

Seep data point PPOA422 facing west



Seep data point PPOA423 facing south



Seep data point PPOA421 facing southwest



Spring data point PPOA420 facing west



Seep data point PPOA432 facing east



Seep data point PPOA433 facing east



Seep data point PPOA434 facing north



Seep data point PPOA435 facing north



Seep data point PPOA436 facing north



Seep data point PPOA437 facing northeast



Seep data point PPOA426 facing northwest



Seep data point PPOA427 facing north

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Pocah	ontas	Sampling Date: 6/7/2016	
Applicant/Owner: Dominion		State: WV	Sampling Point: ppoa430	
Investigator(s): GB, KO	Section, Township,	Range:		
Landform (hillslope, terrace, etc.): road cut	Local relief (concave, o	convex, none): <u>none</u>	Slope (%): <u>45</u>	
Subregion (LRR or MLRA): Lat: 38	.369587	Long: <u>-80.087927</u>	Datum: WGS1984	
Soil Map Unit Name:		NWI classi	fication: UPLAND	
Are climatic / hydrologic conditions on the site typical for th	is time of year? Yes <u></u> N	o (If no, explain in	Remarks.)	
Are Vegetation, Soil 🖌 , or Hydrology 🖌	significantly disturbed? A	re "Normal Circumstances'	' present? Yes 🖌 No	
Are Vegetation, Soil, or Hydrology	naturally problematic? (I	f needed, explain any answ	vers in Remarks.)	
SUMMARY OF EINDINGS Attach site man	chowing compling poin	t loootiona trancad	a important factures ato	

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

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

Data point taken at the base of road cut; saturated area with hydrology from road cut seep; minor outflow follows ditch and passes under existing road via culvert; outflow becomes subterranean approximately ten feet downslope of culvert outlet; meets hydrology but does not meet any hydic soil indicators; redoximorhic features not present - likely because of gradient and well oxgenated water. Area of saturation is approximately a hundred square feet.

HYDROLOGY

Wetland Hydrology Indicator	s:		<u>S</u>	econdary Indicators (minimum of two required)
Primary Indicators (minimum of	f one is required; chec	k all that apply)		_ Surface Soil Cracks (B6)
Surface Water (A1)		True Aquatic Plants (B14)	_	_ Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	_	Hydrogen Sulfide Odor (C1)	_	_ Drainage Patterns (B10)
Saturation (A3)	_	Oxidized Rhizospheres on Living	Roots (C3)	_ Moss Trim Lines (B16)
Water Marks (B1)		Presence of Reduced Iron (C4)	_	_ Dry-Season Water Table (C2)
Sediment Deposits (B2)	_	Recent Iron Reduction in Tilled So	oils (C6)	Crayfish Burrows (C8)
Drift Deposits (B3)		Thin Muck Surface (C7)		_ Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Remarks)	_	_ Stunted or Stressed Plants (D1)
Iron Deposits (B5)				_ Geomorphic Position (D2)
Inundation Visible on Aeria	al Imagery (B7)			_ Shallow Aquitard (D3)
Water-Stained Leaves (B9)			Microtopographic Relief (D4)
Aquatic Fauna (B13)			U	FAC-Neutral Test (D5)
Field Observations:				
Surface Water Present?	Yes No 🔽	Depth (inches):		
Water Table Present?	Yes No 🔽	Depth (inches):		
Water Table Present? Saturation Present? (includes capillary fringe)	Yes No Yes No	_ Depth (inches): _ Depth (inches):0	Wetland Hyd	drology Present? Yes 🖌 No
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (strea	Yes No Yes No Mo	_ Depth (inches): _ Depth (inches): well, aerial photos, previous inspec	Wetland Hyd	drology Present? Yes <u>V</u> No
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (strea	Yes No Yes No m gauge, monitoring v	_ Depth (inches): _ Depth (inches): well, aerial photos, previous inspec	Wetland Hyd	drology Present? Yes <u> No</u> No
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (strea Remarks:	Yes No Yes No Im gauge, monitoring v	_ Depth (inches): _ Depth (inches): well, aerial photos, previous inspec	Wetland Hyd	drology Present? Yes <u> No</u> No
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (strea Remarks:	Yes No Yes No Im gauge, monitoring v	_ Depth (inches): _ Depth (inches):0 well, aerial photos, previous inspec	Wetland Hyd tions), if availa	drology Present? Yes <u> No</u> No
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (strea Remarks:	Yes No Yes No m gauge, monitoring v	_ Depth (inches): _ Depth (inches): well, aerial photos, previous inspec	Wetland Hyd	drology Present? Yes <u> V</u> No ble:
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (streat Remarks:	Yes No Yes No Im gauge, monitoring v	_ Depth (inches): _ Depth (inches): well, aerial photos, previous inspec	Wetland Hyd	drology Present? Yes <u> V</u> No ble:
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (streat Remarks:	Yes No Yes No m gauge, monitoring v	_ Depth (inches): _ Depth (inches): well, aerial photos, previous inspec	Wetland Hyd	drology Present? Yes <u> No</u> <u>No</u> ble:
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (strea Remarks:	Yes No Yes No m gauge, monitoring v	_ Depth (inches): _ Depth (inches): well, aerial photos, previous inspec	Wetland Hyd	drology Present? Yes <u>V</u> No ble:
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (streat Remarks:	Yes No Yes No Im gauge, monitoring v	_ Depth (inches): _ Depth (inches): well, aerial photos, previous inspec	Wetland Hyd	drology Present? Yes <u>V</u> No ble:
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (streat Remarks:	Yes No Yes No Im gauge, monitoring v	_ Depth (inches): _ Depth (inches): well, aerial photos, previous inspec	Wetland Hyd	drology Present? Yes <u> No</u> <u>No</u> ble:
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (strea Remarks:	Yes No Yes No Im gauge, monitoring v	_ Depth (inches): _ Depth (inches):0 well, aerial photos, previous inspec	Wetland Hyd	drology Present? Yes <u> No</u> No ble:
Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (strea Remarks:	Yes No Yes No m gauge, monitoring v	_ Depth (inches): _ Depth (inches): well, aerial photos, previous inspec	Wetland Hyd	drology Present? Yes <u> V</u> No ble:

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

Sampling Point: ppoa430

	Absolute	Dominant Ir	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Deminent Species
1 none	0			That Are OBL EACW or EAC 5 (A)
		·		
2				Total Number of Dominant
3				Species Across All Strata:8 (B)
4.				
				Percent of Dominant Species
		·		That Are OBL, FACW, or FAC: (A/B)
6		·		Dravalan oo la dax waxbab aat
7				Prevalence index worksneet:
	0	= Total Cover		Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover:	0	OBL species 15 x 1 = 15
	20 /0 01			$FACW$ species $\frac{30}{x^2 - 60}$
Sapling/Shrub Stratum (Plot size:)	_			20 60
1. Sambucus racemosa	5	Yes	FACU	FAC species 20 x 3 = 00
2				FACU species $\frac{25}{x4} = \frac{100}{100}$
		·		UPL species $0 \times 5 = 0$
3		·	<u> </u>	$\frac{90}{235}$
4				Column lotals: (A) (B)
5				Provolonoo Index - P/A - 2.61
6.				
7.				Hydrophytic Vegetation Indicators:
··				1 - Rapid Test for Hydrophytic Vegetation
8		·		2 - Dominance Test is >50%
9		. <u> </u>		\checkmark 3 - Prevalence Index is <3.0 ¹
	5	= Total Cover		
50% of total cover: 2.5	20% of	total cover:	1	4 - Morphological Adaptations' (Provide supporting
Hart Olaston (Blataina 5	2070 01			data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	45			Problematic Hydrophytic Vegetation ¹ (Explain)
1. Impatiens capensis	15	Yes	FACW	· · · · · · · · · · · · · · · ·
_{2.} Poa sylvestris	15	Yes	FACW	1
3 Ranunculus acris	10	Yes	FAC	'Indicators of hydric soil and wetland hydrology must
↓ Laportea canadensis	10	Yes	FAC	be present, unless disturbed or problematic.
4. Zaportoa barradonoio	10		54.011	Definitions of Four Vegetation Strata:
5. Darbarea vulgaris	10	Yes	FACU	
_{6.} Glyceria striata	10	Yes	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7 Rumex obtusifolius	10	Yes	FACU	hore in diameter at breast height (DBH), regardless of
· Veronica americana	5	No		neight.
8. Veronica americana			ODL	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				
····	05	·		Herb – All herbaceous (non-woody) plants, regardless
10.5	00	= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 42.5	20% of	total cover:	1/	Weedy vine All woody vince greater than 2.29 ft in
Woody Vine Stratum (Plot size: 30)				beight
none	0			
l		·	<u> </u>	
2				
3				
4.				
5		· · <u>· · · · · · · · · · ·</u> ·		Hydrophytic
J		·		Prosent? Voc V
	0	= Total Cover		
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate sl	heet.)			l
······································	,			

Profile Desc	ription: (Describe to	o the depth i	needed to docun	nent the ir	ndicator o	or confirm	the absence	of indicato	rs.)	
Depth	Matrix		Redo	x Features						
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type'	Loc ²	<u>Texture</u>		Remarks	
0-6	5YR 3/2	100					SICL			
6-15	5YR 3/3	100					SIC	rock at 15"		
					·					
					. <u> </u>					
					<u> </u>					
1 Type: C=C(oncentration D-Deple	tion RM-Re	educed Matrix MS	S-Masked	Sand Gra	ains	² Location: P	Pl –Pore Linin	a M-Matrix	
Hydric Soil	Indicators:						Indic	ators for Pro	oblematic Hydi	ric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A	.10) (MLRA 147	7)
Histic Ep	bipedon (A2)		Polyvalue Be	low Surfac	e (S8) (M	LRA 147,	148) 0	Coast Prairie	Redox (A16)	,
Black Hi	stic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)	-	(MLRA 147	7, 148)	
Hydroge	en Sulfide (A4)	-	Loamy Gleye	d Matrix (F	-2)		F	Piedmont Floo	odplain Soils (F	19)
Stratified	d Layers (A5)		Depleted Mat	trix (F3)				(MLRA 136	6, 147)	
2 cm Mu	ıck (A10) (LRR N)		Redox Dark S	Surface (F6	6)		\	/ery Shallow	Dark Surface (ΓF12)
Depleted	d Below Dark Surface	(A11)	Depleted Dar	k Surface	(F7)		C	Other (Explain	n in Remarks)	
Thick Da	ark Surface (A12)		Redox Depre	ssions (F8	5)					
Sandy M	lucky Mineral (S1) (Li	RR N,	Iron-Mangan	ese Masse	s (F12) (l	_RR N,				
MLRA	A 147, 148)		MLRA 13	6) (540) (5			3.			
Sandy G	Bleyed Matrix (S4)		Umbric Surfa	ce (F13) (I		6, 122)		licators of hy	drophytic veget	ation and
Sandy R	(edox (SS)		Pleamont Flo	Actorial (EC	DIIS (F19)	(WILRA 14	8) We	etiana nyaroli	ogy must be pre	esent,
Supped	aver (if observed):			naterial (F2		4 127, 147) un		u or problemati	С.
Tupo. silt	ty clay									
Dopth (in:			_				Hydric Soil	Procont?	Vos	
			_				Hyunc Sol	FIESEIIL?	162	
Remarks:										



Seep data point PPOA430 facing north

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Pocahont	as	Sampling Date: 5/23/2016
Applicant/Owner: Dominion		State: WV	Sampling Point: ppoa415
Investigator(s): GB, KO	Section, Township, Ra	nge:	
Landform (hillslope, terrace, etc.): ditch	Local relief (concave, con	vex, none): <u>concave</u>	Slope (%): <u>5</u>
Subregion (LRR or MLRA): Lat: 38.338	0033 Lor	g: <u>-79.9772064</u>	Datum: WGS1984
Soil Map Unit Name:		NWI classif	fication: UPLAND
Are climatic / hydrologic conditions on the site typical for this tin	ne of year? Yes 🔽 No _	(If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrologysign	ficantly disturbed? Are	'Normal Circumstances"	' present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natu	rally problematic? (If ne	eded, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site map she	owing sampling point I	ocations, transect	s, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes _✔	No No No	Is the Sampled Area within a Wetland?	Yes	No	
Remarks: Intermittent seep located at cut for ditch along County Road 1 CR; outflow follows ditch for distance before passing under road via culvert; outflow						
enters previously delineated wetland w	boc103.	·				

HYDROLOGY

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

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

Sampling Point: ppoa415

,	Abcoluto	Dominant l	dicator	Dominanca Tast workshoot:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	New here (Demised Oracian
1 Quercus alba	25	Yes	FACU	Number of Dominant Species
Carva dabra	15	Yes	FACU	
	10	Ves	FACU	Total Number of Dominant
3. Acer saccharum	10	165	TACU	Species Across All Strata: 10 (B)
4		·		Demont of Demission (Demoise
5.				That Are OBLEACW, or EAC: 10 (A/B)
6				
0		·		Prevalence Index worksheet:
/	<u>50</u>	·		Total % Cover of: Multiply by:
		= Total Cove	. 10	
50% of total cover: 25	20% of	total cover:	10	OBL species $x_1 = 0$
Sapling/Shrub Stratum (Plot size: 15)				FACW species $x^2 = 0$
_{1.} Cornus florida	10	Yes	FACU	FAC species $5 \times 3 = 15$
2 Rosa multiflora	5	Yes	FACU	FACU species 125 x 4 = 500
Prunus serotina	5	Yes	FACU	$\frac{1}{1} \frac{1}{1} \frac{1}$
3. <u>-</u>			17100	$\frac{130}{130} (1) 515 (2)$
4. Elaeagnus umbellata	5	res		Column Totals: (A) (B)
5. Acer rubrum	5	Yes	FAC	Provolonce Index - P/A - 3.96
6.				
7		·		Hydrophytic Vegetation Indicators:
/·		·	<u> </u>	1 - Rapid Test for Hydrophytic Vegetation
٥		·		2 - Dominance Test is >50%
9				3 - Prevalence Index is < 3.01
	30	= Total Cove		Merrichological Adaptations ¹ (Dravide supporting
50% of total cover: 15	20% of	total cover:	6	4 - Morphological Adaptations (Provide supporting
Herb Stratum (Plot size 5)				data in Remarks or on a separate sheet)
Schedonorus arundinaceus	25	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
Destulia glamarata	15	<u> </u>		
2. Daciyiis giomerata	15	res	FACU	¹ Indicators of hydric soil and wetland hydrology must
3. Potentilla simplex	10	No	FACU	be present, unless disturbed or problematic.
_{4.} Barbarea vulgaris	5	No	FACU	Definitions of Four Vagatation Strata
5		· · · · · · · · · · · · · · · · · · ·		Demilions of Four vegetation Strata.
<u>.</u>				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6		·	<u> </u>	more in diameter at breast height (DBH), regardless of
7		·		height.
8		·		Conting/Charte Westernlagts such discussions lass
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
	55	= Total Cove	•	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 27.5	20% of	total cover:	11	Woody vine All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:30)				height
1 none	0			
2		·		
<u>2</u>		·		
3		·		
4				Hydrophytic
5				Vegetation
	0	= Total Cove		Present? Yes No 🖌
50% of total cover: 0	20% of	total cover:	0	
	2078.01			
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Des	cription: (Describe t	o the dept	h needed to docur	ment the indi	icator o	or confirm	the absence of indicators.)	
Depth	Matrix		Redo	<u>x Features</u>	- 1	1 2	T / D /	
(incnes)			Color (moist)	<u>%</u> [уре	LOC	<u> </u>	
0-8	10YR 4/3	100						
				<u> </u>				
·								
1								
·	·							
i ———								
1								
				<u> </u>				
1								
								-
				<u> </u>				
¹ Type: C=C	Concentration D-Denl	etion RM-	Reduced Matrix M	S-Masked Sa	and Gra	ains	² Location: PL=Pore Lining M=Matrix	
Hydric Soil	Indicators:	0001,101-	reduced matrix, m				Indicators for Problematic Hydri	c Soils ³ :
Histoso	I (A1)		Dark Surface	<u>- (S7)</u>			2 cm Muck (A10) (MI RA 147)	
Histic E	ininedon (A2)		Polyvalue Be	olow Surface	(S8) (M	I D A 1/7	1/8) Coast Prairie Redox (A16)	,
Plack L	lighting (A2)		Toiyvalue Be	urfage (SO) (M		AT 440)		
	an Cultida (A4)					47, 140)	(MERA 147, 140) Diadmont Floodalain Soile (F1	0)
	en Sullide (A4)		Loarny Gleye)			9)
Stratifie	d Layers (A5)		Depleted Ma	atrix (F3)			(MLRA 136, 147)	-
2 cm M	uck (A10) (LRR N)	<i></i>	Redox Dark	Surface (F6)	_\		Very Shallow Dark Surface (1	F12)
Deplete	ed Below Dark Surface	e (A11)	Depleted Da	rk Surface (F	7)		Other (Explain in Remarks)	
Thick D	ark Surface (A12)		Redox Depre	essions (F8)				
Sandy I	Mucky Mineral (S1) (L	RR N,	Iron-Mangan	nese Masses ((F12) (l	_RR N,		
MLR	A 147, 148)		MLRA 13	6)				
Sandy	Gleyed Matrix (S4)		Umbric Surfa	ace (F13) (ML	RA 13	6, 122)	³ Indicators of hydrophytic vegeta	tion and
Sandy	Redox (S5)		Piedmont Florence	oodplain Soils	s (F19)	(MLRA 14	8) wetland hydrology must be pres	sent,
Strippe	d Matrix (S6)		Red Parent I	Material (F21)) (MLR/	A 127, 147) unless disturbed or problematic	
Restrictive	Layer (if observed):				-			
Type: rc	ock							
Depth (ir	oches). ⁸						Hydric Soil Present? Yes	No 🗸
								<u> </u>
Remarks:								



Seep data point ppoa415 facing north



Seep data point PPOA406 facing south southeast



Seep data point PPOA404 facing northwest



Seep data point PPOA405 facing south southeast

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Pocahonta	as	_ Sampling Date: <u>5/25/2016</u>
Applicant/Owner: Dominion		State: WV	Sampling Point: ppoa417
Investigator(s): GB, KO	Section, Township, Rar	nge:	
Landform (hillslope, terrace, etc.): slope	Local relief (concave, conv	/ex, none): <u>none</u>	Slope (%): <u>30</u>
Subregion (LRR or MLRA): Lat: 38	3.300464 Long	g: <u>-79.851605</u>	Datum: WGS1984
Soil Map Unit Name:		NWI classif	ication: UPLAND
Are climatic / hydrologic conditions on the site typical for the	his time of year? Yes No	(If no, explain in I	Remarks.)
Are Vegetation, Soil, or Hydrology	_significantly disturbed? Are "	Normal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology	_naturally problematic? (If ne	eded, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	o showing sampling point lo	ocations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes	No_	A	

Hydrophytic Vegetation Present?	Yes	No	Is the Sampled Area			
Hydric Soil Present?	Yes	No <u> 🖌</u>	within a Wetland?	Yes	No 🖌	
Wetland Hydrology Present?	Yes 🖌	No	Willing a Wolland			
Remarks:						
Seep located on slope above ephemeral stream spoa410; surface saturation and surface flow present for approximately 15 feet before entering channel of spoa410 where flow becomes immediately subterranean; lacks hydric soil and hydrophytic vegetation.						

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
✓ Saturation (A3) Oxidized Rhizospheres on Living Roots	(C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C	6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🔽 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes <u>V</u> No Depth (inches): 0 Wet	land Hydrology Present? Yes <u>✓</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections)	, if available:
Remarks:	
surface saturation only	

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

Sampling Point: ppoa417

	Abcoluto	- Dominant I	ndicator	Dominance Test worksheet:				
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Dominance rest worksneet.				
	0	opecies:	Otatus	Number of Dominant Species				
1. <u></u>				That Are OBL, FACW, or FAC: (A)				
2				Total Number of Dominant				
3				Species Across All Strata: 7 (B)				
		· · · · · · · · · · · · · · · · · · ·						
4		·		Percent of Dominant Species				
5				That Are OBL, FACW, or FAC: 42.85714285 (A/B)				
6.								
7		· · · · · · · · · · · · · · · · · · ·		Prevalence Index worksheet:				
1		·		Total % Cover of: Multiply by:				
	0	= Total Cove	er					
50% of total cover: 0	20% of	total cover:	0	OBL species $0 x 1 = 0$				
Sanling/Shrub Stratum (Plot size: 15		_		FACW species $0 x 2 = 0$				
Dipus strobus	3	Voc	EACU	$\frac{9}{27}$				
1. <u>Finus subbus</u>	J	165	TACU	18 72				
2. Robinia pseudoacacia	3	Yes	FACU	FACU species $4 = \frac{12}{12}$				
3 Hamamelis virginiana	3	Yes	FACU	UPL species $2 \times 5 = 10$				
Detula lanta	2	No	EACU	Column Totolo: 29 (A) 109 (B)				
4. Betula lenta	2	INU	TACU	(A)(B)				
5. Viburnum acerifolium	2	No	UPL	Dravela and Julian D/A 3.75				
6				Prevalence index = $B/A = $				
0				Hydrophytic Vegetation Indicators:				
7				1 - Rapid Test for Hydrophytic Vegetation				
8.								
0				2 - Dominance Test is >50%				
9	12	·		3 - Prevalence Index is ≤3.0 ¹				
	15	= Total Cove	er	4 - Morphological Adaptations ¹ (Provide supporting				
50% of total cover: 6.5	20% of	total cover:	2.6					
Herb Stratum (Plot size: 5)				data in Remarks or on a separate sheet)				
Potentilla simplex	5	Vec	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)				
			1700					
2. Carex blanda	3	Yes	FAC	1 - directory of the data and the data discussion of the data and the				
3. Laportea canadensis	3	Yes	FAC	Indicators of hydric soil and wetland hydrology must				
A Agrostis capillaris	3	Yes	FAC	be present, unless disturbed or problematic.				
				Definitions of Four Vegetation Strata:				
5. Anemone virginiana	2	NO	FACU					
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or				
7				more in diameter at breast height (DBH), regardless of				
1		· · · · · · · · · · · · · · · · · · ·		neight.				
8		·		Sanling/Shrub - Woody plants, excluding vines, less				
9				than 3 in, DBH and greater than or equal to 3.28 ft (1				
10				m) tall.				
10		·		,				
11				Herb – All herbaceous (non-woody) plants, regardless				
	16	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.				
50% of total cover: 8	20% of	total cover:	3.2					
Weady Vina Stratum (Blat aiza: 30)				Woody vine – All woody vines greater than 3.28 ft in				
	0			height.				
1. <i>none</i>	0							
2.								
3								
J		·						
4		·		Hydrophytic				
5.				Vegetation				
	0	- Total Cove	r	Present? Yes No V				
			0					
	20% 0	total cover.	-					
Remarks: (Include photo numbers here or on a separate sheet.)								
No trees or vines rooted within area having surface saturation.								
Ű								

Profile Desc	cription: (Describe t	o the depth	n needed to docur	nent the indi	icator o	or confirm	the absence of i	ndicators.)		
Depth	Matrix Redox Features									
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u> T	ype'	Loc ²	Texture	R	emarks	
0-5	10YR 4/3	100								
5-18	10YR 5/3	100					SCL			
·				<u> </u>			· ·			
				<u> </u>						
· · · · · · · · · · · · · · · · · · ·				<u> </u>			·			
							<u> </u>			
¹ Type: C=C	oncentration, D=Deple	etion, RM=F	Reduced Matrix, MS	S=Masked Sa	and Gra	ins.	² Location: PL=P	ore Lining, M	l=Matrix.	
Hydric Soil	Indicators:	2	,				Indicator	s for Proble	matic Hydi	ric Soils ³ :
Histosol	(A1)		Dark Surface	e (S7)			2 cm	Muck (A10)	(MLRA 147	7)
Histic Ep	pipedon (A2)		Polyvalue Be	low Surface ((S8) (M	LRA 147,	148) Coas	t Prairie Red	ox (A16)	
Black Hi	stic (A3)		Thin Dark Su	ırface (S9) (M	ILRA 14	47, 148)	(M	LRA 147, 14	8)	
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (F2)			Piedr	nont Floodpla	ain Soils (F	19)
Stratified	d Layers (A5)		Depleted Ma	trix (F3)			(M	LRA 136, 14	7)	
2 cm Muck (A10) (LRR N) Redox Dark Surface (F6)					Very Shallow Dark Surface (TF12)					
Deplete	d Below Dark Surface	(A11)	Depleted Dai	rk Surface (F	7)		Othe	r (Explain in I	Remarks)	
	ark Surface (A12) Augla: Minoral (S1) (L		Redox Depre	essions (F8)	(E12) /I					
Sanuy N	100Ky Willeral (ST) (L	KK N,		ese masses (6)	(F12) (L	.KK N,				
Sandy (Heved Matrix (S4)		Umbric Surfa	0) ICE (F13) (MI	RA 136	\$ 122)	³ Indicat	ors of hydron	hytic veget	ation and
Sandy B	Redox (S5)		Piedmont Flo	odolain Soils	(F19) (MIRA 14	8) wetlan	d hydrology i	must he pre	esent
Stripped	Matrix (S6)		Red Parent N	Aaterial (F21)		127.147) unless	disturbed or	problemati	C.
Restrictive	Layer (if observed):			()	•	,	,			-
Type: no	ne									
Depth (in	ches):						Hvdric Soil Pre	sent? Yes	5	No 🖌
Remarks:	,								·	
. comanto.										



Seep data point ppoa417 facing northeast



Seep data point PPOA401 facing south



Waterbody PPOA414 facing north



Waterbody PPOA413 facing north-northeast



Waterbody PPOA412 facing northeast



Waterbody PPOA411 facing northwest



Waterbody PPOA410 facing northeast



Waterbody PPOA409 facing north



Waterbody PPOA408 facing east



Waterbody PPOA407 facing west