

Photo 1 Non-water data point NOAUC050 facing east



Photo 2 Non-water data point NOAUC050 facing west

| Project/Site: Atlantic Coast Pipeline | City/County: | Augusta County | _ Sampling Date: 6/14/2016 |
|---|--------------------------|-----------------------------------|----------------------------|
| Applicant/Owner: DOMINION | | State: VA | |
| Investigator(s): Team Z | Section, Tow | nship, Range: No PLSS in this are | |
| Landform (hillslope, terrace, etc.): Floodplain | | ave, convex, none): <u>convex</u> | Slope (%): <u>2</u> |
| Subregion (LRR or MLRA): <u>S</u> Lat: <u>38</u> | .22917482 | Long: <u>-79.3543314</u> | Datum: WGS 1984 |
| Soil Map Unit Name: Philo silt Ioam | | NWI classif | ication: UPL |
| Are climatic / hydrologic conditions on the site typical for th | is time of year? Yes | , No (If no, explain in | Remarks.) |
| Are Vegetation, Soil, or Hydrology | significantly disturbed? | Are "Normal Circumstances" | present? Yes 🖌 No |
| Are Vegetation, Soil, or Hydrology | naturally problematic? | (If needed, explain any answ | vers in Remarks.) |
| SUMMARY OF FINDINGS Attach atta man | chowing compling | noint locations transport | 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 Yes Yes | No No No | V V V | Is the Sampled Area within a Wetland? | Yes | No | <u>v</u> |
|---|-------------------|----------------|-------------|---------------------------------------|-----|----|----------|
| Remarks: | anned NIM/Lwat | and | | | | | |
| This is a "no" point associated with a ma | | and. | | | | | |
| | | | | | | | |
| | | | | | | | |

| 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 I | 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 Sc | 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 No 🖌 Depth (inches): | |
| Water Table Present? Yes No 🖌 Depth (inches): | |
| | Watland Hydralamy Brasant2 Vac No. |
| Saturation Present? Yes No 🖌 Depth (inches): | Wetland Hydrology Present? Yes No |
| (includes capillary fringe) | |
| | |
| (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect | |
| (includes capillary fringe) | |
| (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect | |
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| (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect | |

Sampling Point: noauz002

| , , , | Abaaluta | • Dominant In | diaatar | Deminence Test werkehest |
|---|-----------------------|-------------------------|----------|---|
| Tree Stratum (Plot size: <u>30</u>) | Absolute % Cover | Dominant Ir Species? | | Dominance Test worksheet: |
| | 0 | | Status | Number of Dominant Species |
| 1. none | - | · · | | That Are OBL, FACW, or FAC: (A) |
| 2 | | | | |
| | | | | Total Number of Dominant |
| 3 | | | | Species Across All Strata: (B) |
| 4 | | | | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC: 0 (A/B) |
| | | | | |
| 6 | | · <u> </u> | | Prevalence Index worksheet: |
| 7 | | | | |
| | 0 | = Total Cover | | Total % Cover of: Multiply by: |
| 50% of total cover: 0 | | total cover: | 0 | OBL species x 1 =0 |
| | 2070 01 | | | FACW species 0 x 2 = 0 |
| Sapling/Shrub Stratum (Plot size: 15) | | | | 0 |
| 1. none | 0 | | | FAC species $x^3 = $ |
| 2 | | | | FACU species 100 x 4 = 400 |
| 2 | | | | UPL species 0 x 5 = 0 |
| 3 | | | | 100 400 |
| 4 | | | | Column Totals: (A) (B) |
| | | · · | | |
| 5 | | · · | | Prevalence Index = B/A =4 |
| 6 | | | | Hydrophytic Vegetation Indicators: |
| 7 | | | | |
| | | · · | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8 | | | | 2 - Dominance Test is >50% |
| 9. | | | | |
| | 0 | = Total Cover | | 3 - Prevalence Index is ≤3.0 ¹ |
| | | | 0 | 4 - Morphological Adaptations ¹ (Provide supporting |
| 50% of total cover:0 | 20% 01 | total cover: | <u> </u> | data in Remarks or on a separate sheet) |
| Herb Stratum (Plot size: 5) | | | | |
| 1 Dactylis glomerata | 60 | Yes | FACU | Problematic Hydrophytic Vegetation ¹ (Explain) |
| •• | 40 | Yes | FACU | |
| 2. Phleum pratense | 40 | 165 | FACU | ¹ Indicators of hydric soil and wetland hydrology must |
| 3 | | | | be present, unless disturbed or problematic. |
| | | | | |
| 4 | | | | Definitions of Four Vegetation Strata: |
| 5 | | · · | | |
| 6 | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or |
| | | | | 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. |
| 10 | | · · | | III) tall. |
| 11 | | · | | Herb – All herbaceous (non-woody) plants, regardless |
| | 100 | = Total Cover | | of size, and woody plants less than 3.28 ft tall. |
| | | | | |
| 50% of total cover: 50 | 20% of | total cover | 20 | |
| 50% of total cover: 50 | 20% of | total cover: | 20 | Woody vine – All woody vines greater than 3.28 ft in |
| Woody Vine Stratum (Plot size:) | 20% of | total cover: | 20 | Woody vine – All woody vines greater than 3.28 ft in height. |
| Woody Vine Stratum (Plot size: 30) | 0 | total cover: | 20 | |
| Woody Vine Stratum (Plot size: 30) | 0 | · | 20 | |
| Woody Vine Stratum (Plot size: 30) 1. none 2. | 0 | · · | 20 | |
| Woody Vine Stratum (Plot size: 30) | 0 | · · | 20 | |
| Woody Vine Stratum (Plot size: | 0 | · · | 20 | height. |
| Woody Vine Stratum (Plot size: | 0 | · · | 20 | height. Hydrophytic |
| Woody Vine Stratum (Plot size: | 0 | · · | 20 | height. Hydrophytic Vegetation |
| Woody Vine Stratum (Plot size: | 0 | · · | | height. Hydrophytic |
| Woody Vine Stratum (Plot size: 30) 1. none 2. 3. 3. 4. 5. | 0 | = Total Cover | | height. Hydrophytic Vegetation |
| Woody Vine Stratum (Plot size: | 0 0 0 20% of | | | height. Hydrophytic Vegetation |
| Woody Vine Stratum (Plot size: 30) 1. none 2. 3. 3. 4. 5. | 0 0 0 20% of | = Total Cover | | height. Hydrophytic Vegetation |
| Woody Vine Stratum (Plot size: | 0 0 0 20% of | = Total Cover | | height. Hydrophytic Vegetation |
| Woody Vine Stratum (Plot size: | 0 0 0 20% of | = Total Cover | | height. Hydrophytic Vegetation |
| Woody Vine Stratum (Plot size: | 0 0 0 20% of | = Total Cover | | height. Hydrophytic Vegetation |
| Woody Vine Stratum (Plot size: | 0 0 0 20% of | = Total Cover | | height. Hydrophytic Vegetation |
| Woody Vine Stratum (Plot size: | 0 0 0 20% of | = Total Cover | | height. Hydrophytic Vegetation |
| Woody Vine Stratum (Plot size: | 0 0 0 20% of | = Total Cover | | height. Hydrophytic Vegetation |
| Woody Vine Stratum (Plot size: | 0 0 0 20% of | = Total Cover | | height. Hydrophytic Vegetation |

| Profile Desc | cription: (Describe t | o the depth | needed to docur | nent the in | dicator of | or confirm | the absence of indicators.) | |
|------------------------|-------------------------------|-------------|-------------------|-------------|-------------------|------------------|--|------------------|
| Depth | Matrix | | | x Features | | | | |
| (inches) | Color (moist) | <u>%</u> | Color (moist) | % | Type ¹ | Loc ² | Texture Remarks | |
| 0-3 | 10YR 4/3 | 100 | | | | | SIL | |
| 3-19 | 10YR 5/3 | 100 | | | | | SIL | |
| | | | | | | | | |
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| . <u> </u> | | | | | | | | |
| . <u></u> | | | | | | | | |
| | | | | | | | | |
| ¹ Type: C=C | oncentration, D=Deple | etion, RM=R | Reduced Matrix, M | S=Masked | Sand Gra | ains. | ² Location: PL=Pore Lining, M=Matrix. | |
| Hydric Soil | | , | , | | | | Indicators for Problematic Hydric Soils | s ³ : |
| Histosol | (A1) | | Dark Surface | e (S7) | | | 2 cm Muck (A10) (MLRA 147) | |
| | pipedon (A2) | | Polyvalue Be | · · / | e (S8) (N | ILRA 147. | | |
| | istic (A3) | | Thin Dark Su | | | | (MLRA 147, 148) | |
| | en Sulfide (A4) | | Loamy Gleye | , , | • | ,, | Piedmont Floodplain Soils (F19) | |
| , 0 | d Layers (A5) | | Depleted Ma | | _, | | (MLRA 136, 147) | |
| | uck (A10) (LRR N) | | Redox Dark | . , | 5) | | Very Shallow Dark Surface (TF12) | |
| | d Below Dark Surface | (A11) | Depleted Da | | | | Other (Explain in Remarks) | |
| | ark Surface (A12) | () | Redox Depre | | . , | | <u> </u> | |
| | /lucky Mineral (S1) (L | RR N. | Iron-Mangan | | , | RR N. | | |
| | A 147, 148) | , | MLRA 13 | | o (/ (. | , | | |
| | Gleyed Matrix (S4) | | Umbric Surfa | • | ILRA 13 | 6. 122) | ³ Indicators of hydrophytic vegetation ar | nd |
| | Redox (S5) | | Piedmont Flo | | | | | |
| - | Matrix (S6) | | Red Parent M | | | | | |
| | Layer (if observed): | | | | / (| , | | |
| Type: | , | | | | | | | |
| · · · | ches): | | _ | | | | Hydric Soil Present? Yes No _ | / |
| Remarks: | | | | | | | • | |
| | | | | | | | | |
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| | | | | | | | | |



Non water data point NOAUZ002 facing northeast



Non water data point NOAUZ002 facing northwest

| Project/Site: Atlantic Coast Pipeline | City/County: AL | ugusta County | Sampling Date: 6/14/2016 | | |
|---|--------------------------|----------------------------------|--------------------------|--|--|
| Applicant/Owner: DOMINION | | State: VA | Sampling Point: noauz001 | | |
| Investigator(s): Team Z | Section, Towns | hip, Range: No PLSS in this are | | | |
| Landform (hillslope, terrace, etc.): | | ve, convex, none): <u>convex</u> | Slope (%): <u>2</u> | | |
| Subregion (LRR or MLRA): <u>S</u> Lat: <u>38</u> | .22969766 | Long: <u>-79.35478762</u> | Datum: WGS 1984 | | |
| Soil Map Unit Name: Philo silt Ioam | | NWI classif | ication: UPL | | |
| Are climatic / hydrologic conditions on the site typical for th | is 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 needed, explain any answ | ers in Remarks.) | | |
| SUMMARY OF FINDINGS Attach site man | chowing compling p | oint locations transact | s important foaturos 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 Yes Yes | No No No | Is the Sampled Area within a Wetland? | Yes | No | v |
|---|-------------------|----------------|---------------------------------------|-----|----|---|
| Remarks: This is a "no" point associated with a ma | apped NWI wetl | and. | | | | |
| | | | | | | |
| | | | | | | |

| 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 Sc | 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 No 🖌 Depth (inches): | |
| Water Table Present? Yes No 🖌 Depth (inches): | |
| Saturation Present? Yes No <u><</u> Depth (inches): (includes capillary fringe) | Wetland Hydrology Present? Yes No |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec | tions), if available: |
| | |
| Remarks: | |
| | |
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Sampling Point: noauz001

| | • | Absolute | Dominant I | ndicator | Dominanco Tost workshoot: | |
|---------------------------------|-----------------------------|----------|---------------------------------------|----------|---|---|
| Tree Stratum (Plot size: | 30 | | Species? | | Dominance Test worksheet: | |
| | / | 0 | opecies: | Olalus | Number of Dominant Species | |
| 1. <u>none</u> | | | | | That Are OBL, FACW, or FAC: (| A) |
| 2 | | | | | Total Number of Deminent | |
| | | | | | Total Number of Dominant Species Across All Strata: 2 (I | B) |
| 3 | | | | | | ь) |
| 4 | | | · | | Percent of Dominant Species | |
| 5 | | | | | | A/B) |
| 6 | | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| | | | · | | Prevalence Index worksheet: | |
| 7 | | | · | | | |
| | | 0 | = Total Cove | er | Total % Cover of: Multiply by: | |
| | 50% of total cover: 0 | 20% of | total cover: | 0 | OBL species x 1 =0 | |
| Sapling/Shrub Stratum (Plot siz | 45 | | | | FACW species $\begin{array}{c} 0 \\ x 2 = \\ \end{array}$ | |
| | ze) | 0 | | | | |
| 1. none | | 0 | | | FAC species 0 $x_3 = 0$ | |
| 2 | | | | | FACU species X 4 = | |
| | | | | | UPL species x 5 =0 | |
| 3 | | | | | 100 /00 | |
| 4 | | | · | | Column Totals: (A) | (B) |
| 5 | | | | | | |
| | | | | | Prevalence Index = B/A =4 | |
| 6 | | | · | | Hydrophytic Vegetation Indicators: | |
| 7 | | | | | 1 - Rapid Test for Hydrophytic Vegetation | |
| 8 | | | | | | |
| | | | · | | 2 - Dominance Test is >50% | |
| 9 | | | · | <u> </u> | 3 - Prevalence Index is $\leq 3.0^{1}$ | |
| | | | = Total Cove | | 4 - Morphological Adaptations ¹ (Provide suppo | orting |
| | 50% of total cover: 0 | 20% of | total cover: | 0 | | Jung |
| Herb Stratum (Plot size: | 5 | | | | data in Remarks or on a separate sheet) | |
| 1. Dactylis glomerata |) | 60 | Yes | FACU | Problematic Hydrophytic Vegetation ¹ (Explain) | 1 |
| •• | | | | | | |
| 2. Phleum pratense | | 40 | Yes | FACU | 1 | |
| 3 | | | | | ¹ Indicators of hydric soil and wetland hydrology mu | ist |
| | | | | | be present, unless disturbed or problematic. | |
| 4 | | | · | | Definitions of Four Vegetation Strata: | |
| 5 | | | | | | |
| 6 | | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm | n) or |
| | | | | <u> </u> | more in diameter at breast height (DBH), regardles | s of |
| 7 | | | · | | height. | |
| 8 | | | | | | |
| 9 | | | | | Sapling/Shrub – Woody plants, excluding vines, le than 3 in. DBH and greater than or equal to 3.28 ft | |
| | | | · · · · · · · · · · · · · · · · · · · | | m) tall. | (T |
| 10 | | | · | | ini) tan. | |
| 11 | | | | | Herb – All herbaceous (non-woody) plants, regardl | less |
| | | 100 | = Total Cove | er | of size, and woody plants less than 3.28 ft tall. | |
| | 50% of total cover: 50 | | total cover: | | | |
| | | | | | Woody vine – All woody vines greater than 3.28 ft | in |
| Woody Vine Stratum (Plot size | :) | | | | height. | |
| 1 | | 0 | | | | |
| 2 | | | | | | |
| | | | | | | |
| 3 | | | · | | | |
| 4 | | | | | Hydrophytic | |
| 5 | | | | | Vegetation | |
| ··- | | - | | | Present? Yes No | |
| | 0 | | = Total Cove | <u> </u> | | |
| | 50% of total cover: 0 | 20% of | total cover: | 0 | | |
| Remarks: (Include photo numb | ers here or on a separate s | sheet.) | | | | |
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| Profile Des | cription: (Describe to | o the dept | n needed to docur | nent the i | ndicator o | or confirm | the absence o | f indicato | rs.) | |
|-------------|----------------------------------|------------|------------------------------|-------------|--------------------|------------------|----------------------------|-------------|------------------------------|----------------|
| Depth | Matrix | | | x Features | | | | | | |
| (inches) | Color (moist) | <u>%</u> | Color (moist) | % | Type ¹ | Loc ² | Texture | | Remarks | |
| 0-3 | 10YR 4/3 | 100 | | | | | SIL | | | |
| 3-19 | 10YR 5/3 | 100 | | | | | SIL | | | |
| | | | | | | | | | | |
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| | | | | | | | | | | |
| | oncentration, D=Deple | ation RM- | Peduced Matrix M | S-Maskad | Sand Gra | ine | ² Location: PL= | -Pore Linir | na M-Matrix | |
| Hydric Soil | | | Veduced Matrix, Mc | | Sanu Ora | uns. | | | oblematic Hy | |
| Histosol | | | Dark Surface | (S7) | | | | | 10) (MLRA 1 | |
| | pipedon (A2) | | Polyvalue Be | | ce (S8) (M | LRA 147. | | | Redox (A16) | |
| | istic (A3) | | Thin Dark Su | | | | | MLRA 14 | | |
| Hydroge | en Sulfide (A4) | | Loamy Gleye | d Matrix (I | F2) | | Pie | dmont Flo | odplain Soils | (F19) |
| Stratifie | d Layers (A5) | | Depleted Ma | trix (F3) | | | (| MLRA 13 | 6, 147) | |
| | uck (A10) (LRR N) | | Redox Dark | (| , | | | • | Dark Surface | · / |
| - | d Below Dark Surface | (A11) | Depleted Date | | | | Oth | ner (Explai | n in Remarks |) |
| | ark Surface (A12) | | Redox Depre | | , | | | | | |
| - | Mucky Mineral (S1) (LI | RR N, | Iron-Mangan | | es (F12) (l | _RR N, | | | | |
| | A 147, 148) | | MLRA 13 | | | C 400) | 31.5 ali a | atawa af bi | | and the second |
| | Gleyed Matrix (S4) Redox (S5) | | Umbric Surfa Piedmont Flo | | | | | • | drophytic veo ogy must be | |
| | d Matrix (S6) | | Red Parent N | • | . , | • | • | • | ed or problem | |
| | Layer (if observed): | | | | | ~ 127, 147 | | 33 013(015) | | ano. |
| Type: | | | | | | | | | | |
| , · · · | ches): | | | | | | Hydric Soil P | rocont? | Yes | No 🖌 |
| | <u> </u> | | | | | | | iesent? | 165 | |
| Remarks: | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |



Non water data point NOAUZ001 facing northwest



Non water data point NOAUZ001 facing southwest



Non-water point NOAUA410 facing north

| Project/Site: Atlantic Coast Pipeline | City/County: <u>Augusta County</u> Sampling Date | ə: 3/4/2016 |
|---|---|-----------------------|
| Applicant/Owner: DOMINION | State: VA Sampling P | oint: <u>noauc103</u> |
| Investigator(s): | Section, Township, Range: No PLSS in this area | |
| Landform (hillslope, terrace, etc.): Historic floodplain | | lope (%): <u>2</u> |
| Subregion (LRR or MLRA): S Lat: 38.2667472 | Long: <u>-79.32947503</u> Dat | tum: WGS 1984 |
| Soil Map Unit Name: Craigsville fine sandy loam | NWI classification: None | |
| Are climatic / hydrologic conditions on the site typical for this time of | i year? Yes 🖌 No (If no, explain in Remarks.) | |
| Are Vegetation, Soil, or Hydrology significar | ntly disturbed? Are "Normal Circumstances" present? Yes _ | ✓ No |
| Are Vegetation, Soil, or Hydrology naturally | problematic? (If needed, explain any answers in Remarks.) | 1 |
| SUMMARY OF FINDINGS – Attach site map showi | ng sampling point locations, transects, important | features, etc. |

| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? | Yes Yes Yes | No 🖌 No 🖌 No 🖌 | Is the Sampled Area within a Wetland? | Yes | No |
|---|-------------------|----------------------|--|--------------------|--------------------------------------|
| Remarks: | | | · · · · · | | |
| Non water point for a forest NWI polygon area lacks wetland indicators. | n. Area is locat | ed within his | oric floodplain of nearby perennial | I stream and it ha | as signs of beaver activity, but the |

| uired) |
|-------------|
| |
| (B8) C9) |
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Sampling Point: noauc103

| , , , | Abaaluta | Deminent I | | Deminence Test worksheet |
|---|-----------|-------------------------------|----------------|---|
| Tree Stratum (Plot size: 30) | Absolute | Dominant | - | Dominance Test worksheet: |
| <u></u>) | <u>35</u> | <u>Species?</u> Yes | Status FACU | Number of Dominant Species |
| 1. Quercus rubra | | | | That Are OBL, FACW, or FAC: (A) |
| 2. Pinus strobus | 35 | Yes | FACU | |
| 3. Platanus occidentalis | 25 | Yes | FACW | Total Number of Dominant |
| 3 | | | | Species Across All Strata: 6 (B) |
| 4 | | | | |
| 5 | | | | Percent of Dominant Species That Are OBL_EACW_ or EAC: 33.33333333 (A/B) |
| | | | · | That Are OBL, FACW, or FAC: <u>33.333333333</u> (A/B) |
| 6 | | | | Prevalence Index worksheet: |
| 7 | | | | |
| | 95 | = Total Cove | | Total % Cover of: Multiply by: |
| 500/ of total array 47 F | | | 19 | OBL species0 x 1 =0 |
| 50% of total cover: 47.5 | 20% of | total cover: | 10 | 10 00 |
| Sapling/Shrub Stratum (Plot size: 15) | | | | FACW species $x 2 = $ |
| 1. Quercus rubra | 15 | Yes | FACU | FAC species $0 	 x 3 = 0$ |
| | 15 | Yes | FACW | FACU species 90 x 4 = 360 |
| 2. Vaccinium corymbosum | 15 | 165 | TAGW | |
| 3 | | | | UPL species x 5 = |
| | | | | Column Totals: (A) (B) |
| 4 | | | | |
| 5 | | | | Prevalence Index = B/A =3.38 |
| 6 | | | | |
| | | | <u> </u> | Hydrophytic Vegetation Indicators: |
| 7 | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8 | | | | |
| | | | | 2 - Dominance Test is >50% |
| 9 | - 20 | | | 3 - Prevalence Index is ≤3.0 ¹ |
| | | = Total Cove | | 4 - Morphological Adaptations ¹ (Provide supporting |
| 50% of total cover: 15 | 20% of | total cover: | 6 | |
| Herb Stratum (Plot size: 5) | | _ | | data in Remarks or on a separate sheet) |
| Polystichum acrostichoides | F | | FAOL | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 1. Polysuchum acrosucholdes | 5 | Yes | FACU | · · · · · · · · · · · · · · · · · |
| 2 | | | | |
| | | | | ¹ Indicators of hydric soil and wetland hydrology must |
| 3 | | | | be present, unless disturbed or problematic. |
| 4 | | | | Definitions of Four Vegetation Strata: |
| | | | | Demittons of Four Vegetation of ata. |
| 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 |
| | 5 | = Total Cove | er | of size, and woody plants less than 3.28 ft tall. |
| 50% of total cover: 2.5 | | total cover: | | |
| | | | | Woody vine – All woody vines greater than 3.28 ft in |
| Woody Vine Stratum (Plot size: 30) | | | | height. |
| 1 | | | | |
| | | | | |
| 2 | | | <u> </u> | |
| 3 | | | | |
| 4 | | | | |
| | | | · | Hydrophytic |
| 5 | | | | Vegetation |
| | 0. | = Total Cove | er | Present? Yes <u>No</u> |
| 50% of total cover: 0 | 20% of | total cover: | 0 | |
| | | ····· | | |
| 50% of total cover:0 Remarks: (Include photo numbers here or on a separate s | 20% of | = Total Cove total cover:_ | <u> </u> | Present? Yes No |
| | | | | |
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| 1 | | | | |

| Profile Desc | cription: (Describe to | o the depth | n needed to docur | nent the in | dicator o | or confirm | the absence | of indicators.) | | | |
|------------------------|---------------------------------|-------------|--------------------|----------------------|-------------------|------------------|--------------------------|-----------------------------------|--------------------|--|--|
| Depth | Matrix | | Redo | x Features | | | | | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks | | | |
| 0-18 | 10 YR 3/3 | 100 | | | | | S | 40% gravel and cobble | | | |
| | | | | | | | | | | | |
| | | | | <u> </u> | | | | | | | |
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| | | | | | | | | | | | |
| ¹ Type: C=C | oncentration, D=Deple | etion, RM=F | Reduced Matrix, MS | S=Masked S | Sand Gra | ins. | ² Location: P | L=Pore Lining, M=Matrix. | | | |
| Hydric Soil | Indicators: | | | | | | Indica | ators for Problematic Hydric So | ils ³ : | | |
| <u> </u> | (A1) | | Dark Surface | e (S7) | | | 2 | cm Muck (A10) (MLRA 147) | | | |
| Histic E | pipedon (A2) | | Polyvalue Be | low Surface | e (S8) (M | LRA 147, | 148) C | oast Prairie Redox (A16) | | | |
| Black H | stic (A3) | | Thin Dark Su | irface (S9) (| (MLRA 1 | 47, 148) | | (MLRA 147, 148) | | | |
| Hydroge | en Sulfide (A4) | | Loamy Gleye | ed Matrix (F2 | 2) | | P | iedmont Floodplain Soils (F19) | | | |
| Stratifie | d Layers (A5) | | Depleted Ma | trix (F3) | | | | (MLRA 136, 147) | | | |
| 2 cm Mu | uck (A10) (LRR N) | | Redox Dark | Surface (F6 | i) | | V | ery Shallow Dark Surface (TF12) | | | |
| Deplete | d Below Dark Surface | (A11) | Depleted Date | rk Surface (| F7) | | C | other (Explain in Remarks) | | | |
| Thick Da | ark Surface (A12) | | Redox Depre | essions (F8) |) | | | | | | |
| Sandy N | /lucky Mineral (S1) (L l | RR N, | Iron-Mangan | ese Masses | s (F12) (L | .RR N, | | | | | |
| | A 147, 148) | | MLRA 13 | | | | | | | | |
| | Bleyed Matrix (S4) | | Umbric Surfa | · / • | | | | icators of hydrophytic vegetation | and | | |
| | Redox (S5) | | Piedmont Flo | • | , , | • | • | tland hydrology must be present, | | | |
| | Matrix (S6) | | Red Parent N | Aaterial (F2 | 1) (MLR/ | A 127, 147 |) un | less disturbed or problematic. | | | |
| Restrictive | Layer (if observed): | | | | | | | | | | |
| Туре: | | | | | | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil | Present? Yes No _ | ~ | | |
| Remarks: | | | | | | | 1 | | | | |
| No hydric soil | present | | | | | | | | | | |



Photo 1 Non-water data point NOAUC103 facing northwest



Non-water point NOAUB001 facing west



Non-water data point NOAUE001 facing west

| Project/Site: Atlantic Coast Pipeline | City/County: / | Augusta County | | Sampling Date: 6/22/2016 | | |
|--|-----------------|-------------------------------|----------------------|--------------------------|------------------|--|
| Applicant/Owner: Dominion | | | State: VA | Sampling Poir | | |
| Investigator(s): GB, KO | Section, Towr | nship, Range: <mark>No</mark> | PLSS in this are | ea | | |
| | | | ne): <u>concave</u> | | pe (%): <u>4</u> | |
| Subregion (LRR or MLRA): <u>S</u> Lat: <u>38.25870603</u> | | Long: -79. | 14949127 | Datur | m: WGS 1984 | |
| Soil Map Unit Name: Frederick-Christian gravelly silt loams, 15 to 25 p | percent slopes, | eroded | NWI classifi | ication: UPLAND | | |
| Are climatic / hydrologic conditions on the site typical for this time of ye | ear?Yes 🖌 | No | (If no, explain in F | Remarks.) | | |
| Are Vegetation, Soil, or Hydrology significantly | y disturbed? | Are "Normal | Circumstances" | present? Yes | ✓ No | |
| Are Vegetation, Soil, or Hydrology naturally pr | roblematic? | (If needed, e | explain any answe | ers in Remarks.) | | |
| SUMMARY OF FINDINGS – Attach site map showing | g sampling | point locatio | ons, transects | s, important fe | eatures, 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: No point for a topographic signature in a gully located at the edge of the survey corridor approximately 40 feet upslope from the start of a NHD intermittent stream line. Does not meet criteria for hydric soils nor hydrophytic vegetation. | | | | | | | |

| 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 Sc | 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 No 🖌 Depth (inches): | |
| Water Table Present? Yes No 🖌 Depth (inches): | |
| Saturation Present? Yes No 🔽 Depth (inches): | Wetland Hydrology Present? Yes <u></u> No |
| (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec | tions), if available: |
| | |
| Remarks: | |
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Sampling Point: noaua401

| | A 1 1 (- | Devices | . Pastan | Deminence Test workshoet |
|---|---------------------|------------------------|------------|--|
| Tree Stratum (Plot size: <u>30</u>) | Absolute % Cover | Dominant I Species? | Status | Dominance Test worksheet: |
| Catalpa bignonioides | 5 | Yes | FACU | Number of Dominant Species That Are OBL EACW or EAC: 3 (A) |
| 2. Ailanthus altissima | 5 | Yes | FACU | That Are OBL, FACW, or FAC:3 (A) |
| 2 | | | | Total Number of Dominant |
| 3 | | · | . <u> </u> | Species Across All Strata: 9 (B) |
| 4 | | <u> </u> | | Demonst of Dominant Species |
| 5 | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 33.33333333 (A/B) |
| 6 | | | | |
| | | | | Prevalence Index worksheet: |
| 7 | 10 | | | Total % Cover of: Multiply by: |
| 50% of total cover: 5 | | = Total Cove | r 2 | OBL species 0 $x = 0$ |
| 15 | 20% 01 | f total cover: | | FACW species 0 $x 2 = 0$ |
| Sapling/Shrub Stratum (Plot size:) | | | | |
| 1. Rubus idaeus | 10 | Yes | FAC | FAC species $x_3 = 240$ |
| _{2.} Elaeagnus umbellata | 10 | Yes | | FACU species X 4 = |
| 3. Rosa multiflora | 10 | Yes | FACU | UPL species x 5 = |
| 4. Catalpa bignonioides | 5 | No | FACU | Column Totals: (A) (B) |
| 5. Juglans nigra | 5 | No | FACU | |
| 6. Ailanthus altissima | 5 | No | FACU | Prevalence Index = B/A =3.5 |
| | | · | | Hydrophytic Vegetation Indicators: |
| 7. Berberis thunbergii | 5 | No | FACU | 1 - Rapid Test for Hydrophytic Vegetation |
| 8 | | <u> </u> | | 2 - Dominance Test is >50% |
| 9 | | | | |
| | 50 | = Total Cove | r | 3 - Prevalence Index is $\leq 3.0^{1}$ |
| 50% of total cover: 25 | | f total cover: | 10 | 4 - Morphological Adaptations ¹ (Provide supporting |
| Herb Stratum (Plot size:5) | | | | data in Remarks or on a separate sheet) |
| Persicaria virginiana | 55 | Yes | FAC | Problematic Hydrophytic Vegetation ¹ (Explain) |
| | | | | |
| 2. Alliaria petiolata | 10 | No | FACU | ¹ Indicators of hydric soil and wetland hydrology must |
| 3. Phytolacca americana | 10 | No | FACU | be present, unless disturbed or problematic. |
| 4. Dichanthelium clandestinum | 10 | No | FAC | Definitions of Four Vegetation Strata: |
| 5 | | | | Deminions of Four Vegetation of ata. |
| 6. | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or |
| | | | | more in diameter at breast height (DBH), regardless of |
| 7 | | · | | height. |
| 8 | | | . <u> </u> | Sapling/Shrub – Woody plants, excluding vines, less |
| 9 | | | | than 3 in. DBH and greater than or equal to 3.28 ft (1 |
| 10 | | <u> </u> | | m) tall. |
| 11 | | | | Herb – All herbaceous (non-woody) plants, regardless |
| | 85 | = Total Cove | r | of size, and woody plants less than 3.28 ft tall. |
| 50% of total cover: 42.5 | | total cover: | | |
| Woody Vine Stratum (Plot size: 30) | | | | Woody vine – All woody vines greater than 3.28 ft in |
| Vitis aestivalis | 15 | Yes | FACU | height. |
| 2. Parthenocissus quinquefolia | 10 | Yes | FACU | |
| | 10 | Yes | FAC | |
| 3. Toxicodendron radicans | 10 | res | FAC | |
| 4 | | | | Hydrophytic |
| 5. | | | | Vegetation |
| | 35 | = Total Cove | r | Present? Yes No V |
| 50% of total cover: 17.5 | | f total cover: | - | |
| | | | | |
| Remarks: (Include photo numbers here or on a separate s | neet.) | | | |
| | | | | |
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| Depth Matrix Redox Features (inches) Color (moist) % Type' Loc' Texture Remarks 0-3 7.5YR 3/2 100 SIC SIC SIC | Profile Des | cription: (Describe t | o the depth | needed to docur | nent the in | dicator o | or confirm | the absence o | f indicato | rs.) | | |
|---|-------------|-------------------------------|-------------|------------------|--------------|-------------------|------------------|---------------------------|-------------|---------------|----------|-------------------|
| 0-3 7.5YR 3/2 100 SIC 3-18 7.5YR 5/6 100 C | Depth | | | | x Features | | | | | | | |
| 3-18 7.5YR 5/6 100 C 3-18 7.5YR 5/6 100 C | | | | Color (moist) | % | Type ¹ | Loc ² | | | Remarks | | |
| Image: Indicators in the image: Im | 0-3 | 7.5YR 3/2 | 100 | | | | | SIC | | | | |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : | 3-18 | 7.5YR 5/6 | 100 | | | | | С | | | | |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : | <u> </u> | | | | | | | | | | | |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : | · | | | | | | | | | | | |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : | | | | | | | | | | | | |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : | | | | | | | | | | | | |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : | | | | | | | | | | | | |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : | | | | | | | | | | | | |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : | | | | <u> </u> | | | | | | | | |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : | | | | | | | | | | | | |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : | | | | | | | | | | | | |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : | | | | | | | | | | | | |
| Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : | | oncontration D-Don | otion PM-E | Poducod Matrix M | S-Mackad | Sand Gra | inc | ² Location: PL | -Doro Linir | a M-Matrix | | |
| 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) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: Silly clay Hydric Soil Present? Yes No Depth (inches): 0 Hydric Soil Present? Yes No ✓ | | | | | S=IVIASKEU | Sanu Gra | uns. | | | | | ls ³ : |
| 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) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Type: Silty clay No Vers Depth (inches): 0 No Vers | - | | | Dark Surface | (97) | | | | | | | |
| | | () | | | | e (S8) (M | I RA 147. | | | | | |
| 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) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 136, Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Type: <u>0</u> Unbric Surface (F13) (MLRA 127, 147) unless disturbed or problematic. | | | | · | | | | | | | | |
| 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) Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Iron-Manganese Masses (F12) (LRR N, Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic 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 or problematic. Restrictive Layer (if observed): Type: <u>silty clay</u> No Depth (inches): 0 Hydric Soil Present? Yes No No | | () | | | · · · | • | ,, | | • | | (F19) | |
| 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) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Imprice Surface (F13) (MLRA 136, 122) 3 Indicators of hydrophytic vegetation and Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) 3 Indicators of hydrophytic 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 or problematic. Restrictive Layer (if observed): Type: silty clay No ✓ Depth (inches): 0 No ✓ | - · · | . , | | | | , | | | | | , | |
| Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) No Mulca 127, 147 Wetland hydrology must be present, Unless disturbed or problematic. Hydric Soil Present? Yes No | | | | | | 5) | | | | | e (TF12) | |
| 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) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): rype: Type: 0 Depth (inches): 0 | Deplete | d Below Dark Surface | e (A11) | Depleted Da | rk Surface (| (F7) | | Oth | ner (Explai | n in Remarks | 5) | |
| MLRA 147, 148) MLRA 136) | Thick D | ark Surface (A12) | | Redox Depre | essions (F8) |) | | | | | | |
| Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 136, 122) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Restrictive Layer (if observed): Type: silty clay Depth (inches): 0 Hydric Soil Present? Yes No | Sandy M | /lucky Mineral (S1) (L | RR N, | Iron-Mangan | ese Masse | s (F12) (l | _RR N, | | | | | |
| Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): Type: silty clay Depth (inches): 0 Ves No | | | | | | | | 2 | | | | |
| Stripped Matrix (S6)Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. Restrictive Layer (if observed): | | • • • • | | | · / · | | | | | | - | .nd |
| Restrictive Layer (if observed): Type: silty clay Depth (inches): 0 Hydric Soil Present? Yes No | | . , | | | | | | | • | ••• | | |
| Type: silty clay Depth (inches): 0 Hydric Soil Present? Yes No ✓ | | | | Red Parent N | Material (F2 | 1) (MLR/ | A 127, 147 | ') unle | ss disturbe | ed or problem | natic. | |
| Depth (inches): 0 V Mo V | Restrictive | Layer (if observed): | | | | | | | | | | |
| | | | | | | | | | | | | |
| Remarks: | Depth (in | ches): U | | | | | | Hydric Soil P | Present? | Yes | No | <u>v</u> |
| | Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | | |



Non water data point NOAUA401 facing southwest



Non-water point NOAUA402 facing south



Non-water point NOAUA007K facing east through karst point



Non-water point NOAUB008 facing north



Non-water point NOAUA008K facing south through karst point



Non-water data point NOAUA052 facing east northeast



Non-water point NOAUB017 facing west



Non-water point NOAUB009 facing west



Non-water point NOAUB010 facing north



Non-water point NOAUB011 facing south



Non-water point NOAUB012 facing south



Non-water point NOAUB005 facing south



Non-water point NOAUA011K facing north through karst point



Non-water point NOAUB004 facing north



Non-water point NOAUA012K facing southeast through karst point



Non-water point NOAUA013K facing southeast through karst point



Non-water point NOAUA015K facing east through karst point



Non-water point NOAUA014K facing southeast through karst point



Non-water point NOAUB003 facing southeast



Non-water point NOAUZ008 facing west



Non-water point NOAUZ007 facing east



Non-water point NOAUZ006 facing north

Environmental Field Surveys Non-water Point Photo Page



Non-water point noaup001 facing southeast. (NHD, not stream)



Non-water point noaup001 facing northwest. (NHD, not stream)

Photo Sheet 1 of 2

Environmental Field Surveys Non-water Point Photo Page



Non-water point noaup001 facing northeast. (NHD, not stream)



Non-water point noaup001, across road facing north. (NHD, not stream)



Non-water point NOAUA408 facing east



Non-water data point NOAUF004 facing east

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

| Project/Site: Atlantic Coast Pipeline | City/County: Augusta County | Sampling Date: 5/13/2016 |
|---|--|--|
| Applicant/Owner: Dominion | Stat | e: <u>VA</u> Sampling Point: <u>noauf003</u> |
| Investigator(s): SH, LC | _ Section, Township, Range: No PLSS | in this area |
| Landform (hillslope, terrace, etc.): Depression | .ocal relief (concave, convex, none): <u>c</u> | |
| Subregion (LRR or MLRA): <u>S</u> Lat: <u>38.12614888</u> | Long: <u>-79.14166</u> | 989 Datum: WGS 1984 |
| Soil Map Unit Name: <u>Water</u> | N | WI classification: UPL |
| 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 _ 🖌 significant | ly disturbed? Are "Normal Circu | mstances" present? Yes No |
| Are Vegetation, Soil, or Hydrology naturally p | problematic? (If needed, explain | any answers in Remarks.) |
| SUMMARY OF FINDINGS – Attach site map showin | ig sampling point locations, t | ransects, 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: | | | | | | | |
| Area appears to have been altered, possibly a historic attempted stock pond. However, no hydric vegetation or soils | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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) |
| | Dry-Season Water Table (C2) |
| Field Observations: | |
| Surface Water Present? Yes No <u></u> Depth (inches): | |
| Water Table Present? Yes No <u><</u> Depth (inches): | |
| Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect) | Wetland Hydrology Present? Yes V ions), if available: |

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

Sampling Point: noauf003

| | Absolute | Dominant Ir | dicator | Dominance Test worksheet: |
|---|------------------|---------------|---------|--|
| Tree Stratum (Plot size: 0) | | | Status | |
| Prunus serotina | 15 | Yes | FACU | Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A) |
| 2. Juglans nigra | 5 | No | FACU | |
| 3. Viburnum prunifolium | 3 | No | FACU | Total Number of Dominant |
| | 3 | No | 17100 | Species Across All Strata:4 (B) |
| 4. Pinus virginiana | | INO | | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC: 0 (A/B) |
| 6 | | | | |
| | | | | Prevalence Index worksheet: |
| 7 | 26 | | | Total % Cover of: Multiply by: |
| 50% of total cover: 13 | | = Total Cover | 5.2 | OBL species 0 x 1 =0 |
| | 20% of | total cover: | | 3 6 |
| Sapling/Shrub Stratum (Plot size:) | | | | FACW species $\begin{array}{c} 0 \\ \hline \end{array}$ x 2 = $\begin{array}{c} 0 \\ \hline \end{array}$ |
| 1. Symphoricarpos orbiculatus | 15 | Yes | FACU | FAC species X 3 = |
| 2. Viburnum prunifolium | 10 | Yes | FACU | FACU species 81 x 4 = 324 |
| 3. Lonicera morrowii | 5 | No | FACU | UPL species $0 	 x 5 = 0$ |
| 4. Juglans nigra | 3 | No | FACU | Column Totals: (A) (B) |
| | | | | |
| 5 | | | | Prevalence Index = B/A =3.92 |
| 6 | | . <u> </u> | | Hydrophytic Vegetation Indicators: |
| 7 | | | | |
| 8 | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 0 | | | | 2 - Dominance Test is >50% |
| 9 | - 22 | . <u> </u> | | 3 - Prevalence Index is ≤3.0 ¹ |
| | 33 = Total Cover | | | 4 - Morphological Adaptations ¹ (Provide supporting |
| 50% of total cover:16.5 | 20% of | total cover: | 6.6 | data in Remarks or on a separate sheet) |
| Herb Stratum (Plot size: 0) | | | | |
| _{1.} Arctium lappa | 30 | Yes | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 2. Carex normalis | 10 | No | FACU | |
| 3. Rubus allegheniensis | 10 | No | FACU | ¹ Indicators of hydric soil and wetland hydrology must |
| | 5 | | | be present, unless disturbed or problematic. |
| 4. Parthenocissus quinquefolia | | No | FACU | Definitions of Four Vegetation Strata: |
| 5. Agrimonia parviflora | 3 | No | FACW | |
| 6 | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 7 | | | | more in diameter at breast height (DBH), regardless of height. |
| · | | | | noight. |
| δ | | | | 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 |
| | 28 | = Total Cover | r | of size, and woody plants less than 3.28 ft tall. |
| 50% of total cover: 29 | | total cover: | | , |
| Woody Vine Stratum (Plot size: 0) | | | | Woody vine – All woody vines greater than 3.28 ft in |
| 1. none | 0 | | | height. |
| | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5. | | | | Hydrophytic Vegetation |
| | 0 | | | Present? Yes No |
| | | = Total Cover | ~ | |
| 50% of total cover: 0 | | total cover: | | |
| Remarks: (Include photo numbers here or on a separate s | heet.) | | | |
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| | | o the dep | | | | or confirm | the absence of indicators.) | |
|-------------------|--------------------------------|-------------|------------------------------|-----------------------|------------------------|------------------|--|--------------------|
| Depth (inches) | <u>Matrix</u> Color (moist) | % | Color (moist) | <u>x Feature</u> % | s Type ¹ | Loc ² | Texture Remarks | |
| 0-8 | 10YR 5/4 | 80 | 7.5YR 4/6 | 3 | C | <u></u> M | C | |
| | | | 10YR 4/2 | 17 | | M | | |
| | | | | | | | | |
| 8-18 | 10YR 5/3 | 98 | 7.5YR 5/6 | 2 | C | PL/M | C | |
| 1 | | | | | | | | |
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| | | | | | | | | |
| 1 | | | De de se d'Matrix M | 2 | | | ² Provide Plance Linited M. Martein | |
| | Concentration, D=Depl | etion, Rivi | =Reduced Matrix, Ma | 5=Masked | a Sand Gra | ains. | ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric So | ile ³ . |
| - | | | Dark Surfage | (07) | | | • | |
| Histoso | Epipedon (A2) | | Dark Surface Polyvalue Be | . , | 000 (S8) (M | | 2 cm Muck (A10) (MLRA 147) 148) Coast Prairie Redox (A16) | |
| | listic (A3) | | Thin Dark Su | | | | (MLRA 147, 148) | |
| | en Sulfide (A4) | | Loamy Gleye | • | , , | 47, 140) | Piedmont Floodplain Soils (F19) | |
| | ed Layers (A5) | | Depleted Ma | | (1 2) | | (MLRA 136, 147) | |
| | luck (A10) (LRR N) | | Redox Dark | | -6) | | Very Shallow Dark Surface (TF12) | |
| | ed Below Dark Surface | e (A11) | Depleted Da | | , | | Other (Explain in Remarks) | |
| | Dark Surface (A12) | () | Redox Depre | | • • | | | |
| | Mucky Mineral (S1) (L | RR N, | Iron-Mangan | • | | LRR N, | | |
| MLR | A 147, 148) | | MLRA 13 | 6) | . , . | | | |
| Sandy | Gleyed Matrix (S4) | | Umbric Surfa | ice (F13) | (MLRA 13 | 6, 122) | ³ Indicators of hydrophytic vegetation | and |
| Sandy | Redox (S5) | | Piedmont Flo | odplain S | Soils (F19) | (MLRA 14 | 8) wetland hydrology must be present, | |
| Strippe | d Matrix (S6) | | Red Parent M | Material (F | 21) (MLR | A 127, 147 |) unless disturbed or problematic. | |
| Restrictive | Layer (if observed): | | | | | | | |
| Туре: | | | | | | | | |
| Depth (ir | nches): | | | | | | Hydric Soil Present? Yes No | ~ |
| Remarks: | | | | | | | 1 | |
| | | | | | | | | |
| | | | | | | | | |



No-water data point NOAUF003 facing west



No-water data point NOAUF003 facing east



Non-water point NOAUA405 facing north



Non-water point NOAUA405 facing south



Non-water point NOAUA404 facing northeast



Non-water point NOAUA003K facing north through karst point