in Remarks)
	Park Surface (A12)	DD N	Redox Depre			1 DD N		
	Mucky Mineral (S1) (L	.KK N,	Iron-Mangan		es (F12) (	LRR N,		
	A 147, 148)		MLRA 13	-	/MII DA 44	)C 400\	31	diantana of landanahatian and
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					retland hydrology must be present,
	d Matrix (S6)  Layer (if observed):		Red Parent N	nateriai (F	(IVILR	A 127, 147	r) u	nless disturbed or problematic.
Restrictive	Layer (ii observed):							
Type: cl								
Depth (ir	nches): 4						Hydric So	il Present? Yes No
Remarks:								



Photo 1 Wetland data point WRAA407e\_w facing west



Photo 2
Wetland data point WRAA407e\_w facing south

Project/Site: Atlantic Coast Pi	peline	,	Sampling Date: 3/5/2016				
Applicant/Owner: Dominion		Sampling Point: wraa407_u					
Investigator(s): GB, AS, CG Section, Township, Range: No PLSS in this area							
Landform (hillslope, terrace, etc.): ridge top Local relief (concave, convex, none): none Slope (%):3							
		Datum: WGS 1984					
Soil Map Unit Name: Dekalb	extremely stony los	Latam_moist 35 to 70 perce	ent slones		None		
Are climatic / hydrologic condi							
Are Vegetation, Soil	, or Hydrolog	y significantly dis	sturbed? Are "Normal	Circumstances" p	present? Yes No		
Are Vegetation, Soil	, or Hydrolog	y naturally probl	ematic? (If needed, e	explain any answe	ers in Remarks.)		
SUMMARY OF FINDIN	GS – Attach s	ite map showing s	sampling point location	ns, transects	, important features, etc.		
Hydrophytic Vegetation Pres	eont? Vos	No_ 🗸					
Hydric Soil Present?		No_ ✓	Is the Sampled Area		•/		
Wetland Hydrology Present?	Yes	No_ V	within a Wetland?	Yes	No		
Remarks:							
Upland data point taken on a	aisturbed riage top	o for a saturated PEIN We	etianu located in an olu road	bed.			
HYDROLOGY							
Wetland Hydrology Indicat	ors:			Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum	of one is required	; check all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)		Sparsely Ve	getated Concave Surface (B8)				
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)							
Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)							
Water Marks (B1)		uced Iron (C4)	Dry-Season Water Table (C2)				
Sediment Deposits (B2)		iction in Tilled Soils (C6)					
Drift Deposits (B3)		e (C7)	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4) Iron Deposits (B5)		Remarks)	<pre> Stunted or Stressed Plants (D1) Geomorphic Position (D2)</pre>				
Inundation Visible on Ae	orial Imagery (R7)		Shallow Aquitard (D3)				
Water-Stained Leaves (				aphic Relief (D4)			
Aquatic Fauna (B13)	20)			FAC-Neutral	. , ,		
Field Observations:					. ,		
Surface Water Present?	Yes No	Depth (inches):_					
Water Table Present?		Depth (inches):					
Saturation Present?		Depth (inches):		lydrology Preser	nt? Yes No		
(includes capillary fringe)							
Describe Recorded Data (str	eam gauge, monito	oring well, aerial photos,	previous inspections), if ava	ilable:			
Remarks:							
no hydrology indicators prese	ent						

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

				Sampling Point: wraa407_u
	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:30)  1 Acer saccharum	% Cover 15	Species? Yes	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC:3 (A)
2. Betula lenta	15	Yes	FACU	That Alc OBE, I AOW, OI I AO(A)
3 <sub>.</sub> Betula alleghaniensis	10	No	FAC	Total Number of Dominant
3. Fagus grandifolia	10	No	FACU	Species Across All Strata: (B)
·	5	No	FAC	Percent of Dominant Species
<sub>5.</sub> Acer rubrum 6.				That Are OBL, FACW, or FAC: 42.85714285 (A/B)
0				Prevalence Index worksheet:
1	55	Tatal Cau		Total % Cover of: Multiply by:
50% of total cover:27.5		= Total Cover:	er 11	OBL species0 x 1 =0
15	_ 20 % 01	iolai covei.		FACW species0
Sapling/Shrub Stratum (Plot size:)  1. Fagus grandifolia	20	Yes	FACU	FAC species33
2. Acer pensylvanicum	15	Yes	FACU	FACU species 93 x 4 = 372
3. Betula lenta	8	No	FACU	UPL species0 x 5 =0
3	5	No	FACU	Column Totals: 126 (A) 471 (B)
5 Prunus serotina	5	No	FACU	
·				Prevalence Index = B/A =3.73
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8. <u> </u>				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
26.5		= Total Cov	er 10.6	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: <u>26.5</u>	_ 20% of	total cover:	10.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	-			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Dichanthelium clandestinum	7	Yes	FAC	Troblematic Tryanophytic Vegetation (Explain)
2. Carex blanda	6	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Dryopteris carthusiana	5	Yes	FAC	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
9.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Hank All bonk account (account and a plants in a condition
	18	= Total Cov	<u></u>	<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 9		total cover:		
Woody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1				neight.
2.				
3				
4				Hydrophytic
5	•	T-1-1-0		Vegetation Present?  Yes No
EOW of total cover:		= Total Cov	_	
0070 01 total 00VCI.		lotal cover.		
50% of total cover:0		total cover:	0	

Sampling Point: wraa407\_u

Profile Desc	ription: (Describe	to the depth	needed to docum	nent the i	ndicator	or confirm	the absence	e of indicate	ors.)	
Depth	Matrix		Redo	x Features	<u> </u>					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>		Remarks	
0-4	10YR 3/2	100					L	_		
4-12	10YR 4/3	100					CL			
12-18	10YR 4/2	100					CL			
								_		
								_		
								_		_
· <del></del>								_		
¹Type: C=Co	oncentration, D=Depl	etion RM-R	educed Matrix MS	S-Masked	Sand Gr	ains	<sup>2</sup> Location:	PI =Pore I ini	ing, M=Matrix.	
Hydric Soil I		Guori, ixivi–ix	educed Matrix, Mc	)—IVIASKEU	Sand Or	ııı ı.			roblematic Hydr	ic Soils <sup>3</sup> :
Histosol			Dark Surface	(\$7)					A10) <b>(MLRA 147</b>	
	ipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	ILRA 147.		,	Redox (A16)	,
Black His			Thin Dark Su				,	(MLRA 14	, ,	
	n Sulfide (A4)		Loamy Gleye			, -,			oodplain Soils (F	19)
	Layers (A5)		Depleted Mat		,			(MLRA 13		,
2 cm Mu	ck (A10) (LRR N)		Redox Dark S	Surface (F	6)			Very Shallov	v Dark Surface (T	F12)
	Below Dark Surface	e (A11)	Depleted Dar				_	Other (Expla	in in Remarks)	
	rk Surface (A12)		Redox Depre							
	lucky Mineral (S1) (L	RR N,	Iron-Mangan		es (F12) <b>(</b>	LRR N,				
	147, 148)		MLRA 13			0 400\	3,		do a sa la . d' a d	. C
	leyed Matrix (S4)		Umbric Surfa						ydrophytic vegeta	
	edox (S5) Matrix (S6)			Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic.						
	ayer (if observed):		Neu i aleili li	iateriai (i z	ZI) (IVILIX	A 121, 141	1	iriicaa diaturb	ed of problemati	J.
Type: noi										
			<u> </u>				Usalaia Ca	oil Present?	Yes	No 🗸
Depth (inc	nes)						nyunc 30	on Fresent?	162	NO
Remarks:										



Photo 1 Upland data point WRAA407\_u facing west



Photo 2
Upland data point WRAA407\_u facing north

Project/Site: Atlantic Coast Pipelin	ie	City/C	County: Randolph County	/	Sampling Date: 3/5/2016		
Applicant/Owner: Dominion		State: WV Sampling Point: wraa400					
			on, Township, Range: No PLSS in this area				
Landform (hillslope, terrace, etc.):							
Subregion (LRR or MLRA): N		at: 38.70156183	Long: -80.	11531974	Datum: WGS 1984		
Soil Map Unit Name: Buchanan ar	nd Ernest stony soi	ls, 15 to 35 percent slop	pes	NWI classifi	cation: None		
Are climatic / hydrologic conditions	on the site typical	for this time of year? Y	′es No	(If no, explain in F	Remarks.)		
Are Vegetation, Soil	_, or Hydrology	significantly distur	bed? Are "Norma	I Circumstances"	present? Yes No		
Are Vegetation, Soil							
					s, important features, etc.		
Hydrophytic Vegetation Present?	Vec V	No					
Hydric Soil Present?	Yes V	No	Is the Sampled Area	V V			
Wetland Hydrology Present?		No	within a Wetland?	Yes	No		
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)		
Primary Indicators (minimum of c	ne is required; che	eck all that apply)		Surface Soil Cracks (B6)			
✓ Surface Water (A1)	<u></u>	_ True Aquatic Plants (	B14)	Sparsely Ve	getated Concave Surface (B8)		
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)							
Saturation (A3)	Moss Trim L	lines (B16)					
Water Marks (B1)	Dry-Season	Water Table (C2)					
Sediment Deposits (B2)	_	n in Tilled Soils (C6)	ls (C6) Crayfish Burrows (C8)				
Drift Deposits (B3)	_	C7)	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	_	marks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)	(57)		Geomorphic Position (D2)				
Inundation Visible on Aerial	magery (B7)				Shallow Aquitard (D3) Microtopographic Relief (D4)		
<ul><li>Water-Stained Leaves (B9)</li><li>Aquatic Fauna (B13)</li></ul>				FAC-Neutra			
Field Observations:				I AO-Neulla	r rest (D3)		
	es No	Depth (inches):	).5				
		Depth (inches):					
		Depth (inches):	0 Wetland H	Hydrology Present? Yes No			
(includes capillary fringe)				3-1-1-			
Describe Recorded Data (stream	gauge, monitoring	y weii, aeriai photos, pre	evious inspections), if ava	illable:			
Remarks:							

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

/EGETATION (Four Strata) – Use scientific n	ames of	plants.		Sampling Point: wraa408f_w
	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)  1. Acer rubrum	% Cover 10	Species? Yes	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC:8 (A)
2. Betula alleghaniensis	10	Yes	FAC	That Are OBL, I ACW, OIT AC (A)
3. Betula lenta	8	Yes	FACU	Total Number of Dominant
3 <u>. Бенла тепна</u> 4.				Species Across All Strata: 11 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:  72.72727272 (A/B)
6				Prevalence Index worksheet:
7	28			Total % Cover of: Multiply by:
		= Total Cove		OBL species 0 x 1 = 0
50% of total cover: 15	20% of	total cover:	<u> </u>	4
Sapling/Shrub Stratum (Plot size:)  1 Betula lenta	8	Yes	FACU	FACW species $\begin{array}{cccccccccccccccccccccccccccccccccccc$
2. Fagus grandifolia		Yes	FACU	FACU species 21 x 4 = 84
		Yes	FAC	UPL species 0 x 5 = 0
3. Acer rubrum				75 242
4. Betula alleghaniensis 5	5	Yes	FAC	Column Totals: (A) (B)
5 6		·		Prevalence Index = B/A = 3.22
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8		· ——		✓ 2 - Dominance Test is >50%
9	23			3 - Prevalence Index is ≤3.0 <sup>1</sup>
11.5		= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:11.5	20% of	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5	4			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Packera aurea	4	Yes	FACW	Troblematic Tryanophytic Vegetation (Explain)
2. Dryopteris carthusiana	3	Yes	FAC	1 Indicators of budgio soil and watland budgelogy must
3. Carex blanda	2	Yes	FAC	'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4		·		Definitions of Four Vegetation Strata:
5		·		Tree Meady plants and wines 2 in (7.6 am) an
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
9.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11.	-			,
	9	T-1-1-0		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 4.5		= Total Cover:	er 1.8	of size, and woody plants less than 3.20 it tall.
00	20 /6 01	iolai covei.		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)  1 Smilax rotundifolia	15	Yes	FAC	height.
1. Strillax Totuliuliulia		165	TAC	
2				
3				
4				Hydrophytic
5.				Hydrophytic Vegetation
	15	= Total Cove	<u></u>	Present? Yes No
50% of total cover: 7.5		total cover:	2	
		total oover.		
Remarks: (Include photo numbers here or on a separate s	neet.)			

Sampling Point: wraa408f\_w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		Redox	x Features	3				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks	
0-13	10YR 2/1	100					L		
13-18	10YR 4/1	85	10YR 5/6	15	С	M	L		
							-		
					-		-	· <del></del>	
								- · <u></u>	
							-		
							_		
1- 0.0				<del></del>		· <u></u>	2, ., .		
		etion, RM	=Reduced Matrix, MS	s=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils <sup>3</sup> :	
Hydric Soil I				(O=)				•	
Histosol			Dark Surface		· · (00) 7			2 cm Muck (A10) (MLRA 147)	
	oipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)	
Black His			Thin Dark Su			147, 148)		(MLRA 147, 148)	
	n Sulfide (A4) I Layers (A5)		Loamy Gleye Depleted Mate		r2)			Piedmont Floodplain Soils (F19) (MLRA 136, 147)	
	ck (A10) <b>(LRR N)</b>		Depleted Mai		(e)		,	Very Shallow Dark Surface (TF12)	
	Below Dark Surface	(A11)	Depleted Dar					Other (Explain in Remarks)	
	ark Surface (A12)	, (, (, , , ,	Redox Depre				<del></del> `	Caron (Explain in Nomanio)	
	lucky Mineral (S1) <b>(L</b>	RR N.	Iron-Mangane			LRR N,			
	\ 147, 148)	•	MLRA 130		· / ·	•			
	leyed Matrix (S4)		Umbric Surfa		MLRA 13	86, 122)	<sup>3</sup> In	dicators of hydrophytic vegetation and	
Sandy R	edox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	<b>l8)</b> w	etland hydrology must be present,	
Stripped	Matrix (S6)		Red Parent M	faterial (F	21) <b>(MLR</b>	A 127, 147	<b>7)</b> ui	nless disturbed or problematic.	
	ayer (if observed):								
Type: noi	ne								
Depth (inc	ches):						Hydric So	il Present? Yes No	
Remarks:									



Photo 1 Wetland data point WRAA408f\_w facing west



Photo 2
Wetland data point WRAA408f\_w facing north

Project/Site: Atlantic Coast Pi	peline	City/C	ounty: Randolph County		Sampling Date: 3/5/2016
Applicant/Owner: Dominion					Sampling Point: wraa408_u
Investigator(s): GB, AS, CG		Section	on, Township, Range: No		
Landform (hillslope, terrace, et					
Subragion (LDD or MLDA): N	1.	at: 38.70149608	Long: -80.1	1543229	Datum: WGS 1984
Soil Man Unit Name: Buchana	an and Ernest stony so	ils, 15 to 35 percent slop	es	NIV/I algorific	Datum: WGS 1984 cation: None
Are climatic / hydrologic condit		-			
				Circumstances"	oresent? Yes No
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If needed, e.	xplain any answe	ers in Remarks.)
SUMMARY OF FINDIN	GS – Attach site	map showing sam	pling point locatio	ns, transects	s, important features, etc.
Hydrophytic Vegetation Pres	ent? Yes	No			
Hydric Soil Present?		No	Is the Sampled Area	Vaa	No 🗸
Wetland Hydrology Present?	Yes	No 🗸	within a Wetland?	res	NO
Remarks:					
Upland data point taken on a	siope adjacent to a sai	tarated i i o seep wettar	ia located in a minor drav	v.	
HYDROLOGY					
Wetland Hydrology Indicat	ors:			Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum	of one is required; che	eck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	_	_ True Aquatic Plants (	B14)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)	<del>_</del>	_ Hydrogen Sulfide Ode	or (C1)	Drainage Pa	itterns (B10)
Saturation (A3)	_		es on Living Roots (C3)	Moss Trim L	
Water Marks (B1)		_ Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)	_	_ Recent Iron Reductio		Crayfish Bur	
Drift Deposits (B3)	_	_ Thin Muck Surface (C			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_	_ Other (Explain in Ren	narks)		stressed Plants (D1)
Iron Deposits (B5)	rial Imagary (P7)			Shallow Aqu	Position (D2)
Inundation Visible on Ae Water-Stained Leaves (I					aphic Relief (D4)
Aquatic Fauna (B13)	<i>39)</i>			FAC-Neutral	• • • •
Field Observations:					1 1001 (20)
Surface Water Present?	Yes No 🗸	Depth (inches):			
Water Table Present?		Depth (inches):			
Saturation Present?		Depth (inches):		vdrology Presei	nt? Yes No
(includes capillary fringe)		_ , , , ,			
Describe Recorded Data (str	eam gauge, monitoring	g well, aerial photos, pre	vious inspections), if avai	lable:	
Remarks:					
no hydrology indicators prese	nt				

Tree Stratum (Plot size:	30		Absolute % Cover	Dominant Species?	ndicator Status	Dominance Test worksheet:	
1. Betula lenta			15	Yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC:	3 (A
<sub>2.</sub> Fagus grandifolia			15	Yes	FACU	Total Number of Dominant	
3. Acer saccharum			15	Yes	FACU	Species Across All Strata:	(E
<sub>1.</sub> Prunus serotina			10	No	FACU		,
. Acer rubrum			10	No	FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:	37.5 (A
S							٠,
·						Prevalence Index worksheet:	
				= Total Cove			tiply by:
	50% of 1	total cover: 32.5	20% of	total cover:	13	OBL species x i = _	0
Sapling/Shrub Stratum (Plot s	ize:	)				FACW species x 2 =	75
Betula lenta			15	Yes	FACU	FAC species x 3 =	380
Fagus grandifolia			15	Yes	FACU	FACU species x 4 =	0
Acer saccharum			5	No	FACU	UPL species x 5 =	155
Liriodendron tulipifera			5	No	FACU	Column Totals:(A)	(
5						Prevalence Index = B/A =	3.79
). <u> </u>						Hydrophytic Vegetation Indicators:	
·						1 - Rapid Test for Hydrophytic Ve	netation
J						2 - Dominance Test is >50%	gotation
). <u> </u>						3 - Prevalence Index is ≤3.0 <sup>1</sup>	
				= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Pi	rovide suppor
		total cover: 20	20% of	total cover:	8	data in Remarks or on a separa	
Herb Stratum (Plot size:	5	)	_			Problematic Hydrophytic Vegetation	
Dryopteris carthusiana			3	Yes	FAC	robicinatio riyaropriyare vegetatio	on (Explain)
Carex blanda			2	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland h	vdrology mus
3						be present, unless disturbed or problem	
ł. <u> </u>						Definitions of Four Vegetation Strate	a:
5							
						Troe Woody plants excluding vines	2 in (7.6 cm)
S						Tree – Woody plants, excluding vines, more in diameter at breast height (DBI	
)							
13				· ———		more in diameter at breast height (DBI height.	H), regardless
7						more in diameter at breast height (DBh height.  Sapling/Shrub – Woody plants, excluthan 3 in. DBH and greater than or equ	H), regardless
7. 3. 9. 0.						more in diameter at breast height (DBI height.  Sapling/Shrub – Woody plants, exclude	H), regardless
7. 3. 9.						more in diameter at breast height (DBh height.  Sapling/Shrub – Woody plants, excluthan 3 in. DBH and greater than or equin) tall.  Herb – All herbaceous (non-woody) pl	H), regardless ding vines, lea ual to 3.28 ft (
7. 3. 9. 0.			5	= Total Cove		more in diameter at breast height (DBh height.  Sapling/Shrub – Woody plants, excluthan 3 in. DBH and greater than or equin) tall.	H), regardless ding vines, lea ual to 3.28 ft (
7	50% of t	total cover: 2.5	5			more in diameter at breast height (DBh height.  Sapling/Shrub – Woody plants, excluthan 3 in. DBH and greater than or equin) tall.  Herb – All herbaceous (non-woody) pl	H), regardless ding vines, let ual to 3.28 ft ( ants, regardle 28 ft tall.
7	50% of t		5 20% of	= Total Cover:	1	more in diameter at breast height (DBh height.  Sapling/Shrub – Woody plants, excluthan 3 in. DBH and greater than or equin) tall.  Herb – All herbaceous (non-woody) plof size, and woody plants less than 3.2	H), regardless ding vines, let ual to 3.28 ft ( ants, regardle 28 ft tall.
Noody Vine Stratum (Plot size	50% of t	total cover: 2.5 30 )	5 20% of	= Total Cover: total cover: Yes		more in diameter at breast height (DBh height.  Sapling/Shrub – Woody plants, excluthan 3 in. DBH and greater than or equin) tall.  Herb – All herbaceous (non-woody) plof size, and woody plants less than 3.2  Woody vine – All woody vines greater	H), regardless ding vines, let ual to 3.28 ft ( ants, regardle 28 ft tall.
Noody Vine Stratum (Plot size Smilax rotundifolia	50% of t	total cover: 2.5	5 	= Total Cover: total cover: Yes	1	more in diameter at breast height (DBh height.  Sapling/Shrub – Woody plants, excluthan 3 in. DBH and greater than or equin) tall.  Herb – All herbaceous (non-woody) plof size, and woody plants less than 3.2  Woody vine – All woody vines greater	H), regardless ding vines, let ual to 3.28 ft ( ants, regardle 28 ft tall.
Noody Vine Stratum (Plot size Smilax rotundifolia	50% of t	total cover: 2.5	5 	= Total Cover: total cover: Yes	1	more in diameter at breast height (DBh height.  Sapling/Shrub – Woody plants, excluthan 3 in. DBH and greater than or equin) tall.  Herb – All herbaceous (non-woody) plof size, and woody plants less than 3.2  Woody vine – All woody vines greater	H), regardless ding vines, let ual to 3.28 ft ( ants, regardle 28 ft tall.
Noody Vine Stratum (Plot size Smilax rotundifolia	50% of t	total cover:2.5	5 20% of	= Total Cover: total cover: Yes	1	more in diameter at breast height (DBh height.  Sapling/Shrub – Woody plants, excluthan 3 in. DBH and greater than or equin) tall.  Herb – All herbaceous (non-woody) plof size, and woody plants less than 3.2  Woody vine – All woody vines greater	H), regardless ding vines, let ual to 3.28 ft ( ants, regardle 28 ft tall.
7	50% of t	total cover:2.5	5 	= Total Cover: total cover: Yes	1 FAC	more in diameter at breast height (DBh height.  Sapling/Shrub – Woody plants, excluthan 3 in. DBH and greater than or equin) tall.  Herb – All herbaceous (non-woody) plof size, and woody plants less than 3.2  Woody vine – All woody vines greater height.  Hydrophytic Vegetation	H), regardless ding vines, let ual to 3.28 ft ( lants, regardle 28 ft tall. r than 3.28 ft i
Noody Vine Stratum (Plot size Smilax rotundifolia	50% of t	total cover: 2.5	5 	= Total Cover: Yes  = Total Cover:	FAC	more in diameter at breast height (DBH height.  Sapling/Shrub – Woody plants, excluthan 3 in. DBH and greater than or equin) tall.  Herb – All herbaceous (non-woody) plof size, and woody plants less than 3.2  Woody vine – All woody vines greater height.  Hydrophytic	H), regardless ding vines, let ual to 3.28 ft ( lants, regardle 28 ft tall. r than 3.28 ft i
Noody Vine Stratum (Plot size Smilax rotundifolia)  2	50% of t	total cover: 2.5 30 )	5 20% of 10 10 20% of	= Total Cover: total cover: Yes	1 FAC	more in diameter at breast height (DBh height.  Sapling/Shrub – Woody plants, excluthan 3 in. DBH and greater than or equin) tall.  Herb – All herbaceous (non-woody) plof size, and woody plants less than 3.2  Woody vine – All woody vines greater height.  Hydrophytic Vegetation	H), regardless ding vines, let ual to 3.28 ft ( lants, regardle 28 ft tall. r than 3.28 ft i
7	50% of t	total cover: 2.5 30 )	5 20% of 10 10 20% of	= Total Cover: Yes  = Total Cover:	FAC	more in diameter at breast height (DBh height.  Sapling/Shrub – Woody plants, excluthan 3 in. DBH and greater than or equin) tall.  Herb – All herbaceous (non-woody) plof size, and woody plants less than 3.2  Woody vine – All woody vines greater height.  Hydrophytic Vegetation	H), regardless ding vines, let ual to 3.28 ft ( lants, regardle 28 ft tall. r than 3.28 ft i

Sampling Point: wraa408\_u

Profile Desc	cription: (Describe t	o the depth	needed to document the indicator of	r confirm	the absence	of indicators.)
Depth	Matrix		Redox Features			
(inches) 0-3	Color (moist) 10YR 3/2	<u>%</u> 100	Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> L	Remarks
3-8	10YR 4/3	100			CL	
8-18	10YR 3/4	100			CL	
<sup>1</sup> Type: C=C <b>Hydric Soil</b>		etion, RM=R	educed Matrix, MS=Masked Sand Gra	ins.		L=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :
-			David Courfe on (CZ)			
Histosol	pipedon (A2)		<ul><li>Dark Surface (S7)</li><li>Polyvalue Below Surface (S8) (M</li></ul>	I D A 147 '		cm Muck (A10) <b>(MLRA 147)</b> Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Surface (S9) (MLRA 14		140) (	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)	17, 140)	F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)		<u> </u>	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)		\	/ery Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)			Other (Explain in Remarks)
	ark Surface (A12)		Redox Depressions (F8)			
	Mucky Mineral (S1) <b>(L</b>	RR N,	Iron-Manganese Masses (F12) (L	.RR N,		
	A 147, 148)		MLRA 136)		3.	
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136			licators of hydrophytic vegetation and
-	Redox (S5)		Piedmont Floodplain Soils (F19)			etland hydrology must be present,
	d Matrix (S6)		Red Parent Material (F21) (MLRA	A 127, 147)	un	lless disturbed or problematic.
Type: _nc	Layer (if observed):					
	iches):		<u> </u>		Hydric Soi	Present? Yes No
	cries).		<del>_</del>		nyunc son	rresent: res NO
Remarks:						



Photo 1 Upland data point WRAA408\_u facing south



Photo 2
Upland data point WRAA408\_u facing east

Project/Site: Atlantic Coast Pipeline		City/C	County: Randolph County	/	Sampling Date: 3/5/2016	
Applicant/Owner: Dominion			Sampling Point: wraa409e_w			
			on, Township, Range: No			
Landform (hillslope, terrace, etc.): O						
Subregion (LRR or MLRA): N					Datum: WGS 1984	
Soil Map Unit Name: Buchanan and	Ernest stony soils,	15 to 35 percent slop	pes	NWI classifi	cation: None	
Are climatic / hydrologic conditions of	on the site typical fo	r this time of year? Y	′es No	(If no, explain in I	Remarks.)	
Are Vegetation, Soil,	or Hydrology	significantly distur	bed? Are "Norma	I Circumstances"	present? Yes No	
Are Vegetation, Soil,						
SUMMARY OF FINDINGS -						
Hydrophytic Vegetation Present?	hytic Vegetation Present? Yes No le the Sampled Are					
Hydric Soil Present?	Yes 🗸	No	Is the Sampled Area	V V	No	
Wetland Hydrology Present?		No	within a Wetland?	res	NO	
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)	
Primary Indicators (minimum of one	e is required; check	all that apply)		Surface Soi	l Cracks (B6)	
✓ Surface Water (A1)	egetated Concave Surface (B8)					
High Water Table (A2)		Hydrogen Sulfide Od	or (C1)	✓ Drainage Patterns (B10)		
Saturation (A3)		Oxidized Rhizosphere	es on Living Roots (C3)	Moss Trim I	_ines (B16)	
Water Marks (B1)		Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)		Recent Iron Reductio	n in Tilled Soils (C6)	Crayfish Bu	rrows (C8)	
Drift Deposits (B3)		Thin Muck Surface (C			/isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)		Stressed Plants (D1)	
Iron Deposits (B5)	(DZ)				Position (D2)	
Inundation Visible on Aerial Im Water-Stained Leaves (B9)	agery (B7)			Shallow Aqu	antard (D3) raphic Relief (D4)	
Aquatic Fauna (B13)				✓ FAC-Neutra	• • •	
Field Observations:						
	s V No	Depth (inches):	1			
		Depth (inches):				
	s / No		0 Wetland I	lydrology Prese	nt? Yes ✓ No	
(includes capillary fringe)						
Describe Recorded Data (stream g	auge, monitoring w	ell, aerial photos, pre	evious inspections), if ava	ailable:		
Remarks:						

/EGETATION (Four Strata) – Use scientific na	ames of	plants.		Sampling Point: wraa409e_w
	Absolute	Dominant I		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30) 1.	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:5 (A)
				(/y
				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 83.33333333 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cove		
50% of total cover:0	20% of	total cover:_	0	/5 x 1 =
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
1. Sambucus nigra	3	Yes	FAC	FAC species X3 =
2. Alnus serrulata	3	Yes	OBL	FACU species X 4 =
3. Spiraea japonica	2	Yes	FACU	UPL species x 5 =
4				Column Totals:83 (A)160 (B)
5				Prevalence Index = B/A =1.92
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9.				<del></del>
	8	= Total Cove		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 4		total cover:_	1.6	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5		_		data in Remarks or on a separate sheet)
1. Carex lupulina	20	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2 Juncus effusus	20	Yes	FACW	
3. Onoclea sensibilis	15	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4 Dichanthelium clandestinum	10	No	FAC	be present, unless disturbed or problematic.
5. Carex scoparia	5	No	FACW	Definitions of Four Vegetation Strata:
6. Packera aurea	5	No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Fackera aurea		INO	FACW	more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	<u>75</u>	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover:37.5	20% of	total cover:_	15	Was devices Allowed by since proster their 2.00 ft in
Woody Vine Stratum (Plot size:)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1				noight.
2				
3.				
4 5.				Hydrophytic
J	0 .	T-1-1-0		Vegetation Present? Yes No
50% of total cover: 0		= Total Cove total cover:_	_	
0070 01 total 00 vol		total cover:_		
Remarks: (Include photo numbers here or on a separate sl	neet.)			

Sampling Point: wraa409e\_w

	Matrix		Redox	Features	_ 1	. 2	_	
nches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-3	10YR 2/1	100					L	
3-6	10YR 3/1	100					L	
6-11	10YR 4/2	96	10YR 5/6	4	С	PL/M	SCL	rock at 11"
	-							
								-
vne: C=C	Concentration, D=De	oletion, RM	=Reduced Matrix, MS	=Masked S	Sand Gra	ins.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
	Indicators:	01011011, 1111	in reaction matrix, me		Jana Ora		Indica	ators for Problematic Hydric Soils <sup>3</sup> :
_ Histosol			Dark Surface	(S7)				cm Muck (A10) <b>(MLRA 147)</b>
	pipedon (A2)		Polyvalue Bel		e (S8) <b>(M</b>	LRA 147,		Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Sur				·, —	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed				P	Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Mati	rix (F3)				(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S					ery Shallow Dark Surface (TF12)
	ed Below Dark Surface	ce (A11)	Depleted Dark				c	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depres					
	Mucky Mineral (S1) (	LRR N,	Iron-Mangane		s (F12) <b>(L</b>	.RR N,		
	A 147, 148)		MLRA 136	•	II DA 426	. 400)	3 <sub>1m</sub> a	licators of budraphytic variation and
	Gleyed Matrix (S4) Redox (S5)		Umbric Surfac					licators of hydrophytic vegetation and etland hydrology must be present,
	d Matrix (S6)		Red Parent M					less disturbed or problematic.
	Layer (if observed)	):		atoriai (i 2	., (	,	,	need aletailed C. problemane.
	ock							
Type: 10								./
Type: ro							Hydric Soil	Present? Yes No
Depth (in	nches): 11						Hydric Soil	Present? Yes No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No
Depth (in			<u> </u>				Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No
Depth (in							Hydric Soil	Present? Yes No No



Photo 1 Wetland data point WRAA409e\_w facing north



Photo 2
Wetland data point WRAA409e\_w facing west

Project/Site: Atlantic Coast Pip	peline	City/C	county: Randolph County		Sampling Date: 3/5/2016		
Applicant/Owner: Dominion					Sampling Point: wraa409_u		
Investigator(s): GB, AS, CG		Section	on, Township, Range: No P				
Landform (hillslope, terrace, et							
Subragion (LDD or MLDA): N		at: 38.70065852	Long: -80.116	613972	Datum: WGS 1984		
Soil Man Unit Name: Buchana	an and Ernest stony so	oils, 15 to 35 percent slop	es	NIMI alegaifie	Datum: WGS 1984 None		
Are climatic / hydrologic condit							
, ,	• •	•			,		
Are Vegetation, Soil				ircumstances" p	present? Yes V No No		
Are Vegetation, Soil	, or Hydrology _	naturally problema	atic? (If needed, exp	olain any answe	rs in Remarks.)		
SUMMARY OF FINDIN	GS – Attach site	map showing sam	pling point locations	s, transects	, important features, etc.		
Hydrophytic Vegetation Pres	ent? Yes	No					
Hydric Soil Present?		No	Is the Sampled Area	Vac	No 🗸		
Wetland Hydrology Present?	Yes	No	within a Wetland?	res	NO		
Remarks:							
Upland data point taken on a	siope above a saturat	ed Pew Wetland located	on an old road bed.				
HYDROLOGY							
Wetland Hydrology Indicat	ors:		Se	econdary Indica	tors (minimum of two required)		
Primary Indicators (minimum	of one is required; ch	eck all that apply)		_ Surface Soil	Cracks (B6)		
Surface Water (A1)	_	True Aquatic Plants (	B14)	_ Sparsely Ve	getated Concave Surface (B8)		
High Water Table (A2)	_	Hydrogen Sulfide Od	or (C1)	_ Drainage Pa	tterns (B10)		
Saturation (A3)		Oxidized Rhizosphere		_ Moss Trim Li			
Water Marks (B1)	_	Presence of Reduced	Iron (C4)	_ Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	-	Recent Iron Reductio		_ Crayfish Buri			
Drift Deposits (B3)	-	Thin Muck Surface (C			sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	_	Other (Explain in Rer	narks)		tressed Plants (D1)		
Iron Deposits (B5)			_		Position (D2)		
Inundation Visible on Ae				_ Shallow Aqui	` ,		
<ul><li>Water-Stained Leaves (B</li><li>Aquatic Fauna (B13)</li></ul>	59)		_	Microtopogra FAC-Neutral	aphic Relief (D4)		
Field Observations:				_ I AC-Neuliai	1631 (00)		
Surface Water Present?	Vas No V	Depth (inches):					
Water Table Present?		Depth (inches):					
Saturation Present?		Depth (inches):		trology Presen	nt? Yes No		
(includes capillary fringe)		_			10		
Describe Recorded Data (str	eam gauge, monitorin	g well, aerial photos, pre	vious inspections), if availal	ble:			
Remarks:							
no hydrology indicators prese	ent						

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

/EGETATION (Four Strata) – Use scientific na	ames of	plants.		Sampling Point: wraa409_u
•	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:30) 1.		Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:0 (A)
·				That Are OBE, I ACW, OIT AC(A)
2				Total Number of Dominant
3		<u> </u>		Species Across All Strata:3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7	0			Total % Cover of: Multiply by:
<b></b> 0	:	= Total Cove	er O	OBL species0 x 1 =0
50% of total cover: 0	20% of	total cover:		FACW species 5
Sapiing/Shrub Stratum (Plot size:)	10	Voo	FACU	FAC species 13 x 3 = 39
1. Spiraea japonica		Yes		67 269
2. Rubus allegheniensis	5	Yes	FACU	FACU species $\frac{07}{0}$ x 4 = $\frac{200}{0}$
3. Sambucus nigra	3	No	FAC	UPL species x 5 = 317
4. Robinia pseudoacacia	2	No	FACU	Column Totals: (A) (B)
5				Prevalence Index = B/A =3.72
6				T TOVAIGNOO INGCX = B/TX =
7				Hydrophytic Vegetation Indicators:
8.				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
·	20	= Total Cove		3 - Prevalence Index is ≤3.0¹
50% of total cover: 10		total cover:	4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5 )	_	-		data in Remarks or on a separate sheet)
1 Solidago altissima	50	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Dichanthelium clandestinum	10	No	FAC	
3. Packera aurea	5	No	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
<u>,                                    </u>			-71011	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	65	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 32.5	20% of	total cover:		Was designs. All one designs are startless 0.00 ft.
Woody Vine Stratum (Plot size:)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1				g.m
2.				
3				
4		· · · · · · · · · · · · · · · · · · ·		
_				Hydrophytic
5		T-1-1-0		Vegetation Present? Yes No
50% of total cover: 0		= Total Cover:	_	100 100
00 /0 01 total 00 vol		total cover.		
Remarks: (Include photo numbers here or on a separate sl	neet.)			

Sampling Point: wraa409\_u

Depth	Matrix		Redox Features	<del></del>	
(inches)	Color (moist)	%	Color (moist) % Type <sup>1</sup> Loc		Remarks
0-3	10YR 3/2	100		SL	
3-10	10YR 3/4	100		SCL	rock at 10"
				<del></del>	
				<del></del>	· .
Tunoi C C	anacatrotica D Don	Lation DM D	advesd Matrix MC Masked Cond Crains	2l postion. [	D. Doro Lining M. Motrice
	oncentration, בבטפף Indicators:	letion, Rivi=Re	educed Matrix, MS=Masked Sand Grains.		PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils <sup>3</sup> :
•					
Histosol			Dark Surface (S7)		2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA		Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Surface (S9) (MLRA 147, 14		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)	「	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)		Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)	(	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depressions (F8)	_	
	Mucky Mineral (S1) (L	.RR N,	Iron-Manganese Masses (F12) (LRR N	l,	
	A 147, 148)		MLRA 136)	3	
	Bleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122		dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floodplain Soils (F19) (MLR.		etland hydrology must be present,
	Matrix (S6)		Red Parent Material (F21) (MLRA 127)	, <b>147</b> ) ur	nless disturbed or problematic.
	Layer (if observed):				
Type: roo			_		
Depth (in	ches): <u>10</u>		<u>_</u>	Hydric Soi	il Present? Yes No
Remarks:					



Photo 1 Upland data point WRAA409\_u facing west



Photo 2 Upland data point WRAA409\_u facing south

Project/Site: Atlantic Coast Pipeline		City/County: Randolph County Sampling Date: 3/28/2016					
Applicant/Owner: Dominion				State: WV	Sampling Point: wraa431s_w		
			on, Township, Range: No				
Landform (hillslope, terrace, etc.): depre							
Subregion (LRR or MLRA). N	l at·	38.69968732	Long80.	11389314	Datum: WGS 1984		
Soil Map Unit Name: Udorthents, muds	one and shale,	low base		NWI classifi	cation: None		
Are climatic / hydrologic conditions on the	ne site typical fo	r this time of year? Y	es No	(If no, explain in I	Remarks.)		
Are Vegetation, Soil, or I	Hydrology	significantly distur	bed? Are "Normal	Circumstances"	present? Yes No		
Are Vegetation, Soil, or I							
SUMMARY OF FINDINGS – A							
Hydrophytic Vegetation Present?	nytic Vegetation Present? Yes Vo No Is the Complet Ass						
Hydric Soil Present?		No	Is the Sampled Area	V V	No		
Wetland Hydrology Present?		No	within a Wetland?	res	NO		
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)		
Primary Indicators (minimum of one is	required; check	all that apply)		Surface Soi	Cracks (B6)		
Surface Water (A1)							
High Water Table (A2)		Hydrogen Sulfide Od		<ul><li>Sparsely Vegetated Concave Surface (B8)</li><li>Drainage Patterns (B10)</li><li>Moss Trim Lines (B16)</li></ul>			
Saturation (A3)		Oxidized Rhizosphere	es on Living Roots (C3)				
Water Marks (B1)		Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)		Recent Iron Reductio	n in Tilled Soils (C6)	Crayfish Bu	rrows (C8)		
Drift Deposits (B3)		Thin Muck Surface (C			isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)		Stressed Plants (D1)		
Iron Deposits (B5)	(57)				Position (D2)		
Inundation Visible on Aerial Image	ry (B7)			Shallow Aqu			
Water-Stained Leaves (B9) Aquatic Fauna (B13)				✓ FAC-Neutra	aphic Relief (D4)		
Field Observations:				TAO Neutra	1 1031 (103)		
	No.	Depth (inches):					
<u> </u>		Depth (inches):					
			0 Wetland h	lydrology Prese	nt? Yes 🗸 No		
(includes capillary fringe)					nt: 100		
Describe Recorded Data (stream gaug	je, monitoring w	ell, aerial photos, pre	vious inspections), if ava	iilable:			
Remarks:							
Nomano.							

/EGETATION (Four Strata) – Use scientific n	ames of	plants.		Sampling Point: wraa431s_w
Tree Stratum (Plot size: 30 )	Absolute	Dominant Ir		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30) 1	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:6 (A)
2		. <del></del> .		Total Number of Dominant
3	-			Species Across All Strata: 6 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6		. <u> </u>		Burnelouse Indonesia Indonesia
7				Prevalence Index worksheet:
	0	= Total Cover		Total % Cover of: Multiply by:  ORL species 55 × 1 = 55
50% of total cover:0	20% of	total cover:	0	OBL species X I =
Sapling/Shrub Stratum (Plot size: 15 )				FACVV species X 2 =
1. Salix sericea	35	Yes	OBL	FAC species X 3 =
2. Rosa multiflora	5	<u>No</u>	FACU	FACU species x 4 =
3				UPL species x 5 =
4		<u></u> .		Column Totals: (A) (B)
5	-	. <u> </u>		Prevalence Index = B/A =1.8
6				Hydrophytic Vegetation Indicators:
7				
8		<u> </u>		1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
9.				2 - Dominance Test is >50%  ✓ 3 - Prevalence Index is ≤3.0¹
	40	= Total Cover		<del></del>
50% of total cover: 20	20% of	total cover:	8	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:)				data in Remarks or on a separate sheet)
1. Scirpus hattorianus	15	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Solidago rugosa	10	Yes	FAC	1
3. Dichanthelium clandestinum	10	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Dichanthelium scoparium	10	Yes	FACW	Definitions of Four Vegetation Strata:
5. Juncus effusus	10	Yes	FACW	Definitions of Four Vegetation Strata.
6. Carex lupulina	5	No	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7. Epilobium ciliatum	5	No	FAC	more in diameter at breast height (DBH), regardless of height.
8.		· .		
9.		· · · <u></u>		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10		· · · <u></u>		m) tall.
11.				Harb All barbassaya (non woody) planta regardless
	65	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover:32.5		total cover:		
Woody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1				noight.
2				
3				
4		· · · · · · · · · · · · · · · · · · ·		
5.				Hydrophytic Vegetation
<u>.                                    </u>	0	= Total Cover		Present? Yes No
50% of total cover: 0		total cover:	0	
Remarks: (Include photo numbers here or on a separate s				
Remarks. (include prioto numbers here of on a separate s	neet.)			

Sampling Point: wraa431s\_w

Profile Des	cription: (Describe	to the de	pth needed to docum			or confirm	the absence	ce of indicators.)
Depth	Matrix	0/	Redo	x Feature	S1	10-2	Ta4	Downsiles
(inches) 0-6	Color (moist) 10YR 2/1	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> L	Remarks
	· -		· <u></u>					
6-18	10YR 4/1	96	7.5YR 4/6	4	C	PL/M	SICL	_
							_	
			· <del></del>					<del>-</del> -
			· -					_
<sup>1</sup> Type: C=C	Concentration, D=Dep	letion. RM	1=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
	Indicators:		, , , , , , , , , , , , , , , , , , , ,					icators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be	. ,	ce (S8) <b>(I</b>	VILRA 147.	148)	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su					(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		. •	, <b>.,</b>		Piedmont Floodplain Soils (F19)
	ed Layers (A5)		<u>✓</u> Depleted Ma		(- –)			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark		<del>-</del> 6)			Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	e (A11)	Depleted Dar				_	Other (Explain in Remarks)
	ark Surface (A12)	` '	Redox Depre					,
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan			LRR N,		
	A 147, 148)		MLRA 13					
Sandy	Gleyed Matrix (S4)		Umbric Surfa	ce (F13)	(MLRA 13	36, 122)	3lı	ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo				l <b>8)</b> \	wetland hydrology must be present,
Strippe	d Matrix (S6)		Red Parent N	/laterial (F	21) <b>(MLR</b>	A 127, 147	<b>7)</b>	unless disturbed or problematic.
Restrictive	Layer (if observed):							
Type: _n	one							
Depth (ir							Hydric So	oil Present? Yes No
Remarks:							,	
Kemana.								



Photo 1
Wetland data point WRAA431s\_w facing north



Photo 2
Wetland data point WRAA431s\_w facing east

Project/Site: Atlantic Coast Pipeline	City/Cou	inty: Randolph County	Sampling Date: 3/28/2016		
Applicant/Owner: Dominion		State: W	V Sampling Point: wraa431_u		
		Township, Range: No PLSS in thi			
Landform (hillslope, terrace, etc.): road berm					
Subregion (LRR or MLRA): N Soil Map Unit Name: Udorthents, mudstone and	shale, low base	NWI cl	assification: None		
Are climatic / hydrologic conditions on the site ty					
Are Vegetation, Soil, or Hydrolog	gy significantly disturbe	d? Are "Normal Circumstar	nces" present? Yes No		
Are Vegetation, Soil, or Hydrolog					
SUMMARY OF FINDINGS – Attach					
Hydrophytic Vegetation Present?	No. 4				
	No. 4	s the Sampled Area	🗸		
Wetland Hydrology Present? Yes	No_ 🗸	vithin a Wetland? Yes	No		
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary	Indicators (minimum of two required)		
Primary Indicators (minimum of one is required	: check all that apply)		e Soil Cracks (B6)		
Surface Water (A1)	True Aquatic Plants (B1		ely Vegetated Concave Surface (B8)		
High Water Table (A2)	Hydrogen Sulfide Odor		Drainage Patterns (B10)		
Saturation (A3)					
Water Marks (B1)	Presence of Reduced Ir		eason Water Table (C2)		
Sediment Deposits (B2)	Recent Iron Reduction i	n Tilled Soils (C6) Crayfis	sh Burrows (C8)		
Drift Deposits (B3)	Thin Muck Surface (C7)	Satura	tion Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Other (Explain in Rema	rks) Stunte	d or Stressed Plants (D1)		
Iron Deposits (B5)			orphic Position (D2)		
Inundation Visible on Aerial Imagery (B7)			w Aquitard (D3)		
Water-Stained Leaves (B9)			opographic Relief (D4)		
Aquatic Fauna (B13)		FAC-N	leutral Test (D5)		
Field Observations:	V Dansk (in ab as)				
	Depth (inches): Depth (inches):				
	Depth (inches):		Dunnanda Van Na V		
(includes capillary fringe)	Depth (inches):	wetland hydrology F	Present? Yes No		
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previo	ous inspections), if available:			
Remarks:					
no hydrology indicators present					
Inc Hydrology maleuters process					

EGETATION (Four Strata) – Use scientific r	names of	plants.		Sampling Point: wraa431_u
Tree Stratum (Plot size: 30 )	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:30) 1.	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)
2	_			Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC:  25 (A/B)
6				That Ale Obl., FACW, OF FAC (A/b)
7.	_			Prevalence Index worksheet:
·· <u> </u>	0	= Total Cove		Total % Cover of: Multiply by:
50% of total cover:		f total cover:	^	OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15 )				FACW species5 x 2 =10
Spiraea japonica	15	Yes	FACU	FAC species30
2. Robinia pseudoacacia	6	Yes	FACU	FACU species65
3 Betula lenta	5	No	FACU	UPL species 0 x 5 = 0
J		. —		Column Totals: 100 (A) 360 (B)
4				(2)
5				Prevalence Index = B/A = 3.6
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
3				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
4.0		= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:13	20% of	f total cover:	5.2	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)				Problematic Hydrophytic Vegetation¹ (Explain)
1. Lespedeza cuneata	25	Yes	FACU	1 Toblematic Trydrophytic Vegetation (Explain)
2 <sub>.</sub> Agrostis capillaris	20	Yes	FAC	The disease of budgies as it and wettered budgets are recent
3. Solidago rugosa	10	No	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<sub>4.</sub> Potentilla indica	5	No	FACU	Definitions of Four Vegetation Strata:
<sub>5.</sub> Packera aurea	5	No	FACW	Definitions of Four Pogetation Strata.
6. Taraxacum officinale	5	No	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
Tussilago farfara	4	No	FACU	more in diameter at breast height (DBH), regardless of height.
	-			g
9.	-			Sapling/Shrub – Woody plants, excluding vines, less
10.	-			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
		. ——		
11	74	T-1-1-0		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 37		= Total Cover:		or size, and woody plants less than 3.20 it tall.
Woody Vine Stratum (Plot size: 30 )	20 /0 01	total cover.		Woody vine – All woody vines greater than 3.28 ft in
· · · · · · · · · · · · · · · · · · ·				height.
1				
2				
3				
4		<del></del>		Hydrophytic
5				Vegetation No. No.
		= Total Cove	0	Present? Yes No
50% of total cover:0	20 /0 01	f total cover:		
Remarks: (Include photo numbers here or on a separate	sheet.)			

Sampling Point: wraa431\_u

Profile Desc	cription: (Describe to	the depth r	needed to docur	nent the in	dicator or c	onfirm t	the abs	ence of indic	ators.)	
Depth	Matrix		Redo	x Features						
(inches) 0-11	Color (moist) 10YR 3/2	100	Color (moist)		Type <sup>1</sup> L	oc² _	Textu SCL		11"	rks
					·					_
1Tyrpo: C-C	oncentration, D=Deple	tion PM-Po	duced Metrix MS		Sand Crains		<sup>2</sup> l contin	on: PL=Pore L	ining M-Mc	striv
Hydric Soil		uon, Rivi=Re	duced Matrix, Mi	s=iviaskeu s	Sano Grains.					c Hydric Soils³:
Histosol	(A1)		Dark Surface	(S7)				2 cm Mucl	k (A10) <b>(ML</b> I	RA 147)
	pipedon (A2)		Polyvalue Be	. ,	e (S8) <b>(MLR</b>	A 147, 1			irie Redox (/	
	istic (A3)		Thin Dark Su				· -		147, 148)	,
	en Sulfide (A4)		Loamy Gleye				_	Piedmont	Floodplain S	Soils (F19)
Stratified	d Layers (A5)	_	Depleted Ma	trix (F3)				(MLRA	136, 147)	
2 cm Mu	uck (A10) (LRR N)	_	Redox Dark	Surface (F6	5)		_	Very Shall	ow Dark Su	face (TF12)
Deplete	d Below Dark Surface	(A11)	Depleted Dai	k Surface (	F7)		_	Other (Exp	olain in Rem	arks)
Thick Da	ark Surface (A12)	-	Redox Depre	ssions (F8)						
	Mucky Mineral (S1) (LR	RN,	Iron-Mangan	ese Masses	s (F12) <b>(LRR</b>	N,				
	A 147, 148)		MLRA 13	•						
	Gleyed Matrix (S4)	-	Umbric Surfa							vegetation and
Sandy F	Redox (S5)	-	Piedmont Flo	odplain Soi	ils (F19) <b>(ML</b>	RA 148	5)	wetland hyd	drology must	be present,
Stripped	l Matrix (S6)	-	Red Parent N	Naterial (F2	1) <b>(MLRA 12</b>	27, 147)		unless distu	ırbed or prol	olematic.
	Layer (if observed):									
Type: ro			_							,
	ches): 11		_				Hydric	Soil Present	? Yes	No
Remarks:										



Photo 1 Upland data point WRAA431\_u facing southeast



**Photo 2**Upland data point WRAA431\_u facing northwest

Project/Site: Atlantic Coast Pip	eline	City/Co	ounty: Randolph County	У	Sampling Date: 3/7/2016
Applicant/Owner: Dominion				State: WV	Sampling Point: wraa410f_w
Investigator(s): GB, KM					
Landform (hillslope, terrace, etc.	c.): slope	Local relie	ef (concave, convex, no	ne): concave	Slope (%): 15
Subregion (LRR or MLRA): N	La	t: <u>38.69991665</u>	Long: <u>-</u> 80.	1161194	Datum: WGS 1984
Soil Map Unit Name: Buchana	າ and Ernest stony soil	s, 15 to 35 percent slop	es	NWI classifica	ation: None
Are climatic / hydrologic conditi	ons on the site typical	for this time of year? Ye	es <u>'</u> No	(If no, explain in Re	emarks.)
Are Vegetation . Soil	or Hydrology	significantly disturb	ped? Are "Normal	l Circumstances" p	resent? Yes No
Are Vegetation, Soil					
_					, important features, etc.
					, ,
Hydrophytic Vegetation Prese		No	Is the Sampled Area		
Hydric Soil Present? Wetland Hydrology Present?		No	within a Wetland?	Yes	No
Remarks:	163				
the spoil slope below an old st	The finite terrade, area i	nginy diotalbed by past	Timing and solective log	99"'9.	
HYDROLOGY					
Wetland Hydrology Indicato					tors (minimum of two required)
Primary Indicators (minimum	•			Surface Soil (	
Surface Water (A1)		True Aquatic Plants (E Hydrogen Sulfide Odd			etated Concave Surface (B8)
High Water Table (A2)		✓ Drainage Pat			
Saturation (A3)		<ul><li>Oxidized Rhizosphere</li><li>Presence of Reduced</li></ul>	-	Moss Trim Li	
<ul><li>Water Marks (B1)</li><li>Sediment Deposits (B2)</li></ul>		Recent Iron Reduction		Crayfish Burn	Vater Table (C2)
Drift Deposits (B3)		Thin Muck Surface (C			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rem			ressed Plants (D1)
Iron Deposits (B5)			,	Geomorphic I	` ,
Inundation Visible on Aer	ial Imagery (B7)			✓ Shallow Aquit	tard (D3)
Water-Stained Leaves (B	9)			Microtopogra	phic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)
Field Observations:			_		
Surface Water Present?	Yes No		.5		
Water Table Present?	Yes No		<u> </u>		
Saturation Present?	Yes V No	_ Depth (inches):	Wetland F	Hydrology Presen	t? Yes / No
(includes capillary fringe)  Describe Recorded Data (stre	am gauge, monitoring	well, aerial photos, prev	/ious inspections), if ava	ailable:	
·					
Remarks:					

/EGETATION (Four Strata) – Use s	cientific names of	plants.		Sampling Point: wraa410f_w
	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)  1 Betula alleghaniensis	<u>% Cover</u> 15	Species? Yes	Status FAC	Number of Dominant Species That Are OBL FACW or FAC: 6 (A)
·	8	Yes	FACU	That Are OBL, FACW, or FAC: (A)
2. Acer saccharum		Yes	FAC	Total Number of Dominant
3. Acer rubrum		162	TAC	Species Across All Strata: 9 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 66.6666666 (A/B)
6				Prevelence in devivorable est.
7				Prevalence Index worksheet:
		= Total Cove		Total % Cover of: Multiply by:
50% of total	cover: 14.5 20% of	total cover:	5.8	// X I =
Sapling/Shrub Stratum (Plot size: 15	)			FACW species x 2 =
1. Betula alleghaniensis	10	Yes	FAC	FAC species x 3 =
2. Fagus grandifolia	10	Yes	FACU	FACU species X 4 =
3. Betula lenta	8	Yes	FACU	UPL species
4. Acer saccharum	4	No	FACU	Column Totals:(A)(B)
5. Acer rubrum	4	No	FAC	Prevalence Index = B/A =2.66
6				Trevalence index = B/rt =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
<u> </u>	36	= Total Cove	er	3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total		total cover:	7.2	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5)	· <del></del>	_		data in Remarks or on a separate sheet)
1. Carex scoparia	15	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Juncus effusus	15	Yes	FACW	
3. Glyceria striata	12	Yes	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Dichanthelium scoparium	10	No	FACW	be present, unless disturbed or problematic.
5. Packera aurea	5	No	FACW	Definitions of Four Vegetation Strata:
6. Viola cucullata		No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of
				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				m) tan.
11				Herb – All herbaceous (non-woody) plants, regardless
500/ of total		= Total Cover: total cover:		of size, and woody plants less than 3.28 ft tall.
50% of total Woody Vine Stratum (Plot size: 30	cover: 20% or	total cover:		Woody vine – All woody vines greater than 3.28 ft in
(1 lot size.	)			height.
1				
2				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove	^	Present? Yes No
50% of total	cover: 0 20% of	total cover:	0	
Remarks: (Include photo numbers here or or	n a separate sheet.)			

Sampling Point: wraa410f\_w

Profile Des	cription: (Describe t	o the dep	th needed to docum	ent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix			Features	3			
(inches) 0-2	Color (moist) 10YR 3/2	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SCL	Remarks
2-7	10YR 4/1	96	10YR 5/4	4	С	PL/M	SC	
7-11	10YR 5/1	95	10YR 4/6	5	С	PL/M	SC	rock at 11"
	oncentration, D=Depl	etion, RM	=Reduced Matrix, MS	=Masked	Sand Gr	ains.		L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indic	cators for Problematic Hydric Soils <sup>3</sup> :
Histosol	• •		Dark Surface	. ,				2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Bel				148) (	Coast Prairie Redox (A16)
Black H	istic (A3)		Thin Dark Sur			147, 148)		(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (I	F2)			Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat					(MLRA 136, 147)
2 cm Mi	uck (A10) <b>(LRR N)</b>		Redox Dark S					Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Darl				(	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depres					
	Mucky Mineral (S1) (L	RR N,	Iron-Mangane		es (F12) (	LRR N,		
	A 147, 148)		MLRA 136	-			3	
	Gleyed Matrix (S4)		Umbric Surfac					dicators of hydrophytic vegetation and
-	Redox (S5)		Piedmont Floo					etland hydrology must be present,
	d Matrix (S6)		Red Parent M	aterial (F	21) <b>(MLR</b>	A 127, 147	<u>')</u> ur	nless disturbed or problematic.
Restrictive	Layer (if observed):							
Type: cla								
Depth (in	ches): 2		<u></u>				Hydric Soi	I Present? Yes No
Remarks:								



**Photo 1**Wetland data point WRAA410f\_w facing northwest



Photo 2
Wetland data point WRAA410f\_w facing east

Project/Site: Atlantic Coast Pipeline	City/County: Randolph Cou	nty Sampling Date: 3/7/2016		
Applicant/Owner: Dominion		State: WV Sampling Point: wraa410_u		
	Section, Township, Range:			
		none): none Slope (%): 30		
Subregion (LRR or MLRA): N		0.11620838 Datum: WGS 1984		
Soil Map Unit Name: Buchanan and Ernest stony s	soils, 15 to 35 percent slopes	NWI classification: None		
Are climatic / hydrologic conditions on the site typic				
		nal Circumstances" present? Yes No		
Are Vegetation, Soil, or Hydrology _				
		tions, transects, important features, etc.		
	No V Is the Sampled Are within a Wetland?			
Wetland Hydrology Present? Yes	No within a Wetland?	Yes No		
Remarks:	110			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; c	heck all that annly)	Surface Soil Cracks (B6)		
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)		
Saturation (A3)	<ul> <li>Oxidized Rhizospheres on Living Roots (C3</li> </ul>			
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)		
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)		
Iron Deposits (B5)		Geomorphic Position (D2)		
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)		
Water-Stained Leaves (B9)		Microtopographic Relief (D4)		
Aquatic Fauna (B13)		FAC-Neutral Test (D5)		
Field Observations:				
	Depth (inches):			
	Depth (inches):			
Saturation Present? Yes No (includes capillary fringe)	Depth (inches): Wetland	d Hydrology Present? Yes No		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous inspections), if a	vailable:		
Remarks:				
no hydrology indicators present				

Samo	lina	Point:	wraa410_u
Janio	mu	I UIIII.	_

00	Absolute	Dominant I		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Acer saccharum	20	Yes	FACU	That Are OBL, FACW, or FAC:3 (A)
2. Fagus grandifolia	10	Yes	FACU	Total Number of Deminent
3. Magnolia acuminata	10	Yes	FACU	Total Number of Dominant Species Across All Strata: 10 (B)
4. Liriodendron tulipifera	10	Yes	FACU	Openies / toross / tir circuta.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:30 (A/B)
6				Prevalence Index worksheet:
7				
	50	= Total Cove		Total % Cover of: Multiply by:  OBL species 0 x 1 = 0
50% of total cover: 25	20% of	total cover:_	10	ODL species
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
1 Fagus grandifolia	45	Yes	FACU	FAC species19
2. Magnolia acuminata		No	FACU	FACU species111 x 4 =444
3. Acer saccharinum	5	No	FACW	UPL species
			FAC	135 511
4. Sambucus nigra		No	FAC	Column Totals:(A)(B)
5				Prevalence Index = B/A =3.78
6				Trevalence mack = B/TC =
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
20.5		= Total Cove	er 11.8	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 29.5	20% of	total cover:_	11.0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				· · · · · · · · · · · · · · · · · · ·
1. Polystichum acrostichoides	4	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2 Carex blanda	2	Yes	FAC	
2				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree Weedy plants evaluding vines 2 in (7.6 cm) or
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
^				Sapling/Shrub – Woody plants, excluding vines, less
··				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
_	6	= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover:3	20% of	total cover:_	1.2	Woody vine All woody vines greater than 2.39 ft in
Woody Vine Stratum (Plot size:)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1. Smilax rotundifolia	8	Yes	FAC	noight.
2 Rubus allegheniensis	7	Yes	FACU	
3. Vitis rotundifolia		Yes	FAC	
3. Villo rotananona				
4				Hydrophytic
5				Vegetation
	20	= Total Cove	er	Present? Yes No
50% of total cover: 10	20% of	total cover:_	4	
Remarks: (Include photo numbers here or on a separate s				
Tromano. (morado prioto namboro noro or on a coparato o				

Sampling Point: wraa410\_u

Profile Desc	ription: (Describe t	o the depth	needed to docur	nent the i	ndicator	or confirm	n the absence	e of indicators.)
Depth	Matrix		Redo	x Feature:	s			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	10YR 3/3	100					SCL	
5-13	10YR 4/4	100					SCL	rock at 13"
					-			
			-					· <del></del>
					-			
					-			
-			<del></del>				-	
<u> </u>								
	oncentration, D=Depl	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil I								ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface					2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148) (	Coast Prairie Redox (A16)
Black Hi			Thin Dark Su			47, 148)		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		F2)		F	Piedmont Floodplain Soils (F19)
	l Layers (A5)		Depleted Ma					(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark					/ery Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11)	Depleted Dai				— (	Other (Explain in Remarks)
	ark Surface (A12)	DD 11	Redox Depre			. DD N		
	lucky Mineral (S1) (L	RR N,	Iron-Mangan		es (F12) <b>(</b>	LRR N,		
	147, 148)		MLRA 13		MI DA 40	C 400\	31	diantara of landranka dia constation and
	ileyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
	edox (S5) Matrix (S6)		Piedmont Flo Red Parent N					etland hydrology must be present,
	_ayer (if observed):		Red Falentin	nateriai (F	Z1) (WILK	A 121, 141	r) ui	nless disturbed or problematic.
Type: no								
			<del>_</del>					
Depth (inc	ches):		_				Hydric Soi	I Present? Yes No
Remarks:								



Photo 1 Upland data point WRAA410\_u facing southwest



**Photo 2**Upland data point WRAA410\_u facing northwest

Project/Site: Atlantic Coast Pipeline	City/C	county: Randolph County	Sam	pling Date: 6/13/2016
Applicant/Owner: Dominion		Sta	te: WV Sa	ampling Point: wrae251e_w
Investigator(s): CG, SA, KO		on, Township, Range: No PLS		
Landform (hillslope, terrace, etc.): bench				Slope (%): <sup>4</sup>
Subregion (LRR or MLRA): N	Lat: 38.70113188	Long: -80.11827	904	Datum: WGS 1984
Soil Map Unit Name: Gilpin-Dekalb stony com	plex, moist, 15 to 35 percent s	lopes	NWI classification	PEM
Are climatic / hydrologic conditions on the site	typical for this time of year? Y	res No (If no,	explain in Remar	ks.)
Are Vegetation, Soil, or Hydrol	ogy significantly distur	bed? Are "Normal Circu	ımstances" preser	nt? Yes 🔽 No
Are Vegetation, Soil, or Hydrol				
SUMMARY OF FINDINGS – Attach			-	
Hydrophytic Vegetation Present? Ye	s 🗸 No			
	No	Is the Sampled Area	Yes /	da.
	s <u>/</u> No	within a Wetland?	res i	NO
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:		Seco	ndary Indicators (	minimum of two required)
Primary Indicators (minimum of one is requir	ed: check all that apply)		Surface Soil Crack	
Surface Water (A1)	True Aquatic Plants (			ed Concave Surface (B8)
High Water Table (A2)				
Saturation (A3)		Drainage Patterns Moss Trim Lines (		
Water Marks (B1)	=	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Recent Iron Reduction		Crayfish Burrows	
Drift Deposits (B3)	Thin Muck Surface (0	C7) S	Saturation Visible	on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Explain in Rer	marks) S	Stunted or Stresse	ed Plants (D1)
Iron Deposits (B5)			Geomorphic Posit	
Inundation Visible on Aerial Imagery (B7	)		Shallow Aquitard (	
Water-Stained Leaves (B9)			Microtopographic	
Aquatic Fauna (B13)		<u>v</u> 1	FAC-Neutral Test	(D5)
Field Observations:				
	lo Depth (inches):			
	lo V Depth (inches):	0		
Saturation Present? Yes N (includes capillary fringe)	lo Depth (inches):	Wetland Hydro	logy Present?	Yes No
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, pre	vious inspections), if available		
Remarks:				

Sampling Point: wrae251e_v	Sampling	Point·wrae251e_	W
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	Absolute	Dominant I	ndicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?		Number of Dominant Species
1. none	0			That Are OBL, FACW, or FAC: 2 (A)
2				(//
				Total Number of Dominant
3				Species Across All Strata:2 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:100 (A/B)
6				
7				Prevalence Index worksheet:
	0	= Total Cove	r	Total % Cover of: Multiply by:
50% of total cover:		total cover:	0	OBL species20 x 1 =20
Sapling/Shrub Stratum (Plot size: 15 )		_		FACW species x 2 = 150
1. none	0			FAC species 5 x 3 = 15
				FACU species 0 x 4 = 0
2				0
3				UPL species $\begin{array}{c} 0 \\ 100 \\ \end{array}$ $\begin{array}{c} x \ 5 = \\ 185 \\ \end{array}$
4				Column Totals: (A) (B)
5				Prevalence Index = B/A = 1.85
6				Trevalence mack = B/TC =
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
0		= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:0	20% of	total cover:_	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				· , , , , ,
1. Leersia virginica	45	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Juncus effusus	20	Yes	FACW	4
3. Carex lurida	15	No	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Carex scoparia	10	No	FACW	
5 Cardamine pensylvanica	5	No	OBL	Definitions of Four Vegetation Strata:
6. Carex amphibola	5	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
			1710	more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	100	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50		total cover:		
Woody Vine Stratum (Plot size: 30 )		_		<b>Woody vine</b> – All woody vines greater than 3.28 ft in
none ( to obs.	0			height.
•				
2				
3				
4				Hydrophytic
5				Vegetation
	0	= Total Cove	•	Present? Yes No
50% of total cover:0	20% of	total cover:_	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wrae251e\_w

Depth	cription: (Describe to Matrix			x Features				
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-1	10YR 2/2	100					SIL	
1-8	10YR 5/2	80	2.5Y 6/1	10	D	M	SICL	
			10YR 4/6			· <del></del>		
			10114/6	10		M		
	<del>.</del>				-			
			-		-			
Type: C=C	Concentration, D=Depl	letion RM	=Reduced Matrix M	S=Masked	Sand Gr	ains	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
	Indicators:	iotion, rtiv	-readoca Matrix, M	<del>O-Maskea</del>	Odrid Oil	unio.		licators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface	o (97)				2 cm Muck (A10) (MLRA 147)
	Epipedon (A2)		Polyvalue Be		co (SR) <b>(N</b>	AI DA 1 <i>1</i> 7	1/8)	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark S				, 170)	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gley			·, ·· <del></del> 0)		Piedmont Floodplain Soils (F19)
	ed Layers (A5)		✓ Depleted Ma		<i>( ( )</i>			(MLRA 136, 147)
	luck (A10) <b>(LRR N)</b>		Redox Dark	, ,	·6)			Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	e (A11)	Depleted Da	,	,			Other (Explain in Remarks)
	Park Surface (A12)	3 (7111)	Redox Depre					- Other (Explain III Normaliko)
	Mucky Mineral (S1) <b>(L</b>	RR N	Iron-Mangar			I RR N		
	A 147, 148)		MLRA 13		33 (1 12) (			
	Gleyed Matrix (S4)		Umbric Surfa	•	MIRA 13	(6. 122)	3	Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Fl					wetland hydrology must be present,
-	d Matrix (S6)		Red Parent					unless disturbed or problematic.
Restrictive	Laver (if observed):			Traterial (	/ <b>(</b>		·,	amood dictalized of problematic
Type: ro	ock/gravel							
							11	all Bassacia Van V
	nches): <u></u> 8		<del></del>				Hydric S	oil Present? Yes No
Remarks:								
fusal due t	o coarse rock fragmer	nts.						



Wetland data point wrae251e\_w facing south



Wetland data point wrae251e\_w facing east

Project/Site: Atlantic Coast Pipeline	City/County: Randolph Count	y Sampling Date: 6/13/2016			
Applicant/Owner: Dominion		State: WV Sampling Point: wrae251_u			
	Section, Township, Range: N				
Landform (hillslope, terrace, etc.): bench					
Subregion (LRR or MLRA): N		11841037 Datum: WGS 1984			
Soil Map Unit Name: Gilpin-Dekalb stony comple	x, moist, 15 to 35 percent slopes	NWI classification: UPLAND			
	ical for this time of year? Yes No				
		al Circumstances" present? Yes No			
	naturally problematic? (If needed,				
		ons, transects, important features, etc.			
Hudronkutia Vanatatian Brassat2	No. of	·			
	No V Is the Sampled Area within a Wetland?				
	No within a Wetland?	Yes No			
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required;	check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	True Aquatic Plants (B14)				
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	<ul><li>Sparsely Vegetated Concave Surface (B8)</li><li>Drainage Patterns (B10)</li></ul>			
Saturation (A3)	Oxidized Rhizospheres on Living Roots (C3)				
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)			
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)			
Iron Deposits (B5)		Geomorphic Position (D2)			
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)			
Water-Stained Leaves (B9)		Microtopographic Relief (D4)			
Aquatic Fauna (B13)		FAC-Neutral Test (D5)			
Field Observations:					
	Depth (inches):				
	Depth (inches):				
Saturation Present? Yes No _ (includes capillary fringe)	Depth (inches): Wetland	Wetland Hydrology Present? Yes No			
	ring well, aerial photos, previous inspections), if av	ailable:			
Remarks:					

Samplin	na Point:	wrae251_u
Sambill	iu Poilii.	

•	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Acer saccharum	50	Yes	FACU	That Are OBL, FACW, or FAC:1 (A)
2. Acer pensylvanicum	15	Yes	FACU	Total Number of Dominant
3. Robinia pseudoacacia	10	No	FACU	Species Across All Strata: 8 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC:  12.5 (A/B)
0				That Are OBL, FACW, OF FAC.
0				Prevalence Index worksheet:
7	75	Total Cava		Total % Cover of: Multiply by:
50% of total cover: 37.5		= Total Cove total cover:	er 15	OBL species0 x 1 =0
15	20 /6 01	total cover		FACW species 10 x 2 = 20
Sapling/Shrub Stratum (Plot size:)  1 Acer saccharum	20	Yes	FACU	FAC species 30 x 3 = 90
· ·				145 500
2. Fagus grandifolia	15	Yes	FACU	FACU species 145 x 4 = 560 75
3. Dryopteris campyloptera	10	Yes	UPL_	UPL species X 5 =
4				Column Totals:(A)(B)
5				Prevalence Index = B/A = 3.82
6				Trevalence index = b/A =
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
9	45	Tatal Cause		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 25		= Total Cove total cover:_	er 10	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50 % of total cover	20% 01	total cover		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)  1 Tussilago farfara	25	V	FACIL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
-19		Yes	FACU	
2. Dichanthelium clandestinum	20	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Packera aurea	10	No	FACW	be present, unless disturbed or problematic.
4. Eurybia macrophylla	5	No	UPL	Definitions of Four Vegetation Strata:
<sub>5.</sub> Rumex crispus	5	No	FAC	
6. Equisetum arvense	5	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7. Poa pratensis	5	No	FACU	more in diameter at breast height (DBH), regardless of height.
8.				
0	-	-		Sapling/Shrub – Woody plants, excluding vines, less
10				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				m) tall.
11	75			Herb – All herbaceous (non-woody) plants, regardless
500/ - ( ( - ( ) -		= Total Cove	er 15	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 37.5	20% of	total cover:_	10	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)	_		E4011	height.
1. Smilax glauca	5	Yes	FACU	
2				
3				
4				Hudrankutia
5.				Hydrophytic Vegetation
	5	= Total Cove		Present? Yes No
50% of total cover: 2.5		total cover:_	4	
Remarks: (Include photo numbers here or on a separate s		_		
include photo humbers here of on a separate s	neet.)			

Sampling Point: wrae251\_u

Profile Des	cription: (Describe	to the dept				or confirm	the absen	ce of indicators.)
Depth	Matrix		Redo	x Feature	S1	Loc <sup>2</sup>	T t	Demonto
(inches) 0-3	Color (moist) 10YR 3/4	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	LOC	Texture SIL	Remarks
	· .	· <del></del>						
3-16	10YR 4/4	100					SIL	
	-	· ——						- ,
	- 1				-			
	· .							
								<del>-</del> -
1							2	
	Concentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
-	Indicators:			·			ina	icators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface		( <del>-</del> - ) (-		—	2 cm Muck (A10) (MLRA 147)
	Epipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su			147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)			Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Mat		<b>-</b> 0)			(MLRA 136, 147)
	uck (A10) (LRR N)	o (A11)	Redox Dark S				_	Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
	ed Below Dark Surfac	e (ATT)	Depleted Dar Redox Depre					Other (Explain in Remarks)
	Park Surface (A12) Mucky Mineral (S1) <b>(I</b>	DD N	Iron-Mangan			I DD N		
	A 147, 148)	-NN IN,	MLRA 13		es (F12) <b>(</b>	LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa	•	MIDA 13	e 122\	31	ndicators 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):		Neu i aleni i	nateriai (i	Z1) (WILK	A 121, 141	1	unless disturbed of problematic.
	Layer (ii observed).							
Type:			<del></del>					11 D 10 11 V
	nches):						Hydric S	oil Present? Yes No
Remarks:								



Upland data point wrae251\_u facing northeast



Upland data point wrae251\_u facing north

Project/Site: Atlantic Coast Pipeline		City/C	county: Randolph County	/	Sampling Date: 3/7/2016		
Applicant/Owner: Dominion				State: WV	Sampling Point: wraa411f_w		
			on, Township, Range: No				
Landform (hillslope, terrace, etc.): slop							
Subregion (LRR or MLRA): N	1180395	Datum: WGS 1984					
Soil Map Unit Name: Buchanan and E	rnest stony soils,	15 to 35 percent slop	oes	NWI classific	cation: None		
Are climatic / hydrologic conditions on	the site typical fo	r this time of year? Y	es No	(If no, explain in F	Remarks.)		
Are Vegetation, Soil, oil	· Hydrology	significantly distur	bed? Are "Norma	I Circumstances"	present? Yes No		
Are Vegetation, Soil, or							
SUMMARY OF FINDINGS – A							
Hydrophytic Vegetation Present?	Yes 🗸	No					
Hydric Soil Present?		No	Is the Sampled Area	v V	Na		
Wetland Hydrology Present?	Yes 🗸		within a Wetland?	Yes	No		
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is	s required; check	all that apply)		Surface Soil			
Surface Water (A1)	•	True Aquatic Plants (	B14)		getated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Pa			
Saturation (A3)	1	Oxidized Rhizospher	es on Living Roots (C3)	Moss Trim L	ines (B16)		
Water Marks (B1)		Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)		Recent Iron Reduction	n in Tilled Soils (C6)	Crayfish Bu	rrows (C8)		
Drift Deposits (B3)		Thin Muck Surface (C		Saturation V	isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)	Stunted or Stressed Plants (D1)			
Iron Deposits (B5)				Geomorphic Position (D2)			
Inundation Visible on Aerial Imag	ery (B7)			Shallow Aquitard (D3)			
Water-Stained Leaves (B9)				Microtopographic Relief (D4)  ✓ FAC-Neutral Test (D5)			
Aquatic Fauna (B13)				FAC-Neutra	Trest (D5)		
Field Observations: Surface Water Present? Yes	No. V	Depth (inches):					
<u> </u>		Depth (inches):					
	No		0 Westernell	landrala aux Bassa			
(includes capillary fringe)	NO	Depth (inches):	wetland r	Hydrology Prese	nt? Yes V No		
Describe Recorded Data (stream gau	ge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ilable:			
Devente							
Remarks:							

	ames of	•		Sampling Point: wraa411f_w
Tree Stratum (Plot size: 30 )	Absolute	Dominant In		Dominance Test worksheet:
Tree Stratum (Plot size:30)  1 Acer rubrum	<u>% Cover</u> 15	Species? Yes	<u>Status</u> FAC	Number of Dominant Species That Are OBL FACW or FAC: 5 (A)
1. Fagus grandifolia	10	Yes	FACU	That Are OBL, FACW, or FAC: (A)
3 Betula alleghaniensis		No	FAC	Total Number of Dominant
×				Species Across All Strata: 7 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 71.42857142 (A/B)
6				Prevalence Index worksheet:
7	30			Total % Cover of: Multiply by:
45		= Total Cover	6	OBL species x 1 = 14
50% of total cover:15	20% of	total cover:		FACW species x 2 = 40
Sapiing/Shrub Stratum (Plot size:)	10	Voo	FACIL	20 04
1. Fagus grandifolia	<u>10</u> 5	Yes	FACU	. 20
2. Sambucus nigra		Yes	FAC	,
3. Alnus serrulata	4	No No	OBL	UPL species $\frac{0}{82}$ $x = \frac{0}{218}$
4. Acer rubrum	3	No No	FAC	Column Totals: (A) (B)
5				Prevalence Index = B/A = 2.65
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9		. <u> </u>		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	22	= Total Cover		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:11	20% of	total cover:	4.4	
Herb Stratum (Plot size:5				data in Remarks or on a separate sheet)
1. Symphyotrichum lanceolatum	12	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Carex scabrata	10	Yes	OBL	1
3. Osmundastrum cinnamomeum	8	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Deminions of Four Vegetation offata.
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
7		· · · · · · · · · · · · · · · · · · ·		more in diameter at breast height (DBH), regardless of height.
8				
9.		· <del></del>		Sapling/Shrub – Woody plants, excluding vines, less
10.		· <del></del>		than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
11				
· · · <u> </u>	30	= Total Cover		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 size it tall.
50% of total cover: 15	20% of	total cover:	6	
20	20% of	total cover:		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)	20 70 01		0	Woody vine – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size:)  1				
Woody Vine Stratum (Plot size:30 ) 12.				
Woody Vine Stratum (Plot size:)  1				
Woody Vine Stratum (Plot size:)  1				height.  Hydrophytic
Woody Vine Stratum (Plot size:)  1				height.  Hydrophytic Vegetation
Woody Vine Stratum (Plot size:	0			height.  Hydrophytic

Sampling Point: wraa411f\_w

SOIL

Profile Desc	ription: (Describe t	o the dep	oth needed to docum	ent the i	indicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	Feature	s			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	<u>Remarks</u>
0-4	10YR 2/1	100					L	
4-7	10YR 3/1	100					SCL	
7-12	10YR 4/1	96	10YR 4/6	4	С	PL/M	SCL	rock at 12"
					-			
			·					
					,			
							-	
<sup>1</sup> Type: C=Co	oncentration, D=Dept	etion. RM	=Reduced Matrix, MS	=Masked	d Sand Gr	ains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
Hydric Soil		ouon, run	-reduced Matrix, Me	IVIGORO	a Garia Gi	an 10.		ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(S7)				cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Bel		ce (S8) <b>(N</b>	ILRA 147.		Coast Prairie Redox (A16)
Black Hi			Thin Dark Sur					(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			, ,	P	Piedmont Floodplain Soils (F19)
Stratified	Layers (A5)		✓ Depleted Mat	rix (F3)				(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark S	,	,			ery Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Darl				<u> </u>	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depres					
	lucky Mineral (S1) (L	RR N,	Iron-Mangane		es (F12) <b>(</b>	LRR N,		
	\ 147, 148)		MLRA 136		(NAL DA 40	0 400\	3,	Parton of budger by Carry and Carry and
	ileyed Matrix (S4)		Umbric Surface Piedmont Floo					licators of hydrophytic vegetation and
	edox (S5) Matrix (S6)		Red Parent M					etland hydrology must be present, less disturbed or problematic.
	_ayer (if observed):		Red r arent iv	iateriai (i	Z1) (WILK	A 121, 141	, un	liess disturbed of problematic.
Type: roo	k							
Depth (inc	<sub>2haa</sub> ). 12		<del></del>				Hydric Soil	Present? Yes V No No
							nyuric 3011	Present? resNo
Remarks:								



Photo 1
Wetland data point WRAA411f\_w facing west



Photo 2
Wetland data point WRAA411f\_w facing south

Project/Site: Atlantic Coast Pi	peline	City/C	ounty: Randolph County		Sampling Date: 3/7/2016	
Applicant/Owner: Dominion					Sampling Point: wraa411_u	
Investigator(s): GB, KM		Section	on, Township, Range: No P			
Landform (hillslope, terrace, et						
Subragion (LDD or MLDA): N	.0.).	38.6985888	Lang80.11	796345	Glope (70)	
Subregion (LRR of MLRA):	La an and Frnest stony soil	ls 15 to 35 percent slor	Long:	ADA(I 1 20	Datum: WGS 1984 cation: None	
Are climatic / hydrologic condit						
Are Vegetation, Soil	, or Hydrology	significantly distur	oed? Are "Normal C	ircumstances" p	present? Yes No	
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If needed, exp	plain any answe	ers in Remarks.)	
SUMMARY OF FINDIN	GS – Attach site r	map showing sam	pling point location	s, transects	, important features, etc.	
Lludraphytic Variation Dres	ent? Vee	No. 4				
Hydrophytic Vegetation Pres Hydric Soil Present?		No	Is the Sampled Area			
Wetland Hydrology Present?		No 🗸	within a Wetland?	Yes	No	
Remarks:						
Upland data point taken on a	disturbed, rocky slope i	ior a saturated in C see	р weцапи.			
HYDROLOGY						
Wetland Hydrology Indicat	ors:		<u>S</u>	econdary Indica	ators (minimum of two required)	
Primary Indicators (minimum	of one is required; che	ck all that apply)		_ Surface Soil	Cracks (B6)	
Surface Water (A1)		B14)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	_	Drainage Pa				
Saturation (A3)	_		es on Living Roots (C3)	Moss Trim L		
Water Marks (B1)		_ Presence of Reduced		Dry-Season Water Table (C2)		
Sediment Deposits (B2)	_	_ Recent Iron Reductio		Crayfish Bur		
Drift Deposits (B3)	_	_ Thin Muck Surface (C			isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	_	Other (Explain in Ren	narks)		tressed Plants (D1)	
Iron Deposits (B5) Inundation Visible on Ae	rial Imagery (R7)		_	Geomorphic Shallow Aqu	Position (D2)	
Water-Stained Leaves (E	• • • •		<del>-</del>		aphic Relief (D4)	
Aquatic Fauna (B13)	30)		_	FAC-Neutral	• • • •	
Field Observations:			<u> </u>	_		
Surface Water Present?	Yes No	Depth (inches):				
Water Table Present?		Depth (inches):				
Saturation Present?		Depth (inches):		drology Preser	nt? Yes No	
(includes capillary fringe)		_ , , , , _ ,				
Describe Recorded Data (str	eam gauge, monitoring	well, aerial photos, pre	vious inspections), if availa	able:		
Remarks:						
no hydrology indicators prese	nt					

Sampling Point: wraa411_u
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00	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Acer saccharum	20	Yes	FACU	That Are OBL, FACW, or FAC: (A)
2. Fagus grandifolia	15	Yes	FACU	Total Number of Deminant
3. Magnolia acuminata	10	Yes	FACU	Total Number of Dominant Species Across All Strata:  8 (B)
4. Liriodendron tulipifera	5	No	FACU	Openies / toross / tir etrata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 25 (A/B)
6				Prevalence Index worksheet:
7				
	50	= Total Cove		Total % Cover of: Multiply by:  OBL species 0 x 1 = 0
50% of total cover: 25	20% of	total cover:_	10	ODL species
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
1 Fagus grandifolia	30	Yes	FACU	FAC species11 x 3 =33
2. Acer saccharinum	5	No	FACW	FACU species99
3. Magnolia acuminata	5	No	FACU	UPL species
	4		FAC	115 430
4. Sambucus nigra		No	FAC	Column Totals: (A) (B)
5				Prevalence Index = B/A =3.81
6				
7		_		Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	44			3 - Prevalence Index is ≤3.0 <sup>1</sup>
33		= Total Cove	er 8.8	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 22	20% of	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)				
1. Polystichum acrostichoides	4	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Carex blanda	3	Yes	FAC	
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
···				m) tall.
10				,
11	7			Herb – All herbaceous (non-woody) plants, regardless
2.5		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 3.5	20% of	total cover:	1.4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1. Rubus allegheniensis	10	Yes	FACU	
2. Smilax rotundifolia	4	Yes	FAC	
3.				
4				
4				Hydrophytic
5				Vegetation No. No.
_	14	= Total Cove		Present? Yes No
50% of total cover:/	20% of	total cover:_	2.8	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wraa411\_u

	cription: (Describe	to the dept				or confirm	the absence	e of indicators.)
Depth	Matrix		Redo	x Feature:	S1	1 2	T	Demonto
(inches) 0-2	Color (moist) 10YR 2/2	<u>%</u> 100	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> L	Remarks
2-7	10YR 4/3	100					SCL	
7-14	10YR 4/4	100					SCL	rock at 14"
								•
	· -				-			• -
							-	
1Tumor C (	Concentration D. Dor	olotion DM	Doduced Metrix MS	Mookee			21 acation. [	D. Dare Lining M. Metrix
	Concentration, D=Dep	pietion, Rivi=	Reduced Matrix, MS	s=iviasked	sand Gr	ains.		PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils <sup>3</sup> :
•			DI- 0(	(07)				
Histoso			Dark Surface		(00) (1	U DA 447		2 cm Muck (A10) (MLRA 147)
	Epipedon (A2)		Polyvalue Be				148) (	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su	. ,		47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(Г∠)		<u> </u>	Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Mar		-c)		,	(MLRA 136, 147)
	luck (A10) (LRR N)	o (A11)	Redox Dark					Very Shallow Dark Surface (TF12)
	ed Below Dark Surfac Park Surface (A12)	e (ATT)	Depleted Dar Redox Depre				— '	Other (Explain in Remarks)
	Mucky Mineral (S1) <b>(</b>	IDDN	Iron-Mangan			I DD N		
	A 147, 148)	LINI IN,	MLRA 13		es (F12) <b>(</b>	LINN IN,		
	Gleyed Matrix (S4)		Umbric Surfa		(MI D A 13	6 122\	3In	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	d Matrix (S6)		Red Parent N					nless disturbed or problematic.
	Layer (if observed)	•	Neu i alentin	iateriai (i	Z1) (WILK	A 121, 141	) ui	liess disturbed of problematic.
Type: n	one	•						
			<u></u>					
	nches):						Hydric Soi	il Present? Yes No
Remarks:								



Photo 1 Upland data point WRAA411\_u facing southeast



Photo 2
Upland data point WRAA411\_u facing northeast

Project/Site: Atlantic Coast Pip	eline		City/C	ounty: Randolph County	/	Sampling Date: 3/7/2016	
Applicant/Owner: Dominion				,		Sampling Point: wraa412f_w	
			Section	on, Township, Range: No	PLSS in this area	 a	
Landform (hillslope, terrace, etc							
Subregion (LRR or MLRA): N						Datum: WGS 1984	
Soil Map Unit Name: Gilpin-De	kalh stony con	Lai nnlex mois	t 15 to 35 percent sl	Long lones	NA/ 1 'C'	None	
Are climatic / hydrologic condition							
Are Vegetation, Soil	v, or Hydro	logy	_ significantly disturb	bed? Are "Normal	Circumstances"	oresent? Yes No	
Are Vegetation, Soil	, or Hydro	logy	_naturally problema	atic? (If needed, e	explain any answe	ers in Remarks.)	
SUMMARY OF FINDING	GS – Attach	site ma	p showing sam	pling point location	ons, transects	s, important features, etc.	
Hydrophytic Vegetation Prese	ont? Va	es 🗸	No				
Hydric Soil Present?	Ye.	s /	No	Is the Sampled Area			
Wetland Hydrology Present?			No	within a Wetland?	Yes	No	
Remarks:			·				
Saturated PFO seep wetland intermittent stream sraa406	ocated in a slo	pe concavi	ty on a disturbed slo	pe, old strip mine. Hydro	ology from seeps	praa413, & praa414; origin of	
HYDROLOGY							
Wetland Hydrology Indicato	rs:				Secondary Indica	ators (minimum of two required)	
Primary Indicators (minimum	of one is requir	ed; check a	all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)		Т	rue Aquatic Plants (I	B14)	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)			lydrogen Sulfide Odd		✓ Drainage Pa		
Saturation (A3)				es on Living Roots (C3)	Moss Trim L		
Water Marks (B1)			Presence of Reduced			Water Table (C2)	
Sediment Deposits (B2)				n in Tilled Soils (C6)	Crayfish Bur	· · ·	
Drift Deposits (B3) Algal Mat or Crust (B4)			hin Muck Surface (C Other (Explain in Ren			isible on Aerial Imagery (C9) tressed Plants (D1)	
Iron Deposits (B5)		_ `	other (Explain in Neil	iaiks)		Position (D2)	
Inundation Visible on Aer	ial Imagery (Bī	7)				` '	
Water-Stained Leaves (B		,			<ul><li>Shallow Aquitard (D3)</li><li>Microtopographic Relief (D4)</li></ul>		
Aquatic Fauna (B13)	-,				FAC-Neutral		
Field Observations:							
Surface Water Present?	Yes 🖊 I	No I	Depth (inches): 0	.5			
Water Table Present?	Yes 1	No <u> </u>	Depth (inches):				
Saturation Present?	Yes 1	No I	Depth (inches):	0 Wetland H	lydrology Presei	nt? Yes <u>/</u> No	
(includes capillary fringe)  Describe Recorded Data (stre	am dalide mc	nitoring we	all aerial photos pre	vious inspections) if ava	ilable:		
Describe Necorded Data (Site	am gauge, mo	illioning we	en, aeriai priotos, pre	vious irispections), ii ava	illable.		
Remarks:							

Sampling F	Point: wraa412f_w
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00	Absolute	Dominant Ir	ndicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	<u>% Cover</u> 10		Status FAC	Number of Dominant Species
1. Betula alleghaniensis		Yes		That Are OBL, FACW, or FAC:5 (A)
2. Fagus grandifolia	10	Yes	FACU	Total Number of Dominant
3. Acer rubrum	10	Yes	FAC	Species Across All Strata: 7 (B)
4				Description of Description of Organiza
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 71.42857142 (A/B)
6				
7.				Prevalence Index worksheet:
	30	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 15		total cover:_	6	OBL species 36 x 1 = 36
Sapling/Shrub Stratum (Plot size: 15 )				FACW species21
1 Fagus grandifolia	8	Yes	FACU	FAC species39
2. Acer rubrum	5	Yes	FAC	FACU species18
3. Betula alleghaniensis	4	No	FAC	UPL species
4. Alnus serrulata	4	No	OBL	Column Totals: 114 (A) 267 (B)
	3			Column Totals (A) (B)
5. Sambucus nigra		No	FAC	Prevalence Index = B/A =2.34
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0¹
	24	= Total Cove		
50% of total cover: 12		total cover:	4.8	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5				data in Remarks or on a separate sheet)
1. Carex scabrata	20	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Scirpus divaricatus	12	Yes	OBL	
3. Juncus effusus	8	No	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Dichanthelium clandestinum	7	No	FAC	be present, unless disturbed or problematic.
5. Symphyotrichum lanceolatum	7	No	FACW	Definitions of Four Vegetation Strata:
			1 7011	
			EACM/	Tree – Woody plants, excluding vines, 3 in, (7.6 cm) or
6. Osmundastrum cinnamomeum	6	No	FACW	<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
	6		FACW	
6. Osmundastrum cinnamomeum	6		FACW	more in diameter at breast height (DBH), regardless of height.
6. Osmundastrum cinnamomeum 7	6		FACW	more in diameter at breast height (DBH), regardless of
6. Osmundastrum cinnamomeum 7	6		FACW	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less
6. Osmundastrum cinnamomeum 7. 8. 9.	6		FACW	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.
6. Osmundastrum cinnamomeum 7 8 9 10				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
6. Osmundastrum cinnamomeum 7 8 9 10	60	No		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6. Osmundastrum cinnamomeum 7 8 9 10 11	60	No No		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6. Osmundastrum cinnamomeum 7	60 20% of	No  No  Total Cover total cover:		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6. Osmundastrum cinnamomeum 7	60 20% of	No  Total Covertotal cover:		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6. Osmundastrum cinnamomeum 7.	60 20% of	No  Total Covertotal cover:		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6. Osmundastrum cinnamomeum 7	60 20% of	No  Total Covertotal cover:		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6. Osmundastrum cinnamomeum 7	60 20% of	No  Total Covertotal cover:		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6. Osmundastrum cinnamomeum 7	60 20% of	No N	12	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. Osmundastrum cinnamomeum 7.	60 20% of	No  Total Cover total cover:  Total Cover:	12	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
6. Osmundastrum cinnamomeum 7	60 20% of	No N	12	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. Osmundastrum cinnamomeum 7.		No  Total Cover total cover:  Total Cover:	12	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. Osmundastrum cinnamomeum 7		No  Total Cover total cover:  Total Cover:	12	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. Osmundastrum cinnamomeum 7		No  Total Cover total cover:  Total Cover:	12	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. Osmundastrum cinnamomeum 7		No  Total Cover total cover:  Total Cover:	12	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. Osmundastrum cinnamomeum 7		No  Total Cover total cover:  Total Cover:	12	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. Osmundastrum cinnamomeum 7		No  Total Cover total cover:  Total Cover:	12	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. Osmundastrum cinnamomeum 7		No  Total Cover total cover:  Total Cover:	12	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. Osmundastrum cinnamomeum 7		No  Total Cover total cover:  Total Cover:	12	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation

Sampling Point: wraa412f\_w

SOIL

Profile Desc	ription: (Describe t	o the dep	oth needed to docum	ent the i	ndicator	or confirm	the absenc	e of indicators.)
Depth	Matrix		Redox	Features	S			
(inches) 0-3	Color (moist) 10YR 2/1	100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> L	Remarks
3-7	10YR 3/1	100					SCL	
7-11	10YR 4/1	95	10YR 4/6	5	С	PL/M	SCL	rock at 11"
17			Dada and Markin MO				21 ( 1	Di Dan Listan M Marks
Hydric Soil		etion, RM	=Reduced Matrix, MS	=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(S7)				2 cm Muck (A10) <b>(MLRA 147)</b>
	pipedon (A2)		Polyvalue Bel	. ,	ce (S8) <b>(N</b>	/ILRA 147.		Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Sur					(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed			· · · · · · · · · · · · · · · · · · ·		Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Mati		,			(MLRA 136, 147)
	ick (A10) (LRR N)		Redox Dark S		6)			Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dark					Other (Explain in Remarks)
	ark Surface (A12)	,	Redox Depres		. ,			, ,
	Mucky Mineral (S1) (L	RR N,	Iron-Mangane			LRR N,		
	A 147, 148)		MLRA 136		` ,			
	Gleyed Matrix (S4)		Umbric Surfac		MLRA 13	86, 122)	<sup>3</sup> ln	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floo					vetland hydrology must be present,
-	Matrix (S6)		Red Parent M					nless disturbed or problematic.
	Layer (if observed):							
Type: ro	ck							
Depth (in							Hydric So	il Present? Yes No
Remarks:								



Photo 1 Wetland data point WRAA412f\_w facing north



Photo 2
Wetland data point WRAA412f\_w facing west

Project/Site: Atlantic Coast Pipeline		City/C	county: Randolph County		Sampling Date: 3/7/2016		
Applicant/Owner: Dominion				State: WV	Sampling Point: wraa412_u		
Investigator(s): GB, KM Section, Township, Range: No PLSS in this area							
Landform (hillslope, terrace, etc.): slope							
Subregion (LRR or MLRA): N							
Soil Map Unit Name: Gilpin-Dekalb ston	y complex, mois	t, 15 to 35 percent s	lopes	NWI classific	ation: None		
Are climatic / hydrologic conditions on the	e site typical for	this time of year? Y	es <u> </u>	If no, explain in R	emarks.)		
Are Vegetation, Soil, or F	lydrology	significantly distur	bed? Are "Normal	Circumstances" p	resent? Yes V No		
Are Vegetation, Soil, or F							
SUMMARY OF FINDINGS – At							
Hydrophytic Vegetation Present?	Yes	No 🗸					
Hydric Soil Present?	Yes		Is the Sampled Area	Vaa	No		
Wetland Hydrology Present?	Yes	No	within a Wetland?	res	NO		
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	tors (minimum of two required)		
Primary Indicators (minimum of one is a	equired; check a	all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	т	rue Aquatic Plants (	B14)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	н	lydrogen Sulfide Od	or (C1)	Drainage Patterns (B10)			
Saturation (A3)	c	xidized Rhizospher	es on Living Roots (C3)	Roots (C3) Moss Trim Lines (B16)			
Water Marks (B1)	P	resence of Reduced	l Iron (C4)	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	R	ecent Iron Reductio	n in Tilled Soils (C6)	oils (C6) Crayfish Burrows (C8)			
Drift Deposits (B3)		hin Muck Surface (C		Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	C	ther (Explain in Rer	narks)	Stunted or Stressed Plants (D1)			
Iron Deposits (B5)	(DT)			Geomorphic Position (D2)			
Inundation Visible on Aerial Image	ry (B7)			Shallow Aquitard (D3)			
<ul><li>Water-Stained Leaves (B9)</li><li>Aquatic Fauna (B13)</li></ul>				Microtopographic Relief (D4) FAC-Neutral Test (D5)			
Field Observations:				FAC-Neutral	Test (D3)		
	No 🗸 I	Depth (inches):					
		Depth (inches):					
		Depth (inches):		ydrology Presen	t? Yes No		
(includes capillary fringe)	110 1	Deptit (inches)	Wetland II	lydrology i resen	it: 165 NO		
Describe Recorded Data (stream gauge	e, monitoring we	ll, aerial photos, pre	vious inspections), if avai	ilable:			
Remarks:							
no hydrology indicators present							
ine riyareregy mareatere present							

Sampl	ina	Point:	wraa412_u
Samui	II IU	roini.	

00	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Acer saccharum	20	Yes	FACU	That Are OBL, FACW, or FAC: 2 (A)
2. Magnolia acuminata	15	Yes	FACU	Total Number of Deminent
3. Fagus grandifolia	10	Yes	FACU	Total Number of Dominant Species Across All Strata:  9 (B)
4 Liriodendron tulipifera	5	No	FACU	Openies / toross / tir circuta.
-				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 22.2222222 (A/B)
6				Prevalence Index worksheet:
7				
	50	= Total Cove		Total % Cover of: Multiply by:  OBL species 0 x 1 = 0
50% of total cover: 25	20% of	total cover:	10	ODE species x 1 =
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
1 Fagus grandifolia	30	Yes	FACU	FAC species12 x 3 =36
2. Magnolia acuminata	10	Yes	FACU	FACU species105 x 4 =420
3. Acer saccharinum	8	No	FACW	UPL species
			FAC	125 472
4. Sambucus nigra		No	FAC	Column Totals: (A) (B)
5				Prevalence Index = B/A =3.77
6				Trevalence mack = B//(=
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
0.5		= Total Cove	er 10	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 25	20% of	total cover:	10	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				· · · · · · · · · · · · · · · · · · ·
1. Polystichum acrostichoides	5	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2 Carex blanda	2	Yes	FAC	
2				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree Weedy plants evaluding vines 2 in (7.6 cm) or
6				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
^				Sapling/Shrub – Woody plants, excluding vines, less
··				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 3.5	20% of	total cover:	1.4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1. Rubus allegheniensis	10	Yes	FACU	noight.
2 Smilax rotundifolia	8	Yes	FAC	
=·				
3				
4				Hydrophytic
5				Vegetation
	18 :	= Total Cove	er	Present? Yes No
50% of total cover: 9	20% of	total cover:	3.6	
Remarks: (Include photo numbers here or on a separate s		-		
remarks. (include prioto numbers here of off a separate s	neet.)			

Sampling Point: wraa412\_u

0-5 10YR 3/3 100 SCL	
0-5 10YR 3/3 100 SCL	Remarks
	Romano
5-13 10YR 4/4 100 SCL rock at 13"	
<del></del>	
<del></del>	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining,	
	ematic Hydric Soils <sup>3</sup> :
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10	
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Re	dox (A16)
Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 1	48)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Flood	olain Soils (F19)
Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 1	47)
	rk Surface (TF12)
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in	n Remarks)
Thick Dark Surface (A12) Redox Depressions (F8)	
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N,	
MLRA 147, 148) MLRA 136)	
Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) <sup>3</sup> Indicators of hydro	phytic vegetation and
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology	must be present,
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed of	or problematic.
Restrictive Layer (if observed):	
Type: none	
	es No
Remarks:	



**Photo 1**Upland data point WRAA412\_u facing east



**Photo 2**Upland data point WRAA412\_u facing southwest

Project/Site: Atlantic Coast Pip	peline	City/Cour	nty: Randolph County	,	Sampling Date: 3/7/2016		
Applicant/Owner: Dominion					Sampling Point: wraa413f_w		
		Section.	Township, Range: No				
Landform (hillslope, terrace, et							
Subregion (LRR or MLRA): N							
Soil Map Unit Name: Gilpin-De	Lat	15 to 35 percent slope	Long:		None		
Are climatic / hydrologic condit		*					
Are Vegetation, Soil	, or Hydrology	significantly disturbed	? Are "Normal	Circumstances" p	resent? Yes V No No		
Are Vegetation, Soil	, or Hydrology	_ naturally problematic?	? (If needed, e	explain any answe	rs in Remarks.)		
SUMMARY OF FINDING	GS – Attach site ma	p showing sampl	ing point location	ns, transects	, important features, etc.		
Hydrophytic Vegetation Prese	ent? Yes	No					
Hydric Soil Present?	Yes	15	the Sampled Area				
Wetland Hydrology Present?		No	ithin a Wetland?	Yes	No		
Remarks:							
on the spoil slope below an ol	receiving hydrology from s d strip mine terrace; area h	eep praa4015; adjacen nighly disturbed by past	t to intermittent streat mining and selective	m sraa407 but kno logging.	w surface connection. Located		
HYDROLOGY							
Wetland Hydrology Indicate	ors:			Secondary Indica	tors (minimum of two required)		
Primary Indicators (minimum	of one is required; check a	all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)	Tr	rue Aquatic Plants (B14	<b>!</b> )	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	н	✓ Drainage Pat					
Saturation (A3)		xidized Rhizospheres o		Moss Trim Li			
Water Marks (B1)		resence of Reduced Iro		Dry-Season Water Table (C2)			
Sediment Deposits (B2) Drift Deposits (B3)		ecent Iron Reduction in hin Muck Surface (C7)	Tilled Solls (Co)	Crayfish Burr			
Algal Mat or Crust (B4)		ther (Explain in Remark	(s)	<ul><li>Saturation Visible on Aerial Imagery (C9)</li><li>Stunted or Stressed Plants (D1)</li></ul>			
Iron Deposits (B5)	_ •	anor (Explain in Roman	,	Geomorphic	· ·		
Inundation Visible on Aer	rial Imagery (B7)			Shallow Aqui			
Water-Stained Leaves (E				Microtopographic Relief (D4)			
Aquatic Fauna (B13)				✓ FAC-Neutral	Test (D5)		
Field Observations:							
Surface Water Present?	Yes No [	Depth (inches): 0.5					
Water Table Present?	Yes No [	Depth (inches):					
Saturation Present?	Yes No [	Depth (inches):0	Wetland H	lydrology Presen	t? Yes No		
(includes capillary fringe)  Describe Recorded Data (stre	 eam gauge, monitoring we	II, aerial photos, previou	us inspections), if ava	ilable:			
Remarks:							

Tree Stratum (Plot size: 30 )	Absolute	Dominant I		Dominance Test worksheet:				
(Field Statum)	% Cover 10	Species? Yes	Status FAC	Number of Dominant Species	0			
1. Betula alleghaniensis	7	Yes	FACU	That Are OBL, FACW, or FAC:	6	(A)		
2. Acer saccharum	<del></del> 6			Total Number of Dominant				
3. Acer rubrum		Yes	FAC	_   Species Across All Strata:				
<sub>4.</sub> Fagus grandifolia	5	No	FACU	Devent of Deminent Charles				
5				Percent of Dominant Species That Are OBL, FACW, or FAC:	75	(A/B)		
6						( /		
7.				Prevalence Index worksheet:				
	28	= Total Cove			<u>lultiply by:</u>			
50% of total cover: 14		total cover:	5.6	OBL species 5 x 1 =		_		
Sapling/Shrub Stratum (Plot size: 15 )	<u> </u>	_	,	FACW species 43	86	_		
1 Fagus grandifolia	15	Yes	FACU	FAC species 30 x 3 =	90			
2. Betula alleghaniensis	10	Yes	FAC	FACU species 39 x 4 =	156			
3. Betula lenta	8	No	FACU	UPL species 0 x 5 =	0			
4. Acer rubrum	4	No	FAC	Column Totals: 117 (A)	337	– _ (B)		
	4			Column rotals (A)		_ (D)		
5. Acer saccharum	4	No	FACU	Prevalence Index = B/A =	2.88			
6				Hydrophytic Vegetation Indicator		_		
7				1 - Rapid Test for Hydrophytic \				
8				2 - Dominance Test is >50%	regetation			
9				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>				
	4.4	= Total Cove	er		<b>(</b> D			
50% of total cover: 20.5	20% of	total cover:_	8.2	4 - Morphological Adaptations <sup>1</sup>		porting		
Herb Stratum (Plot size:5				data in Remarks or on a sep				
1 Juncus effusus	15	Yes	FACW	Problematic Hydrophytic Vegeta	ation <sup>1</sup> (Expla	in)		
2. Carex scoparia	10	Yes	FACW					
3. Dichanthelium scoparium	10	Yes	FACW	- Indicators of hydric call and watland hydrology myst				
4. Glyceria striata	5	No	OBL	be present, unless disturbed or problematic.				
5. Packera aurea				Definitions of Four Vegetation Strata:				
		No No	FACW	Tree - Woody plants, excluding vine	as 3 in (7.6	cm) or		
6. Viola cucullata	3	No	FACW	<ul> <li>Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or</li> <li>more in diameter at breast height (DBH), regardless of</li> </ul>				
7				height.	,. 0			
8				Sapling/Shrub – Woody plants, exc	cluding vines	locc		
9				than 3 in. DBH and greater than or e				
10				m) tall.		`		
11.				Harb All barbassaus (non woody)	nlanta roga	rdloog		
	48	= Total Cove		<b>Herb</b> – All herbaceous (non-woody) of size, and woody plants less than		luless		
50% of total cover: 24		total cover:_						
Woody Vine Stratum (Plot size: 30 )		_	,	Woody vine – All woody vines great	ter than 3.28	3 ft in		
,				height.				
1								
2								
3								
4				Hydrophytic				
5				Vegetation				
	0 :	= Total Cove		Present? Yes	No			
50% of total cover:0	20% of	total cover:_	0					
Remarks: (Include photo numbers here or on a separate s	heet.)			1				

Sampling Point: wraa413f\_w

Profile Desc	ription: (Describe t	o the dep	th needed to docur	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix			x Features	S			
(inches) 0-2	Color (moist) 10YR 3/2	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SCL	Remarks
2-7	10YR 4/1	96	10YR 5/4	4	С	PL/M	SC	rock at 7"
						· ——		
	-							
						· ——		
<sup>1</sup> Type: C=Ce	oncentration, D=Deple	etion. RM=	Reduced Matrix. MS	S=Masked	Sand Gr	ains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
Hydric Soil			, , , , , , , , , , , , , , , , , , , ,					ators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	(S7)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ce (S8) <b>(N</b>	/ILRA 147,		Coast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su	rface (S9)	(MLRA	147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye	ed Matrix (	F2)		F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma					(MLRA 136, 147)
	ıck (A10) <b>(LRR N)</b>		Redox Dark					/ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Date				_ (	Other (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre			I DD N		
	Mucky Mineral (S1) <b>(L</b> l <b>\ 147, 148)</b>	KK N,	Iron-Mangan MLRA 13		es (F12) <b>(</b>	LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa	-	MIRA 13	86, 122)	<sup>3</sup> Inc	licators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent N					lless disturbed or problematic.
Restrictive I	Layer (if observed):			`		<u> </u>	1	·
Type: cla	ıy							
Depth (in							Hydric Soi	Present? Yes V No No No
Remarks:							,	



Photo 1
Wetland data point WRAA413f\_w facing north



**Photo 2**Wetland data point WRAA413f\_w facing southeast

Project/Site: Atlantic Coast Pipeline		City/C	ounty: Randolph County		Sampling Date: 3/7/2016			
Applicant/Owner: Dominion			-		Sampling Point: wraa413_u			
			on, Township, Range: No					
Landform (hillslope, terrace, etc.): slop					Slope (%): <u>45</u>			
Subregion (LRR or MLRA): N					Datum: WGS 1984			
Soil Map Unit Name: Gilpin-Dekalb sto	ny complex, mois	t, 15 to 35 percent sl	lopes	NWI classifica	ntion: None			
Are climatic / hydrologic conditions on t								
Are Vegetation, Soil, or								
Are Vegetation, Soil, or								
SUMMARY OF FINDINGS – A								
				110, trailocoto,	important routares, etc.			
Hydrophytic Vegetation Present?	Yes		Is the Sampled Area					
Hydric Soil Present?	Yes	No	within a Wetland?	Yes	No			
Wetland Hydrology Present?  Remarks:	Yes	No						
LIVEROL COV								
HYDROLOGY					( : :			
Wetland Hydrology Indicators:					ors (minimum of two required)			
Primary Indicators (minimum of one is	-			Surface Soil C				
Surface Water (A1)		rue Aquatic Plants (I			etated Concave Surface (B8)			
High Water Table (A2) Saturation (A3)		lydrogen Sulfide Odd	es on Living Roots (C3)	Drainage Patt Moss Trim Lin				
Water Marks (B1)		Presence of Reduced	=					
Sediment Deposits (B2)			n in Tilled Soils (C6)	Dry-Season Water Table (C2) oils (C6) Crayfish Burrows (C8)				
Drift Deposits (B3)		hin Muck Surface (C		Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)		Other (Explain in Ren		Stunted or Stressed Plants (D1)				
Iron Deposits (B5)				Geomorphic Position (D2)				
Inundation Visible on Aerial Imag	ery (B7)			Shallow Aquitard (D3)				
Water-Stained Leaves (B9)				Microtopographic Relief (D4)				
Aquatic Fauna (B13)				FAC-Neutral 1	Γest (D5)			
Field Observations:								
		Depth (inches):						
		Depth (inches):						
Saturation Present? Yes _ (includes capillary fringe)	No [	Depth (inches):	Wetland H	ydrology Present	? Yes No			
Describe Recorded Data (stream gau	ge, monitoring we	ell, aerial photos, pre	vious inspections), if avai	lable:				
Remarks: no hydrology indicators present								
The frydrology indicators present								

Sampling	Point: wraa413_u
Samonia	FUIII.

00	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Acer saccharum	20	Yes	FACU	That Are OBL, FACW, or FAC: 2 (A)
2. Fagus grandifolia	15	Yes	FACU	Total Number of Deminent
3. Magnolia acuminata	10	Yes	FACU	Total Number of Dominant Species Across All Strata:  8 (B)
4. Liriodendron tulipifera	5	No	FACU	Openies / toross / tir etrata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 25 (A/B)
6				Prevalence Index worksheet:
7				
		= Total Cove		Total % Cover of: Multiply by:  OBL species 0 v.1 = 0
50% of total cover: 25	20% of	total cover:	10	DDL species x 1 =
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
1 Fagus grandifolia	30	Yes	FACU	FAC species9 x 3 =27
2. Spiraea japonica	8	No	FACU	FACU species117 x 4 =468
3. Magnolia acuminata		No	FACU	UPL species0 x 5 =0
			FACW	131 505
4. Acer saccharinum		No	FACW	Column Totals: (A) (B)
5				Prevalence Index = B/A = 3.85
6				
7		_		Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8	-			2 - Dominance Test is >50%
9	48			3 - Prevalence Index is ≤3.0 <sup>1</sup>
24		= Total Cove	er 9.6	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 24	20% of	total cover:	<u> </u>	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				
1. Polystichum acrostichoides	4	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Carex blanda	3	Yes	FAC	
3.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				
9.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
···	·			m) tall.
10				,
11	7			Herb – All herbaceous (non-woody) plants, regardless
2.5		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 3.5	20% of	total cover:	1.4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1. Rubus allegheniensis	20	Yes	FACU	
2. Smilax rotundifolia	6	Yes	FAC	
3.				
J				
4				Hydrophytic
5				Vegetation
		= Total Cove		Present? Yes No
50% of total cover:13	20% of	total cover:	5.2	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wraa413\_u

	cription: (Describe	to the dept				or confirm	the absence	e of indicators.)
Depth	Matrix		Redo	x Feature:	S1	1 2	T	Demonto
(inches) 0-2	Color (moist) 10YR 2/2	<u>%</u> 100	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> L	Remarks
2-7	10YR 4/3	100					SCL	
7-14	10YR 4/4	100					SCL	rock at 14"
								•
	· -				-			• -
							-	
1Tumor C (	Concentration D. Dor	olotion DM	Doduced Metrix MS	Mookee			21 acation. [	D. Dare Lining M. Metrix
	Concentration, D=Dep	pietion, Rivi=	Reduced Matrix, MS	s=iviasked	sand Gr	ains.		PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils <sup>3</sup> :
•			DI- 0(	(07)				
Histoso			Dark Surface		(00) (1			2 cm Muck (A10) (MLRA 147)
	Epipedon (A2)		Polyvalue Be				148) (	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su	. ,		47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(Г∠)		<u> </u>	Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Mar		-c)		,	(MLRA 136, 147)
	luck (A10) (LRR N)	o (A11)	Redox Dark					Very Shallow Dark Surface (TF12)
	ed Below Dark Surfac Park Surface (A12)	e (ATT)	Depleted Dar Redox Depre				— '	Other (Explain in Remarks)
	Mucky Mineral (S1) <b>(</b>	IDDN	Iron-Mangan			I DD N		
	A 147, 148)	LINI IN,	MLRA 13		es (F12) <b>(</b>	LINN IN,		
	Gleyed Matrix (S4)		Umbric Surfa		(MI D A 13	6 122\	3In	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	d Matrix (S6)		Red Parent N					nless disturbed or problematic.
	Layer (if observed)	•	Neu i alentin	iateriai (i	Z1) (WILK	A 121, 141	) ui	liess disturbed of problematic.
Type: n	one	•						
			<u></u>					
	nches):						Hydric Soi	il Present? Yes No
Remarks:								



Photo 1 Upland data point WRAA413\_u facing northwest



Photo 2
Upland data point WRAA413\_u facing south

Project/Site: Atlantic Coast Pipeline		City/C	ounty: Randolph County	/	Sampling Date: 3/7/2016				
Applicant/Owner: Dominion					Sampling Point: wraa414e_w				
Investigator(s): GB, KM									
Landform (hillslope, terrace, etc.): dra					Slope (%): <u>25</u>				
Subregion (LRR or MLRA): N									
Soil Map Unit Name: Gilpin-Dekalb s	tony complex, mois	t, 3 to 15 percent slo	ppes	NWI classific	cation: None				
Are climatic / hydrologic conditions or									
Are Vegetation, Soil,									
Are Vegetation, Soil,		-							
SUMMARY OF FINDINGS -									
					, ,				
Hydrophytic Vegetation Present?	Yes	No No	Is the Sampled Area						
Hydric Soil Present? Wetland Hydrology Present?	Yes 🗸	No	within a Wetland?	Yes	No				
Remarks:	163	110							
	Saturated PEM seep wetland located in a draw; hydrology from seep praa416 at top of draw; draw begins at base of spoil slope below a strip mine terrace. Entire area is highly disturbed by past mining and selective logging.								
HYDROLOGY									
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)				
Primary Indicators (minimum of one	is required; check	all that apply)		Surface Soil	Cracks (B6)				
Surface Water (A1)	т	rue Aquatic Plants (l	B14)	Sparsely Ve	getated Concave Surface (B8)				
High Water Table (A2)	F	Hydrogen Sulfide Odo	or (C1)	✓ Drainage Pa	itterns (B10)				
Saturation (A3)	0	Oxidized Rhizosphere	es on Living Roots (C3)	Moss Trim L	ines (B16)				
Water Marks (B1)		Presence of Reduced	` '	Dry-Season	Water Table (C2)				
Sediment Deposits (B2)			n in Tilled Soils (C6)	Crayfish Bur					
Drift Deposits (B3)		hin Muck Surface (C			isible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	<u> </u>	Other (Explain in Ren	narks)		stressed Plants (D1)				
Iron Deposits (B5)	(5-)			Geomorphic Position (D2)					
Inundation Visible on Aerial Ima	igery (B7)			Shallow Aquitard (D3)					
Water-Stained Leaves (B9)				✓ FAC-Neutral	aphic Relief (D4)				
Aquatic Fauna (B13)				FAC-Neutra	Test (D5)				
Field Observations: Surface Water Present? Yes	No. 2	Denth (Seekee)							
		Depth (inches):							
		Depth (inches):	0						
Saturation Present? Yes (includes capillary fringe)	No	Depth (inches):	wetland F	lydrology Presei	nt? Yes V No				
Describe Recorded Data (stream ga	luge, monitoring we	ell, aerial photos, pre	vious inspections), if ava	ilable:					
Remarks:									

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

\_\_)

50% of total cover: \_\_\_

50% of total cover: \_\_\_\_7

50% of total cover:

50% of total cover: \_\_\_ 5

30

Tree Stratum (Plot size:

1. Rubus allegheniensis

Herb Stratum (Plot size: \_ Carex scabrata Juncus effusus

Glyceria striata

6. Carex blanda

7. Packera aurea

3. Dichanthelium clandestinum

Osmundastrum cinnamomeum

1. Smilax rotundifolia

3. Fagus grandifolia

2 Betula lenta

Sapling/Shrub Stratum (Plot size: 15

na	mes of	plants.		Sampling Point: <u>wraa414e_w</u>
	Absolute	Dominant		Dominance Test worksheet:
	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 4  (A)
<u> </u>				Total Number of Dominant Species Across All Strata: 5 (B)
<u> </u>				Percent of Dominant Species That Are OBL, FACW, or FAC:  80  (A/B)
				Prevalence Index worksheet:
	0	= Total Cove	er	Total % Cover of: Multiply by:
0		total cover:	0	OBL species
		<del>-</del>		FACW species14
	10	Yes	FACU	FAC species 20 x 3 = 60
	2	No	FACU	FACU species14 x 4 =56
	2	No	FACU	UPL species0 x 5 =0
				Column Totals: 62 (A) 158 (B)
				Prevalence Index = B/A = 2.54
—				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				✓ 2 - Dominance Test is >50%
	14			✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7		= Total Cove total cover:	er 2.8	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
-	20% 01	iolai cover.		data in Remarks or on a separate sheet)
	12	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	10	Yes	FACW	
—	8	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	2	No	OBL	be present, unless disturbed or problematic.
	2	No	FACW	Definitions of Four Vegetation Strata:
	2	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
_	2	No	FACW	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.
	38	= Total Cove		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
19		total cover:	7.6	Woody vine – All woody vines greater than 3.28 ft in height.
<u> </u>	10	Yes	FAC	neight.
·	10			Hydrophytic Vegetation Present? Yes No
5		= Total Cove total cover:	er 2	100
J	.7U0/~ Ot	TOTAL COVER	_	

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

Woody Vine Stratum (Plot size: \_\_\_\_\_\_)

Sampling Point: wraa414e\_w

Profile Des	cription: (Describe	to the dep	oth needed to docun	nent the	indicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redox	<u> Feature</u>	s1	. 2		
(inches) 0-4	Color (moist) 10YR 2/1	% 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> L	Remarks
U- <del>4</del>								
4-10	10YR 3/1	100					SL	_
10-18	10YR 4/1	97	10YR 5/6	3	С	PL/M	SCL	
								<u> </u>
				-				
								_
Type: C=0	Concentration, D=Dep	oletion, RM	=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
	Indicators:		·					cators for Problematic Hydric Soils <sup>3</sup> :
Histoso	l (A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be	low Surfa	ce (S8) (N	ILRA 147,		Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su	rface (S9	) <b>(MLRA</b> 1			(MLRA 147, 148)
Hydrog	en Sulfide (A4)		Loamy Gleye	d Matrix (	(F2)			Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Mat					(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S	,	,			Very Shallow Dark Surface (TF12)
	ed Below Dark Surfac	ce (A11)	Depleted Dar				_	Other (Explain in Remarks)
	Park Surface (A12)	. DD N	Redox Depre			. DD N		
	Mucky Mineral (S1) (	LRR N,	Iron-Mangane		es (F12) <b>(</b>	LRK N,		
	<b>A 147, 148)</b> Gleyed Matrix (S4)		MLRA 130 Umbric Surfa		/MI D A 12	6 122\	3 <sub>1r</sub>	ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					vetland hydrology must be present,
-	d Matrix (S6)		Red Parent M					inless disturbed or problematic.
	Layer (if observed)	1:	rear arenew	iatoriai (i	Z1) (IIIZI	7. 127, 147	,	miles distarbed or problematic.
Type: n	one (" observed)							
Depth (ir							Hudria Ca	oil Present? Yes No
	iches):						nyuric Sc	on Present? Tes No
Remarks:								



Photo 1 Wetland data point WRAA414e\_w facing north



Photo 2
Wetland data point WRAA414e\_w facing south

Project/Site: Atlantic Coast Pipeline			City/0	County: Randolph Count	у	Sampling Date: 3/7/2016			
Applicant/Owner: Dominion					State: WV	Sampling Point: wraa414_u			
				on, Township, Range: No					
Landform (hillslope, terrace, etc.): slope						Slope (%): <u>35</u>			
Subregion (LRR or MLRA): N						Datum: WGS 1984			
Soil Map Unit Name: Gilpin-Dekalb stony	complex, mo	opes	NWI classif	ication: None					
Are climatic / hydrologic conditions on the	site typical fo	or this tir	me of year?	∕es <b>✓</b> _ No	(If no, explain in	Remarks.)			
Are Vegetation, Soil, or Hy	/drology	sign	ificantly distu	rbed? Are "Norma	al Circumstances"	present? Yes No			
Are Vegetation, Soil, or Hy									
SUMMARY OF FINDINGS – Att									
Hydrophytic Vegetation Present?	Yes	No	<i>y</i>						
Hydric Soil Present?	Yes			Is the Sampled Area	Vaa	No <u> </u>			
Wetland Hydrology Present?	Yes	No_	<b>✓</b>	within a Wetland?	res	NO			
Remarks:									
HYDROLOGY									
Wetland Hydrology Indicators:					Secondary Indic	eators (minimum of two required)			
Primary Indicators (minimum of one is re	equired; checl	k all that	t apply)		Surface Soi	l Cracks (B6)			
Surface Water (A1)	<u></u>	True Ad	quatic Plants	(B14)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)			en Sulfide Od			atterns (B10)			
Saturation (A3)	_	Oxidize	ed Rhizospher	res on Living Roots (C3)	Moss Trim I	Lines (B16)			
Water Marks (B1)		Presen	ce of Reduce	d Iron (C4)	Dry-Season	Water Table (C2)			
Sediment Deposits (B2)	_	Recent	Iron Reduction	on in Tilled Soils (C6)	Crayfish Bu	rrows (C8)			
Drift Deposits (B3)			uck Surface (			/isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	_	Other (	Explain in Re	marks)		Stressed Plants (D1)			
Iron Deposits (B5)	(D.T)					Position (D2)			
Inundation Visible on Aerial Imagery	/ (B/)				Shallow Aq				
<ul><li>Water-Stained Leaves (B9)</li><li>Aquatic Fauna (B13)</li></ul>					Microtopogi	raphic Relief (D4)			
Field Observations:					FAC-Neutra	11 1651 (D3)			
	No. V	Donth	(inches):						
			(inches):						
			(inches):		Hydrology Proso	ent? Yes No			
(includes capillary fringe)	110	Deptili	(11101163)		riyarology r rese	HIL: 165 NO			
Describe Recorded Data (stream gauge	, monitoring v	vell, aeri	ial photos, pre	evious inspections), if ava	ailable:				
Remarks:									
no hydrology indicators present									
, , , , , , , , , , , , , , , , , , , ,									

Sampling	Point: wraa414_u

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Acer saccharum	15	Yes	FACU	That Are OBL, FACW, or FAC: (A)
2. Fagus grandifolia	15	Yes	FACU	Total Number of Dominant
3. Magnolia acuminata	10	Yes	FACU	Species Across All Strata: 8 (B)
4. Liriodendron tulipifera	5	No	FACU	
5				Percent of Dominant Species That Are OBL, FACW, or FAC:  25 (A/B)
6				That Are Obc., FACW, or FAC.
7.				Prevalence Index worksheet:
T	45	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 22.5		total cover:_	9	OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15 )	20 /6 01	total cover		FACW species 5 x 2 = 10
1 Fagus grandifolia	30	Yes	FACU	FAC species 27 x 3 = 81
2. Betula lenta	10	No	FACU	FACU species 119 x 4 = 476
	5	No	FACW	UPL species 0 x 5 = 0
3. Acer saccharinum	5			151 567
4. Magnolia acuminata		No	FACU	Column Totals: (A) (B)
5. Spiraea japonica	5	No	FACU	Prevalence Index = B/A = 3.75
6				Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
-	55	= Total Cove		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 27.5	20% of	total cover:	11	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5 )		_		data in Remarks or on a separate sheet)
1 Polystichum acrostichoides	4	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Carex blanda	2	Yes	FAC	
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Continue/Charle Mandy plants evaluating vines loss
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11.				
	6	= Total Cove		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 3		total cover:	1.2	
Woody Vine Stratum (Plot size: 30 )				Woody vine – All woody vines greater than 3.28 ft in
1 Smilax rotundifolia	25	Yes	FAC	height.
2 Rubus allegheniensis	20	Yes	FACU	
= <del>-</del> -				
3				
4				Hydrophytic
5				Vegetation
		= Total Cove	r	Present? Yes No
50% of total cover: 22.5	20% of	total cover:_	9	
Remarks: (Include photo numbers here or on a separate s	heet.)			
				I

Sampling Point: wraa414\_u

Profile Desc	ription: (Describe	to the depth	needed to docum	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redo	x Features	5	-		
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-2	10YR 2/2	100					L	
2-8	10YR 4/3	100					SCL	
8-16	10YR 4/4	100	_				SCL	rock at 16"
·								
	-							
		· <u></u> -		<u> </u>				
	oncentration, D=Dep	letion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gra	ains.		L=Pore Lining, M=Matrix.
Hydric Soil I								ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface		(00) (5)			2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148) (	Coast Prairie Redox (A16)
Black Hi	stic (A3) n Sulfide (A4)		Thin Dark Su Loamy Gleye			41, 148)	<b>-</b>	(MLRA 147, 148) Piedmont Floodplain Soils (F19)
	l Layers (A5)		Depleted Mat		· <i>∠)</i>		<u> </u>	(MLRA 136, 147)
	ick (A10) <b>(LRR N)</b>		Redox Dark S		6)		V	/ery Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11)	Depleted Dar					Other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depre					
	lucky Mineral (S1) <b>(L</b>	.RR N,	Iron-Mangan		es (F12) <b>(</b> I	LRR N,		
	147, 148)		MLRA 13			0 400)	3,	
	ileyed Matrix (S4)		Umbric Surfa Piedmont Flo					licators of hydrophytic vegetation and
	edox (S5) Matrix (S6)		Red Parent N					etland hydrology must be present, lless disturbed or problematic.
	_ayer (if observed):		Red r arent n	iatoriai (i	Z I ) (IVILIX	A 121, 171		ileas disturbed of problematic.
Type: no								
Depth (inc			_				Hydric Soil	Present? Yes No
Remarks:			<del>_</del>				,	
rtomarks.								



Photo 1 Upland data point WRAA414\_u facing southwest



Photo 2
Upland data point WRAA414\_u facing northwest

Project/Site: Atlantic Coast Pipeline		City/C	County: Randolph County	/	Sampling Date: 3/8/2016
Applicant/Owner: Dominion				State: WV	Sampling Point: wraa419e_w
			on, Township, Range: No		
Landform (hillslope, terrace, etc.): d					
Subregion (LRR or MLRA): N		38.69496039	Long: -80.	11965701	Datum: WGS 1984
Soil Map Unit Name: Gilpin-Dekalb	stony complex, mo	nist, 3 to 15 percent slo	opes	NWI classifi	cation: None
Are climatic / hydrologic conditions of	on the site typical fo	or this time of year? Y	′es No	(If no, explain in I	Remarks.)
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Norma	l Circumstances"	present? Yes No
Are Vegetation, Soil					
SUMMARY OF FINDINGS -					
Hydrophytic Vegetation Present?	Yes 🗸	No			
Hydric Soil Present?		No	Is the Sampled Area within a Wetland?	Vos V	No
Wetland Hydrology Present?	Yes 🗸		within a wetianu:	165	
Remarks:				In a site of books	1 f 400 ltlt
Saturated PEM seep wetland in a not top of draw.	ninor draw on a slo	ppe highly disturbed by	past mining and selective	ve logging; hydro	logy from seep praa423 located at
top of draw.					
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indic	eators (minimum of two required)
Primary Indicators (minimum of on	e is required; chec	k all that apply)		Surface Soi	l Cracks (B6)
✓ Surface Water (A1)	-	True Aquatic Plants (	B14)		egetated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Pa	
Saturation (A3)			es on Living Roots (C3)	Moss Trim I	
Water Marks (B1)		Presence of Reduced	= : : :	· · · · · · · · · · · · · · · · · · ·	Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reduction	, ,	Crayfish Bu	
Drift Deposits (B3)		Thin Muck Surface (0		· ·	/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rer			Stressed Plants (D1)
Iron Deposits (B5)	<del></del>				c Position (D2)
Inundation Visible on Aerial Im	nagery (B7)			Shallow Aqu	
Water-Stained Leaves (B9)	3-7( )				aphic Relief (D4)
Aquatic Fauna (B13)				✓ FAC-Neutra	
Field Observations:					,
Surface Water Present? Ye	s_ <b>'</b> No	Depth (inches):	1		
		Depth (inches):			
	s / No		0 Wetland I	lydrology Prese	nt? Yes V No
(includes capillary fringe)					
Describe Recorded Data (stream g	jauge, monitoring v	weii, aeriai pnotos, pre	evious inspections), if ava	allable:	
Remarks:					

#### **VEGETATION** (Four Strata) – Use s

	EGETATION (Four Strata) – Use scientific r	Absolute	Dominant I	Indicator	Sampling Point: Wraa419e_w  Dominance Test worksheet:
Total Number of Dominant Species Across All Strata:		% Cover	Species?		Number of Dominant Species
Prevalence Index worksheet:					
Solidation   Sol					
Total % Cover of:					Provolence Index worksheets
The stratum   Forward   Solution   Stratum   Forward   Solution   Stratum   Forward   Solution					
Solve of total cover:   10   20% of total cove	_			_	
According   Factor		20% of	total cover:_	0	OBL species
Facus grandifolia   5   Yes   FaCU   FACU   Facus grandifolia	apling/Shrub Stratum (Plot size:)				FACW species x 2 =
Fagus grandinola   S   Yes   FACU			Yes	FACU	FAC species x 3 =
Setula lenta   Sample   Samp		- <u> </u>	Yes		FACU species X 4 = 0
Column lotals:	Betula lenta	3	No	FACU	UPL species x 5 =
Prevalence Index = B/A =24_  Hydrophytic Vegetation Indicators:					Column Totals: (A) (B)
Hydrophytic Vegetation Indicators:  10 20 = Total Cover 20% of total cover:  11 2 Yes OBL 30 FACW 100					Prevalence Index = R/A = 2.4
1 - Rapid Test for Hydrophytic Vegetation   2 - Dominance Test is >50%					1 Tevalence index = B/T(=
20 = Total Cover 50% of total cover: 10 20% of total cover: 4    Solution   Stratum   (Plot size: 5   )					
Solution		_			
### Stratum (Plot size: 5 )    Carex scabrata					
Solve of total cover   Solve of total cover   Solve of total cover   Solver Stratum (Plot size:   Solver   So		20	= Total Cove	er	
12 Yes OBL   Problematic Hydrophytic Vegetation (Explain)	50% of total cover:10	20% of	total cover:_	4	
Solution	CID Ottatum (1 lot size.				
Juncus effusus	Carex scabrata	12	Yes	OBL	Problematic Hydrophytic Vegetation* (Explain)
Domundastrum cinnamomeum	Glyceria striata	8	Yes	OBL	_
Osmundastrum cinnamomeum  4 No FACW  Viola blanda  2 No FACW  Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30 )  Oody Vine Stratum (Plot size: 30 )  Total Cover   Hydrophytic Vegetation   Hydrophytic Vegetation   Present? Yes No   No    Hydrophytic Vegetation   Present? Yes No   No   No    Hydrophytic Vegetation   Present? Yes No   No   No    No   FACW   Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, a in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height.	Juncus effusus	4	No	FACW	
Viola blanda  2 No FACW Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless o height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present? Yes No	Osmundastrum cinnamomeum	4	No	FACW	
more in diameter at breast height (DBH), regardless on height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present?  Yes No	Viola blanda	2	No	FACW	Definitions of Four Vegetation Strata.
height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.    30		-			
Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30 )  Woody Vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present? Yes No					
Sapling/Shrub — Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.    30		-			
1		-			
11					• • • • • • • • • • • • • • • • • • • •
30   = Total Cover   50% of total cover:   15   20% of total cover:   6   Woody vine - All woody vines greater than 3.28 ft tall.   Woody vine - All woody vines greater than 3.28 ft in height.   Hydrophytic Vegetation   Present?   Yes   Ves   No   No   No   No   No   No   No   N		-			
50% of total cover: 15 20% of total cover: 6 Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present? Yes Vegetation Present? Yes No	·· <u>-</u>	30	- Total Cove		
/oody Vine Stratum (Plot size:	50% of total cover· 15			_	
Hydrophytic Vegetation Present? Yes No		20 /0 01	557011_		
Hydrophytic Vegetation Present? Yes No	(Flot Size:)				neight.
U = Total Cover Hydrophytic Vegetation Present? Yes No					
Hydrophytic Vegetation Present? Yes No					
U = Total Cover Vegetation Present? Yes No					
		-			
= Total Cover					
50% of total cover: 0 20% of total cover: 0				^	100

Sampling Point: wraa419e\_w

Profile Des	scription: (Describe	to the dep	oth needed to docur	nent the i	indicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redo	x Feature	S1	- 3		
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-3	10YR 2/1	100					L	_
3-6	10YR 3/1	100					SL	
6-18	10YR 4/1	85	7.5YR 4/6	15	С	PL/M	SCL	
							-	
	<u> </u>				·			_
							-	
	-							
<sup>1</sup> Type: C=0	Concentration, D=Dep	oletion. RM	=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
	I Indicators:	71011011, 11111	-reduced matrix, me	<u>J-Macket</u>	a cana ci	uo.		cators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	Epipedon (A2)		Polyvalue Be	. ,	ice (S8) <b>(N</b>	/II RA 147		Coast Prairie Redox (A16)
	Histic (A3)		Thin Dark Su				0,	(MLRA 147, 148)
	gen Sulfide (A4)		Loamy Gleye			, 1-0)		Piedmont Floodplain Soils (F19)
	ed Layers (A5)		<u>✓</u> Depleted Ma		· -/			(MLRA 136, 147)
	luck (A10) (LRR N)		Redox Dark		<del>-</del> 6)			Very Shallow Dark Surface (TF12)
	ed Below Dark Surfac	e (A11)	Depleted Da					Other (Explain in Remarks)
	Dark Surface (A12)	, o (, )	Redox Depre					(2/p.a (2/p.a )
	Mucky Mineral (S1) (	LRR N.	Iron-Mangan			LRR N.		
	AA 147, 148)		MLRA 13			,		
	Gleyed Matrix (S4)		Umbric Surfa		(MLRA 13	86, 122)	<sup>3</sup> lr	ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					vetland hydrology must be present,
	d Matrix (S6)		Red Parent N					inless disturbed or problematic.
	Layer (if observed)	:	<del>_</del>			<u> </u>	<u></u>	•
Type: n	one `							
	nches):						Hydric So	oil Present? Yes No
Remarks:							,	
Nemaiks.								



**Photo 1**Wetland data point WRAA419e\_w facing southwest



Photo 2
Wetland data point WRAA419e\_w facing north

Project/Site: Atlantic Coast Pi	peline	City/C	ounty: Randolph County	,	Sampling Date: 3/8/2016
Applicant/Owner: Dominion					Sampling Point: wraa419_u
		Section	on, Township, Range: No		
Landform (hillslope, terrace, et					
Subregion (LRR or MLRA): N					Datum: WGS 1984
Soil Map Unit Name: Gilpin-Do	La	noist 3 to 15 percent slo	nnes	A.D.A.D. 1	
Are climatic / hydrologic condit		· · · · · · · · · · · · · · · · · · ·			
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal	Circumstances"	present? Yes No
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If needed, e	explain any answe	ers in Remarks.)
SUMMARY OF FINDIN	GS – Attach site	map showing sam	pling point location	ns, transects	s, important features, etc.
Lludraphytic Variation Dres	ent? Vee	No. 4			
Hydrophytic Vegetation Pres Hydric Soil Present?		No	Is the Sampled Area		
Wetland Hydrology Present?	Yes	No	within a Wetland?	Yes	No
Remarks:					
Upland data point taken on a	disturbed slope for a si	aturated i Livi seep weti	and within an adjacent in	illioi draw.	
HYDROLOGY					
Wetland Hydrology Indicat	ors:			Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum	of one is required; che	eck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	_	Sparsely Ve	getated Concave Surface (B8)		
High Water Table (A2)		_ Hydrogen Sulfide Ode		Drainage Pa	atterns (B10)
Saturation (A3)		<ul> <li>Oxidized Rhizosphere</li> </ul>		Moss Trim L	
Water Marks (B1)		_ Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)	_	_ Recent Iron Reductio		Crayfish Bu	
Drift Deposits (B3)	_	_ Thin Muck Surface (C			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_	_ Other (Explain in Ren	narks)		Stressed Plants (D1)
Iron Deposits (B5)	wiel les enem (DZ)				Position (D2)
Inundation Visible on Ae				Shallow Aqu	aphic Relief (D4)
<ul><li>Water-Stained Leaves (B</li><li>Aquatic Fauna (B13)</li></ul>	<b>5</b> 9)			FAC-Neutra	. ,
Field Observations:				TAO Neulla	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Surface Water Present?	Ves No V	Depth (inches):			
Water Table Present?		Depth (inches):			
Saturation Present?		Depth (inches):		lydrology Prese	nt? Yes No
(includes capillary fringe)	· · · · · · · · · · · · · · · · · · ·	_ , , , ,			int: TesNo
Describe Recorded Data (str	eam gauge, monitoring	g well, aerial photos, pre	vious inspections), if ava	ilable:	
Remarks:					
no hydrology indicators prese	ent				

Sampling	Point: wraa419_u

	Absolute	Dominant Ir		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover 20		Status FACU	Number of Dominant Species
1. Acer saccharum	10	Yes		That Are OBL, FACW, or FAC:3 (A)
2. Liriodendron tulipifera		Yes	FACU	Total Number of Dominant
3. Prunus serotina	8	No	FACU	Species Across All Strata: 9 (B)
4. Betula lenta	5	No	FACU	
5. Magnolia acuminata	5	No	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC: 33.33333333 (A/B)
6				That Ale OBE, I AOW, OF I AO.
7				Prevalence Index worksheet:
	48	= Total Cove	,	Total % Cover of: Multiply by:
50% of total cover: 24		total cover:	9.6	OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15 )	2070 01			FACW species0 x 2 =0
1 Fagus grandifolia	20	Yes	FACU	FAC species 34 x 3 = 102
2. Rubus allegheniensis	20	Yes	FACU	FACU species 116 x 4 = 464
3. Betula lenta	12	No	FACU	UPL species 0 x 5 = 0
	5		FACU	150 566
4. Acer pensylvanicum		No No		Column Totals: (A) (B)
5. Acer saccharum	5	No	FACU	Prevalence Index = B/A =3.77
6				Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
	62	= Total Cove	,	3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 31		total cover:_	12.4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5		_		data in Remarks or on a separate sheet)
1 Dennstaedtia punctilobula	4	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Polystichum acrostichoides		Yes	FACU	
3. Carex blanda	2	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Dichanthelium clandestinum		Yes	FAC	be present, unless disturbed or problematic.
·		165	TAC	Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
				Canling/Chrush Weedy plants evaluding vines less
8				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
9				
9				m) tall.
910				m) tall.
9	10	- Total Cove		m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless
9. 10. 11.	10	= Total Cover		m) tall.
9	10	= Total Cover total cover:_		m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. <b>Woody vine</b> – All woody vines greater than 3.28 ft in
9	10 20% of	total cover:	2	m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9	10 20% of			m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. <b>Woody vine</b> – All woody vines greater than 3.28 ft in
9	10 20% of	total cover:	2	m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. <b>Woody vine</b> – All woody vines greater than 3.28 ft in
9	10 20% of	total cover:	2	m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. <b>Woody vine</b> – All woody vines greater than 3.28 ft in
9	10 20% of	total cover:	2	m) tall. <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. <b>Woody vine</b> – All woody vines greater than 3.28 ft in
9	10 20% of	total cover:	2	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
9	10 20% of 30	total cover:	FAC	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic
9	10 20% of 30	Yes	FAC	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
9	10 20% of 30 30 30 30 20% of	Yes	FAC	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
9	10 20% of 30 30 30 30 20% of	Yes	FAC	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
9	10 20% of 30 30 30 30 20% of	Yes	FAC	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
9	10 20% of 30 30 30 30 20% of	Yes	FAC	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
9	10 20% of 30 30 30 30 20% of	Yes	FAC	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
9	10 20% of 30 30 30 30 20% of	Yes	FAC	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
9	10 20% of 30 30 30 30 20% of	Yes	FAC	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
9	10 20% of 30 30 30 30 20% of	Yes	FAC	m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation

Sampling Point: wraa419\_u

Profile Desc	ription: (Describe	to the depth	needed to docum	nent the i	ndicator	or confirm	the absen	ce of indicat	tors.)	
Depth	Matrix		Redo	x Features	S	-				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>		Remarks	
0-2	10YR 2/2	100					L			
2-7	10YR 3/3	100					SL			
7-18	10YR 5/6	100					SCL			
		· — — -								
·	-									
								_		
		· <u></u>								
								_		
	-									
<del> </del>										
	oncentration, D=Dep	letion, RM=R	Reduced Matrix, MS	S=Masked	Sand Gra	ains.			ning, M=Matrix.	
Hydric Soil							Ind		Problematic Hy	
Histosol			Dark Surface		- (00) (5)				(A10) <b>(MLRA 1</b>	47)
	oipedon (A2)		Polyvalue Be				148)		e Redox (A16)	
Black Hi	stic (A3) en Sulfide (A4)		Thin Dark Su Loamy Gleye			41, 148)		(MLRA 1	<b>47, 148)</b> Ioodplain Soils	(F19)
	d Layers (A5)		Depleted Ma		<i>L)</i>			(MLRA 1		(i 1 <i>3)</i>
	ick (A10) <b>(LRR N)</b>		Redox Dark		6)				w Dark Surface	(TF12)
	d Below Dark Surface	e (A11)	Depleted Dar				_	•	ain in Remarks)	,
	ark Surface (A12)		Redox Depre							
	lucky Mineral (S1) <b>(L</b>	.RR N,	Iron-Mangan		es (F12) <b>(</b>	LRR N,				
	A 147, 148)		MLRA 13			0 400)	3,			
	Gleyed Matrix (S4) Redox (S5)		Umbric Surfa Piedmont Flo						nydrophytic veg ology must be p	
	Matrix (S6)		Red Parent N					-	bed or problema	
	Layer (if observed):		red r drene n	natorial (17	er) (MER	127, 147	<u>,                                     </u>	ariicoo diotari	bed of problem	ano.
Type: no										
Depth (inc			_				Hydric Se	oil Present?	Yes	No 🗸
Remarks:			_				,			
rtomants.										



**Photo 1**Upland data point WRAA419\_u facing southeast



Photo 2
Upland data point WRAA419\_u facing northeast

Project/Site: Atlantic Coast Pip	eline	City/Co	ounty: Randolph County	/	Sampling Date: 3/8/2016			
Applicant/Owner: Dominion		State: WV Sampling Point: wraa418e						
		Section	n, Township, Range: No	PLSS in this area				
Landform (hillslope, terrace, etc		Local relie	ef (concave, convex, no	ne): concave	Slope (%): 20			
Subregion (LRR or MLRA): N		t: 38.69490556	Long: -80.	120394	Datum: WGS 1984			
Soil Map Unit Name: Gilpin-De	kalb stony complex, m	oist, 3 to 15 percent slop	pes	NWI classifica	ation: None			
Are climatic / hydrologic condition	ons on the site typical	for this time of year? Ye	es <u>/</u> No	(If no, explain in Re	emarks.)			
Are Vegetation V . Soil	or Hydrology	significantly disturb	ed? Are "Norma	l Circumstances" p	resent? Yes No			
Are Vegetation, Soil								
-					important features, etc.			
Hydrophytic Vegetation Prese Hydric Soil Present?	int? Yes Ves V	NI <sub>0</sub>	Is the Sampled Area					
Wetland Hydrology Present?		No No	within a Wetland?	Yes	No			
Remarks:	100							
top of draw.								
HYDROLOGY								
Wetland Hydrology Indicato	rs:			Secondary Indicat	ors (minimum of two required)			
Primary Indicators (minimum	of one is required; che	ck all that apply)		Surface Soil 0	Cracks (B6)			
✓ Surface Water (A1)		_ True Aquatic Plants (B			etated Concave Surface (B8)			
High Water Table (A2)		_ Hydrogen Sulfide Odo		✓ Drainage Pat				
Saturation (A3)		Oxidized Rhizosphere	-	Moss Trim Lir				
Water Marks (B1)	_	_ Presence of Reduced	` '	Dry-Season Water Table (C2)				
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Burrows (C8)				
Drift Deposits (B3)		Thin Muck Surface (C) Other (Explain in Rem			sible on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Iron Deposits (B5)	_	_ Other (Explain in Rem	arks)	Geomorphic I	ressed Plants (D1)			
Inundation Visible on Aer	ial Imagery (B7)			Shallow Aquit				
Water-Stained Leaves (B	• • • •			Microtopographic Relief (D4)				
Aquatic Fauna (B13)	-,			✓ FAC-Neutral	, ,			
Field Observations:					. ,			
Surface Water Present?	Yes No	Depth (inches): 0.	5					
Water Table Present?	Yes No 🔽							
Saturation Present?	Yes No No	_	Wetland H	Hydrology Present	t? Yes 🗸 No			
(includes capillary fringe)								
Describe Recorded Data (stre	am gauge, monitoring	well, aerial photos, prev	rious inspections), if ava	illable:				
Remarks:								

### VEGE

00	Absolute	Dominant I		Dominance Test worksheet:
ree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
	-			That Are OBL, FACW, or FAC:2 (A)
				Total Number of Dominant
				Species Across All Strata:3 (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC:
				Prevalence Index worksheet:
	0	= Total Cove	r	Total % Cover of: Multiply by:  ORL species 18 × 1 = 18
50% of total cover:0	20% of	total cover:_	0	OBL species
apling/Shrub Stratum (Plot size: 15 )				FACW species x 2 =
Rubus allegheniensis	12	Yes	FACU	FAC species x 3 =
Fagus grandifolia	3	No	FACU	FACU species x 4 = 72
Betula lenta	3	No	FACU	UPL species $0 \times 5 = 0$
				Column Totals: (A) (B)
				Prevalence Index – R/A – 2.38
				1 Tevalence index = B/A =
		· -		Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				✓ 2 - Dominance Test is >50%
·	18	Total Cava		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 9		= Total Cove total cover:_	3.6	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
F	20 % 01	total cover		data in Remarks or on a separate sheet)
lerb Stratum (Plot size:) Carex scabrata	12	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	6	· <del></del>	OBL	
Glyceria striata		Yes		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Osmundastrum cinnamomeum		No No	FACW	be present, unless disturbed or problematic.
Juncus effusus	4	No No	FACW	Definitions of Four Vegetation Strata:
. Viola blanda	2	No	FACW	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
0				m) tall.
1				Herb – All herbaceous (non-woody) plants, regardless
	29	= Total Cove	r <u>—</u>	of size, and woody plants less than 3.28 ft tall.
50% of total cover:14.5		total cover:_		Was deader Allowed at 1 2 2 2 2 2
		_	_	Woody vine – All woody vines greater than 3.28 ft in height.
Voody Vine Stratum (Plot size: 30 )				noight.
( iot o.zor )				
				Hydrophytic
				Vegetation
	0	= Total Cove	_	
50% of total cover:0	0 20% of			Vegetation
	0 20% of	= Total Cove	_	Vegetation

Sampling Point: wraa418e\_w

Profile Des	cription: (Describe	to the dep	oth needed to docun	nent the	indicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redox	k Feature	S1	. 2	_	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-3	10YR 2/1	100					L	· .
3-6	10YR 3/1	100					SL	
6-16	10YR 4/1	92	7.5YR 4/6	8	С	PL/M	SCL	rock at 16"
								•
								· <del></del>
								· -
								· -
	· ·			-				-
Type: C=0	Concentration, D=Dec	letion. RM	=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location: F	PL=Pore Lining, M=Matrix.
	Indicators:	,	,					cators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface	(S7)				2 cm Muck (A10) <b>(MLRA 147)</b>
	Epipedon (A2)		Polyvalue Be	. ,	ice (S8) (N	ILRA 147.		Coast Prairie Redox (A16)
	Histic (A3)		Thin Dark Su				·-, <u> </u>	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye	•		, <b>,</b>	F	Piedmont Floodplain Soils (F19)
	ed Layers (A5)		<u>✓</u> Depleted Mat		(- –)			(MLRA 136, 147)
	luck (A10) (LRR N)		Redox Dark S		<del>-</del> 6)		\	Very Shallow Dark Surface (TF12)
	ed Below Dark Surfac	e (A11)	Depleted Dar					Other (Explain in Remarks)
	Oark Surface (A12)	, ,	Redox Depre					
	Mucky Mineral (S1) (	LRR N,	Iron-Mangane			LRR N,		
	A 147, 148)		MLRA 136					
	Gleyed Matrix (S4)		Umbric Surfa		(MLRA 13	6, 122)	<sup>3</sup> Inc	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo				8) w	etland hydrology must be present,
Strippe	d Matrix (S6)		Red Parent M	1aterial (F	21) <b>(MLR</b>	A 127, 147	) ur	nless disturbed or problematic.
Restrictive	Layer (if observed)	:						
Type: n	one							
	nches):		<u></u>				Hydric Soi	il Present? Yes No
Remarks:							,	
rtemants.								



Photo 1
Wetland data point WRAA418e\_w facing south



Photo 2
Wetland data point WRAA418e\_w facing north

Project/Site: Atlantic Coast Pip	peline	City/C	ounty: Randolph County		Sampling Date: 3/8/2016
Applicant/Owner: Dominion					Sampling Point: wraa418_u
		Section	on, Township, Range: No		-
Landform (hillslope, terrace, et					
Subregion (LRR or MLRA): N		38.69496908	Lang80.1	120467	Datum: WGS 1984
Soil Map Unit Name: Gilpin-De	La ekalh stony complex m	noist 3 to 15 percent slo	nnes		
Are climatic / hydrologic condit					
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal	Circumstances"	present? Yes No
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If needed, e	explain any answe	ers in Remarks.)
SUMMARY OF FINDIN	GS – Attach site	map showing sam	pling point locatio	ns, transects	s, important features, etc.
Lludraphytic Variation Dres	ont? Voc	No. 4			
Hydrophytic Vegetation President Hydric Soil Present?		No	Is the Sampled Area		
Wetland Hydrology Present?	Yes	No	within a Wetland?	Yes	No
Remarks:					
Upland data point taken on a	distanced slope for a se	attifated i Liw seep weti	and within an adjacent in	inioi diaw.	
HYDROLOGY					
Wetland Hydrology Indicate	ors:			Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum	of one is required; che	eck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	_	B14)	Sparsely Ve	getated Concave Surface (B8)	
High Water Table (A2)		or (C1)	_	atterns (B10)	
Saturation (A3)		_ Oxidized Rhizosphere		Moss Trim L	
Water Marks (B1)		_ Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)	_	_ Recent Iron Reductio		Crayfish Bur	
Drift Deposits (B3)	_	_ Thin Muck Surface (C			risible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_	_ Other (Explain in Ren	narks)		Stressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Ae	rial Imagary (P7)			Geomorphic	Position (D2)
Water-Stained Leaves (E	• • • •				aphic Relief (D4)
Aquatic Fauna (B13)	39)			FAC-Neutra	. ,
Field Observations:					
Surface Water Present?	Yes No V	Depth (inches):			
Water Table Present?		Depth (inches):			
Saturation Present?		Depth (inches):		lydrology Prese	nt? Yes No
(includes capillary fringe)		_ , , ,			
Describe Recorded Data (str	eam gauge, monitoring	y well, aerial photos, pre	vious inspections), if avai	ilable:	
Remarks:					
no hydrology indicators prese	ent				

Sampling Point: wraa418_u
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00	Absolute	Dominant I		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover 20	Species?	Status FACU	Number of Dominant Species
1. Acer saccharum	10	Yes		That Are OBL, FACW, or FAC:3 (A)
2. Liriodendron tulipifera		Yes	FACU	Total Number of Dominant
3. Prunus serotina	8	No	FACU	Species Across All Strata: 9 (B)
4. Magnolia acuminata	5	No	FACU	
5. Betula lenta	5	No	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC: 33.33333333 (A/B)
6				That Ale OBE, 1 New, of 1 No (AB)
7.				Prevalence Index worksheet:
	48	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 24		total cover:_	9.6	OBL species0 x 1 =0
Sapling/Shrub Stratum (Plot size: 15 )	2070 01			FACW species0 x 2 =0
1 Rubus allegheniensis	20	Yes	FACU	FAC species 34 x 3 = 102
2. Fagus grandifolia	20	Yes	FACU	FACU species 116 x 4 = 464
3. Betula lenta	12	No	FACU	UPL species
	5		FACU	150 566
4. Acer saccharum		No No		Column Totals: (A) (B)
5. Acer pensylvanicum	5	No	FACU	Prevalence Index = B/A =3.77
6				Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
	62	= Total Cove		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 31		total cover:_	12.4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5		_		data in Remarks or on a separate sheet)
1. Dennstaedtia punctilobula	4	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Dichanthelium clandestinum	2	Yes	FAC	
3. Carex blanda		Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Polystichum acrostichoides		Yes	FACU	be present, unless disturbed or problematic.
			1700	Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Herb – All herbaceous (non-woody) plants, regardless
	10	= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 5		total cover:_	2	
Woody Vine Stratum (Plot size: 30 )		_		<b>Woody vine</b> – All woody vines greater than 3.28 ft in
1 Smilax rotundifolia	30	Yes	FAC	height.
2				
3				
4				Hydrophytic
5				Vegetation
	30	= Total Cove		Present? Yes No
50% of total cover:15	20% of	total cover:_	6	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wraa418\_u

Profile Desc	ription: (Describe t	o the depth	needed to document th	e indicator or confirr	n the absence	e of indicators.)
Depth	Matrix		Redox Featu			
(inches) 0-2	Color (moist) 10YR 2/2	100	Color (moist) %	Type <sup>1</sup> Loc <sup>2</sup>	<u>Texture</u> L	Remarks
2-6	10YR 4/3	100			SL	
6-13	10YR 3/3	100			SCL	rock at 13"
1					2	
Type: C=Co		etion, RM=R	Reduced Matrix, MS=Mask	ed Sand Grains.		PL=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface (S7)			2 cm Muck (A10) <b>(MLRA 147)</b>
	pipedon (A2)			rface (S8) <b>(MLRA 147</b>		Coast Prairie Redox (A16)
Black Hi			-	69) <b>(MLRA 147, 148)</b>	, <u> </u>	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleyed Matri		F	Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Matrix (F3			(MLRA 136, 147)
2 cm Mu	ick (A10) (LRR N)		Redox Dark Surface	(F6)	\	/ery Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dark Surfa			Other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depressions	(F8)		
Sandy M	lucky Mineral (S1) (L	RR N,	Iron-Manganese Ma	sses (F12) (LRR N,		
MLRA	A 147, 148)		MLRA 136)			
Sandy G	Gleyed Matrix (S4)		Umbric Surface (F13	B) (MLRA 136, 122)	<sup>3</sup> Inc	dicators of hydrophytic vegetation and
Sandy R	tedox (S5)		Piedmont Floodplair	Soils (F19) (MLRA 1	<b>48)</b> we	etland hydrology must be present,
Stripped	Matrix (S6)		Red Parent Material	(F21) (MLRA 127, 14	<b>7)</b> ur	nless disturbed or problematic.
Restrictive I	_ayer (if observed):					
Type: no	ne		<u> </u>			
	ches):				Hydric Soi	I Present? Yes No
Remarks:						



Photo 1 Upland data point WRAA418\_u facing west



Photo 2 Upland data point WRAA418\_u facing north

Project/Site: Atlantic Coast Pipe	line	City/C	County: Randolph County	У	Sampling Date: 3/29/2016			
Applicant/Owner: Dominion			State: WV Sampling Point: wraa432					
nvestigator(s): GB, RP Section, Township, Range: No PLSS in this area								
Landform (hillslope, terrace, etc.								
Subregion (LRR or MLRA). N		l at: 38.6902227	Long80.	11750068	Datum: WGS 1984			
Soil Map Unit Name: Udorthents	s, mudstone and sh	nale, low base		NWI classifica	ation: None			
Are climatic / hydrologic conditio								
·		·			resent? Yes No			
Are Vegetation, Soil								
					, important features, etc.			
					,portant routeros, etc.			
Hydrophytic Vegetation Preser	it? Yes	No No	Is the Sampled Area					
Hydric Soil Present?		No	within a Wetland?	Yes	No			
Wetland Hydrology Present?  Remarks:	Yes	NO						
HYDROLOGY								
Wetland Hydrology Indicator				Socondary Indicat	tors (minimum of two required)			
Primary Indicators (minimum o		hook all that apply)			·			
✓ Surface Water (A1)	-	True Aquatic Plants (	(D14)	Surface Soil (	etated Concave Surface (B8)			
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Pat				
Saturation (A3)		Oxidized Rhizospher		Moss Trim Li				
Water Marks (B1)		Presence of Reduced	-		Vater Table (C2)			
Sediment Deposits (B2)	•	Recent Iron Reduction		Crayfish Burn				
Drift Deposits (B3)		Thin Muck Surface (0	C7)	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)		Other (Explain in Rer	marks)	Stunted or St	ressed Plants (D1)			
Iron Deposits (B5)				Geomorphic I				
Inundation Visible on Aeria				Shallow Aquitard (D3)				
Water-Stained Leaves (B9	)			Microtopographic Relief (D4) ✓ FAC-Neutral Test (D5)				
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)			
Field Observations:	v <b>v</b> v	5 (1 (1 )	2					
Surface Water Present?		Depth (inches):						
Water Table Present?		Depth (inches):	0					
Saturation Present? (includes capillary fringe)	Yes No	Depth (inches):	Wetland F	Hydrology Presen	t? Yes No			
Describe Recorded Data (stream	m gauge, monitori	ng well, aerial photos, pre	evious inspections), if ava	ailable:				
Remarks:								

### ٧

% Cover	Species? _	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A) Total Number of Dominant Species Across All Strata: 4 (B) Percent of Dominant Species
			Species Across All Strata: 4 (B)
			Percent of Dominant Species
			That Are OBL, FACW, or FAC: 100 (A/I
			Prevalence Index worksheet:
0			Total % Cover of: Multiply by:
=	= Total Cove	r O	OBL species65 x 1 =65
20% of 1	total cover:_		FACW species 25 x 2 = 50
20	Voc	OBL	FAC species 10 x 3 = 30
			2 12
		FAC	FACU species
		FACIL	UPL species $0$ $x.5 = 0$ $157$ $(B)$
	INO	FACU	Column Totals: (A) (B)
			Prevalence Index = B/A = 1.52
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			✓ 2 - Dominance Test is >50%
			✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	= Total Cove		4 - Morphological Adaptations¹ (Provide supporting
20% of	total cover:_	7.6	data in Remarks or on a separate sheet)
			. ,
40	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10	No	FACW	4
5	No	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5	No	OBL	Definitions of Four Vegetation Strata:
			Definitions of Four Vegetation Strata.
			Tree – Woody plants, excluding vines, 3 in. (7.6 cm)
			more in diameter at breast height (DBH), regardless of height.
			noight.
			Sapling/Shrub – Woody plants, excluding vines, less
			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
			iii) taii.
60			Herb – All herbaceous (non-woody) plants, regardles
=			of size, and woody plants less than 3.28 ft tall.
20% of 1	total cover:_		Woody vine - All woody vines greater than 3.28 ft in
10	Voo	EACW	height.
10	168	FACW	
			Hydrophytic
			Vegetation
10 =	= Total Cove	r	Present? Yes No No
20% of	total cover	2	
	38 = 20% of 40	10 Yes 5 No 3 No 3 No 3 No 38 = Total Cove 20% of total cover: 40 Yes 10 No 5 No 5 No 60 = Total Cove 20% of total cover: 10 Yes 10 Yes	10 Yes FAC  5 No 3 No FACU  38 = Total Cover 20% of total cover: 7.6  40 Yes OBL 10 No FACW 5 No FACW 5 No OBL  60 = Total Cover 20% of total cover: 16  10 Yes FACW

Sampling Point: wraa432s\_w

SOIL

Depth	Matrix			x Features				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-6	7.5YR 4/1	100					SL	
6-18	7.5YR 5/1	95	7.5YR 4/6	5	С	PL/M	SL	
		· ——						
		· ——						
Type: C=C	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Masked	Sand Gra	ains	<sup>2</sup> l ocation: P	L=Pore Lining, M=Matrix.
Hydric Soil			Troudous manny me	mached	<u> </u>			ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(97)				cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		۸ (SR) (N	II RΔ 147		Coast Prairie Redox (A16)
	stic (A3)		Tolyvalde Be				0	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			-1, 140 <i>)</i>	n	Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Mat		2)		<u> </u>	(MLRA 136, 147)
					2)		V	
	ick (A10) <b>(LRR N)</b> d Below Dark Surface	o (A11)	Redox Dark S Depleted Dar					ery Shallow Dark Surface (TF12) Other (Explain in Remarks)
		# (A11)			. ,			Arrier (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre			DD N		
	Mucky Mineral (S1) (L	.KK N,	Iron-Mangane		S (F12) (	LKK N,		
	A 147, 148)		MLRA 130	-			3, ,	
	Gleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
-	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent M	laterial (F2	(1) <b>(ML</b> R	A 127, 147	<b>')</b> un	less disturbed or problematic.
	Layer (if observed):							
Type: no	IIC .							
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:							1	



Photo 1
Wetland data point WRAA432s\_w facing northwest



**Photo 2**Wetland data point WRAA432s\_w facing northeast

Project/Site: Atlantic Coast Pip	peline	City/C	county: Randolph County		Sampling Date: 3/29/2016
Applicant/Owner: Dominion					Sampling Point: wraa432_u
Investigator(s): GB, RP		Section	on, Township, Range: No Pl		
Landform (hillslope, terrace, et					
Culturation (LDD and DA). N	0.).	28 69026318	-80 117	· 735574	Glope (76)
Subregion (LRR or MLRA): N Soil Map Unit Name: Buchana	La in and Ernest stony soi/	ls: 15 to 35 percent slor	Long:		. None
Are climatic / hydrologic condit					
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal Ci	rcumstances" pr	resent? Yes No
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If needed, exp	lain any answer	s in Remarks.)
SUMMARY OF FINDING	GS – Attach site ı	map showing sam	pling point locations	s, transects,	important features, etc.
Hydrophytic Vegetation Prese	ont? Voc	No			
Hydric Soil Present?		No <b>✓</b>	Is the Sampled Area		🗸
Wetland Hydrology Present?		No 🗸	within a Wetland?	Yes	_ No
Remarks:					
Upland data point taken on a	aistarbed slope for a se	activated to seasonally in	ooded 1 00 welland loodles	zon dir old strip	mine serior.
HYDROLOGY					
Wetland Hydrology Indicate	ors:		<u>Se</u>	econdary Indicat	ors (minimum of two required)
Primary Indicators (minimum	of one is required; che	ck all that apply)		_ Surface Soil C	Cracks (B6)
Surface Water (A1)	<del>_</del>	_ True Aquatic Plants (	B14)	_ Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2)	_	_ Hydrogen Sulfide Ode		_ Drainage Patt	
Saturation (A3)	_		es on Living Roots (C3)	_ Moss Trim Lir	
Water Marks (B1)		Presence of Reduced		-	Vater Table (C2)
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burro	
Drift Deposits (B3) Algal Mat or Crust (B4)		<ul><li>Thin Muck Surface (C</li><li>Other (Explain in Ren</li></ul>			sible on Aerial Imagery (C9) ressed Plants (D1)
Iron Deposits (B5)	<del></del>	_ Other (Explain in Neil		_ Geomorphic F	
Inundation Visible on Ae	rial Imagery (B7)		_	Shallow Aquit	
Water-Stained Leaves (E					phic Relief (D4)
Aquatic Fauna (B13)	,		_	_ FAC-Neutral	` '
Field Observations:					
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes No	Depth (inches):			
Saturation Present?	Yes No	Depth (inches):	Wetland Hyd	Irology Present	? Yes No
(includes capillary fringe)  Describe Recorded Data (stre	eam gauge, monitoring	well, aerial photos, pre	vious inspections), if availab	ble:	
,		, , , , , , ,	, ,,		
Remarks:					
no hydrology indicators prese	nt				

EGETATION (Four Strat	:a) – Use scientific na	ames of	plants.		Sampling Point: wraa432_u
Trac Ctratum (Diet size)	30	Absolute	Dominant In		Dominance Test worksheet:
Tree Stratum (Plot size: 1_ Acer saccharum	)	% Cover 15	Species? Yes	Status FACU	Number of Dominant Species That Are OBL FACW or FAC: 3 (A)
1. Acer rubrum		15	Yes	FAC	That Are OBL, FACW, or FAC:3 (A)
2. Acer rubrum 3. Liriodendron tulipifera		10	Yes	FACU	Total Number of Dominant
					Species Across All Strata: 8 (B)
		-	· ———		Percent of Dominant Species
5					That Are OBL, FACW, or FAC: 37.5 (A/B)
6			·		Prevalence Index worksheet:
7		40			Total % Cover of: Multiply by:
	20		= Total Cover	_	
	50% of total cover: 20	20% of	total cover:	<u>8</u>	0 0
Sapling/Shrub Stratum (Plot siz	:e:)				FACW species x 2 = 0
1. Elaeagnus umbellata		10	Yes		FAC species X 3 =
2. Rubus allegheniensis		10	Yes	FACU	FACU species x 4 =
<sub>3.</sub> Spiraea japonica		8	Yes	FACU	UPL species $x = 5 = 6$
4. Robinia pseudoacacia		7	No	FACU	Column Totals:(A)(B)
<sub>5.</sub> Rubus argutus		6	No	FACU	Prevalence Index = B/A = 3.39
6					1 Tevalence index = B/TC=
7					Hydrophytic Vegetation Indicators:
8. <u> </u>			· ·		1 - Rapid Test for Hydrophytic Vegetation
9.					2 - Dominance Test is >50%
v		41	= Total Cover	-	3 - Prevalence Index is ≤3.0 <sup>1</sup>
	50% of total cover: 20.5		total cover:	8.2	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:	F				data in Remarks or on a separate sheet)
1 Solidago rugosa		45	Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Dichanthelium clandestinum		25	Yes	FAC	
3.		•	· ·		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
J		-			be present, unless disturbed or problematic.
4					Definitions of Four Vegetation Strata:
D		•	· —— ·		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6					more in diameter at breast height (DBH), regardless of
7		•	· —— ·		height.
8					Sapling/Shrub – Woody plants, excluding vines, less
9			·		than 3 in. DBH and greater than or equal to 3.28 ft (1
10	_		·		m) tall.
11					Herb - All herbaceous (non-woody) plants, regardless
	0.5		= Total Cover		of size, and woody plants less than 3.28 ft tall.
	50% of total cover: 35	20% of	total cover:	14	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:	30 )				height.
1			·		
2					
3					
4			. <u> </u>		Hydrophytic
5					Vegetation
		0	= Total Cover		Present? Yes No
	50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbe	<u> </u>	heet.)			
, , ,	•	,			

Sampling Point: wraa432\_u

	cription: (Describe	to the dept				or confirm	the absence	e of indicators.)
Depth	Matrix	%	Redo:	x Features		Loc <sup>2</sup>	T4	Demonto
(inches) 0-6	Color (moist) 10YR 3/4	100	Color (moist)	%	Type <sup>1</sup>	LOC	Texture SCL	Remarks
	· .	<del></del>						· -
6-14	10YR 4/3	100					SCL	rock at 14"
	· ·	· ——					-	
							_	
	· ·	· ——					-	
	· -							
		- · ·						
	-						•	
	Concentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indic	cators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface					2 cm Muck (A10) (MLRA 147)
Histic E	pipedon (A2)		Polyvalue Be				148) (	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su	, ,	•	47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)		!	Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Mat					(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S					Very Shallow Dark Surface (TF12)
	ed Below Dark Surfac	e (A11)	Depleted Dar				(	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1) <b>(I</b>	_RR N,	Iron-Mangan		es (F12) <b>(</b>	LRR N,		
	A 147, 148)		MLRA 13	•			3	
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
	Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present						
	d Matrix (S6)		Red Parent N	faterial (F	21) <b>(MLR</b>	A 127, 147	7) uı	nless disturbed or problematic.
Restrictive	Layer (if observed):							
Type: _n			<u></u>					
Depth (ir	nches):						Hydric Soi	il Present? Yes No
Remarks:								



**Photo 1**Upland data point WRAA432\_u facing northwest



**Photo 2**Upland data point WRAA432\_u facing northeast

Project/Site: Atlantic Coast Pip	eline		City/C	ounty: Randolph County	/	Sampling Date: 3/8/2016
Applicant/Owner: Dominion				,		Sampling Point: wraa417e_w
Investigator(s): GB, KM			Section	n, Township, Range: No		
Landform (hillslope, terrace, etc						
Subragion (LDD or MLDA): N	,. <sub>.</sub> ,.	l ot: 3		Lange -80.	12253385	Glope (70)
Oction (LRR of WLRA)	kalb stony c	Lat omplex mois	st 3 to 15 percent slo	nes	NNA(I -1'C'	Datum: WGS 1984 cation: None
Soil Map Unit Name:					INVVI classifi	cation:
Are climatic / hydrologic conditi						
Are Vegetation, Soil					I Circumstances"	present? Yes No
Are Vegetation, Soil	, or Hyd	Irology	_ naturally problema	tic? (If needed, e	explain any answe	ers in Remarks.)
SUMMARY OF FINDING	3S – Atta	ch site ma	ap showing sam	pling point location	ons, transects	s, important features, etc.
Hydrophytic Vegetation Prese	ent?	Yes 🗸	No			
Hydric Soil Present?		Yes 🔽	No	Is the Sampled Area	Yes 🗸	No
Wetland Hydrology Present?			No	within a Wetland?	res	NO
Remarks:						
Saturated PEM seep wetland top of draw.	n a minor dr	aw on a slop	e highly disturbed by	past mining and selective	ve logging; hydrol	ogy from seep praa421 located at
HYDROLOGY						
Wetland Hydrology Indicato	rs:				Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum	of one is req	uired; check	all that apply)		Surface Soil	Cracks (B6)
✓ Surface Water (A1)			rue Aquatic Plants (I			getated Concave Surface (B8)
High Water Table (A2)			Hydrogen Sulfide Odd		✓ Drainage Pa	
Saturation (A3)				es on Living Roots (C3)	Moss Trim L	
Water Marks (B1)			Presence of Reduced Recent Iron Reduction			Water Table (C2)
Sediment Deposits (B2) Drift Deposits (B3)			Thin Muck Surface (C		Crayfish Bu	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Other (Explain in Ren			Stressed Plants (D1)
Iron Deposits (B5)			(=:	,	<b>✓</b> Geomorphic	
Inundation Visible on Aer	ial Imagery (	(B7)			Shallow Aqu	
Water-Stained Leaves (B	9)				Microtopogr	aphic Relief (D4)
Aquatic Fauna (B13)					FAC-Neutra	l Test (D5)
Field Observations:			_			
Surface Water Present?			Deptil (iliches)	.5		
Water Table Present?			Depth (inches):	^		
Saturation Present?	Yes	No	Depth (inches):	Wetland H	lydrology Prese	nt? Yes V No
(includes capillary fringe)  Describe Recorded Data (stre	am gauge, r	monitoring we	ell, aerial photos, pre	l vious inspections), if ava	nilable:	
,				. ,		
Remarks:						

EGETATION (Four Strat	a) – Use scientific na	ames of	plants.		Sampling Point: wraa417e_w
		Absolute	Dominant Ir		Dominance Test worksheet:
Tree Stratum (Plot size:1	30)	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2					Total Number of Dominant
3					Species Across All Strata: 3 (B)
4					Descent of Deminent Coopies
5					Percent of Dominant Species That Are OBL, FACW, or FAC: 66.6666666 (A/B)
6					
7					Prevalence Index worksheet:
		0	= Total Cover	-	Total % Cover of: Multiply by:
	50% of total cover: 0	20% of	total cover:	0	OBL species 38 x 1 = 38
Sapling/Shrub Stratum (Plot size	e:)				FACW species x 2 =
1. Rubus allegheniensis		14	Yes	FACU	FAC species $0 \times 3 = 0$
2. Betula lenta		3	No	FACU	FACU species x 4 = 68
3					UPL species $0 \times 5 = 0$
					Column Totals:64 (A)124 (B)
5					103
6					Prevalence Index = B/A =1.93
7					Hydrophytic Vegetation Indicators:
8					1 - Rapid Test for Hydrophytic Vegetation
9.					2 - Dominance Test is >50%
o		17	= Total Cover		3 - Prevalence Index is ≤3.0 <sup>1</sup>
	50% of total cover: 8.5			3.4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:					data in Remarks or on a separate sheet)
1 Carex scabrata	/	20	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Glyceria striata		15	Yes	OBL	
3. Juncus effusus		4	No	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Osmundastrum cinnamomeui	m	3	No	FACW	be present, unless disturbed or problematic.
5. Eleocharis palustris	···	3	No	OBL	Definitions of Four Vegetation Strata:
6. Viola blanda		2	No No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Viola biarida				TAOW	more in diameter at breast height (DBH), regardless of
7					height.
8					Sapling/Shrub – Woody plants, excluding vines, less
9					than 3 in. DBH and greater than or equal to 3.28 ft (1
					m) tall.
11		47			Herb – All herbaceous (non-woody) plants, regardless
	50% of total cover: 23.5		= Total Cover		of size, and woody plants less than 3.28 ft tall.
	20	20% of	total cover:_	3.4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:	)				height.
1					
2					
3					
4					Hydrophytic
5					Vegetation
	_		= Total Cover		Present? Yes No No
	50% of total cover: 0	20% of	total cover:	0	
Remarks: (Include photo number	ers here or on a separate sh	neet.)			

Sampling Point: wraa417e\_w

Profile Des	cription: (Describe	to the dep	oth needed to docum	nent the	indicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redox	K Feature	es	. 2	_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-3	10YR 2/1	100					L	
3-8	10YR 3/1	100					SL	
8-14	10YR 4/1	97	10YR 4/6	3	С	PL/M	SCL	rock at 14"
				-	· <u></u>			
	<u> </u>							
	-							• •
								•
1							2	
		oletion, RM	=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.		PL=Pore Lining, M=Matrix.
•	Indicators:							eators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface	. ,				2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148) (	Coast Prairie Redox (A16)
	Histic (A3)		Thin Dark Su		, .	147, 148)	_	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(F2)		F	Piedmont Floodplain Soils (F19)
	ed Layers (A5)		<u>✓</u> Depleted Mat		>			(MLRA 136, 147)
	luck (A10) (LRR N)	(0.4.4)	Redox Dark S					Very Shallow Dark Surface (TF12)
	ed Below Dark Surfac	e (A11)	Depleted Dar				_ (	Other (Explain in Remarks)
	Dark Surface (A12)	I DD N	Redox Depre			LDD N		
	Mucky Mineral (S1) (I	LKK N,	Iron-Mangane		ses (F12) (	LKK N,		
	(A 147, 148)		MLRA 136 Umbric Surfa		/MI D A 12	e 122\	3 <sub>ln</sub>	dicators of hydrophytic vegetation and
	Gleyed Matrix (S4) Redox (S5)		Piedmont Flo					etland hydrology must be present,
	d Matrix (S6)		Red Parent M					nless disturbed or problematic.
	Layer (if observed):		Red Falent iv	ialenai (r	-21) (IVILK	A 121, 141	) ui	liess disturbed or problematic.
Type: n	one	•						
	nches):						Hydric Soi	I Present? Yes No
Remarks:								



Photo 1
Wetland data point WRAA417e\_w facing south



Photo 2
Wetland data point WRAA417e\_w facing north

Project/Site: Atlantic Coast Pi	peline	City/C	ounty: Randolph County	,	Sampling Date: 3/8/2016
Applicant/Owner: Dominion					Sampling Point: wraa417_u
		Section	on, Township, Range: No		
Landform (hillslope, terrace, et					
		. 38 69413467	er (concave, convex, nor	12259244	Slope (76) WGS 1984
Subregion (LRR or MLRA): N	La	at: 00.00410407	Long:	12200244	Datum: WGS 1984
Soil Map Unit Name: Gilpin-Do					
Are climatic / hydrologic condit	• •	•		•	•
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal	Circumstances"	present? Yes No
Are Vegetation, Soil	, or Hydrology	naturally problema	atic? (If needed, e	explain any answe	ers in Remarks.)
SUMMARY OF FINDIN	GS – Attach site	map showing sam	pling point location	ns, transects	s, important features, etc.
Lhudranhutia Vanatatian Duca		No. 4			
Hydrophytic Vegetation Pres Hydric Soil Present?		No	Is the Sampled Area		
Wetland Hydrology Present?	Yes	No	within a Wetland?	Yes	No
Remarks:	100				
Upland data point taken on a	disturbed slope for a si	aturated i Livi seep wet	and within an adjacent in	illioi diaw.	
HYDROLOGY					
Wetland Hydrology Indicat	ors:			Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum	of one is required; che	eck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	_	_ True Aquatic Plants (	B14)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)		_ Hydrogen Sulfide Ode		_	atterns (B10)
Saturation (A3)		<ul> <li>Oxidized Rhizosphere</li> </ul>		Moss Trim L	
Water Marks (B1)		_ Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)	_	_ Recent Iron Reductio		Crayfish Bu	
Drift Deposits (B3)	_	_ Thin Muck Surface (C			/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_	_ Other (Explain in Ren	narks)		Stressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Ae	rial Imagary (P7)			Geomorphic	Position (D2)
Water-Stained Leaves (E					aphic Relief (D4)
Aquatic Fauna (B13)	30)			FAC-Neutra	• • • •
Field Observations:				_	
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?		Depth (inches):			
Saturation Present?		Depth (inches):		lvdrology Prese	nt? Yes No
(includes capillary fringe)	· · · · · · · · · · · · · · · · · · ·	_ , , , ,			
Describe Recorded Data (str	eam gauge, monitoring	g weil, aeriai pnotos, pre	vious inspections), if ava	liable:	
Remarks:					
no hydrology indicators prese	nt				

Sampling	Point: wraa417_u
Sambilliu	Point. """"

•	Absolute	Dominant Ir	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 )	<u>% Cover</u> 18		Status	Number of Dominant Species
1. Acer saccharum		Yes	FACU	That Are OBL, FACW, or FAC:1 (A)
2. Liriodendron tulipifera	10	Yes	FACU	Total Number of Dominant
3. Prunus serotina	7	No	FACU	Species Across All Strata: 8 (B)
<sub>4.</sub> Magnolia acuminata	6	No	FACU	Descent of Deminent Species
5. Betula lenta	5	No	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC:  12.5 (A/B)
6				- , ,
7.				Prevalence Index worksheet:
	46	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 23		total cover:_	9.2	OBL species x 1 = 0
Sapling/Shrub Stratum (Plot size: 15				FACW species
1. Betula lenta	20	Yes	FACU	FAC species30 x 3 =90
2. Fagus grandifolia	20	Yes	FACU	FACU species118
3. Rubus allegheniensis	15	Yes	FACU	UPL species0 x 5 =0
4. Acer pensylvanicum	5	No	FACU	Column Totals: 148 (A) 562 (B)
5 Acer saccharum	5	No	FACU	(-)
o			17100	Prevalence Index = B/A = 3.79
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	65	= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover: 32.5	20% of	total cover:	13	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				Problematic Hydrophytic Vegetation¹ (Explain)
1. Dennstaedtia punctilobula	5	Yes	FACU	Problematic Hydrophytic vegetation (Explain)
2. Polystichum acrostichoides	2	Yes	FACU	1
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4.				Definitions of Four Vegetation Strata:
5				Definitions of Four Vegetation Strata.
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
•				noight.
9.				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				
11	7			Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 3.5		= Total Cove	r 1.4	of size, and woody plants less than 3.28 ft tall.
0070 01 total 00101.	20% of	total cover:_	1.7	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)  1 Smilax rotundifolia	30	Yes	FAC	height.
1. Sitiliax fotulidilolla		163	TAC	
2				
3				
4				Hydrophytic
5				Vegetation
	30	= Total Cove	r	Present? Yes No
50% of total cover: 15	20% of	total cover:	6	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wraa417\_u

Profile Des	cription: (Describe	to the dept				or confirm	the absence	e of indicators.)
Depth	Matrix		Redo	K Feature:	S1	. 2	<b>-</b> .	<b>5</b>
(inches) 0-4	Color (moist) 10YR 4/3	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> SL	Remarks
0-4		· <del></del>						· -
4-10	10YR 3/3	100					SCL	rock at 10"
					-			
	· <del></del>							
	-							• -
	·							
								•
1							2, ,, ,	
	Concentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
-	Indicators:							cators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface		/ <del>-</del> - \ /-			2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148) (	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su			47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)		'	Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Mat		-c)		,	(MLRA 136, 147)
	uck (A10) (LRR N)	o (A11)	Redox Dark S Depleted Dar					Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
	ed Below Dark Surfac Park Surface (A12)	e (ATT)	Redox Depre				— '	Other (Explain in Remarks)
	Mucky Mineral (S1) <b>(L</b>	DD N	Iron-Mangan			I DD N		
	A 147, 148)	-IXIX I <b>X</b> ,	MLRA 13		63 (1 12) <b>(</b>	LIXIX IV,		
	Gleyed Matrix (S4)		Umbric Surfa	•	MIRA 13	6 122)	3In	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	d Matrix (S6)		Red Parent N					nless disturbed or problematic.
	Layer (if observed):		Red r drene n	iatoriai (i	Z I) (IIILIX	7. 121, 171	1	nicos distarbed or problematio.
Type: rc	ck							
Type	10		<del></del>				l a .	
	nches): 10						Hydric Soi	il Present? Yes No
Remarks:								



Photo 1 Upland data point WRAA417\_u facing west



Photo 2 Upland data point WRAA417\_u facing north

Project/Site: Atlantic Coast Pipeline		City/County: Randolph County Sampling Date: 7/22/2016						
Applicant/Owner: Dominion			State: WV	Sampling Point: wrae284e_w				
Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none Slope (%): 25								
Subregion (LRR or MLRA): N Lat: 38.70123024 Long: -80.13776342 Datu								
Soil Map Unit Name: Gilpin-Dekalb sto	ny complex, moi	ist, 35 to 70 percent s	slopes	NWI classific	cation: PEM			
Are climatic / hydrologic conditions on t	he site typical fo	or this time of year? Y	′es No	(If no, explain in R	temarks.)			
Are Vegetation, Soil, or	Hydrology	significantly distur	bed? Are "Normal	Circumstances" p	oresent? Yes No			
Are Vegetation, Soil, or								
SUMMARY OF FINDINGS – A								
Hydrophytic Vegetation Present?	Yes	No						
Hydric Soil Present?	Yes 🗸	No	Is the Sampled Area	Vac V	No			
Wetland Hydrology Present?		No	within a Wetland?	res	NO			
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one is	required; check	call that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)		True Aquatic Plants (			getated Concave Surface (B8)			
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Pa				
✓ Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16) Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2)								
Water Marks (B1)		Water Table (C2)						
Sediment Deposits (B2)	Crayfish Burrows (C8)							
Drift Deposits (B3) Algal Mat or Crust (B4)		Thin Muck Surface (C Other (Explain in Rer		Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)				
Algal Mat of Crust (B4) Iron Deposits (B5)		Other (Explain in Nei	ilaiks)	Geomorphic Position (D2)				
Inundation Visible on Aerial Imag	erv (B7)			Shallow Aquitard (D3)				
Water-Stained Leaves (B9)	- , (			Microtopographic Relief (D4)				
Aquatic Fauna (B13)				FAC-Neutral				
Field Observations:								
Surface Water Present? Yes _	No	Depth (inches):						
Water Table Present? Yes _	<b>✓</b> No	Depth (inches):	2					
		Depth (inches):	0 Wetland H	nd Hydrology Present? Yes No				
(includes capillary fringe)  Describe Recorded Data (stream gau	ae monitorina v	vell aerial photos pre	vious inspections) if ava	ilahle:				
Describe Necorded Data (stream gad	ge, monitoring w	veii, aeriai priotos, pre	vious inspections), ii ava	illabic.				
Remarks:								

Sampling	Point: wrae284e_	W
Sambiinu	POINT. ""GOZO 10-	

00	Absolute	Dominant Ir		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1. none				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Deminerat
3				Total Number of Dominant Species Across All Strata: 2 (B)
4				Sporice / torode / till etrata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:100 (A/B)
6		-		Prevalence Index worksheet:
7				
	0	= Total Cover		Total % Cover of: Multiply by:  ORL species 65 x 1 = 65
50% of total cover:0	20% of	total cover:	0	OBL species X I =
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
1 none	0			FAC species0 x 3 =0
2	-	-		FACU species0 x 4 =0
2		-		UPL species
3		-		125 185
4				Column Totals:(A)(B)
5				Prevalence Index = B/A = 1.48
6			_	Trevalence index = B/T(=
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	0	= Total Cover		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:0	20% of	total cover:	0	
Herb Stratum (Plot size:)				data in Remarks or on a separate sheet)
1 Leersia oryzoides	45	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Scirpus cyperinus	25	Yes	FACW	
3. Carex scoparia	15	No	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
De aliana anno a	15	No	FACW	be present, unless disturbed or problematic.
4. Packera aurea 5. Carex vulpinoidea	10		OBL	Definitions of Four Vegetation Strata:
·		No		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Scirpus atrovirens	10	<u>No</u>	OBL	more in diameter at breast height (DBH), regardless of
7. Eupatorium perfoliatum	5	No	FACW	height.
8		-		Canling/Chrush Wasdy plants avaluating vines less
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				
· · · · · · · · · · · · · · · · · · ·	125	T-1-1 0		Herb – All herbaceous (non-woody) plants, regardless
50% of total cover: 62.5		= Total Cover	25	of size, and woody plants less than 3.28 ft tall.
0070 01 total 00101.	20% of	total cover:		Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1. <u>none</u>	0			
2				
3				
4		-		Hydrophytic
5		·		Vegetation Present? Yes No
		= Total Cover		Present? Yes No
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			
` .	,			

Sampling Point: wrae284e\_w

Profile Desc	cription: (Describe to	the depth	needed to docur	nent the in	dicator	or confirm	the ab	sence of indi	cators.)	
Depth	Matrix			x Features						
(inches) 0-6	Color (moist) 10YR 4/2	% 90	Color (moist) IOYR 4/6	<u>%</u> 10	Type <sup>1</sup> C	Loc <sup>2</sup>		ture CL	Remarl	KS
	·	<del></del> -								
	oncentration, D=Deple	tion, RM=F	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	<sup>2</sup> Locat		Lining, M=Mat	
Hydric Soil	Indicators:							Indicators fo	r Problematic	Hydric Soils <sup>3</sup> :
Histosol			Dark Surface						ck (A10) (MLR.	
	oipedon (A2)		Polyvalue Be				148)		airie Redox (A	16)
	stic (A3)		Thin Dark Su			47, 148)		•	A 147, 148)	
	en Sulfide (A4)		Loamy Gleye		2)				t Floodplain Sc	oils (F19)
	d Layers (A5)		<u>✓</u> Depleted Ma	. ,	• • • • • • • • • • • • • • • • • • • •				A 136, 147)	(TE40)
	uck (A10) <b>(LRR N)</b> d Below Dark Surface	(111)	Redox Dark						allow Dark Surfa xplain in Rema	
	ark Surface (A12)	(A11)	Redox Depre					Other (E	хріані ін Кеніа	185)
	Mucky Mineral (S1) <b>(LF</b>	R N.	Iron-Mangan			LRR N.				
	A 147, 148)	,	MLRA 13		· (· ·=/ <b>(</b>	,				
	Gleyed Matrix (S4)		Umbric Surfa	•	ILRA 13	6, 122)		<sup>3</sup> Indicators	of hydrophytic	vegetation and
	Redox (S5)		Piedmont Flo				l8)		ydrology must b	-
Stripped	Matrix (S6)		Red Parent N	/laterial (F2	1) <b>(MLR</b>	A 127, 147	7)	unless dis	turbed or probl	ematic.
	Layer (if observed):									
Type: roo			<u> </u>							
Depth (in	ches): <u>6</u>		<u> </u>				Hydr	ric Soil Preser	nt? Yes <u> </u>	No
Remarks:										
Auger refusal	at 6 inches.									



Wetland data point wrae284e\_w facing south



Wetland data point wrae284e\_w facing north

Project/Site: Atlantic Coast Pipeline		City/County: Randolph County Sampling Date: 7/22/2010						
Applicant/Owner: Dominion			Sampling Point: wrae284_u					
	Section, Township, Range: No PLSS in this area							
Landform (hillslope, terrace, etc.): road Local relief (concave, convex, none): convex Slope (%):3								
Subregion (LRR or MLRA): N Lat: 38.70121505 Long: -80.13781467 Datum: WGS Soil Map Unit Name: Gilpin-Dekalb stony complex, moist, 35 to 70 percent slopes NWI classification: UPL								
Are climatic / hydrologic conditions on the								
Are Vegetation, Soil, or H	ydrology	, significantly distur	bed? Are "Normal	Circumstances" p	resent? Yes No			
Are Vegetation, Soil, or H								
SUMMARY OF FINDINGS – Att								
Hydrophytic Vegetation Present?	Yes	No 🗸						
Hydric Soil Present?		No 🗸	Is the Sampled Area	Voc	No			
Wetland Hydrology Present?	Yes		within a Wetland?	res	NO			
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indica	tors (minimum of two required)			
Primary Indicators (minimum of one is r	equired; checl	k 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		Drainage Pat				
Saturation (A3)	• ,							
Water Marks (B1)	d Iron (C4)	Dry-Season Water Table (C2)						
Sediment Deposits (B2)	on in Tilled Soils (C6)							
Drift Deposits (B3) Algal Mat or Crust (B4)		Thin Muck Surface (C Other (Explain in Rer		<ul><li>Saturation Visible on Aerial Imagery (C9)</li><li>Stunted or Stressed Plants (D1)</li></ul>				
Algal Mat of Crust (B4) Iron Deposits (B5)		Other (Explain in Nei	ilaiks)	Geomorphic Position (D2)				
Inundation Visible on Aerial Imager	v (B7)			Shallow Aquitard (D3)				
Water-Stained Leaves (B9)	, (			Microtopographic Relief (D4)				
Aquatic Fauna (B13)				FAC-Neutral				
Field Observations:								
Surface Water Present? Yes	No <u> </u>	Depth (inches):						
Water Table Present? Yes	No <u> </u>	Depth (inches):						
Saturation Present? Yes (includes capillary fringe)	No	Wetland F	Wetland Hydrology Present? Yes No					
Describe Recorded Data (stream gauge	, monitoring w	vell, aerial photos, pre	evious inspections), if ava	ilable:				
Remarks:								
Remarks.								

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-		Absolute	Dominant	Indicator	Dominance Test worksheet:
ree Stratum (Plot size:	0 )		Species?		Number of Dominant Species
none		0			That Are OBL, FACW, or FAC:0 (A)
					Total Number of Dominant Species Across All Strata:  0 (B)
					Openies / toross / torosta
		-			Percent of Dominant Species That Are ORL FACW or FAC:  0 (A/F
					That Are OBL, FACW, or FAC: (A/E
		•			Prevalence Index worksheet:
		0	= Total Cov		Total % Cover of: Multiply by:
	50% of total cover:0			_	OBL species x 1 =
apling/Shrub Stratum (Plot siz	0	20 /0 01	total cover.		FACW species x 2 =
none stratum (Plot Siz	e)	0			FAC species x 3 =
					FACU species x 4 =
					UPL species x 5 =
·		-			'
					Column Totals: (A) (B
		-			Prevalence Index = B/A =
					Hydrophytic Vegetation Indicators:
					1 - Rapid Test for Hydrophytic Vegetation
		-			2 - Dominance Test is >50%
					3 - Prevalence Index is ≤3.0¹
		0	= Total Cov	er	
	50% of total cover:0	20% of	total cover:	0	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
lerb Stratum (Plot size:	0 )				data in Remarks or on a separate sheet)
none	,	0			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
					<sup>1</sup> Indicators of hydric soil and wetland hydrology must
•					be present, unless disturbed or problematic.
		-			Definitions of Four Vegetation Strata:
-					<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) of
		•			more in diameter at breast height (DBH), regardless of
•		•			height.
					Sapling/Shrub – Woody plants, excluding vines, less
•					than 3 in. DBH and greater than or equal to 3.28 ft (1
0					m) tall.
1					Herb – All herbaceous (non-woody) plants, regardles
		0	= Total Cov	er	of size, and woody plants less than 3.28 ft tall.
	50% of total cover: 0	20% of	total cover:	0	<b>Woody vine</b> – All woody vines greater than 3.28 ft in
Voody Vine Stratum (Plot size:	)				height.
none		0			
	_				
					Hydrophytic Vegetation
•		0	= Total Cov		Present? Yes No
	50% of total cover: 0		total cover:	_	
temarks: (Include photo numbe	00 /0 01 total 00 ver.			_	1
cemants. (molude prioto numbe	ero nere ur un a separate s	neet.)			

Sampling Point: wrae284\_u

Profile Desc	ription: (Describe to th	ne depth ne	eded to docum	ent the ind	cator or confirm	n the al	sence of indicators.)
Depth	Matrix		Redox	Features			
(inches)	Color (moist)	% C	olor (moist)		ype <sup>1</sup> Loc <sup>2</sup>	Tex	ture Remarks
						-	
	oncentration, D=Depletio	n, RM=Red	uced Matrix, MS	=Masked Sa	and Grains.	<sup>2</sup> Loca	tion: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		_ Dark Surface	(S7)			2 cm Muck (A10) (MLRA 147)
	oipedon (A2)			. ,	(S8) <b>(MLRA 147</b>	148)	Coast Prairie Redox (A16)
Black His					ILRA 147, 148)	, . <del></del> ,	(MLRA 147, 148)
		_					
	n Sulfide (A4)	_	_ Loamy Gleye	, ,			Piedmont Floodplain Soils (F19)
	I Layers (A5)		Depleted Mat				(MLRA 136, 147)
	ck (A10) (LRR N)	_	_ Redox Dark S				Very Shallow Dark Surface (TF12)
	d Below Dark Surface (A	11)	Depleted Dar		7)		Other (Explain in Remarks)
	rk Surface (A12)		Redox Depre				
Sandy M	lucky Mineral (S1) (LRR	N,	_ Iron-Mangane	se Masses	(F12) <b>(LRR N,</b>		
MLRA	\ 147, 148)		MLRA 136	5)			
Sandy G	leyed Matrix (S4)		Umbric Surfa	e (F13) <b>(ML</b>	.RA 136, 122)		<sup>3</sup> Indicators of hydrophytic vegetation and
	edox (S5)				(F19) <b>(MLRA 1</b> 4	48)	wetland hydrology must be present,
-	Matrix (S6)				(MLRA 127, 14		unless disturbed or problematic.
	ayer (if observed):		_ rtou r dront iv	aterial (1 2 1)	(MERCA 127, 14	·,	diffects distarbed of problematic.
Type:							
Depth (inc	ches):					Hydı	ric Soil Present? Yes No
Remarks:							
gravel road							
graverroad							



Upland data point wrae284\_u facing south

# WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Randolph County Sampling Date: 3/8/2016							
Applicant/Owner: Dominion		State: WV	Sampling Point: wraa416e_w					
Investigator(s): GB, KM Section, Township, Range: No PLSS in this area								
Landform (hillslope, terrace, etc.): slope								
Subregion (LRR or MLRA): N	ong: -80.12441475	Datum: WGS 1984						
Soil Map Unit Name: Gilpin-Dekalb stony complex	x, moist, 15 to 35 percent slopes	NWI classific	cation: None					
Are climatic / hydrologic conditions on the site typi	cal for this time of year? Yes No	o (If no, explain in R	emarks.)					
Are Vegetation, Soil, or Hydrology	significantly disturbed?	re "Normal Circumstances" p	present? Yes No					
Are Vegetation, Soil, or Hydrology								
SUMMARY OF FINDINGS – Attach sit								
Hydrophytic Vegetation Present? Yes	V No la the Comm							
Hydric Soil Present? Yes	Is the Samp		No					
	v No within a Wes	nand? fes	NO					
Remarks:	l l							
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)					
Primary Indicators (minimum of one is required;	check all that apply)	Surface Soil	Cracks (B6)					
Surface Water (A1)	True Aquatic Plants (B14)		getated Concave Surface (B8)					
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	<u>✓</u> Drainage Pa						
✓ Saturation (A3)	oots (C3) Moss Trim Li	ines (B16)						
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season	Water Table (C2)					
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soil	s (C6) Crayfish Bur	rows (C8)					
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation V	isible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)	Other (Explain in Remarks)		Stunted or Stressed Plants (D1)					
Iron Deposits (B5)		<u> </u>	Geomorphic Position (D2)					
Inundation Visible on Aerial Imagery (B7)			Shallow Aquitard (D3)					
Water-Stained Leaves (B9)		Microtopographic Relief (D4) FAC-Neutral Test (D5)						
Aquatic Fauna (B13)		FAC-Neutral	Test (D5)					
Field Observations:	V Donath (in also a)							
<u> </u>	Depth (inches):							
	Depth (inches):  Depth (inches):  0							
Saturation Present? Yes No _ (includes capillary fringe)	Wetland Hydrology Preser	nd Hydrology Present? Yes No						
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous inspection	ons), if available:						
Remarks:								

### **VEGETATION** (Four Stra

00		Dominant		Dominance Test worksheet:
ree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
				That Are OBL, FACW, or FAC:3 (A)
		-		Total Number of Dominant
		-		Species Across All Strata: 5 (B)
·				Percent of Dominant Species
		-		That Are OBL, FACW, or FAC:60 (A/B)
		-		Prevalence Index worksheet:
	0	= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 0		total cover:	^	OBL species 40 x 1 = 40
apling/Shrub Stratum (Plot size: 15 )				FACW species0 x 2 =0
Rubus allegheniensis	6	Yes	FACU	FAC species 20 x 3 = 60
Betula lenta	4	Yes	FACU	FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A) (B)
				Prevalence Index = B/A = 2
				1 Tovalence mack = B/TC =
				Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
				✓ 3 - Prevalence Index is ≤3.0¹
_		= Total Cov	^	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:5	20% of	total cover:	2	data in Remarks or on a separate sheet)
erb Stratum (Plot size:)	0.5			Problematic Hydrophytic Vegetation (Explain)
Scirpus atrovirens	25	Yes	OBL	
Carex scabrata	15	Yes	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Dichanthelium clandestinum Symphyotrichum dumosum	<u>15</u> 5	Yes No	FAC FAC	be present, unless disturbed or problematic.
<del>'</del>		INU	FAC	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.
0				
1	60	= Total Cov		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 30				
/oody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
				neight.
				Hydrophytio
				Hydrophytic Vegetation
		= Total Cov		Present? Yes No
		- iolaioov	CI	

Sampling Point: wraa416e\_w

Profile Desc	cription: (Describe t	o the dep	th needed to docum	ent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix			Features	3			
(inches) 0-5	Color (moist) 10YR 2/1	100	Color (moist)	<u></u> %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SL	Remarks
5-10	10YR 3/1	100					SL	
10-14	10YR 4/1	97	10YR 5/6	3	С	PL/M	SCL	rock at 14"
						· ——		
						·		
	oncentration, D=Deple	etion, RM	=Reduced Matrix, MS	=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil								ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	. ,				2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Bel				148) (	Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Sur			147, 148)	_	(MLRA 147, 148)
	en Sulfide (A4) d Layers (A5)		Loamy Gleyed ✓ Depleted Mate		F2)		'	Piedmont Floodplain Soils (F19)
	uck (A10) <b>(LRR N)</b>		Redox Dark S		.e)		,	(MLRA 136, 147) /ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dark					Other (Explain in Remarks)
	ark Surface (A12)	(,,,,	Redox Depres				`	(2) (2) (2) (2) (2) (2) (2) (2) (2) (2)
	Mucky Mineral (S1) <b>(L</b>	RR N,	Iron-Mangane			LRR N,		
	A 147, 148)		MLRA 136					
Sandy C	Gleyed Matrix (S4)		Umbric Surfac	ce (F13) <b>(</b>	MLRA 13	6, 122)	<sup>3</sup> Inc	dicators of hydrophytic vegetation and
Sandy F	Redox (S5)		Piedmont Floo					etland hydrology must be present,
	d Matrix (S6)		Red Parent M	aterial (F	21) <b>(MLR</b>	A 127, 147	') ur	nless disturbed or problematic.
	Layer (if observed):							
Type: no								
	ches):						Hydric Soi	I Present? Yes No
Remarks:								



**Photo 1**Wetland data point WRAA416e\_w facing northeast



Photo 2
Wetland data point WRAA416e\_w facing southwest

# WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline		City/County: Randolph County Sampling Date: 3/8/2016							
Applicant/Owner: Dominion			-		Sampling Point: wraa416_u				
		Section, Township, Range: No PLSS in this area							
Landform (hillslope, terrace, etc.): slope									
Subregion (LRR or MLRA): N					Datum: WGS 1984				
Soil Map Unit Name: Gilpin-Dekalb stor	ny complex, moist, 1	5 to 35 percent sl	lopes	NWI classifica	tion: None				
Are climatic / hydrologic conditions on t									
Are Vegetation, Soil, or									
Are Vegetation, Soil, or									
SUMMARY OF FINDINGS – A									
				,					
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes No		Is the Sampled Area						
Wetland Hydrology Present?	Yes No	0 1	within a Wetland?	Yes	_ No				
Remarks:		<u></u>							
HADBOI OCA									
HYDROLOGY Wetland Hydrology Indicators:				Coondan, Indicate	oro (minimum of two required)				
Wetland Hydrology Indicators:	roquired; abook all t	hat apply)			ors (minimum of two required)				
Primary Indicators (minimum of one is	D4.4\	Surface Soil Cracks (B6)							
Surface Water (A1) High Water Table (A2)	B14) or (C1)	<ul><li>Sparsely Vegetated Concave Surface (B8)</li><li>Drainage Patterns (B10)</li></ul>							
Saturation (A3)	Moss Trim Lin								
Water Marks (B1)		sence of Reduced	es on Living Roots (C3) I Iron (C4)		/ater Table (C2)				
Sediment Deposits (B2)			n in Tilled Soils (C6)	Crayfish Burrows (C8)					
Drift Deposits (B3)		Muck Surface (C		Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)	Othe	er (Explain in Rem	narks)	Stunted or Stressed Plants (D1)					
Iron Deposits (B5)				Geomorphic Position (D2)					
Inundation Visible on Aerial Image	ery (B7)			Shallow Aquitard (D3)					
Water-Stained Leaves (B9)				<pre> Microtopographic Relief (D4) FAC-Neutral Test (D5)</pre>					
Aquatic Fauna (B13)				FAC-Neutral T	est (D5)				
Field Observations: Surface Water Present? Yes	No <u> </u>	oth (inches).							
	No <u> </u>								
	No <u> </u>			ludrologu Brocont	? Yes No ✔				
(includes capillary fringe)	No _• Dep	oth (inches):	wetland n	lydrology Present	r res No				
Describe Recorded Data (stream gauge	ge, monitoring well, a	aerial photos, prev	vious inspections), if ava	ilable:					
Remarks:									
no hydrology indicators present									
, ,									

Sampling	Point: wraa416_u
Samulinu	FUIIIL.

•	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u> 12	Species?	Status	Number of Dominant Species
1. Acer saccharum		Yes	FACU	That Are OBL, FACW, or FAC:1 (A)
2. Liriodendron tulipifera	10	Yes	FACU	Total Number of Dominant
3. Prunus serotina	10	Yes	FACU	Species Across All Strata: 8 (B)
4. Betula lenta	5	No	FACU	Barrant of Barrian of Oracina
<sub>5.</sub> Magnolia acuminata	4	No	FACU	Percent of Dominant Species That Are OBL, FACW, or FAC:  12.5 (A/B)
6				
7				Prevalence Index worksheet:
	41	= Total Cove	r	Total % Cover of: Multiply by:
50% of total cover:20.5	20% of	total cover:_	8.2	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
1. Betula lenta	35	Yes	FACU	FAC species15 x 3 =45
2. Rubus allegheniensis	25	Yes	FACU	FACU species127 x 4 =508
3. Fagus grandifolia	15	No	FACU	UPL species0 x 5 =0
4. Acer saccharum	5	No	FACU	Column Totals:142
5				0.00
6			-	Prevalence Index = B/A =3.89
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	80	T 0		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 40		= Total Cove total cover:	r 16	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50 % of total cover	20% 01	total cover:_		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:	3	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2 Polystichum acrostichoides	3	Yes	FACU	
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	6	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 3	20% of	total cover:_	1.2	Was divising. All was divising a greater than 2.20 ft in
Woody Vine Stratum (Plot size:)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1. Smilax rotundifolia	15	Yes	FAC	
2				
3				
4				
r				Hydrophytic
5	15	Tatal Caus		Vegetation Present? Yes No
50% of total cover: 7.5		= Total Cove total cover:	^	
00700110101001011		total cover		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wraa416\_u

Profile Desc	cription: (Describe t	o the depth	needed to document the indicator or	confirm	the absence	e of indicators.)
Depth	Matrix		Redox Features			
(inches) 0-4	Color (moist) 10YR 4/3	100	Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup>	Texture SL	Remarks
4-10	10YR 3/3	100			SCL	rock at 10"
					2	·
<sup>1</sup> Type: C=C Hydric Soil		etion, RM=R	Reduced Matrix, MS=Masked Sand Grain	S.		PL=Pore Lining, M=Matrix. eators for Problematic Hydric Soils <sup>3</sup> :
Histosol	I (A1)		Dark Surface (S7)		2	2 cm Muck (A10) (MLRA 147)
Histic E	pipedon (A2)		Polyvalue Below Surface (S8) (MLF	RA 147,	148) (	Coast Prairie Redox (A16)
Black H	istic (A3)		Thin Dark Surface (S9) (MLRA 147	', 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)		F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)			Very Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dark Surface (F7)		_ (	Other (Explain in Remarks)
	ark Surface (A12) Mucky Mineral (S1) <b>(L</b>	DD N	<ul><li>Redox Depressions (F8)</li><li>Iron-Manganese Masses (F12) (LR</li></ul>	D N		
	A 147, 148)	KK N,	MLRA 136)	K N,		
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136,	122)	<sup>3</sup> Inc	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floodplain Soils (F19) (M			etland hydrology must be present,
-	d Matrix (S6)		Red Parent Material (F21) (MLRA 1			nless disturbed or problematic.
Restrictive	Layer (if observed):					·
Type: ro	ck					
Depth (in	ches): 10				Hydric Soi	I Present? Yes No
Remarks:						



**Photo 1**Upland data point WRAA416\_u facing northeast



**Photo 2**Upland data point WRAA416\_u facing southeast

# WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline		City/County: Randolph County Sampling Date: 3/8/2016							
Applicant/Owner: Dominion				State: WV	Sampling Point: wraa415f_w				
Investigator(s): GB, KM Section, Township, Range: No PLSS in this area									
Landform (hillslope, terrace, etc.): str									
Subregion (LRR or MLRA). N	Lat.	Long80.	12534029	Datum: WGS 1984					
Soil Map Unit Name: Udorthents, mu	dstone and shale,	low base		NWI classifi	cation: None				
Are climatic / hydrologic conditions or	the site typical for	this time of year? Y	es No	(If no, explain in I	Remarks.)				
Are Vegetation, Soil,	or Hydrology	significantly distur	bed? Are "Norma	I Circumstances"	present? Yes No				
Are Vegetation, Soil,									
SUMMARY OF FINDINGS -									
Hydrophytic Vegetation Present?	Yes 🗸	No							
Hydric Soil Present?	Yes V	No	Is the Sampled Area within a Wetland?	Vos V	No				
Wetland Hydrology Present?		No	within a wettand:	165					
Saturated to seasonally flooded PFC praa419	) wetland located o	n a strip mine bench	with a concave surface;	hydrology from s	eeps praa417, praa418, &				
HYDROLOGY									
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)				
Primary Indicators (minimum of one	is required; check	all that apply)		Surface Soi	Cracks (B6)				
✓ Surface Water (A1)	B14)		egetated Concave Surface (B8)						
High Water Table (A2)		Hydrogen Sulfide Od		✓ Drainage Pa					
Saturation (A3)	• , ,	Moss Trim I	, ,						
Water Marks (B1)		Presence of Reduced			Water Table (C2)				
Sediment Deposits (B2)			n in Tilled Soils (C6)	Crayfish Bu					
Drift Deposits (B3)		Thin Muck Surface (C			/isible on Aerial Imagery (C9)				
Algal Mat or Crust (B4) Iron Deposits (B5)	_ `	Other (Explain in Rer	narks)	Stunted or Stressed Plants (D1)					
Inundation Visible on Aerial Ima	agery (B7)			<ul><li>Geomorphic Position (D2)</li><li>Shallow Aquitard (D3)</li></ul>					
✓ Water-Stained Leaves (B9)	.90.7 (2.7			Microtopographic Relief (D4)					
Aquatic Fauna (B13)			✓ FAC-Neutra	• • •					
Field Observations:									
Surface Water Present? Yes	<u> ✓</u> No	Depth (inches):	1						
Water Table Present? Yes	No	Depth (inches):							
Saturation Present? Yes	<u> ✓</u> No	Depth (inches):	0 Wetland H	Hydrology Prese	nt? Yes 🗸 No				
(includes capillary fringe)  Describe Recorded Data (stream ga	auge monitoring w	all aprial photos pre	vious inspections) if ava	ailahla:					
Describe Necorded Data (stream ga	luge, monitoring w	eli, aeriai priotos, pre	vious irispections), ii ava	allable.					
Remarks:									

			Absolute	Dominant	Indicator	Dominance Test worksheet:
Γree Stratum (Plot size:	30	_)		Species?	Status	Number of Dominant Species
Acer rubrum			15	Yes	FAC	That Are OBL, FACW, or FAC:6 (A)
Betula lenta			12	Yes	FACU	(**,
<u>-</u> 3.						Total Number of Dominant Species Across All Strate: 8 (B)
			-			Species Across All Strata: 6 (B)
ł			-			Percent of Dominant Species
5			-			That Are OBL, FACW, or FAC: 75 (A/B)
S						Prevalence Index worksheet:
<b>7</b>						
				= Total Cove		Total % Cover of: Multiply by:
		tal cover: 13.5	5 20% of	total cover:	5.4	OBL species X I =
Sapling/Shrub Stratum (Plot siz	ze:	15)				FACW species x 2 =
Betula lenta			15	Yes	FACU	FAC species x 3 =
Acer rubrum			10	Yes	FAC	FACU species 32 x 4 = 128
Liriodendron tulipifera			5	No	FACU	UPL species0 x 5 =0
·			-			Column Totals: (A) 271 (B)
1 5.			-	· ——		
						Prevalence Index = B/A =2.65
S						Hydrophytic Vegetation Indicators:
7			-			1 - Rapid Test for Hydrophytic Vegetation
3			-			✓ 2 - Dominance Test is >50%
9						3 - Prevalence Index is ≤3.0 <sup>1</sup>
				= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
	50% of to	tal cover: 15	20% of	total cover:	6	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:	5	_)				·
. Carex lupulina			12	Yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Carex scabrata			10	Yes	OBL	
Juncus effusus			10	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Panicum dichotomiflorum			10	Yes	FACW	be present, unless disturbed or problematic.
Viola cucullata			3	No	FACW	Definitions of Four Vegetation Strata:
·					171011	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5						more in diameter at breast height (DBH), regardless of
7						height.
3						Sapling/Shrub – Woody plants, excluding vines, less
)						than 3 in. DBH and greater than or equal to 3.28 ft (1
0						m) tall.
l1						Herb – All herbaceous (non-woody) plants, regardless
			45	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
	50% of to	tal cover: 22.5	20% of	total cover:	9	
Voody Vine Stratum (Plot size:	0/					<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
						neight.
2						
3						
1			-			Hydrophytic
5						Vegetation
			0	= Total Cove	er	Present? Yes No No
	50% of to	tal cover:0	20% of	total cover:		
Remarks: (Include photo numb	ers here or	on a separate s	sheet.)			-
-		-				

Sampling Point: wraa415f\_w

Profile Desc	ription: (Describe t	o the dept	h needed to docur	nent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redo	x Features	S			
(inches) 0-5	Color (moist) 10YR 2/1	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SL	<u>Remarks</u>
5-9	10YR 4/1	94	7.5YR 4/6	6	С	PL/M	SCL	rock at 9"
							-	
			_					
	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil								ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface		(00) (1			2 cm Muck (A10) (MLRA 147)
	pipedon (A2) stic (A3)		Polyvalue Be Thin Dark Su				148) (	Coast Prairie Redox (A16)
	en Sulfide (A4)		Loamy Gleye	. ,	•	147, 140)	F	(MLRA 147, 148) Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Ma		,		<u> </u>	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark		6)		\	/ery Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Depleted Dar				(	Other (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre					
	Mucky Mineral (S1) <b>(L</b> l <b>A 147, 148)</b>	KK N,	Iron-Mangan MLRA 13		es (F12) <b>(</b>	LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa	•	MLRA 13	6. 122)	<sup>3</sup> Inc	dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent N					nless disturbed or problematic.
Restrictive I	Layer (if observed):							
Type: roo								
Depth (in	ches): <sup>9</sup>						Hydric Soi	I Present? Yes No
Remarks:								



**Photo 1**Wetland data point WRAA415f\_w facing northwest



**Photo 2**Wetland data point WRAA415f\_w facing southeast