



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: Pocahontas 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, convex, none): none Slope (%): 45
 Subregion (LRR or MLRA): _____ Lat: 38.369587 Long: -80.087927 Datum: WGS1984
 Soil Map Unit Name: _____ NWI classification: UPLAND

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
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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 hydric soil indicators; redoximorphic features not present - likely because of gradient and well oxygenated water. Area of saturation is approximately a hundred square feet.

HYDROLOGY

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

Remarks:

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

Sampling Point: ppoa430

	Absolute % Cover	Dominant Species?	Indicator Status																																									
Tree Stratum (Plot size: <u>30</u>)																																												
1. <u>none</u>	<u>0</u>			Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>62.5</u> (A/B)																																								
2. _____																																												
3. _____																																												
4. _____																																												
5. _____																																												
6. _____																																												
7. _____																																												
50% of total cover: <u>0</u>	<u>0</u> = Total Cover		20% of total cover: <u>0</u>																																									
Sapling/Shrub Stratum (Plot size: <u>15</u>)																																												
1. <u>Sambucus racemosa</u>	<u>5</u>	Yes	FACU	Prevalence Index worksheet: <table style="width:100%; border:none;"> <tr> <td style="width:50%;"></td> <td style="width:10%; text-align:center;">Total % Cover of:</td> <td style="width:10%;"></td> <td style="width:10%; text-align:center;">Multiply by:</td> <td style="width:15%;"></td> </tr> <tr> <td>OBL species</td> <td style="text-align:center;"><u>15</u></td> <td></td> <td style="text-align:center;">x 1 =</td> <td style="text-align:center;"><u>15</u></td> </tr> <tr> <td>FACW species</td> <td style="text-align:center;"><u>30</u></td> <td></td> <td style="text-align:center;">x 2 =</td> <td style="text-align:center;"><u>60</u></td> </tr> <tr> <td>FAC species</td> <td style="text-align:center;"><u>20</u></td> <td></td> <td style="text-align:center;">x 3 =</td> <td style="text-align:center;"><u>60</u></td> </tr> <tr> <td>FACU species</td> <td style="text-align:center;"><u>25</u></td> <td></td> <td style="text-align:center;">x 4 =</td> <td style="text-align:center;"><u>100</u></td> </tr> <tr> <td>UPL species</td> <td style="text-align:center;"><u>0</u></td> <td></td> <td style="text-align:center;">x 5 =</td> <td style="text-align:center;"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align:center;"><u>90</u></td> <td style="text-align:center;">(A)</td> <td></td> <td style="text-align:center;"><u>235</u> (B)</td> </tr> <tr> <td colspan="4" style="text-align:right;">Prevalence Index = B/A =</td> <td style="text-align:center;"><u>2.61</u></td> </tr> </table>		Total % Cover of:		Multiply by:		OBL species	<u>15</u>		x 1 =	<u>15</u>	FACW species	<u>30</u>		x 2 =	<u>60</u>	FAC species	<u>20</u>		x 3 =	<u>60</u>	FACU species	<u>25</u>		x 4 =	<u>100</u>	UPL species	<u>0</u>		x 5 =	<u>0</u>	Column Totals:	<u>90</u>	(A)		<u>235</u> (B)	Prevalence Index = B/A =				<u>2.61</u>
	Total % Cover of:		Multiply by:																																									
OBL species	<u>15</u>		x 1 =		<u>15</u>																																							
FACW species	<u>30</u>		x 2 =		<u>60</u>																																							
FAC species	<u>20</u>		x 3 =		<u>60</u>																																							
FACU species	<u>25</u>		x 4 =		<u>100</u>																																							
UPL species	<u>0</u>		x 5 =		<u>0</u>																																							
Column Totals:	<u>90</u>	(A)			<u>235</u> (B)																																							
Prevalence Index = B/A =					<u>2.61</u>																																							
2. _____																																												
3. _____																																												
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5. _____																																												
6. _____																																												
7. _____																																												
8. _____																																												
9. _____																																												
50% of total cover: <u>2.5</u>	<u>5</u> = Total Cover		20% of total cover: <u>1</u>																																									
Herb Stratum (Plot size: <u>5</u>)																																												
1. <u>Impatiens capensis</u>	<u>15</u>	Yes	FACW	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)																																								
2. <u>Poa sylvestris</u>	<u>15</u>	Yes	FACW																																									
3. <u>Ranunculus acris</u>	<u>10</u>	Yes	FAC																																									
4. <u>Laportea canadensis</u>	<u>10</u>	Yes	FAC																																									
5. <u>Barbarea vulgaris</u>	<u>10</u>	Yes	FACU																																									
6. <u>Glyceria striata</u>	<u>10</u>	Yes	OBL																																									
7. <u>Rumex obtusifolius</u>	<u>10</u>	Yes	FACU																																									
8. <u>Veronica americana</u>	<u>5</u>	No	OBL																																									
9. _____																																												
10. _____																																												
11. _____																																												
50% of total cover: <u>42.5</u>	<u>85</u> = Total Cover		20% of total cover: <u>17</u>																																									
Woody Vine Stratum (Plot size: <u>30</u>)																																												
1. <u>none</u>	<u>0</u>			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.																																								
2. _____																																												
3. _____																																												
4. _____																																												
5. _____																																												
50% of total cover: <u>0</u>	<u>0</u> = Total Cover		20% of total cover: <u>0</u>																																									
Hydrophytic Vegetation Present?				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																																								
Remarks: (Include photo numbers here or on a separate sheet.)																																												

SOIL

Sampling Point: ppoa430

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	5YR 3/2	100					SICL	
6-15	5YR 3/3	100					SIC	rock at 15"

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> 2 cm Muck (A10) (MLRA 147)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Polyvalue Below Surface (S8) (MLRA 147, 148)	<input type="checkbox"/> Coast Prairie Redox (A16)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (MLRA 147, 148)	<input type="checkbox"/> (MLRA 147, 148)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> (MLRA 136, 147)	
<input type="checkbox"/> 2 cm Muck (A10) (LRR N)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR N, MLRA 136)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Umbric Surface (F13) (MLRA 136, 122)		
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 148)		
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21) (MLRA 127, 147)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u>silty clay</u> Depth (inches): <u>6</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:



Seep data point PPOA430 facing north

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline City/County: Pocahontas Sampling Date: 5/23/2016
 Applicant/Owner: Dominion State: WV Sampling Point: ppoa415
 Investigator(s): GB, KO Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): ditch Local relief (concave, convex, none): concave Slope (%): 5
 Subregion (LRR or MLRA): _____ Lat: 38.3380033 Long: -79.9772064 Datum: WGS1984
 Soil Map Unit Name: _____ NWI classification: UPLAND

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
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 wpoc103.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) _____ True Aquatic Plants (B14) _____ High Water Table (A2) _____ Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Saturation (A3) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Water Marks (B1) _____ Presence of Reduced Iron (C4) _____ Sediment Deposits (B2) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Drift Deposits (B3) _____ Thin Muck Surface (C7) _____ Algal Mat or Crust (B4) _____ Other (Explain in Remarks) _____ Iron Deposits (B5) _____ _____ Inundation Visible on Aerial Imagery (B7) _____ _____ Water-Stained Leaves (B9) _____ _____ Aquatic Fauna (B13) _____	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Sparsely Vegetated Concave Surface (B8) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>1</u> Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Sampling Point: ppoa415

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30</u>)																				
1. <i>Quercus alba</i>	25	Yes	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>10</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>10</u> (A/B)																
2. <i>Carya glabra</i>	15	Yes	FACU																	
3. <i>Acer saccharum</i>	10	Yes	FACU																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
50 = Total Cover 50% of total cover: <u>25</u> 20% of total cover: <u>10</u>				Prevalence Index worksheet: <table style="width:100%; border:none;"> <tr> <td style="text-align:right">Total % Cover of:</td> <td style="text-align:center">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>125</u></td> <td>x 4 = <u>500</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>130</u> (A)</td> <td><u>515</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center">Prevalence Index = B/A = <u>3.96</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>125</u>	x 4 = <u>500</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>130</u> (A)	<u>515</u> (B)	Prevalence Index = B/A = <u>3.96</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>5</u>	x 3 = <u>15</u>																			
FACU species <u>125</u>	x 4 = <u>500</u>																			
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Column Totals: <u>130</u> (A)	<u>515</u> (B)																			
Prevalence Index = B/A = <u>3.96</u>																				
Sapling/Shrub Stratum (Plot size: <u>15</u>)																				
1. <i>Cornus florida</i>	10	Yes	FACU	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)																
2. <i>Rosa multiflora</i>	5	Yes	FACU																	
3. <i>Prunus serotina</i>	5	Yes	FACU																	
4. <i>Elaeagnus umbellata</i>	5	Yes																		
5. <i>Acer rubrum</i>	5	Yes	FAC																	
6. _____																				
7. _____																				
8. _____																				
9. _____																				
30 = Total Cover 50% of total cover: <u>15</u> 20% of total cover: <u>6</u>																				
Herb Stratum (Plot size: <u>5</u>)																				
1. <i>Schedonorus arundinaceus</i>	25	Yes	FACU	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.																
2. <i>Dactylis glomerata</i>	15	Yes	FACU																	
3. <i>Potentilla simplex</i>	10	No	FACU																	
4. <i>Barbarea vulgaris</i>	5	No	FACU																	
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
55 = Total Cover 50% of total cover: <u>27.5</u> 20% of total cover: <u>11</u>																				
Woody Vine Stratum (Plot size: <u>30</u>)																				
1. <i>none</i>	0			Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
0 = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																				

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



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: Pocahontas Sampling Date: 5/25/2016
 Applicant/Owner: Dominion State: WV Sampling Point: ppoa417
 Investigator(s): GB, KO Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none Slope (%): 30
 Subregion (LRR or MLRA): _____ Lat: 38.300464 Long: -79.851605 Datum: WGS1984
 Soil Map Unit Name: _____ NWI classification: UPLAND

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
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: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ True Aquatic Plants (B14) ___ High Water Table (A2) ___ Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Saturation (A3) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Water Marks (B1) ___ Presence of Reduced Iron (C4) ___ Sediment Deposits (B2) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Drift Deposits (B3) ___ Thin Muck Surface (C7) ___ Algal Mat or Crust (B4) ___ Other (Explain in Remarks) ___ Iron Deposits (B5) ___ ___ Inundation Visible on Aerial Imagery (B7) ___ ___ Water-Stained Leaves (B9) ___ ___ Aquatic Fauna (B13) ___	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Sparsely Vegetated Concave Surface (B8) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> 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

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>none</u>	<u>0</u>			Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>42.85714285</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
50% of total cover: <u>0</u>	<u>0</u> = Total Cover	20% of total cover: <u>0</u>		Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>9</u> x 3 = <u>27</u> FACU species <u>18</u> x 4 = <u>72</u> UPL species <u>2</u> x 5 = <u>10</u> Column Totals: <u>29</u> (A) <u>109</u> (B) Prevalence Index = B/A = <u>3.75</u>
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1. <u>Pinus strobus</u>	<u>3</u>	Yes	FACU	
2. <u>Robinia pseudoacacia</u>	<u>3</u>	Yes	FACU	
3. <u>Hamamelis virginiana</u>	<u>3</u>	Yes	FACU	
4. <u>Betula lenta</u>	<u>2</u>	No	FACU	
5. <u>Viburnum acerifolium</u>	<u>2</u>	No	UPL	
6. _____				
7. _____				
8. _____				
9. _____				
50% of total cover: <u>6.5</u>	<u>13</u> = Total Cover	20% of total cover: <u>2.6</u>		
Herb Stratum (Plot size: <u>5</u>)				
1. <u>Potentilla simplex</u>	<u>5</u>	Yes	FACU	
2. <u>Carex blanda</u>	<u>3</u>	Yes	FAC	
3. <u>Laportea canadensis</u>	<u>3</u>	Yes	FAC	
4. <u>Agrostis capillaris</u>	<u>3</u>	Yes	FAC	
5. <u>Anemone virginiana</u>	<u>2</u>	No	FACU	
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
50% of total cover: <u>8</u>	<u>16</u> = Total Cover	20% of total cover: <u>3.2</u>		
Woody Vine Stratum (Plot size: <u>30</u>)				
1. <u>none</u>	<u>0</u>			
2. _____				
3. _____				
4. _____				
5. _____				
50% of total cover: <u>0</u>	<u>0</u> = Total Cover	20% of total cover: <u>0</u>		
Remarks: (Include photo numbers here or on a separate sheet.) No trees or vines rooted within area having surface saturation.				
Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>				

SOIL

Sampling Point: ppoa417

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 4/3	100					CL	
5-18	10YR 5/3	100					SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> 2 cm Muck (A10) (MLRA 147)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Polyvalue Below Surface (S8) (MLRA 147, 148)	<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 147, 148)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (MLRA 147, 148)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 136, 147)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 2 cm Muck (A10) (LRR N)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR N, MLRA 136)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Umbric Surface (F13) (MLRA 136, 122)		
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 148)		
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21) (MLRA 127, 147)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: <u>none</u> Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
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Remarks:



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