

Non-water point NOAUB006 facing north



Non-water point NOAUB007 facing west



Non-water point NOAUB014 facing south



Non-water point NOAUB013 facing east



Non-water point NOAUA005K facing northeast through karst point



Non-water point NOAUA006K facing east through karst point



Non-water data point NOAUA125 facing northeast



Non-water data point NOAUA125 facing southwest



Non-water data point NOAUC104 facing east



Non-water data point NOAUC104 facing west

| Project/Site: Atlantic Coast Pipeline | City/County: Augusta County Sampling Date: 4/15/20 | | | | | |
|---|--|-----------------------------------|---|--|--|--|
| Applicant/Owner: Dominion | | | ate: VA Sampling Point: noaua400 | | | |
| | Section, Township, Range: No PLSS in this area | | | | | |
| Landform (hillslope, terrace, etc.): swale | | | cave Slope (%): 4 | | | |
| Subregion (LRR or MLRA): S | | | | | | |
| Soil Map Unit Name: Craigsville cobbly sandy loa | m | NV | VI classification: None | | | |
| Are climatic / hydrologic conditions on the site typ | | | | | | |
| Are Vegetation, Soil, or Hydrology | | | | | | |
| Are Vegetation, Soil, or Hydrology | | | | | | |
| SUMMARY OF FINDINGS – Attach si | | | | | | |
| | | , | | | | |
| Hydrophytic Vegetation Present? Yes | No | Is the Sampled Area | ., | | | |
| Hydric Soil Present? Yes _ Wetland Hydrology Present? Yes _ | No No | within a Wetland? | es No | | | |
| Remarks: | | | _ | | | |
| No water point taken in a swale exhibiting wetlan hydrophytic vegetation. | a, a a cog, a a c to processo | | | | | |
| HYDROLOGY | | | | | | |
| Wetland Hydrology Indicators: | | Second | dary Indicators (minimum of two required) | | | |
| Primary Indicators (minimum of one is required; | check all that apply) | Su | rface Soil Cracks (B6) | | | |
| Surface Water (A1) | True Aquatic Plants (I | Spa | arsely Vegetated Concave Surface (B8) | | | |
| High Water Table (A2) | Hydrogen Sulfide Odd | | ainage Patterns (B10) | | | |
| Saturation (A3) | Oxidized Rhizosphere | | oss Trim Lines (B16) | | | |
| Water Marks (B1) | Presence of Reduced | | y-Season Water Table (C2) | | | |
| Sediment Deposits (B2) | Recent Iron Reduction | | ayfish Burrows (C8) | | | |
| Drift Deposits (B3) | Thin Muck Surface (C | | turation Visible on Aerial Imagery (C9) | | | |
| Algal Mat or Crust (B4) | Other (Explain in Rem | • | unted or Stressed Plants (D1) comorphic Position (D2) | | | |
| Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) | | | allow Aquitard (D3) | | | |
| ✓ Water-Stained Leaves (B9) | | | crotopographic Relief (D4) | | | |
| Aquatic Fauna (B13) | | | C-Neutral Test (D5) | | | |
| Field Observations: | | | | | | |
| | Depth (inches): | | | | | |
| | | 8 | | | | |
| | | 7 Wetland Hydrolog | gy Present? Yes V No No | | | |
| (includes capillary fringe) | | | ,, | | | |
| Describe Recorded Data (stream gauge, monito | ring well, aerial photos, pre | vious inspections), if available: | | | | |
| Remarks: | | | | | | |
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VEGETATION (Four Strata) – Use scientific names of plants.

| | iiiies oi | plants. | | Sampling Point: noaua400 |
|--|-----------|------------------------|------|---|
| | Absolute | | | Dominance Test worksheet: |
| Tree Stratum (Plot size:30) 1 | | Species? | | Number of Dominant Species That Are OBL, FACW, or FAC: (A) |
| 2 | | | | Total Number of Dominant |
| 3 4 | | | | Species Across Air Strata. |
| 5 | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) |
| 6 | | | | Prevalence Index worksheet: |
| 7 | 0 | | | Total % Cover of: Multiply by: |
| 0 | | = Total Cove | | OBL species x 1 = 0 |
| 15 | 20% of | f total cover:_ | | 0 |
| Sapling/Shrub Stratum (Plot size: 13) | | | | FACW species $\begin{array}{c} 0 \\ 0 \\ \end{array}$ $\begin{array}{c} x 2 = \begin{array}{c} 0 \\ 0 \\ \end{array}$ |
| 1 | | | | FAC species X3 = 20 |
| 2 | | | | FACU species x 4 = |
| 3 | | | | UPL species |
| 4 | | | | Column Totals: (A) (B) |
| 5 | | | | Prevalence Index = B/A =4 |
| 6 | | | | |
| 7 | | | | Hydrophytic Vegetation Indicators: |
| 8 | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| | | | | 2 - Dominance Test is >50% |
| 9 | 0 | - Total Cove | | 3 - Prevalence Index is ≤3.0 ¹ |
| 50% of total cover:0 | | = Total Cover: | 0 | 4 - Morphological Adaptations ¹ (Provide supporting |
| | 20 /0 01 | total cover | | data in Remarks or on a separate sheet) |
| Herb Stratum (Plot size:) 1 Danthonia compressa | 4 | Yes | FACU | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 1. Luzula multiflora | 2 | Yes | FACU | |
| | | | TACO | 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 | | | | |
| 9. | | | | Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 |
| 10 | | | | m) tall. |
| 11 | | | | |
| ·· | 6 | T-1-1-0 | | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| | | = Total Cove | r | of Size, and woody plants less than 3.20 it tall. |
| F0% of total cover: 3 | 200/ of | total agyar | 12 | |
| 50% of total cover: 3 | 20% of | f total cover:_ | 1.2 | Woody vine – All woody vines greater than 3.28 ft in |
| Woody Vine Stratum (Plot size:) | | | | |
| Woody Vine Stratum (Plot size: 30) 1. Smilax glauca | 20% of | f total cover:_ Yes | FACU | Woody vine – All woody vines greater than 3.28 ft in |
| Woody Vine Stratum (Plot size: 30) 1. Smilax glauca 2. | 3 | Yes | | Woody vine – All woody vines greater than 3.28 ft in |
| Woody Vine Stratum (Plot size: 30) 1. Smilax glauca | 3 | Yes | | Woody vine – All woody vines greater than 3.28 ft in |
| Woody Vine Stratum (Plot size: 30) 1. Smilax glauca 2. | 3 | Yes | | Woody vine – All woody vines greater than 3.28 ft in |
| Woody Vine Stratum (Plot size: 30) 1. Smilax glauca 2 | 3 | Yes | | Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation |
| Woody Vine Stratum (Plot size: 30) 1. Smilax glauca 2 | 3 | Yes | FACU | Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic |

Sampling Point: noaua400

| Profile Desc | ription: (Describe t | o the depth | needed to document | the indicator or | confirm t | the absenc | e of indicators.) |
|-------------------------|--|-------------|---------------------------------------|-------------------------------|-----------|---------------|--|
| Depth | Matrix | | Redox Fe | | | | |
| (inches) 0-2 | Color (moist) 10YR 2/1 | 100 | | | _oc² | Texture SL | Remarks |
| 2-8 | 10YR 4/2 | 55 | | | | L | |
| | 10YR 3/1 | 45 | | | | L | |
| 8-18 | 10YR 6/4 | 100 | | | | LS | |
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| | | | | | | | |
| ¹ Type: C=Ce | | etion, RM=R | educed Matrix, MS=Ma | asked Sand Grains | S | | PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils ³ : |
| Histosol | | | Dark Surface (S7 |) | | | 2 cm Muck (A10) (MLRA 147) |
| | oipedon (A2) | | | , Surface (S8) (MLF | RA 147, 1 | | Coast Prairie Redox (A16) |
| | stic (A3) | | · | e (S9) (MLRA 147 | | · , | (MLRA 147, 148) |
| | en Sulfide (A4) | | Loamy Gleyed Ma | , , | | | Piedmont Floodplain Soils (F19) |
| | d Layers (A5) | | Depleted Matrix (| • | | | (MLRA 136, 147) |
| | ıck (A10) (LRR N) d Below Dark Surface | (111) | Redox Dark Surfa | | | | Very Shallow Dark Surface (TF12) |
| | ark Surface (A12) | (ATT) | Depleted Dark Su Redox Depressio | | | | Other (Explain in Remarks) |
| | Mucky Mineral (S1) (L | RR N, | Iron-Manganese | | R N, | | |
| | A 147, 148) | | MLRA 136) | , , , | | | |
| | Sleyed Matrix (S4) | | | =13) (MLRA 136, 1 | | | ndicators of hydrophytic vegetation and |
| - | Redox (S5) | | | ain Soils (F19) (M | | | vetland hydrology must be present, |
| | Matrix (S6) Layer (if observed): | | Red Parent Mater | rial (F21) (MLRA 1 | 27, 147) | u | inless disturbed or problematic. |
| Type: no | ne | | | | | | |
| | ches): | | _ | | | Hydric So | oil Present? Yes No |
| Remarks: | | | <u> </u> | | | Tiyane oo | 103103103103103103103103103103103103103103103103 |
| itemarks. | | | | | | | |
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Non-water data point NOAUA050 facing south southwest

Environmental Field Surveys Non-water Point Photo Page



Non-water point noaup002 facing northeast. (NHD, not stream)



Non-water point noaup002 facing southwest. (NHD, not stream)

Photo Sheet 1 of 1



Non-water point NOAUA411 facing northeast



Non-water point NOAUA411 facing southwest



Non-water data point NONEA050 facing southwest



Non-water point NONEC001 facing west



Non-water point NONEA001K facing northwest through karst point

| Project/Site: Atlantic Coast Pipeline | City/County: Buckingham | Sampling Date: 11/10/2014 |
|--|---|---|
| Applicant/Owner: DOMINION | | State: VA Sampling Point: nobuc001 |
| | Section, Township, Range: | |
| Landform (hillslope, terrace, etc.): Hill Slope | | |
| Subregion (LRR or MLRA): P | | 78.6956255 Datum: WGS 1984 |
| Soil Map Unit Name: Codorus-Hatboro complex, 0 | | NWI classification: PFO1A |
| Are climatic / hydrologic conditions on the site typical | al for this time of year? Yes No | _ (If no, explain in Remarks.) |
| | | nal Circumstances" present? Yes No |
| Are Vegetation, Soil, or Hydrology _ | | |
| | | tions, transects, important features, etc. |
| Hydrophytic Vegetation Present? Yes | No Is the Sampled Area | _ |
| | No. 4/ | |
| Wetland Hydrology Present? Yes | within a Wetland? | Yes No |
| Remarks: | | |
| | | |
| HYDROLOGY | | |
| Wetland Hydrology Indicators: | | Secondary Indicators (minimum of two required) |
| Primary Indicators (minimum of one is required; ch | | _ Surface Soil Cracks (B6) |
| Surface Water (A1) | True Aquatic Plants (B14) | Sparsely Vegetated Concave Surface (B8) |
| | Hydrogen Sulfide Odor (C1) | Drainage Patterns (B10) |
| | Oxidized Rhizospheres on Living Roots (C3Presence of Reduced Iron (C4) | |
| Water Marks (B1) Sediment Deposits (B2) | Recent Iron Reduction in Tilled Soils (C6) | Dry-Season Water Table (C2) Crayfish Burrows (C8) |
| Occurrent Deposits (B2) | 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): | |
| | Depth (inches): Wetland | d Hydrology Present? Yes No |
| (includes capillary fringe) Describe Recorded Data (stream gauge, monitorir | l ng well, aerial photos, previous inspections), if a | uvailable: |
| | | |
| Remarks: | | |
| No wetland hydrology present | | |
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VEGETATION (Four Strata) – Use scientific names of plants.

| /EGETATION (Four Strata) – Use scientific n | ames of | plants. | | Sampling Point: nobuc001 |
|---|---------------|-----------------|----------------|--|
| | Absolute | Dominant I | ndicator | Dominance Test worksheet: |
| <u>Tree Stratum</u> (Plot size:) 1. Quercus alba | % Cover 40 | Species? Yes | Status FACU | Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) |
| 2. Acer rubrum | 30 | Yes | FAC | That Are OBE, I AGW, OF I AG(A) |
| 2. Carya tomentosa | 10 | No | | Total Number of Dominant |
| ··· | 10 | No | FACU | Species Across All Strata: 4 (B) |
| 4. Liriodendron tulipifera | | | 1 700 | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC:50 (A/B) |
| 6 | | | | |
| 7 | | | | Prevalence Index worksheet: |
| | 80 | = Total Cove | r | Total % Cover of: Multiply by: |
| 50% of total cover: 45 | 20% of | total cover:_ | 18 | OBL species |
| Sapling/Shrub Stratum (Plot size: 15 | | | | FACW species x 2 = |
| 1. Quercus alba | 25 | Yes | FACU | FAC species 100 x 3 = 300 |
| 2 | | | | FACU species75 |
| | | | | UPL species0 x 5 =0 |
| 3 | | | | Column Totals: 175 (A) 600 (B) |
| 4 | | | | (5) |
| 5 | | | | Prevalence Index = B/A =3.42 |
| 6 | | | | Hydrophytic Vegetation Indicators: |
| 7 | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8 | | | | 2 - Dominance Test is >50% |
| 9 | | | | |
| | 25 | = Total Cove | r | 3 - Prevalence Index is ≤3.0 ¹ |
| 50% of total cover: 12.5 | | total cover: | _ | 4 - Morphological Adaptations ¹ (Provide supporting |
| Herb Stratum (Plot size:5) | | | | data in Remarks or on a separate sheet) |
| 1 Athyrium asplenioides | 60 | Yes | FAC | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 2. Smilax rotundifolia | 10 | No | FAC | |
| 2. Vaccinium pallidum | 5 | No | | ¹ Indicators of hydric soil and wetland hydrology must |
| 3. Vacciniam paindam | | | | be present, unless disturbed or problematic. |
| 4 | | | | Definitions of Four Vegetation Strata: |
| 5 | | | | Tree Meady plants avaluating vines 2 in (7.6 cm) of |
| 6 | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of |
| 7 | | | | height. |
| 8 | | | | Canling/Church Weady plants and disputing the |
| 9 | | | | Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 |
| 10. | | | | m) tall. |
| 11. | | | | |
| | 70 | = Total Cove | | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 50% of total cover: 37.5 | | total cover:_ | | or size, and woody plants less than 5.20 it tall. |
| Woody Vine Stratum (Plot size:30) | 2070 01 | total oover | | Woody vine – All woody vines greater than 3.28 ft in |
| | | | | height. |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | Hydrophytic |
| 5 | | | | Vegetation |
| | 0 | = Total Cove | r | Present? Yes No |
| 50% of total cover:0 | 20% of | total cover:_ | 0 | |
| Remarks: (Include photo numbers here or on a separate s | | _ | | <u> </u> |
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Sampling Point: nobuc001

| | cription: (Describe | to the de | | | | or confirm | the absenc | e of indicators.) |
|-----------------|-----------------------------|---------------|---------------------------|--------------|-------------------|------------------|-----------------|--|
| Depth | Matrix | % | Redo | x Feature | S T 1 | Loc ² | Ta4 | Down-di- |
| (inches) 0-3 | Color (moist) 10 YR 3/3 | 100 | Color (moist) | % | Type ¹ | LOC | Texture SICL | Remarks |
| | | · | | | | | | |
| 3-12 | 2.5 Y 5/3 | 95 | 10 YR 3/6 | 5 | C | PL/M | SL | |
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| 1 | | | | | | | 2 | |
| | Concentration, D=Dep | letion, RM | I=Reduced Matrix, MS | S=Masked | d Sand Gr | ains. | | PL=Pore Lining, M=Matrix. |
| - | Indicators: | | | | | | | cators for Problematic Hydric Soils ³ : |
| Histoso | | | Dark Surface | | | | | 2 cm Muck (A10) (MLRA 147) |
| | pipedon (A2) | | Polyvalue Be | | | | 148) | Coast Prairie Redox (A16) |
| | listic (A3) | | Thin Dark Su | • | , . | 147, 148) | | (MLRA 147, 148) |
| | en Sulfide (A4) | | Loamy Gleye | | (F2) | | | Piedmont Floodplain Soils (F19) |
| | ed Layers (A5) | | Depleted Ma | | \ | | | (MLRA 136, 147) |
| | uck (A10) (LRR N) | (4.4.4) | Redox Dark | | | | | Very Shallow Dark Surface (TF12) |
| | ed Below Dark Surface | e (A11) | Depleted Dai | | | | - | Other (Explain in Remarks) |
| | Park Surface (A12) | DD 11 | Redox Depre | | | I DD N | | |
| | Mucky Mineral (S1) (L | .KK N, | Iron-Mangan | | es (F12) (| LKK N, | | |
| | A 147, 148) | | MLRA 13 | - | /MI DA 44 |)C 400\ | 31 | |
| | Gleyed Matrix (S4) | | Umbric Surfa | | | | | dicators of hydrophytic vegetation and |
| | Redox (S5) d Matrix (S6) | | Piedmont Florage Parent N | | | | | vetland hydrology must be present, |
| | Layer (if observed): | | Red Falelii ii | viateriai (F | 21) (IVILI | A 127, 147 | r) u | nless disturbed or problematic. |
| | Layer (II observed). | | | | | | | |
| Type: | | | | | | | | ., |
| Depth (ir | nches): | | | | | | Hydric So | il Present? Yes No |
| Remarks: | | | | | | | | |
| No hydric so | il present | | | | | | | |
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Photo 1 Non-water data point nobuc001 facing south



Photo 2 Non-water data point nobuc001 facing north



Non-water point nobul001 facing South



Non-water point nobul001 facing North



Non-water point nobul001 facing West

| Project/Site: Atlantic Coast Pipeline City/County: MA Buckingham Sampling Date: 4/9/14 State: VA Sampling Point: NOBULOO: |
|--|
| Applicant/Owner: Joya 1 100 grants |
| Investigator(s). Very laboration (see Stopp (%)). NA |
| Landiorni (illisiope, terrace, etc.). |
| Supredion (LRR of MLRA): Lat. 27 (0) |
| Soil Map Unit Name: 27 1442 18451 Compact, 19 10 310 |
| Are climate? Tryglorogic containers on the site typical and the site typ |
| Are Vegetation, or rejuncted to to to to to to to to |
| 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? Hydric Soil Present? Wetland Hydrology Present? Yes No Ves Within a Wetland? Is the Sampled Area within a Wetland? Yes No Ves No Ves Ves No Ves Ves No Ves |
| Remarks: Non-wet Floodplain, Mapped NWI. Not a wetland. |
| has the hospital has been a |
| |
| PHOTOS # 100 - 1088 to 1092 Soils, N.E.S.W |
| 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 (C6) Crayfish Burrows (C8) |
| Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) |
| |
| Algal Mat or Crust (B4) |
| Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1) Geomorphic Position (D2) |
| Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Geomorphic Position (D2) Shallow Aquitard (D3) |
| Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Other (Explain in Remarks) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) |
| Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Other (Explain in Remarks) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) |
| Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Other (Explain in Remarks) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) |
| Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13) Other (Explain in Remarks) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) |
| Algal Mat or Crust (B4) |

| ^ | Absolute | Dominant | Indicator | Dominance Test worksheet: |
|--|--|---------------|--|---|
| | | Species? | | Number of Dominant Species |
| 1. Liriodendron tulipitera | 75 | <u> </u> | FACU | That Are OBL, FACW, or FAC: (A) |
| 2. Querous Velutina | 15 | N | NI | |
| | 10 | N | FAC | Total Number of Dominant Species Across All Strata: (B) |
| 4. | | | | Species Across Air Strata. |
| 5 | | | | Percent of Dominant Species That Are OBL. FACW. or FAC: 50% (A/B) |
| 5 | | | | That Are OBL, FACW, or FAC: 50% (A/B) |
| 0 | 102 | = Total Co | | Prevalence Index worksheet: |
| _ | | | _ | Total % Cover of: Multiply by: |
| 50% of total cover: 50 | 20% o | f total cover | r: | OBL species x 1 = |
| Sapling Stratum (Plot size: 15 ft | <u> </u> | V | | FACW species x 2 = |
| 1. Carpinus caroliniana | 85 | | FAC | FAC species x 3 = |
| 2. Cercis canadensis | _10_ | <u> </u> | FACU | FACU species x 4 = |
| 3. Morus rubra | <u>io</u> | <u> </u> | <u>FAC</u> | UPL species x 5 = |
| 4. Juniperus Virginiana | 5_ | <u> </u> | FACU | Column Totals: (A) (B) |
| 5 | | | _ | Column rotals: (A) (B) |
| 6 | | | | Prevalence Index = B/A = |
| 1 | 1108 | = Total Co | ver | Hydrophytic Vegetation Indicators: |
| 50% of total cover: | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| | | i total covel | | 2 - Dominance Test is >50% |
| Shrub Stratum (Plot size: 15 ++ 1. <u>Carpinus Caroliniana</u> 2. Cercis Canadasis | 7. | ~ | FAC | 3 - Prevalence Index is ≤3.0¹ |
| 1. Carpinus Carollal and | $\frac{\omega}{\varepsilon}$ | 7 | | 4 - Morphological Adaptations¹ (Provide supporting |
| 2. Cercis ranadensis | | | FACU | data in Damanto an an a concesta abact) |
| 3. Francis avericana | | _ <u>N</u> _ | FACU | Problematic Hydrophytic Vegetation ¹ (Explain) |
| T. DITOCIAL DENZOIN | | <u> </u> | FAC | |
| 5 | | | | ¹ Indicators of hydric soil and wetland hydrology must |
| 6 | | | | be present, unless disturbed or problematic. |
| | | | | _ · · · · · · · · · · · · · · · · · · · |
| 39 | 30 | = Total Co | ver | Definitions of Five Vegetation Strata: |
| | _ | | _ / | Definitions of Five Vegetation Strata: |
| 50% of total cover: <u>175</u> | _ | | _ / | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, |
| 50% of total cover: 175 Herb Stratum (Plot size: 5 5+) | 20% o | | r: 7 % | Definitions of Five Vegetation Strata: |
| 50% of total cover: 175 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrostichoides | 20% o | | FACU | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). |
| 50% of total cover: 175 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrostichoides 2. Hammalis virginiana | 20% o | f total cove | FACU FACU | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, |
| 50% of total cover: 17.5 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrosfichoides 2. Hammaleis virginiana 3. Viburnum acerifolium | 20% o 10 5 | f total cover | FACU FACU UPL | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). |
| 50% of total cover: 17.5 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrostichoides 2. Hammaleis Virginiana 3. Viburnum acerifolium 4. Lindera benzoin | 20% o 10 5 5 2 | f total cover | FACU FACU | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. |
| 50% of total cover: 17.5 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrostichoides 2. Hammaleis virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5 | 10 5 5 2 | f total cover | FACU FACU UPL | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, |
| 50% of total cover: 175 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrostichoides 2. Hammaleis virginiana 3. Viburnum aceritolium 4. Lindera benzoin 5 6 | 10 5 5 2 | f total cover | FACU FACU UPL FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. |
| 50% of total cover: 175 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrostichoides 2. Hammaleis Virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5 | 10 5 5 2 | f total cover | FACU FACU UPL FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including |
| 50% of total cover: 17.5 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrostichoides 2. Hammaleis Virginiana 3. Viburnum aceritalium 4. Lindera benzoin 5 6 7 8 | 20% o | f total cover | FACU FACU UPL FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. |
| 50% of total cover: 17.5 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrosfichoides 2. Hammaleis virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5 6 7 8 9 | 20% o | f total cover | FACU FACU UPL FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody |
| 50% of total cover: 175 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrostichoides 2. Hammakis virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5 | 20% o | f total cover | FACU FACU UPL FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 50% of total cover: 17.5 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrosfichoides 2. Hammaleis virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5 6 7 8 9 | 10 5 5 2 | f total cover | FACU FACU UPL FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 |
| 50% of total cover: 175 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrostichoides 2. Hammakis virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5 | 20% o | f total cover | FACU FACU UPL FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 50% of total cover: 17.5 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrosfichoides 2. Hammaleis Virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5 6 7 8 9 10 11 50% of total cover: 11 | 20% o | f total cover | FACU FACU UPL FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 50% of total cover: 17.5 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrosfichoides 2. Hammaleis Virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5 6 7 8 9 10 11 50% of total cover: 11 | 20% o | f total cover | FACU FACU UPL FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 50% of total cover: 17.5 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrostichoides 2. Hummaleis virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5 | 20% o | f total cover | FACU FACU UPL FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 50% of total cover: 17.5 Herb Stratum (Plot size: 5 ft) 1. Polystichum acrostichoides 2. Hummaleis virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5 | 20% o | f total cover | FACU FACU UPL FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| Herb Stratum (Plot size: 5 ft) 1. Polystichum acrosfichoides 2. Hammaleis Virginiana 3. Viburnum acerifolium 4. Lindera Denzoin 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size: 30 ft) 1. Lonicera japonica 2. Smilax rotindifolia | 20% o 10 5 2 2 20% o | f total cover | FACU FACU UPL FAC FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| Herb Stratum (Plot size: 5 ft) 1. Polystichum acrosfichoides 2. Hammaleis Virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size: 30 ft) 1. Lonicera japonica 2. Smilax rotindifolia 3. | 20% o 10 5 2 2 20% o | f total cover | FACU FACU UPL FAC FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| Herb Stratum (Plot size: 5 ft) 1. Polystichum acrosfichoides 2. Hammaleis Virginiana 3. Viburnim acerifolium 4. Lindera Denzoin 5 | 20% o 10 5 2 2 20% o | f total cover | FACU FACU UPL FAC FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. |
| Herb Stratum (Plot size: 5 ft) 1. Polystichum acrosfichoides 2. Hammaleis Virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size: 30 ft) 1. Lonicera japonica 2. Smilax rotindifolia 3. | 20% o 10 5 2 22 20% o 5 5 5 7 8 9 10 10 10 10 10 10 10 10 10 | f total cover | FACU FACU UPL FAC FAC Ver FAC FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. |
| Herb Stratum (Plot size: 5 ft) 1. Polystichum acrostichoides 2. Hummaleis virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5 | 20% o 10 5 2 22 20% o 5 5 10 | f total cover | FACU FACU UPL FAC FAC Ver FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. |
| Herb Stratum (Plot size: 5 ft) 1. Polystichum acrosfichoides 2. Hammaleis Virginiana 3. Viburnim acerifolium 4. Lindera Denzoin 5 | 20% o 10 5 2 22 20% o 5 5 10 20% o | f total cover | FACU FACU UPL FAC FAC Ver FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. |
| Herb Stratum (Plot size: 5 ft) 1. Polystichum acrostichoides 2. Hummaleis virginiana 3. Viburnum acerifolium 4. Lindera benzoin 5 | 20% o 10 5 2 22 20% o 5 5 10 20% o | f total cover | FACU FACU UPL FAC FAC Ver FAC | Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. |

| 1 | | to the depti | | | | or confir | m the absence of indicators.) |
|-------------------|---|---------------|------------------------------|-----------------|----------------------|------------------|--|
| Depth (inches) | Matrix Color (moist) | | Redo Color (moist) | x Feature: % | SType ¹ _ | Loc ² | Texture Remarks |
| 0-3 | 10YR 3/2 | 100 | - | _ | | - | fine sondy loan |
| 3-15 | 10YR 3/4 | [00 | | | | - | Sandy loan |
| 15-20 | 10YR 3/6 | 100 | <u> </u> | | | _ | Sandy clay loam some gravel |
| 15 20 | 1011 7/8 | 100 | | | | | with the some graver |
| | | · | | | | | |
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| | | | | | | | |
| 1Typo: C-C | oncontration D. Don | lotion DM I | Dodugod Matrix MS | | | | 21 continue DI Dans Living M Matrix |
| Hydric Soil | oncentration, D=Dep Indicators: | ieuon, Rivi=i | Reduced Matrix, Mis | s=iviasked | i Sand Gra | ins. | ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : |
| Histosol | | | ■ Dark Surface | (S7) | | | 2 cm Muck (A10) (MLRA 147) |
| | pipedon (A2) | | Polyvalue Be | | | | |
| Black Hi | stic (A3) en Sulfide (A4) | | ☐ Thin Dark Su☐ Loamy Gleye | | | 47, 148) | (MLRA 147, 148) ☐ Piedmont Floodplain Soils (F19) |
| | Layers (A5) | | Depleted Mat | | · <i>)</i> | | (MLRA 136, 147) |
| | ıck (A10) (LRR N) | | Redox Dark | • | • | | ☐ Very Shallow Dark Surface (TF12) |
| | d Below Dark Surfact ark Surface (A12) | e (A11) | ☐ Depleted Dar ☐ Redox Depre | | | | ☐ Other (Explain in Remarks) |
| | /ucky Mineral (S1) (L | .RR N, | ☐ Iron-Mangan | | | .RR N, | |
| l — | A 147, 148) | | MLRA 130 | • | | | 2 |
| | Gleyed Matrix (S4) Redox (S5) | | Umbric Surfa Piedmont Flo | | | | ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, |
| | Matrix (S6) | | Red Parent N | • | | | 3 03 1 |
| | Layer (if observed): | | | | | | |
| Type: | NA NA | ********** | · | | | | |
| | ches): NA | | | | | | Hydric Soil Present? Yes No |
| Remarks: | Hydric Soils | cite | ria nat | Mot | | | |
| | rigoric seris | Citie | 200 100 | 1001. | | | |
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Non-water point nobul002 facing North



Non-water point nobul002 facing East



Non-water point nobul002 soil profile

| Project/Site: Atlantic Coast Pipeline | City | /County: Buckingham | | Sampling Date: 1/15/2015 | | | |
|--|-----------------------------------|--|----------------------|--------------------------------|--|--|--|
| Applicant/Owner: DOMINION | | | State: VA | Sampling Point: nobuc002 | | | |
| | | Section, Township, Range: No PLSS in this area | | | | | |
| Landform (hillslope, terrace, etc.): Hill Slope | | | | | | | |
| Subregion (LRR or MLRA): P | Lat: 37.45498389 | Long: -78.5 | 1105798 | Datum: WGS 1984 | | | |
| Soil Map Unit Name: Codorus-Hatboro com | plex, 0 to 3 percent slopes, free | quently flooded | NWI classifica | ation: PFO1A | | | |
| Are climatic / hydrologic conditions on the sit | te typical for this time of year? | Yes No (| If no, explain in Re | emarks.) | | | |
| Are Vegetation, Soil, or Hydr | rology significantly dist | urbed? Are "Normal | Circumstances" p | resent? Yes No | | | |
| Are Vegetation, Soil, or Hydr | | | | | | | |
| SUMMARY OF FINDINGS – Attac | | | | | | | |
| Hydrophytic Vegetation Present? | Yes ✓ No | | | | | | |
| | Yes No | Is the Sampled Area | V | No 🗸 | | | |
| | Yes No | within a Wetland? | Yes | NO | | | |
| Remarks: | | | | | | | |
| LIVERSLOOV | | | | | | | |
| HYDROLOGY | | | 0 | tone (orbital according to | | | |
| Wetland Hydrology Indicators: | Sand about all that and A | | | tors (minimum of two required) | | | |
| Primary Indicators (minimum of one is requ | | | Surface Soil (| | | | |
| Surface Water (A1) | True Aquatic Plants | | | etated Concave Surface (B8) | | | |
| High Water Table (A2) | Hydrogen Sulfide C | | Drainage Pat | | | | |
| Saturation (A3) Water Marks (B1) | Oxidized Kriizospri | | Moss Trim Li | Nater Table (C2) | | | |
| Sediment Deposits (B2) | | ion in Tilled Soils (C6) | Crayfish Burr | | | | |
| Drift Deposits (B3) | Thin Muck Surface | | | sible on Aerial Imagery (C9) | | | |
| Algal Mat or Crust (B4) | Other (Explain in R | | | ressed Plants (D1) | | | |
| Iron Deposits (B5) | | - · · · , | Geomorphic I | , , | | | |
| Inundation Visible on Aerial Imagery (E | B7) | | Shallow Aquit | | | | |
| Water-Stained Leaves (B9) | | | | phic 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): | | | | | | |
| | No V Depth (inches): | Wetland H | ydrology Presen | t? Yes No | | | |
| (includes capillary fringe) Describe Recorded Data (stream gauge, m | nonitoring well, aerial photos, p | revious inspections), if avai | ilable: | | | | |
| (3 3 7 | 3 / 1 /1 | , ,, | | | | | |
| Remarks: | | | | | | | |
| No wetland hydrology present | | | | | | | |
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VEGETATION (Four Strata) – Use scientific names of plants.

| /EGETATION (Four Strata) – Use scientific na | ames of | plants. | | Sampling Point: nobuc002 |
|--|---------------|-----------------|----------------|---|
| 22 | Absolute | Dominant | | Dominance Test worksheet: |
| <u>Tree Stratum</u> (Plot size:) 1. Quercus alba | % Cover 15 | Species? Yes | Status FACU | Number of Dominant Species That Are OBL, FACW, or FAC:3 (A) |
| 2. | | | | |
| 3 | | | | Total Number of Dominant Species Across All Strata: 4 (B) |
| 4 | | | | (S) |
| 5 | | | | Percent of Dominant Species That Are OBL FACW or FAC: 75 (A/B) |
| 6 | | | | That Are OBL, FACW, or FAC:(A/B) |
| 7. | | | | Prevalence Index worksheet: |
| 1 | 15 | = Total Cove | | Total % Cover of: Multiply by: |
| 50% of total cover: 7.5 | | total cover: | 3 | OBL species0 x 1 =0 |
| Sapling/Shrub Stratum (Plot size: 15) | 20 /0 01 | total cover. | | FACW species 60 x 2 = 120 |
| 1. Betula nigra | 60 | Yes | FACW | FAC species 40 x 3 = 120 |
| 2. Pinus echinata | 10 | No | | FACU species15 |
| 3 | | | | UPL species0 x 5 =0 |
| 4. | | | | Column Totals:115 (A)(B) |
| 5. | | | - | |
| 6 | | | | Prevalence Index = B/A = 2.6 |
| | - | | | Hydrophytic Vegetation Indicators: |
| 7 | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8 | | | | ✓ 2 - Dominance Test is >50% |
| 9 | 60 | | | ✓ 3 - Prevalence Index is ≤3.0 ¹ |
| 50% of total cover: 35 | | = Total Cover: | er 14 | 4 - Morphological Adaptations ¹ (Provide supporting |
| 50 % of total cover: | 20 /6 01 | lotal cover. | | data in Remarks or on a separate sheet) |
| Herb Stratum (Plot size: | 30 | Yes | FAC | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 2. Smilax rotundifolia | 10 | Yes | FAC | |
| | | | TAC | ¹ Indicators of hydric soil and wetland hydrology must |
| 3 | | | | be present, unless disturbed or problematic. |
| 4 | | . | | Definitions of Four Vegetation Strata: |
| 5 | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 6 | - | | | more in diameter at breast height (DBH), regardless of |
| 7 | | · —— | | height. |
| 8 | | | | Sapling/Shrub – Woody plants, excluding vines, less |
| 9 | | | | than 3 in. DBH and greater than or equal to 3.28 ft (1 |
| 10 | | | | m) tall. |
| 11 | | | | Herb – All herbaceous (non-woody) plants, regardless |
| | 40 | = Total Cove | er | of size, and woody plants less than 3.28 ft tall. |
| 50% of total cover: 20 | 20% of | total cover: | 8 | Woody vine – All woody vines greater than 3.28 ft in |
| Woody Vine Stratum (Plot size:) | | | | height. |
| 1 | | | | _ |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | Hydronbytio |
| 5 | | | | Hydrophytic Vegetation |
| | 0 | = Total Cove | er | Present? Yes No |
| 50% of total cover:0 | 20% of | total cover: | 0 | |
| Remarks: (Include photo numbers here or on a separate sl | neet.) | | | |
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Sampling Point: nobuc002

| Profile Desc | cription: (Describe t | o the depth | needed to document the indica | ntor or confirm | the absence | e of indicators.) | |
|-------------------|-----------------------------|-------------|--|----------------------------------|----------------------|--|--|
| Depth | Matrix | | Redox Features | 1 2 | | | |
| (inches) 0-3 | Color (moist) 2.5 YR 3/4 | 100 | Color (moist) | pe ¹ Loc ² | <u>Texture</u> SL | Remarks | |
| 3-6 | 2.5 YR 3/3 | 100 | | | SL | | |
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| | | | | | | | |
| | | etion, RM=F | Reduced Matrix, MS=Masked Sand | d Grains. | | PL=Pore Lining, M=Matrix. | |
| Hydric Soil | | | | | | ators for Problematic Hydric Soils ³ : | |
| Histosol | | | Dark Surface (S7) | | | 2 cm Muck (A10) (MLRA 147) | |
| | pipedon (A2) | | Polyvalue Below Surface (S | | 148) (| Coast Prairie Redox (A16) | |
| | istic (A3) | | Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) | | | | |
| | en Sulfide (A4) | | Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) | | | | |
| | d Layers (A5) | | Depleted Matrix (F3) | | | (MLRA 136, 147) | |
| | uck (A10) (LRR N) | | Redox Dark Surface (F6) | | | /ery Shallow Dark Surface (TF12) | |
| | d Below Dark Surface | e (A11) | Depleted Dark Surface (F7) | | — (| Other (Explain in Remarks) | |
| | ark Surface (A12) | 55 M | Redox Depressions (F8) | 10\ | | | |
| | Mucky Mineral (S1) (L | .KR N, | Iron-Manganese Masses (F | 12) (LRR N, | | | |
| | A 147, 148) | | MLRA 136) | A 400 400\ | 31 | dianta un af le caluma le cità con matatione a cal | |
| | Gleyed Matrix (S4) | | Umbric Surface (F13) (MLR. | | | dicators of hydrophytic vegetation and | |
| - | Redox (S5) | | Piedmont Floodplain Soils (F | | | etland hydrology must be present, | |
| | Matrix (S6) | | Red Parent Material (F21) (I | WILKA 127, 147) |) ur | nless disturbed or problematic. | |
| Type: Restrictive | Layer (if observed): | | | | | | |
| Depth (in | | | <u> </u> | | Hydric Soi | I Present? Yes No | |
| Remarks: | · | | | | | | |
| No hydric soi | I present | | | | | | |
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Photo 1 Non-water point nobuc002 facing north



Photo 2 Non-water point nobuc002 facing east



Photo 3 Non-water point nobuc002 facing south



Photo 4
Non-water point nobuc002 facing west

| Project/Site: ACP | city/county: Buckinghan | Sampling Date: 8/7/2015 | | |
|---|-------------------------------------|--|--|--|
| Applicant/Owner: Vaminian | | State: VA Sampling Point Naby 001 | | |
| Investigator(s): Robert Turnbull (ESI) | Section Township Range: | NA | | |
| Landform (hillslope, terrace, etc.): Flood Plain Lo | ocal relief (concave, convex, non | e): Concave Slope (%): 1-4 | | |
| Subregion (LRR or MLRA): LRR P Lat: 37, 44 62 | 8 Long: - 78 | 5, 49888 Datum: WGS 84 | | |
| Soil Map Unit Name: Halifax-pelanco Complex 2-71. Stores, Farely | flooded | 11 | | |
| Are climatic / hydrologic conditions on the site typical for this time of y | | | | |
| Are Vegetation, Soil, or Hydrology significantly | | | | |
| • | | Circumstances" present? Yes X No | | |
| Are Vegetation, Soil, or Hydrology naturally pr | oblematic? (If needed, ex | xplain any answers in Remarks.) | | |
| SUMMARY OF FINDINGS – Attach site map showing | g sampling point locatio | ns, transects, important features, etc. | | |
| Hydrophytic Vegetation Present? Yes NoX | - Is the Sampled Area | | | |
| Hydric Soil Present? Yes No_X | within a Wetland? | Yes No X | | |
| Wetland Hydrology Present? Yes No _X | _ | | | |
| Remarks: | | , | | |
| | | | | |
| HYDROLOGY | | | | |
| Wetland Hydrology Indicators: | | Secondary Indicators (minimum of two required) | | |
| Primary Indicators (minimum of one is required; check all that apply | <u>,</u> | Surface Soil Cracks (B6) | | |
| Surface Water (A1) True Aquatic 1 | | Sparsely Vegetated Concave Surface (B8) | | |
| High Water Table (A2) Hydrogen Sul | | Drainage Patterns (B10) | | |
| | ospheres on Living Roots (C3) | | | |
| Water Marks (B1) Presence of F | | Dry-Season Water Table (C2) | | |
| | eduction in Tilled Soils (C6) | Crayfish Burrows (C8) | | |
| Drift Deposits (B3) Thin Muck Su | • • | Saturation Visible on Aerial Imagery (C9) | | |
| Algal Mat or Crust (B4) Other (Explain | n 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 _X Depth (inche | es): <u>0</u> | | | |
| Water Table Present? Yes No _X Depth (inche | es):>20 | | | |
| Saturation Present? Yes No X Depth (inche | ~^n | Hydrology Present? Yes No X | | |
| (includes capillary fringe) | | | | |
| Describe Recorded Data (stream gauge, monitoring well, aerial pho | itos, previous inspections), if ava | ailable: | | |
| | | | | |
| Remarks: | | | | |
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| Tree Stratum (Plot size: 30 X 30 A) | Absolute | Dominant | | Dominance Test worksheet: |
|--|----------------|--|----------------------|---|
| 1. A Cer rubrum | % Cover H O | Species? | Status FAC | Number of Dominant Species That Are OBL, FACW, or FAC: (A) |
| 2. Juniperus virginiana | | Ÿ | FACU | matrie obt. Thou, of the. |
| 3 | | | | Total Number of Dominant Species Across Ali Strata: (B) |
| 5 | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 37.5% (A/B) |
| 6 | 70 | = Total Cov | | Prevalence Index worksheet: |
| 76 | | | | Total % Cover of:Multiply by: |
| Sapling Stratum (Plot size: 30 x 30 ft) | 20% of | f total cover: | <u> </u> | OBL species x 1 = |
| 1. Juniperus Virginiana | გი | Y | SACIA | FACW species x 2 = |
| 2. Liriodendron talipifera | 20 20 | - | Acti | FAC species 120 x3=366 |
| | | | INCO | FACU species 120 x4= 480 |
| 4 | | | | UPL species x 5 = |
| 5 | | | | Column Totals: <u>240</u> (A) <u>840</u> (B) |
| 6 | | | | Prevalence Index = B/A = 3.5 |
| 0.5 | <u> </u> | = Total Cov | α | Hydrophytic Vegetation Indicators: |
| Shrub Stratum (Plot size: 30×30 FF) | <u>′</u> 20% ó | f total cover: | <u> </u> | 1 - Rapid Test for Hydrophytic Vegetation |
| Shrub Stratum (Plot size: 30x30++) | 20 | \mu | | 2 - Dominance Test is >50% |
| 1. Liguidambar styraciflua | <u>30</u> | - - L | FAC | 3 - Prevalence Index is ≤3.01 |
| 2 Cornns Florida | | | FACU | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) |
| 3 | | | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 4. 5. | | | | |
| 6 | | | . —— | ¹ Indicators of hydric soil and wetland hydrology must |
| | 30 | = Total Cov | er | be present, unless disturbed or problematic. |
| 50% of total cover: [5 | | of total cover | 1 | Definitions of Five Vegetation Strata: |
| Herb Stratum (Plot size: 30 X 30ft) 1. Polystichum acrostichoides | . 10 | _ | FACU | Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). |
| 2 | | | | |
| 3 | | | | Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. |
| 5 | | | | Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. |
| 6 | | | | |
| 8 | - | | | Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 10 | | | | Woody vine - All woody vines, regardless of height. |
| 11, | 40 | <u> </u> | | Troony Time - All Woody Wiles, regardless of Height. |
| | | | | |
| 50% of total cover: 20 | 20% | of total cove | r: <u> 8 </u> | . \ |
| Woody Vine Stratum (Plot size: 30 × 30 ft.) | / ^ | 1/ | . ب | • |
| 1. Lonicera japonica | | | | |
| 2 | | | | |
| 3 | | | | • |
| 4 | | | | • |
| J | - 60 | = Total Co | | Hydrophytic |
| 3/ | | _ | | Vegetation Present? Yes No |
| 50% of total cover: 30 | | ot total cove | er: <u> </u> | - |
| Remarks: (Include photo numbers here or on a separate | sneet.) | | | |

| Profile Description: (Describe to the depth needed to document the indicate | or or confirm the absence of indicators.) |
|---|---|
| DepthMatrix Redox Features | |
| (inches) Color (moist) % Color (moist) % Type | |
| D-6 104R 4/3 100 | fine sand |
| 6-20 104R 5/4 100 | fine Sand |
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| ¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand | Grains. ² Location: PL=Pore Lining, M=Matrix. |
| Hydric Soil Indicators: | Indicators for Problematic Hydric Soils ³ : |
| Histosol (A1) Dark Surface (S7) | 2 cm Muck (A10) (MLRA 147) |
| Histic Epipedon (A2) Polyvalue Below Surface (S8) | |
| Black Histic (A3) Thin Dark Surface (S9) (MLR | A 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) Thick Dark Surface (A12) Redox Depressions (F8) | Other (Explain in Remarks) |
| Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F1) | 2) (I RR N |
| MLRA 147, 148) MLRA 136) | -/ (=:::::::::::::::::::::::::::::::::::: |
| Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA | a 136, 122) ³ Indicators of hydrophytic vegetation and |
| Sandy Redox (S5) Piedmont Floodplain Soils (F | |
| Stripped Matrix (S6) Red Parent Material (F21) (M | |
| Restrictive Layer (if observed): | |
| Type: | |
| Depth (inches): | Hydric Soil Present? Yes No X |
| Remarks: | |
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Environmental Field Surveys Non-Water Photo Page



Non-water point nobup001 facing northeast. (NWI, not a wetland)



Non-water point nobup001 facing southwest. (NWI, not a wetland)

| Project/Site: Atlantic Coast Pi | peline | City/C | ounty: Buckingham | | Sampling Date: 10/23/2014 |
|---|-----------------------|---|-----------------------------|---------------------|---|
| Applicant/Owner: Dominion | | | , | | Sampling Point: nobua002 |
| Investigator(s): GB, TP | | Section | on, Township, Range: No | | |
| Landform (hillslope, terrace, et | | | | | |
| Candioini (illisiope, terrace, e | | | er (concave, convex, non | .8028441 | Slope (%) WGS 1984 |
| Subregion (LRR or MLRA): 1 | Hathara aamalay | O to 2 paraget alapse from | Long: | 0020441 | Datum: WGS 1984 ation: PFO1A |
| | | | | | |
| Are climatic / hydrologic condit | ions on the site typi | ical for this time of year? Y | es No (| If no, explain in R | emarks.) |
| Are Vegetation, Soil | , or Hydrology | significantly distur | bed? Are "Normal | Circumstances" p | resent? Yes No |
| Are Vegetation, Soil | , or Hydrology | naturally problema | atic? (If needed, ex | xplain any answe | rs in Remarks.) |
| SUMMARY OF FINDIN | GS – Attach si | te map showing sam | pling point locatio | ns, transects | , important features, etc. |
| Hydrophytic Vegetation Pres | ent? Ves | ✓ No | | | |
| Hydric Soil Present? | Yes | No V | Is the Sampled Area | ., | 🗸 |
| Wetland Hydrology Present? | Yes | No 🗸 | within a Wetland? | Yes | No |
| Remarks: | | | | | |
| Upland data point taken on th | e neceptain of bish | op Greek within a twent i e | y polygon within contact C | or Access Noad 4 | T . |
| HYDROLOGY | | | | | |
| Wetland Hydrology Indicat | | | | | tors (minimum of two required) |
| Primary Indicators (minimum | of one is required; | | | Surface Soil | , , |
| Surface Water (A1) | | True Aquatic Plants (| | | getated Concave Surface (B8) |
| High Water Table (A2) | | Hydrogen Sulfide Odd | | Drainage Pa | |
| Saturation (A3) | | Oxidized Rhizosphere | | Moss Trim Li | |
| Water Marks (B1) | | Presence of Reduced | | | Water Table (C2) |
| Sediment Deposits (B2) | | Recent Iron Reductio | | Crayfish Buri | |
| Drift Deposits (B3) Algal Mat or Crust (B4) | | Thin Muck Surface (C Other (Explain in Ren | | | sible on Aerial Imagery (C9) tressed Plants (D1) |
| Iron Deposits (B5) | | Other (Explain in Ken | iaiks) | Geomorphic | |
| Inundation Visible on Ae | rial Imagery (B7) | | | Shallow Aqui | |
| Water-Stained Leaves (I | • • • • | | | | phic Relief (D4) |
| Aquatic Fauna (B13) | | | | FAC-Neutral | • |
| Field Observations: | | | | | |
| Surface Water Present? | Yes No | Depth (inches): | | | |
| Water Table Present? | | Depth (inches): | | | |
| Saturation Present? | | Depth (inches): | | vdrology Presen | t? Yes No |
| (includes capillary fringe) | | | | | |
| Describe Recorded Data (str | eam gauge, monito | ring well, aerial photos, pre | vious inspections), if avai | lable: | |
| Remarks: | | | | | |
| no hydrology indicators prese | ent . | | | | |
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| Sampling Point Hobbado | Sampling | Point: nobua002 |
|------------------------|----------|-----------------|
|------------------------|----------|-----------------|

| 00 | Absolute | Dominant In | | Dominance Test worksheet: |
|--|------------|-------------------------------|----------------|---|
| <u>Tree Stratum</u> (Plot size:) 1. Liriodendron tulipifera | % Cover 30 | Species? Yes | Status FACU | Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A) |
| 2. Platanus occidentalis | 15 | Yes | FACW | |
| 3. Liquidambar styraciflua | 15 | Yes | FAC | Total Number of Dominant Species Across All Strata: 9 (B) |
| 4. Ulmus rubra | 5 | No | FAC | Species Across All Strata:9 (B) |
| 5. Juniperus virginiana | | No | FACU | Percent of Dominant Species |
| | | | | That Are OBL, FACW, or FAC: |
| 6 | | | | Prevalence Index worksheet: |
| 7 | 70 | | | Total % Cover of: Multiply by: |
| 25 | | = Total Cover | 14 | OBL species 0 $x = 0$ |
| 50% of total cover: 35 | 20% of | total cover: | | FACW species 19 |
| Sapiing/Snrub Stratum (Plot size:) | 05 | V | E40 | . 00 270 |
| 1. Lindera benzoin | 25 | Yes | FAC | FAC species x 3 = |
| 2. autumn olive | 10 | No | | FACU species X 4 = |
| 3. Asimina triloba | 8 | No | FAC | UPL species X 5 = |
| 4. Corylus americana | 7 | No | FACU | Column Totals: (A) (B) |
| 5. Cornus florida | 5 | No | FACU | Prevalence Index = B/A = 3.24 |
| 6. Acer rubrum | 5 | No | FAC | 1 Tevalence mack = B/TC = |
| 7 | | | | Hydrophytic Vegetation Indicators: |
| | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8 | | | | 2 - Dominance Test is >50% |
| 9 | 50 | T-1-1-0 | | 3 - Prevalence Index is ≤3.0 ¹ |
| 50% of total cover: 30 | | = Total Cover total cover: | 12 | 4 - Morphological Adaptations ¹ (Provide supporting |
| E | 20% 01 | iolai cover | | data in Remarks or on a separate sheet) |
| Herb Stratum (Plot size: 5) 1. Polystichum acrostichoides | 10 | Yes | FACU | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 2. Microstegium vimineum | 7 | Yes | FAC | |
| 3. Luzula multiflora | 3 | No | FACU | ¹ Indicators of hydric soil and wetland hydrology must |
| 4. Elymus virginicus | 2 | No | FACW | be present, unless disturbed or problematic. |
| 5. Arundinaria tecta | 2 | No | FACW | Definitions of Four Vegetation Strata: |
| | | | 17.011 | 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 |
| | 24 | = Total Cover | | of size, and woody plants less than 3.28 ft tall. |
| 50% of total cover: 12 | 20% of | total cover: | 4.8 | Woody vine – All woody vines greater than 3.28 ft in |
| Woody Vine Stratum (Plot size:) | | | | height. |
| 1. Lonicera japonica | 12 | Yes | FAC | |
| 2. Smilax rotundifolia | 8 | Yes | FAC | |
| 3. Campsis radicans | 5 | Yes | FAC | |
| 4. | | | | |
| 5. | | | | Hydrophytic Vegetation |
| <u>. </u> | 25 | = Total Cover | | Present? Yes No |
| 50% of total cover:12.5 | | total cover: | 5 | |
| Remarks: (Include photo numbers here or on a separate si | | 10101 00 101 | | |
| remarks. (include prioto numbers here of off a separate si | neet.) | | | |
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Sampling Point: nobua002

SOIL

| Depth | Matrix | | Redox Features | | _ | |
|-----------|------------------------------------|----------------|---|------------------------|---|----------------------|
| nches) | Color (moist) | <u>%</u> | Color (moist) % Type ¹ | Loc ² Textu | | emarks |
| 0-5 | 10YR 3/3 | 100 | | SIC | <u> </u> | |
| 5-14 | 10YR 3/2 | 100 | | SIC | L | |
| 5-20 | 10YR 3/1 | 100 | | SIC | | |
| | - | | | | | |
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| | | | | 2, | | |
| | Concentration, D=Dep I Indicators: | oletion, RM=Re | educed Matrix, MS=Masked Sand Grain | | on: PL=Pore Lining, M Indicators for Probler | |
| - | | | D 1 0 ((OT) | | | |
| _ Histoso | | | Dark Surface (S7) | DA 447 440\ | 2 cm Muck (A10) (| |
| | Epipedon (A2) Histic (A3) | | Polyvalue Below Surface (S8) (MLThin Dark Surface (S9) (MLRA 14) | | Coast Prairie Redo | |
| | gen Sulfide (A4) | | Loamy Gleyed Matrix (F2) | 7, 140) | (MLRA 147, 148 Piedmont Floodpla | |
| | ed Layers (A5) | | Depleted Matrix (F3) | | (MLRA 136, 147 | |
| | fuck (A10) (LRR N) | | Redox Dark Surface (F6) | | Very Shallow Dark | |
| | ed Below Dark Surfac | ce (A11) | Depleted Dark Surface (F7) | • | Other (Explain in F | |
| | Dark Surface (A12) | , | Redox Depressions (F8) | • | \ ' | , |
| | Mucky Mineral (S1) (| LRR N, | Iron-Manganese Masses (F12) (LF | RR N, | | |
| | RA 147, 148) | | MLRA 136) | | | |
| Sandy | Gleyed Matrix (S4) | | Umbric Surface (F13) (MLRA 136, | 122) | ³ Indicators of hydropl | hytic vegetation and |
| Sandy | Redox (S5) | | Piedmont Floodplain Soils (F19) (N | /ILRA 148) | wetland hydrology r | nust be present, |
| _ Strippe | ed Matrix (S6) | | Red Parent Material (F21) (MLRA | 127, 147) | unless disturbed or | problematic. |
| | Layer (if observed) | : | | | | |
| Type: n | one | | _ | | | |
| Depth (ii | nches): | | <u>_</u> | Hydrid | Soil Present? Yes | s No 🖍 |
| emarks: | | | | l l | | |
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Photo 1 non-water point nobua002 facing north



Non-water point NOBUA001 facing northwest

| Project/Site: Southeast Reliability Project | City/County: NA/Cumberland Sampling Date: 07/22/14 |
|---|--|
| Applicant/Owner: Dominion | State: VA Sampling Point: nocuk001 |
| Investigator(s): W. Medlin, J. Sweitzer | _ Section, Township, Range: NA |
| Landform (hillslope, terrace, etc.): low upland slope | Local relief (concave, convex, none): concave Slope (%): 1-2 |
| Subregion (LRR or MLRA): LRR P Lat: 37.379123 | |
| Soil Map Unit Name: Brickhaven-Creedmoor complex, 7 to | 15 percent slopes NWI classification: NA |
| 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 | tly disturbed? Are "Normal Circumstances" present? Yes No |
| Are Vegetation, Soil, or Hydrology naturally p | problematic? (If needed, explain any answers in Remarks.) |
| | |
| SUMMARY OF FINDINGS – Attach site map showir | ng sampling point locations, transects, important features, etc. |
| Hydrophytic Vegetation Present? Yes No | la the Counted Area |
| Hydric Soil Present? Yes No. ✓ | Is the Sampled Area within a Wetland? Yes No |
| Wetland Hydrology Present? Yes ✓ No | † ······· |
| Remarks: | <u>r</u> |
| This area appears to be a headwater forested epheme | eral system that becomes a narrow, linear ephemeral ditch feature |
| | d drainage patterns were observed in this area. However, hydric |
| soils are not present. All three criteria are not met. Are | a is not a wetland. |
| *Photos 100-0126 to 0130 | |
| HYDROLOGY | |
| | Secondary Indicators (minimum of two required) |
| Wetland Hydrology Indicators: | Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) |
| Primary Indicators (minimum of one is required; check all that apply | |
| Surface Water (A1) True Aquatic High Water Table (A2) Hydrogen Su | Plants (B14) |
| | zospheres on Living Roots (C3) Moss Trim Lines (B16) |
| I — | Reduced Iron (C4) Dry-Season Water Table (C2) |
| | Reduction in Tilled Soils (C6) Crayfish Burrows (C8) |
| ☑ Drift Deposits (B3) ☐ Thin Muck St | |
| l | in 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: | NIA |
| Surface Water Present? Yes No Depth (inche | |
| Water Table Present? Yes No Depth (inche | · ··· / |
| Saturation Present? Yes No Depth (inche (includes capillary fringe) | es): NA Wetland Hydrology Present? Yes V No V |
| Describe Recorded Data (stream gauge, monitoring well, aerial pho | otos, previous inspections), if available: |
| NA | |
| Remarks: | |
| Hydrology criteria met. | |
| , 3, | |
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VEGETATION (Five Strata) – Use scientific names of plants.

| /EGETATION (Five Strata) – Use scientific na | ames of | olants. | | Sampling Point: nocuk001 |
|---|----------|--------------|------|---|
| 00 (1 - 1 | Absolute | Dominant | | Dominance Test worksheet: |
| <u>Tree Stratum</u> (Plot size: 30 ft radius | | Species? | | Number of Dominant Species |
| 1. Fraxinus pennsylvanica | 40 | <u>Y</u> | FACW | That Are OBL, FACW, or FAC: 7 (A) |
| 2. Juniperus virginiana | 15 | Υ | FACU | Total Number of Dominant |
| 3. Quercus alba | 5 | | FACU | Species Across All Strata: 8 (B) |
| 4 | | | | |
| 5. | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 88 (A/B) |
| 6 | | | | That Are OBE, I ACW, OF I AC. |
| <u> </u> | 60 | = Total Cov | er | Prevalence Index worksheet: |
| 4 | | | | Total % Cover of: Multiply by: |
| 50% of total cover: 30 | 20% of | total cover: | 12 | OBL species 10 x 1 = 10 |
| Sapling Stratum (Plot size: 15 ft radius | | | | FACW species 185 x 2 = 370 |
| 1. Fraxinus pennsylvanica | 85 | <u>Y</u> | FACW | FAC species 85 $\times 3 = 255$ |
| 2. Acer rubrum | 20 | | FAC | FACU species 25 x 4 = 100 |
| 3. Diospyros virginiana | 10 | | FAC | |
| 4 | | | | |
| 5 | | | | Column Totals: <u>305</u> (A) <u>735</u> (B) |
| 6. | | | | Prevalence Index = B/A = 2.41 |
| | 115 | = Total Cov | er | Hydrophytic Vegetation Indicators: |
| | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 50% of total cover: <u>57.5</u> | 20% of | total cover: | 23 | |
| Shrub Stratum (Plot size: 15 ft radius | | | | 2 - Dominance Test is >50% |
| 1. Acer rubrum | 25 | Y | FAC | 3 - Prevalence Index is ≤3.0 ¹ |
| 2. Carya tomentosa | 5 | | NI | 4 - Morphological Adaptations (Provide supporting |
| 3. Ulmus rubra | 10 | Υ | FAC | data in Remarks or on a separate sheet) |
| 4 | | | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 5 | | | | |
| 6 | | | | ¹ Indicators of hydric soil and wetland hydrology must |
| <u>. </u> | 40 | = Total Cov | | be present, unless disturbed or problematic. |
| 00 | | | | Definitions of Five Vegetation Strata: |
| | 20% of | total cover: | 8 | Tree – Woody plants, excluding woody vines, |
| Herb Stratum (Plot size: 10 ft radius) | | | | approximately 20 ft (6 m) or more in height and 3 in. |
| 1. Microstegium vimineum | 5 | | FAC | (7.6 cm) or larger in diameter at breast height (DBH). |
| 2. Lycopus americanus | 10 | | OBL | Sapling – Woody plants, excluding woody vines, |
| 3. Ligustrum sinense | 5 | | FACU | approximately 20 ft (6 m) or more in height and less |
| 4. Boehmeria cylindrica | 60 | Υ | FACW | than 3 in. (7.6 cm) DBH. |
| 5 | | | | Shrub – Woody plants, excluding woody vines, |
| | | | | approximately 3 to 20 ft (1 to 6 m) in height. |
| 6 | | | - | |
| 7 | | | | Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody |
| 8 | | | | plants, except woody vines, less than approximately 3 |
| 9 | | | | ft (1 m) in height. |
| 10 | | | | Woody vine – All woody vines, regardless of height. |
| 11 | | | | Woody vine - All Woody vines, regardless of height. |
| | 80 | = Total Cov | er | |
| 50% of total cover: 40 | 20% of | total cover: | 16 | |
| Woody Vine Stratum (Plot size: 15 ft radius) | | | | |
| 1. Lonicera japonica | 5 | Υ | FAC | |
| 2. Toxicodendron radicans | 10 | Y | FAC | |
| | | <u> </u> | 170 | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | Hydrophytic |
| | 15 | = Total Cov | er | Vegetation |
| 50% of total cover: <u>7.5</u> | 20% of | total cover: | 3 | Present? Yes V No No |
| Remarks: (Include photo numbers here or on a separate s | | | | |
| Hydrophytic vegetation criteria met. | / | | | |

Sampling Point: nocuk001

| Depth | Matrix | % | Redo | x Feature | S1 | Loc ² | Tautuma | Domonico |
|--|---------------------------|--------------|---|---|--|------------------|--------------------------|--|
| (inches) 0-8 | Color (moist) 10YR 6/3 | | Color (moist) | % | Type ¹ | LOC | Texture SCL | Remarks silty clay loam; friable and dry |
| | | | 10) (5, 1/0 | | | | | _ |
| 8-20 | 10YR 6/4 | 95 | 10YR 4/6 | 5 | <u>C</u> | <u>M</u> | SCL | friable and dry |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Typo: C-Co | ancontration D. Do | unlation DM | =Reduced Matrix, M | - Mackey | d Sand Cr | | ² Location: F | PL=Pore Lining, M=Matrix. |
| lydric Soil I | | piedon, Riv | i=Reduced Matrix, M. | S=IVIasket | J Sanu Gr | allis. | | ators for Problematic Hydric Soils ³ : |
| Black His Hydroge Stratified 2 cm Mu Depleted Thick Da Sandy M | ipedon (A2) | | Dark Surface Polyvalue Be Thin Dark Su Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre | elow Surfa urface (S9 ed Matrix (trix (F3) Surface (I rk Surface essions (F esse Mass |) (MLRA 1 (F2) =6) e (F7) (8) | 47, 148) | 148) | 2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16) (MLRA 147, 148) Piedmont Floodplain Soils (F19) (MLRA 136, 147) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) |
| | leyed Matrix (S4) | | Umbric Surfa | | (MI DΔ 13 | 6 122) | 3Inc | dicators of hydrophytic vegetation and |
| | edox (S5) | | Piedmont Flo | | | | | etland hydrology must be present, |
| - | Matrix (S6) | | Red Parent I | | | | | nless disturbed or problematic. |
| Restrictive L | ayer (if observed |): | | | | | | |
| Type: NA | \ | | | | | | | |
| Depth (inc | hes): NA | | | | | | Hydric Soi | I Present? Yes No |
| Remarks: Hy | dric soils criter | ria is not ı | met. | | | | | |
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Non-water data point nocuk001 facing Southwest



Non-water data point nocuk001 soils

| Project/Site: SE Reliability Project City/County: NA/Cumberland Sampling Date: 68/05/2014 Applicant/Owner: Dominion Transmission State: VA Sampling Point: NOCUKOO3 Investigator(s): W. Medlin, J. Dean Section, Township, Range: NA Landform (hillslope, terrace, etc.): bottomand Local relief (concave, convex, none): Flast Slope (%): NA Subregion (LRR or MLRA): LRR P Lat: 37, 344891138 Long: 78:343621461 Datum: NAD 1983 Soil Map Unit Name: Chewada and Manacan Soils, 0 to 2% slages, Freq. Flooded 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 (If needed, explain any answers in Remarks.) |
|--|
| SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Wetland Hydrology Present? Remarks: This area is a bottomland HW forest with the floodplain of Green Creek. The area is mapped with a NWI polygon layer, but does not meet all 3 Criteria for it to be considered a Wetland. Area is not a wetland. |
| PHOTOS \$100-0535 to 0539 Soils, N.E.S.W (WLM camera) |
| HYDROLOGY |
| Wetland Hydrology Indicators: 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 (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) Inundation Visible on Aerial Imagery (B7) Geomorphic Position (D2) Water-Stained Leaves (B9) Microtopographic Relief (D4) Aquatic Fauna (B13) FAC-Neutral Test (D5) |
| Field Observations: Surface Water Present? Yes No Depth (inches): NA Water Table Present? Yes No Depth (inches): NA Saturation Present? Yes No Depth (inches): NA Wetland Hydrology Present? Yes No Depth (inches): NA Remarks: Hydrology Criteria is Met. |
| |

| VEGETATION (Five Strata) – Use scientific names of plants | VEG | ETATION | (Five Strata) | - Use | scientific | names of | plants |
|---|-----|----------------|---------------|-------|------------|----------|--------|
|---|-----|----------------|---------------|-------|------------|----------|--------|

| | Absolute | Dominant | Indicator | Dominance Test worksheet; |
|---|---|---|---|--|
| Tree Stratum (Plot size: 36 Ft) | | Species? | | Manufacture (Parada and Constitute |
| 1. Arex cubrum | 60 | · Y | FAC | That Are OBL, FACW, or FAC: (A) |
| 2. Liquidanbar styraciflus | 20 | | FAC | |
| 3. Playanus oxcidentalis | | | FACW | Total Number of Dominant |
| 3. Trodulus Occobalians | | | - Frico | Species Across All Strata: (B) |
| 4. Primus serotina | | | FACU | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC: (A/B) |
| 6 | | | | |
| | 115 | = Total Co | ver | Prevalence Index worksheet: |
| 50% of total cover: <u>57.5</u> | | | | Total % Cover of: Multiply by: |
| | 20% 01 | total covei | : | OBL species 2 x1 = 2 |
| Sapling Stratum (Plot size: 15 Ft) | an area | | | FACW species $52 \times 2 = 104$ |
| 1. Betula Nigra | 25_ | | FACW | FAC species 355 x3 = 1065 |
| 1. Betula Nigra 2. Liquidanbar Styraciflaa | 25 | <u> </u> | FAC | FACU species 35 x 4 = 140 |
| 3. Acer Fubrum | 30 | Y | FAC | |
| 4 | | | | UPL species O x 5 = O |
| 5 | | | | Column Totals: 444 (A) 1311 (B) |
| | | | | 2.95 |
| 6 | 400 | | - | Prevalence Index = B/A = 2.95 |
| | | = Total Co | | Hydrophytic Vegetation Indicators: |
| 50% of total cover: 40 | 20% of | total cover | : <u> 16</u> | 1 - Rapid Test for Hydrophytic Vegetation |
| Shruh Stratum (Plot size: 15 Ct | | | | 2 Dominance Test is >50% |
| 1. Lindera benzoin | 55 | Y | FAC | 3 - Prevalence Index is ≤3.0¹ |
| a C la c and c | | | EAC 1 | 4 - Morphological Adaptations ¹ (Provide supporting |
| 2. Rubus argutus | | | | data in Remarks or on a separate sheet) |
| 3 | | | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 4, | | | | - Troblemane Trysrophytic Vegetation (Explain) |
| 5 | | | | 1 |
| 6 | | | | ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| | 6.5 | = Total Co | ·· —— | I |
| ~2.7 | | | | Definitions of Five Vegetation Strata: |
| 50% of total cover: 32. | <u>3</u> 20% of | total cover | 15_ | Tree – Woody plants, excluding woody vines, |
| Herb Stratum (Plot size: 10 f-t) | | 4 | .v29** | approximately 20 ft (6 m) or more in height and 3 in. |
| 1. Microstegium Vimineum | <u> 80</u> | <u> </u> | <u>FAC</u> | (7.6 cm) or larger in diameter at breast height (DBH). |
| 2. Boehneria cylindrica | < | | FACW | Sapling – Woody plants, excluding woody vines, |
| | 1,000 | | | 3apinig – woody plants, excluding woody vines, |
| 3 Persicacia pensulvanea | - | | | approximately 20 ft (6 m) or more in height and less |
| 3. Persicaria persylvanica | 5 | | FACW | approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. |
| 3. Persicaria pensylvanica 4. Polystichum accostichoides | <u>5</u> | | FACU FACU | than 3 in. (7.6 cm) DBH. |
| 3. Persicaria pensylvanica 4. Polystichum acrostichoirles 5. Dicharthelium elandestinum | <u> </u> | | FACU FACU FAC | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, |
| 3. Persicaria pensylvanica 4. Polystichum acrostichoides 5. Dicharthelium clandestinum 6. Persicaria Sagittata | 5 5 5 | | FACU FACU FAC OBL | than 3 in. (7.6 cm) DBH. |
| 3. Persicaria pensylvanica 4. Polystichum acrostichoirles 5. Dicharthelium elandestinum | 5 5 5 | | FACU FACU FAC OBL | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, |
| 3. Persicaria pensylvanica 4. Polystichum acrostichoirles 5. Dicharthelium clandestimm 6. Persicaria Sayittata 7. Entrychium Fistulosum | 5 5 8 | | FACW FACU FAC OBL FACW | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody |
| 3. Persicaria pensylvanica 4. PolyStichum acrostichoides 5. Dicharthelium elandestinum 6. Persicaria Sagittata 7. Entrychium Fistulosum 8. Entrochium | 5 5 5 2 | | FACW FACU FAC OBL FACW | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 |
| 3. Persicaria pensylvanica 4. Polystichum acrostichoires 5. Dicharthelium clandestinum 6. Persicaria Sagittatu 7. Entrychium Fistulosum 8. Entrochium 9. | 5 5 5 2 | | FACW FACU FAC OBL FACW | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody |
| 3. Persicaria persylvanica 4. Polystichum acrostichoides 5. Dicharthelium etandestimm 6. Persicaria Sagittata 7. Entrychium Fistulosum 8. Eutrochium 9 | 5 5 5 2 | | FACW FACU FAC OBL FACW | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 3. Persicaria persylvanica 4. Polystichum acrostichoires 5. Dicharthelium clandestinum 6. Persicaria Sagittatu 7. Entrychium Fistulosum 8. Entrochium 9. | 5 5 2 2 | | FACU FACU OBL FACW | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 |
| 3. Persicaria persylvanica 4. PolyStichum acrostichoides 5. Dicharthelium elandestinum 6. Persicaria Sagittatu 7. Entrychium Fistulosum 8. Entrochium 9. 10. | 5 5 2 2 | = Total Co | FACW FACU OBL FACW | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 3. Persicaria persylvanica 4. PolyStichum acrostichoides 5. Dicharthelium elandestinum 6. Persicaria Sagittatu 7. Entrychium Fistulosum 8. Entrochium 9. 10. | 5 5 2 2 | = Total Co | FACW FACU OBL FACW | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 3. Persicaria persylvanica 4. Polystichum acrostichoires 5. Dicharthelium etandestinum 6. Persicaria Sayittatu 7. Entrychium Fistulosum 8. Entrochium 9. 10. 11. | 5 5 2 2 | = Total Co | FACW FACU OBL FACW | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 3. Persicaria persylvanica 4. PolyStichum acrostichoires 5. Dicharthelium clandestimm 6. Persicaria Sayittatu 7. Entrychium Fistulosum 8. Entrochium 9. 10. 11. 50% of total cover: 52 Woody Vine Stratum (Plot size: 30 Fit | 5 5 2 2 2 20% of | = Total Co | FACU FACU FAC OBL FACW FACW | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 3. Persicaria persylvanica 4. PolyStichum acrostichoides 5. Dicharthelium elandestimm 6. Persicaria Sagittatu 7. Entrychium Fistulosum 8. Entrochium 9. 10. 11. 50% of total cover: 52 Woody Vine Stratum (Plot size: 30 Fit) 1. Lonicera japanica | 5 5 2 2 2 20% of | = Total Co | FACW FACU OBL FACW | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 3. Persicaria persylvanica 4. Polystichum acrostichoires 5. Dicharthelium clandestimm 6. Persicaria Sayittatu 7. Entrychium Fistulosum 8. Entrochium 9. 10. 11. 50% of total cover: \$2 Woody Vine Stratum (Plot size: 30 Fit) 1. Lanicera japanica 2. Toxicodendron radicans | 5 5 2 2 20% of 55 2.5 | = Total Core | FACU FACU FAC OBL FACW FAC FAC FAC | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 3. Persicaria persylvanica 4. PolyStichum acrostichoides 5. Dicharthelium elandestimm 6. Persicaria Sagittatu 7. Entrychium Fistulosum 8. Entrochium 9. 10. 11. 50% of total cover: 52 Woody Vine Stratum (Plot size: 30 Fit) 1. Lonicera japanica | 5 5 2 2 20% of 55 2.5 | = Total Core | FACU FACU FAC OBL FACW FAC FAC FAC | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 3. Persicaria persylvanica 4. Polystichum acrostichoires 5. Dicharthelium clandestimm 6. Persicaria Sayittatu 7. Entrychium Fistulosum 8. Entrochium 9. 10. 11. 50% of total cover: \$2 Woody Vine Stratum (Plot size: 30 Fit) 1. Lanicera japanica 2. Toxicodendron radicans | 5 5 7 2 -2 -20% of 55 2.5 | = Total Cor total cover | FACU FACU FACU OBL FACW | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 3. Persicaria pensylvanica 4. Polystichum acrostichoires 5. Dichanthelium elandestinum 6. Persicaria Sayittatu 7. Entrychium Fistulosum 8. Entrochium 9 | 5 5 7 2 -2 -20% of 55 2.5 | = Total Cor total cover | FACU FACU FACU OBL FACW | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. |
| 3. Persicaria pensylvanica 4. Polystichum acrostichoires 5. Dichanthelium elandestinum 6. Persicaria Sayittatu 7. Entrychium Fistulosum 8. Entrochium 9 | 5 5 7 2 72 20% of 5 5 2.5 | = Total Cor total cover | FACU FACU FACU OBL FACW | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. Hydrophytic |
| 3. Persicaria pensylvanica 4. PolyStichum acrostichoids 5. Dicharthelium elandestimm 6. Persicaria Sayittata 7. Entrychium Fistulosum 8. Entrochium 9. 10. 11. 50% of total cover: 52 Woody Vine Stratum (Plot size: 30 ft) 1. Lonicera japanica 2. Toxicodendron radicans 3. 4. 5. | 5 5 2 2 20% of 55 25 | = Total Core | FACU FACU FAC OBL FACW Per 20.8 | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. Hydrophytic Vegetation |
| 3. Persicaria pensylvanica 4. Polystichum acrostichoids 5. Dichanthelium elandestinum 6. Persicaria Sayittata 7. Entrychium Fistulosum 8. Entrochium 9 | 5 5 7 2 20% of 55 25 80 20% of | = Total Core | FACU FACU FACU OBL FACW PAC FAC FAC FAC FAC | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. Hydrophytic Vegetation Present? Yes No |
| 3. Persicaria pensylvanica 4. Polystichum acrostichoires 5. Dicharthelium etandestinum 6. Persicaria Sayittatu 7. Entrychium Fistulosum 8. Entrochium 9. 10. 11. 50% of total cover: 52 Woody Vine Stratum (Plot size: 30 ft) 1. Lonicera japanica 2. Toxicodendron radicans 3. 4. 5. | 5 5 7 2 20% of 55 25 80 20% of | = Total Core | FACU FACU FACU OBL FACW PAC FAC FAC FAC FAC | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. Hydrophytic Vegetation Present? Yes No |
| 3. Persicaria persylvanica 4. Polystichum acrostichoires 5. Dicharthelium etandestimm 6. Persicaria Sayittata 7. Entrychium Fistulosum 8. Entrochium 9 | 5 5 7 2 20% of 5 5 2.5 80 20% of heet.) | = Total Covered | FACU FACU FACU FACW FACW FACW FAC FAC FAC FAC F | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. Hydrophytic Vegetation Present? Yes No |
| 3. Persicaria persylvanica 4. Polystichum acrostichoires 5. Dichanthelium elandestinum 6. Persicaria Sayittatu 7. Entrychium Fistulosum 8. Entrochium 9 | 5 5 7 2 20% of 5 5 2.5 80 20% of heet.) | = Total Core total cover Total Core total cover | FACU FACU FACU FACU FACW FAC PORT FAC FAC FAC FAC FAC FAC FOLY90 Micros | than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height. Hydrophytic Vegetation Present? Yes No |

See to

| | NOWKOOZ |
|---------|---------------|
| ampling | Point: WEUKOG |

| Profile Desc | ription: (Describe t | o the dept | needed to docun | nent the ir | ndicator o | or confirm | the absence of ind | icators.) | |
|---------------------------|---|---------------|--------------------|---|----------------------|-------------------|--------------------------------|--|---------------------------|
| Depth | Matrix | | Redo | x Features | | | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | _Loc ² | <u>Texture</u> | Remarks | |
| 0-15 | 7.5YR 4/6 | 100 | lness, | 4=0× | 640 | - Alle | clay loan | | · . |
| 15-20 | 7.5YR 5/3 | <u> 75</u> | 54R 4/6 | 25 | _c_ | PU/M | sandy Clay | lour | |
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| 1 _{Transi} C. C. | anaontration D. Da-l | | Deduced Backet Ass | | | | Ž1 | 12.1 24 22 23 | |
| Hydric Soil | oncentration, D=Deple | etion, Rivi=I | reduced Matrix, MS | >=IVIasked | Sand Gra | ins. | ² Location: PL=Pore | : Lining, M=Matrix. or Problematic Hyd | Irio Soile ³ : |
| Histosol | | | Dark Surface | (C7) | | | _ | · · | t |
| | ipedon (A2) | | Polyvalue Be | | o (88) (M | II D A 147 | | ick (A10) (MLRA 1 4 rairie Redox (A16) | " |
| Black Hi | • | | Thin Dark Su | | | | | A 147, 148) | |
| | n Sulfide (A4) | | Loamy Gleye | | | .,, | | nt Floodplain Soils (i | F19) |
| | l Layers (A5) | | Depleted Mat | rix (F3) | | | | A 136, 147) | · |
| | ck (A10) (LRR N) | | Redox Dark S | | | | | allow Dark Surface | (TF12) |
| | f Below Dark Surface irk Surface (A12) | e (A11) | Depleted Dar | | | | Other (E | xplain in Remarks) | |
| | lucky Mineral (S1) (Li | RR N. | Redox Depre | | | DD M | | | |
| | 147, 148) | | MLRA 136 | | <i>□</i> (1 1 1 1 (1 | _1272 147 | | | |
| Sandy G | leyed Matrix (S4) | | Umbric Surfa | | VILRA 13 | 6, 122) | 3Indicators | of hydrophytic vege | tation and |
| | edox (S5) | | Piedmont Flo | | | | | ydrology must be pr | |
| | Matrix (S6) | | Red Parent M | faterial (F2 | (MLR/ | 4 127, 147 |) unless dis | sturbed or problema | tic. |
| | ayer (if observed): | | | | | | | | |
| Type: | | | | | | | | | |
| | ches): <u>VA</u> | | | | | | Hydric Soil Prese | nt? Yes | No LLL |
| Remarks: | Hydric Soil | Seco | Tica is n | ot m | 1. | | | | |
| • | myone son | · / C; () | Citot it | | | | | | |
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Non-water data point nocuk003 facing North



Non-water data point nocuk003 facing East



Non-water data point nocuk003 soil sample



Non-water point NOCUA002 facing south

| Project/Site: Dominion Southeast Reliability Project City | //County: Cumberland | Sampling Date: 07/31/2014 |
|---|---|----------------------------------|
| Applicant/Owner: Dominion Transmission | State: VA | |
| Investigator(s): J. Sweitzer, W. Medlin See | | <u> </u> |
| Landform (hillslope, terrace, etc.): Floodplain Terrace Local | | Slope (%): 0- |
| Subregion (LRR or MLRA): LRR P Lat: 37.334056162 | Long: 78.329993339 | Datum. NAD 1983 |
| Soil Map Unit Name: Chewacla and Monacan soils, 0 to 2 percent slopes, | frequently flooded NWI classi | fication: 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 dis | curbed? Are "Normal Circumstances" | " present? Yes <u>√</u> No |
| Are Vegetation, Soil, or Hydrology naturally proble | | |
| SUMMARY OF FINDINGS – Attach site map showing sa | | |
| Hydrophytic Vegetation Present? Yes ✓ No | Is the Sampled Area within a Wetland? Yes | No✓ |
| Remarks: | _ L | |
| Photos 104-4680 to 4684 Soils, E, S, W, N (J. Sweitzer Camera) | | |
| Point located in floodplain mapped as NWI wetland. 1 of 3 criteria met. H | ydric soils and Hydrology absent. | |
| HYDROLOGY | | |
| Wetland Hydrology Indicators: | | cators (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | Surface So | |
| Surface Water (A1) True Aquatic Plant | | egetated Concave Surface (B8) |
| High Water Table (A2) Hydrogen Sulfide C | | Patterns (B10) |
| | | Lines (B16) |
| Water Marks (B1) Presence of Reduc | | n Water Table (C2) |
| | | urrows (C8) |
| Drift Deposits (B3) Thin Muck Surface | | Visible on Aerial Imagery (C9) |
| Algal Mat or Crust (B4) Other (Explain in R | · | Stressed Plants (D1) |
| Iron Deposits (B5) | | ic Position (D2) |
| Inundation Visible on Aerial Imagery (B7) | | quitard (D3) |
| Water-Stained Leaves (B9) | | graphic Relief (D4) |
| Aquatic Fauna (B13) | FAC-Neutr | ai rest (D5) |
| Field Observations: Surface Water Present? Yes No ✓ Depth (inches): | | |
| | | |
| Water Table Present? Yes No ✓ _ Depth (inches): | | |
| Saturation Present? Yes No ✓ Depth (inches): (includes capillary fringe) | Wetland Hydrology Pres | ent? Yes No✓ |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, p | previous inspections), if available: | |
| NA | | |
| Remarks: | | |
| Point does not meet hydrology criteria. One secondary indicator was obse | erved: Geomorphic Position (D2) | |
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Sampling Point: 07/31/2014

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

| Trop Stratum (Blot size: 30 ft R | Absolute | Dominant Ir | | Dominance Test worksheet: |
|---|----------------------|---------------|------------|---|
| Tree Stratum (Plot size:) 1 Acer rubrum) | <u>% Cover</u> 85 | Species? Y | FAC | Number of Dominant Species That Are OBL FACW or FAC: 4 (A) |
| 2. Platanus occidentalis | 20 | N | FACW | That Are OBL, FACW, or FAC: 4 (A) |
| 3. Liquidambar styraciflua | | | FAC | Total Number of Dominant |
| | 15 | N | | Species Across All Strata: 4 (B) |
| 4. Liriodendron tulipifera | 10 | N | FACU | Percent of Dominant Species |
| 5. Pawlonia tomentosa | 15 | N | FAOLL | That Are OBL, FACW, or FAC: 100 (A/B) |
| 6. Celtis occidentalis | 10 | N | FACU | Prevalence Index worksheet: |
| 7 | | | | |
| | | = Total Cover | | |
| 50% of total cover: | 20% of | total cover: | 31 | OBL species x 1 = |
| Sapling/Shrub Stratum (Plot size: 15 ft R) | | | | FACW species x 2 = |
| 1. Asimina triloba | 10 | N | FAC | FAC species x 3 = |
| 2. Celtis occidentalis | 15 | <u>N</u> | FACU | FACU species x 4 = |
| 3. Lindera benzoin | 50 | Y | FAC | UPL species x 5 = |
| 4. Carpinus caroliniana | 5 | N | FAC | Column Totals: (A) (B) |
| 5. Alnus serrulata | 5 | <u>N</u> | OBL | Prevalence Index = B/A = |
| 6 | | | | Hydrophytic Vegetation Indicators: |
| 7 | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8 | | | | ✓ 2 - Dominance Test is >50% |
| 9 | | | | |
| | ~- | = Total Cover | | 3 - Prevalence Index is ≤3.0¹ |
| 50% of total cover: 43 | | total cover: | 17 | 4 - Morphological Adaptations ¹ (Provide supporting |
| Herb Stratum (Plot size: 5 FT R) | | | | data in Remarks or on a separate sheet) |
| 1. Microstegium vimineum | 60 | Υ | FAC | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 2 Verbenia alterniflora | 5 | N | FAC | |
| 3 Fragaria virginiana | 5 | N | FACU | ¹ Indicators of hydric soil and wetland hydrology must |
| 4 | | | | be present, unless disturbed or problematic. |
| E. | | | | Definitions of Four Vegetation Strata: |
| 5 | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 6 | | | | more in diameter at breast height (DBH), regardless of |
| 7 | | | | height. |
| 8 | | | | Sapling/Shrub – Woody plants, excluding vines, less |
| 9 | | | | than 3 in. DBH and greater than or equal to 3.28 ft (1 |
| 10 | | | | m) tall. |
| 11 | | | | Herb – All herbaceous (non-woody) plants, regardless |
| 50% (1.1.) 25 | | = Total Cover | | of size, and woody plants less than 3.28 ft tall. |
| 50% of total cover: 35 Woody Vine Stratum (Plot size: 30 Ft R | 20% of | total cover: | 14 | Woody vine – All woody vines greater than 3.28 ft in |
| Woody Vine Stratum (Plot size:) Vitis rotundifolia | 20 | Υ | FAC | height. |
| 1 | | <u> </u> | 170 | |
| 2 | | | | |
| 3 | - | | | |
| 4 | | | | Hydrophytic |
| 5 | | | | Vegetation |
| | 20 | = Total Cover | - | Present? Yes No |
| 50% of total cover: 10 | 20% of | total cover: | 4 | |
| Remarks: (Include photo numbers here or on a separate s | heet.) | | | |
| Vegetation passes dominance test and typical well drained | , | oodplain vege | etation is | present. |
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NOCUK002

Sampling Point: 07/31/2014 SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) Color (moist) Loc2 Texture (inches) Type 10YR 5/6 70 2.5YR 7/3 20 silt Loam NA 0-10 D M 0-10 NA NA 7.5YR 4/6 10 С M silt Loam NA 2.5Y 6/3 7.5YR 3/4 С PL/M 10-15 50 10 silt Loam NA 10YR 4/3 40 NA NA NA 10-15 NA NA silt Loam 15-20 2.5Y 7/1 80 7.5YR 4/6 20 С PL/M fine sandy L NA ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Indicators for Problematic Hydric Soils³: **Hydric Soil Indicators:** ___ Histosol (A1) ___ 2 cm Muck (A10) (MLRA 147) Dark Surface (S7) ___ Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) ___ Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) ___ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) ___ Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) _ Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) **MLRA 136)** Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³Indicators 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: NA Depth (inches): NA **Hydric Soil Present?** Yes Remarks: No indicators of hydric soils observed due to high chroma matrix to below 10".



Non-Wetland data point nocuk002 facing South



Non-Wetland data point nocuk002 facing North



Non-Wetland data point nocuk002 soil sample

| Project/Site: Southeast Reliability Project | City/County: NA/Nottoway Sampling | g Date: 07/24/14 |
|--|---|----------------------|
| Applicant/Owner: Dominion | | ling Point: nonok002 |
| Investigator(s): W. Medlin, J. Sweitzer | Section, Township, Range: NA | |
| | ocal relief (concave, convex, none): none | Slope (%): NA |
| Subregion (LRR or MLRA): LRR P Lat: 37.274584 | Long: -78.223812 | Datum: NAD 1983 |
| Soil Map Unit Name: Mixed alluvial land | NWI classification: U | pland |
| Are climatic / hydrologic conditions on the site typical for this time of y | | |
| Are Vegetation Soil , or Hydrology significantly | / disturbed? Are "Normal Circumstances" present? | Yes ✓ No |
| Are Vegetation Soil , or Hydrology naturally pr | oblematic? (If needed, explain any answers in Rem | arks.) |
| · · ·· | | |
| SUMMARY OF FINDINGS – Attach site map showing | ៗ sampling point locations, transects, impor | tant features, etc. |
| Hydrophytic Vegetation Present? Yes No No | | |
| Hydrophytic Vegetation Present? Yes | Is the Sampled Area within a Wetland? Yes No | $\overline{}$ |
| Wetland Hydrology Present? Yes No ✓ | within a wettand: | <u> </u> |
| Remarks: | · | |
| This area is mapped by USFWS National Wetland Inve | ntory as PEO1A, but no wetlands are located w | ithin the corridor |
| All three criteria are not met. Area is not a wetland. | mory as 11 01A, but no wettands are located w | Turin the corndor. |
| *Photos 100-0216 to 0218 | | |
| | | |
| LIVER OF A COMMENT OF THE PROPERTY OF THE PROP | | |
| HYDROLOGY | | |
| Wetland Hydrology Indicators: | Secondary Indicators (mini | · |
| Primary Indicators (minimum of one is required; check all that apply) | Surface Soil Cracks (B | |
| Surface Water (A1) | _ ` ` ` ` | |
| High Water Table (A2) Hydrogen Sulf | | |
| | ospheres on Living Roots (C3) Moss Trim Lines (B16) | |
| | educed Iron (C4) | |
| Sediment Deposits (B2) Drift Deposits (B3) Recent Iron Iron Recent Iron Iron Iron Iron Iron Iron Iron Iron | | |
| Algal Mat or Crust (B4) Other (Explain | | |
| Iron Deposits (B5) | Geomorphic Position (| |
| Inundation Visible on Aerial Imagery (B7) | Shallow Aquitard (D3) | |
| Water-Stained Leaves (B9) | Microtopographic Relie | |
| Aquatic Fauna (B13) | FAC-Neutral Test (D5) |) |
| Field Observations: | | |
| Surface Water Present? Yes No Depth (inches | s): <u>NA</u> | |
| Water Table Present? Yes No Depth (inches | s): <u>NA</u> | |
| Saturation Present? Yes No Depth (inches | s): NA Wetland Hydrology Present? Yes | No <u></u> ✓ |
| (includes capillary fringe) | | _ |
| Describe Recorded Data (stream gauge, monitoring well, aerial phot NA | os, previous inspections), ii available: | |
| Remarks: | | |
| | | |
| Hydrology criteria is not met. | | |
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VEGETATION (Five Strata) – Use scientific names of plants.

| /EGETATION (Five Strata) – Use scientific na | mes of | plants. | | Sampling Point: nonok002 |
|--|-----------------|--------------|------|---|
| 20 # madii.ia | Absolute | Dominant | | Dominance Test worksheet: |
| Tree Stratum (Plot size: 30 ft radius | | Species? | | Number of Dominant Species |
| 1. Acer rubrum | 65 | <u>Y</u> | FACW | That Are OBL, FACW, or FAC: 5 (A) |
| 2. Carpinus caroliniana | 40 | <u>Y</u> | FACU | Total Number of Dominant |
| 3. Quercus alba | 35 | <u>Y</u> | FACU | Species Across All Strata: 13 (B) |
| 4 | | | | Descrit of Dominant Charles |
| 5 | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 38 (A/B) |
| 6 | | | | |
| | 140 | = Total Cov | er | Prevalence Index worksheet: |
| 50% of total cover: 70 | 20% of | total cover | 28 | Total % Cover of: Multiply by: |
| Sapling Stratum (Plot size: 15 ft radius) | 2070 0. | lutai covo | | OBL species $\frac{0}{27}$ $\times 1 = \frac{0}{104}$ |
| | 45 | Υ | NI | FACW species $\frac{67}{125}$ x 2 = $\frac{134}{215}$ |
| 2. Quercus alba | <u>45</u> 15 | <u>'</u> | FAC | FAC species $\frac{105}{x^3}$ $x^3 = \frac{315}{x^3}$ |
| = | | <u> </u> | TAG | FACU species 120 x 4 = 480 |
| 3 | | | | UPL species 55 $x = 275$ |
| 4 | | | | Column Totals: <u>347</u> (A) <u>1204</u> (B) |
| 5 | | | | |
| 6 | | | | Prevalence Index = B/A = 3.47 |
| | 60 | = Total Cov | er | Hydrophytic Vegetation Indicators: |
| 50% of total cover: 30 | 20% of | total cover: | 12 | 1 - Rapid Test for Hydrophytic Vegetation |
| Shrub Stratum (Plot size: 15 ft radius | | | | 2 - Dominance Test is >50% |
| 1. Carya tomentosa | 30 | Υ | NI | 3 - Prevalence Index is ≤3.0 ¹ |
| 2. Quercus velutina | 20 | Y | NI | 4 - Morphological Adaptations ¹ (Provide supporting |
| 3. Carpinus caroliniana | 25 | Y | FAC | data in Remarks or on a separate sheet) |
| 4. Quercus alba | 10 | | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 5 | | | | |
| S | | | | ¹ Indicators of hydric soil and wetland hydrology must |
| 0 | 85 | = Total Cov | | be present, unless disturbed or problematic. |
| 10.5 | | | | Definitions of Five Vegetation Strata: |
| 50% of total cover: <u>42.5</u> | 20% of | total cover: | 17 | Tree – Woody plants, excluding woody vines, |
| Herb Stratum (Plot size: 10 ft radius | | | | approximately 20 ft (6 m) or more in height and 3 in. |
| 1. Elymus hystrix | 55 | . <u>Y</u> | UPL | (7.6 cm) or larger in diameter at breast height (DBH). |
| 2. Polystichum acrostichoides | 30 | Υ | FACU | Sapling – Woody plants, excluding woody vines, |
| 3. Chasmanthium sessiliflorum | <u>15</u> | | FAC | approximately 20 ft (6 m) or more in height and less |
| 4. Arisaema triphyllum | 2 | | FACW | than 3 in. (7.6 cm) DBH. |
| 5. Quercus velutina | 5 | <u> </u> | NI | Shrub – Woody plants, excluding woody vines, |
| 6. | | | | approximately 3 to 20 ft (1 to 6 m) in height. |
| 7 | | | | Herb – All herbaceous (non-woody) plants, including |
| 8 | | | | herbaceous vines, regardless of size, and woody |
| 9 | | | | plants, except woody vines, less than approximately 3 |
| 10 | | | | ft (1 m) in height. |
| | | | | Woody vine – All woody vines, regardless of height. |
| 11 | 107 | Total Cov | | |
| 52.5 | | = Total Cov | | |
| 50% of total cover: <u>53.5</u> | 20% of | total cover: | 21.4 | |
| Woody Vine Stratum (Plot size: 15 ft radius | . = | | | |
| 1. Parthenocissus quinquefolia | 15 | Υ | FACU | |
| 2. Toxicodendron radicans | 20 | <u>Y</u> | FAC | |
| 3. Lonicera japonica | 30 | Υ | FAC | |
| 4 | | | | |
| 5. | | | | |
| | 65 | = Total Cov | er | Hydrophytic Vegetation |
| 50% of total cover: 32.5 | | total cover: | | Present? Yes No V |
| Remarks: (Include photo numbers here or on a separate sl | | total cover. | | |
| Hydrophytic vegetation criteria is not met. | icci.) | | | |

Sampling Point: nonok002

| 5-18 Type: C=Cor Hydric Soil In Histosol (Histic Epi Black Hist | A1) pedon (A2) | 50 50 100 | Color (moist) % | 5 Type¹ Loc² | SL SL | SL - sandy loam; mixed matrix mixed matrix; no redox |
|--|--|------------------|----------------------|---------------------------------|----------|--|
| 5-18 Type: C=Cor Hydric Soil In Histosol (Histic Epi Black Hist | 10YR 3/1 10YR 5/4 ncentration, D=Depote dicators: A1) pedon (A2) | 50 | | | | |
| Type: C=Cor Histosol (A Histosol (A Histic Epip Black Hist | ncentration, D=Deposition D=Deposition (A2) | 100 | | | SL | mixed matrix; no redox |
| Type: C=Cor Hydric Soil In Histosol (<i>i</i> Histic Epi | ncentration, D=Deposition dicators: A1) pedon (A2) | | | | SL | |
| lydric Soil In Histosol (A Histic Epip Black Hist | ndicators: A1) pedon (A2) | oletion, RM=Re | | | | |
| lydric Soil In Histosol (A Histic Epip Black Hist | ndicators: A1) pedon (A2) | oletion, RM=Re | | | | |
| ydric Soil In Histosol (A Histic Epip Black Hist | ndicators: A1) pedon (A2) | oletion, RM=Re | | | | |
| lydric Soil In Histosol (A Histic Epip Black Hist | ndicators: A1) pedon (A2) | oletion, RM=Re | | | | |
| Hydric Soil In Histosol (A Histic Epip Black Hist | ndicators: A1) pedon (A2) | oletion, RM=Re | | | | |
| lydric Soil In Histosol (A Histic Epip Black Hist | ndicators: A1) pedon (A2) | oletion, RM=Re | | | | |
| Hydric Soil In Histosol (A Histic Epip Black Hist | ndicators: A1) pedon (A2) | oletion, RM=Re | | | | |
| Hydric Soil In Histosol (A Histic Epip Black Hist | ndicators: A1) pedon (A2) | oletion, RM=Re | | | | |
| Hydric Soil In Histosol (A Histic Epip Black Hist | ndicators: A1) pedon (A2) | oletion, RM=Re | | | | |
| Hydric Soil In Histosol (A Histic Epip Black Hist | ndicators: A1) pedon (A2) | pietion, RIVI=RE | | -1 | 21 1: | Di Dana Limina M Matric |
| Histosol (<i>I</i> Histic Epip Black Hist | A1) pedon (A2) | | aucea Matrix, MS=Mas | sked Sand Grains. | | : PL=Pore Lining, M=Matrix. dicators for Problematic Hydric Soils ³ : |
| ☐ Histic Epip☐ Black Hist | pedon (A2) | | ☐ Dark Surface (S7) | | | 2 cm Muck (A10) (MLRA 147) |
| Black Hist | | • | | urface (S8) (MLRA 147, | 148) | Coast Prairie Redox (A16) |
| | tic (A3) | | | (S9) (MLRA 147, 148) | , | (MLRA 147, 148) |
| | Sulfide (A4) | | Loamy Gleyed Mat | | | Piedmont Floodplain Soils (F19) |
| Stratified | Layers (A5) | · - | Depleted Matrix (F | | | (MLRA 136, 147) |
| | k (A10) (LRR N) | | Redox Dark Surfac | | | ☑ Very Shallow Dark Surface (TF12) |
| | Below Dark Surfac | e (A11) | Depleted Dark Sur | | | Other (Explain in Remarks) |
| | k Surface (A12) | | Redox Depression | | | |
| • | ıcky Mineral (S1) (| LRR N, | | lasses (F12) (LRR N, | | |
| | 147, 148) eyed Matrix (S4) | ĺ | MLRA 136) | 13) (MLRA 136, 122) | ; | ³ Indicators of hydrophytic vegetation and |
| Sandy Re | | 1 | | nin Soils (F19) (MLRA 14 | | wetland hydrology must be present, |
| • | Matrix (S6) | • | | al (F21) (MLRA 127, 147 | | unless disturbed or problematic. |
| | yer (if observed) | : | | | ĺ | р |
| Type: NA | | | | | | |
| Depth (inch | | | _ | | Hydric S | Soil Present? Yes No |
| Remarks: | | | <u>-</u> | | 1 | |
| Нус | dric soils criteri | a is not met | | | | |
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Non-water data point nonok002 facing North



Non-water data point nonok002 facing South



Non-water data point nonok002 soils



Non-water data point nonoc100 facing east



Non-water data point nonoc100 facing south

| Project/Site: Atlantic Coast Pipeline City/County: NA/Nottoway Sampling Date: 9/13/14 |
|---|
| Applicant/Owner: Deminion Traismission State: VA Sampling Point: NoNoLooi |
| Investigator(s): W. Medlin, R. Sheridan Section, Township, Range: NA |
| Landform (hillslope, terrace, etc.): hottomland Local relief (concave, convex, none): none/ Flut Slope (%): NA |
| Subregion (LRR or MLRA): <u>IRR P</u> Lat: <u>37. i 2776.7482</u> Long: <u>-77. 957125091</u> Datum: <u>NAD 83</u> |
| Soil Map Unit Name:Mixed alluvial land NWI classification:N/A |
| 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 Vegetation |
| 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 Is the Sampled Area |
| Hydric Soil Present? Yes No |
| Wetland Hydrology Present? Yes No V |
| Remarks: Non-wet floodplain forest. Mapped NWI layer. Area is not a wetland. |
| por per noof and latest, happen lover longer. Area is not a methodic. |
| |
| PHOTOS # 100 - 1245 to 1249 Soils, N.E.S.W |
| 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) |
| |
| Image: Surface Water (A1) Image: True Aquatic Plants (B14) Image: Sparsely Vegetated Concave Surface (B8) Image: High Water Table (A2) Image: Hydrogen Sulfide Odor (C1) Image: 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 (C6) Crayfish Burrows (C8) |
| Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) |
| Algal Mat or Crust (B4) |
| ☐ Iron Deposits (B5) ☐ Geomorphic Position (D2) |
| Inundation Visible on Aerial Imagery (B7) |
| Water-Stained Leaves (B9) Microtopographic Relief (D4) |
| Aquatic Fauna (B13) |
| Field Observations: |
| Surface Water Present? Yes Depth (inches): NA |
| Water Table Present? Yes No Depth (inches): NA |
| Saturation Present? Yes No Depth (inches): NA Wetland Hydrology Present? Yes No V |
| (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: |
| NA |
| Remarks: |
| Hydrology Criteria not Met. |
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| Cattles | |
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| VEGETATION (Five Strata) - Use Scientific na | allies Oi | piarits. | | Sampling Point: NonoLCO1 |
|--|-----------------------------|--|----------------------------|---|
| O. Ci | Absolute | | t Indicator | Dominance Test worksheet: |
| Tree Stratum (Plot size: 30 Ft) | | Species? | Status | Number of Dominant Species |
| 1. Acer rubrum | 50 | Y | _FAC_ | That Are OBL, FACW, or FAC:(A) |
| 2. Litiodendron tulipitera | 45 | | FACU | |
| | | | | Total Number of Dominant |
| 3. Ux vdendrim ar borein | <u> </u> | Ņ | <u>FACU</u> | Species Across All-Strata: (B) |
| 4. Liquidambar Styraciflia | 10 | <u> </u> | FAC | Described Described Consider |
| 5 | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 57 % (A/B) |
| C | | | | That Are OBL, FACW, OF FAC. |
| 0 | illa | | | Prevalence Index worksheet: |
| | | = Total Co | - A | Total % Cover of: Multiply by: |
| 50% of total cover: | 20% o | f total cove | r: 28 | |
| Sapling Stratum (Plot size: 15 Ft) | | | | OBL species x 1 = |
| 1. Carpinus caroliniama | 90 | V | $C \wedge c$ | FACW species x 2 = |
| 1. Corpinus Caroliniana | | . <u> </u> | FAC | FAC species x 3 = |
| 2. Prunus seratina | 10 | <u>N</u> | FACU | FACU species x 4 = |
| 3 | | | | |
| | | | | UPL species x 5 = |
| 4 | | | | Column Totals: (A) (B) |
| 5 | | | | |
| 6 | | | | Prevalence Index = B/A = |
| | 106 | = Total Co | ver | Hydrophytic Vegetation Indicators: |
| 500/ ft. 1 | | | | Rapid Test for Hydrophytic Vegetation |
| 50% of total cover: | 20% 0 | total cove | r: _ | 1 <u> </u> |
| Shrub Stratum (Plot size: 15 ft | | _ | | 2 - Dominance Test is >50% |
| Shrub Stratum (Plot size: 15 ++) 1. Carpinus Caroliniana | 40 | _ Y | FAC | 3 - Prevalence Index is ≤3.0 ¹ |
| 2 | | | | 4 - Morphological Adaptations (Provide supporting |
| | | | | data in Remarks or on a separate sheet) |
| 3 | | | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 4 | | · | | |
| 5 | | | | 1 |
| 6 | | | | ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| | | = Total Co | vor | |
| | | | | Definitions of Five Vegetation Strata: |
| 50% of total cover: 22 | 20% o | f total cove | r: | Tree – Woody plants, excluding woody vines, |
| Herb Stratum (Plot size: 5 ft) | | _ | | approximately 20 ft (6 m) or more in height and 3 in. |
| 1. Palystichum acrostichoides | 5 | 4 | FACU | (7.6 cm) or larger in diameter at breast height (DBH). |
| 1. Taley Strategy Control of Strategy | | · - ' | FACU | , |
| 2. Botrypus virginianus | | · <u> </u> | | Sapling – Woody plants, excluding woody vines, |
| 3 | | | | approximately 20 ft (6 m) or more in height and less |
| 4 | | | | than 3 in. (7.6 cm) DBH. |
| 5 | | | | Shrub – Woody plants, excluding woody vines, |
| | | * | | approximately 3 to 20 ft (1 to 6 m) in height. |
| | | | | |
| 7 | | | | Herb – All herbaceous (non-woody) plants, including |
| 8 | | | | herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 |
| | | | | I DIADIS EXCEDI WOODV VIDES IESS THAN ADDROXIMATEIV 3 |
| 9 | | | | |
| 9 | | | | ft (1 m) in height. |
| 10 | | | | |
| | | | | ft (1 m) in height. |
| 10 | | | ver | ft (1 m) in height. |
| 10 | 10 | = Total Co | _ | ft (1 m) in height. |
| 101150% of total cover: 5 | 10 | | _ | ft (1 m) in height. |
| 10 | | = Total Co | r: <u>2</u> | ft (1 m) in height. |
| 10 | 10 | = Total Co f total cove | r: <u>2</u> <u>FA</u> c | ft (1 m) in height. |
| 10 | | = Total Co | r: <u>2</u> | ft (1 m) in height. |
| 10 | | = Total Co f total cove | r: <u>2</u> <u>FA</u> c | ft (1 m) in height. |
| 10 | | = Total Co f total cove | r: <u>2</u> <u>FA</u> c | ft (1 m) in height. |
| 10 | | = Total Co f total cove | r: <u>2</u> <u>FA</u> c | ft (1 m) in height. |
| 10 | 10 20% o | = Total Co f total cove | FAC | ft (1 m) in height. Woody vine – All woody vines, regardless of height. Hydrophytic |
| 10 | 10 20% o | = Total Co f total cove | FAC | ft (1 m) in height. Woody vine - All woody vines, regardless of height. Hydrophytic Vegetation |
| 10 | 10 20% o 10 2 | = Total Co f total cove N = Total Co | FAC FAC | ft (1 m) in height. Woody vine – All woody vines, regardless of height. Hydrophytic |
| 10 | 10 20% o 10 2 2 | = Total Co f total cove | FAC FAC | ft (1 m) in height. Woody vine - All woody vines, regardless of height. Hydrophytic Vegetation |
| 10 | 10 20% o 10 2 2 | = Total Co f total cove N = Total Co | FAC FAC | ft (1 m) in height. Woody vine - All woody vines, regardless of height. Hydrophytic Vegetation |
| 10 | 10 20% o 10 2 2 | = Total Co f total cove N = Total Co | FAC FAC | ft (1 m) in height. Woody vine - All woody vines, regardless of height. Hydrophytic Vegetation |

| epth | Matrix | | | ox Features | | | - . | | | |
|---|---|------------|-------------------|--------------|-------------------|-------------------|---------------|---------------|----------------------------------|---------------------------|
| nches) | Color (moist) | % | Color (moist) | % | Type ¹ | _Loc ² | Texture | | Remarks | |
| -1 | 10YR 2/2 | 100 | | | | | organic | -qrtt | layer (t | lunic) |
| <u>-</u> 6_ | 10 YR 5/4 | 100 | | | | | sandy clu | y lean | | |
| <u>,-13</u> | 10 YR G/6 | [ଓଠ | | | - | | loany so | nd | | |
| 3-20 | 7.54R6/8 | 100 | | | _ | 74 0 pa | _Sand | | | |
| | , | | | | | | | | | |
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| oe: C=Co | oncentration, D=Depl | etion, RM= | Reduced Matrix. M | S=Masked | Sand Gra | ins. | ²l ocation: P | I =Pore Linir | ng, M=Matrix. | |
| Iric Soil Ir | ndicators: | | , | | | | | | oblematic Hy | dric Soils ³ : |
| Histosol (| (A1) | | ☐ Dark Surface | e (S7) | | | <u> </u> | cm Muck (A | 10) (MLRA 1 4 | 17) |
| | ipedon (A2) | | Polyvalue Be | | | | | | Redox (A16) | • |
| Black His | | | Thin Dark Su | | | 47, 148) | _ | (MLRA 14 | 7, 148) | |
| | n Sulfide (A4) Layers (A5) | | Loamy Gleye | | -2) | | <u>↓</u> P | | odplain Soils (| F19) |
| | ck (A10) (LRR N) | | Depleted Ma | | 6) | | П., | (MLRA 130 | 3, 147) Dark Surface | /TE12\ |
| | Below Dark Surface | e (A11) | Depleted Da | | | | | | n in Remarks) | (1112) |
| Thick Dar | rk Surface (A12) | | Redox Depre | | | | | or (Expidit | | |
| | ucky Mineral (S1) (L | RR N, | ☐ Iron-Mangan | iese Masse | | .RR N, | | | | |
| | 147, 148) | | MLRA 13 | • | | | | | | |
| | leyed Matrix (S4) | | Umbric Surfa | | | | | icators of hy | drophytic vege | etation and |
| | | | | | | | | | | |
| | | | Piedmont Flo | | | | | - | ogy must be p | |
| Stripped I | Matrix (S6) | | Piedmont Flo | | | | | - | ogy must be po ed or problema | |
| trictive L | | | | | | | | - | | |
| Stripped I trictive La ype: | Matrix (S6) ayer (if observed): | | | | | | un un | less disturbe | ed or problema | tic. |
| Stripped Intrictive Law Inc. Strippe: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | | |
| Stripped I trictive L ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | ic cot | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive Large ype: Depth (incl | Matrix (S6) ayer (if observed): | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | itic. |
| Stripped I trictive Large ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive L ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive La ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | is cht | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive La ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | ls cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive La ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive La ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive La ype: epth (incl | Matrix (S6) ayer (if observed): NA hes): NA | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive La ype: epth (incl | Matrix (S6) ayer (if observed): NA hes): NA | ls cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive La ype: epth (incl | Matrix (S6) ayer (if observed): NA hes): NA | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive La ype: epth (incl | Matrix (S6) ayer (if observed): NA hes): NA | ls cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive La ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive L ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive L ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | ls cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive L ype: | Matrix (S6) ayer (if observed): NA hes): NA | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive La ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive La ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive L ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |
| Stripped I trictive L ype: Depth (incl | Matrix (S6) ayer (if observed): NA hes): NA | is cnt | Red Parent i | Material (F2 | 21) (MLR | 127, 147 | Hydric Soil | less disturbe | ed or problema | tic. |



Non-water data point nonol001 facing north



Non-water data point nonol001 facing east



Non-water data point nonol001 soil sample

| Project/Site: Atlantic Coast Pipeline | (| City/County: Dinwiddie | | Sampling Date: 3/17/2015 |
|---|--|---------------------------------------|---------------------|--------------------------------|
| Applicant/Owner: DOMINION | | | State: VA | Sampling Point: nodic002 |
| | | | | |
| Landform (hillslope, terrace, etc.): Dra | | | | |
| Subregion (LRR or MLRA): P | | | | |
| Soil Map Unit Name: Appling sandy lo | am, 7 to 15 percent slopes | | NWI classifica | ation: None |
| Are climatic / hydrologic conditions on | the site typical for this time of year | ar? Yes <u> /</u> No (l | f no, explain in Re | emarks.) |
| Are Vegetation, Soil, oi | r Hydrology significantly o | disturbed? Are "Normal (| Circumstances" p | resent? Yes _ 🗸 No |
| Are Vegetation, Soil, or | | | | |
| SUMMARY OF FINDINGS – A | | | | |
| Hydrophytic Vegetation Present? | Yes No | | | |
| Hydric Soil Present? | Yes No | Is the Sampled Area within a Wetland? | Voc | No |
| Wetland Hydrology Present? | Yes No | within a wetiand? | res | NO |
| Remarks: | | | | |
| HYDROLOGY | | | | |
| Wetland Hydrology Indicators: | | 9 | Secondary Indicat | tors (minimum of two required) |
| Primary Indicators (minimum of one is | s required; check all that apply) | | Surface Soil (| |
| Surface Water (A1) | True Aquatic Pla | ants (B14) | Sparsely Veg | etated Concave Surface (B8) |
| High Water Table (A2) | Hydrogen Sulfid | | Drainage Pat | |
| Saturation (A3) | Oxidized Rhizos | pheres on Living Roots (C3) | Moss Trim Li | nes (B16) |
| Water Marks (B1) | Presence of Rec | duced Iron (C4) | Dry-Season V | Vater Table (C2) |
| Sediment Deposits (B2) | Recent Iron Red | luction in Tilled Soils (C6) | Crayfish Burr | ows (C8) |
| Drift Deposits (B3) | Thin Muck Surfa | | | sible on Aerial Imagery (C9) |
| Algal Mat or Crust (B4) | Other (Explain in | n Remarks) | | ressed Plants (D1) |
| Iron Deposits (B5) | (= -) | - | Geomorphic I | |
| Inundation Visible on Aerial Imag | jery (B7) | - | Shallow Aquit | |
| Water-Stained Leaves (B9) | | - | | phic Relief (D4) |
| Aquatic Fauna (B13) | | <u>-</u> | FAC-Neutral | Test (D5) |
| Field Observations: | No. V Donath (inches) | | | |
| | No Depth (inches): | | | |
| | No Depth (inches): | | | 10 V V N- |
| Saturation Present? Yes _ (includes capillary fringe) | No Depth (inches): | wetiand Hy | drology Presen | t? Yes No |
| Describe Recorded Data (stream gau | uge, monitoring well, aerial photos | s, previous inspections), if avail | able: | |
| Devede | | | | |
| Remarks: Hydrology indicators were present | | | | |
| Trydrology indicators were present | | | | |
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VEGETATION (Four Strata) – Use scientific names of plants.

| /EGETATION (Four Strata) – Use scientif | ic names of | plants. | | Sampling Point: nodic002 |
|--|----------------------|-----------------|---------------|---|
| | Absolute | Dominant | Indicator | Dominance Test worksheet: |
| <u>Tree Stratum</u> (Plot size:) 1. Pinus taeda | <u>% Cover</u> 50 | Species? Yes | Status FAC | Number of Dominant Species That Are OBL, FACW, or FAC:5 (A) |
| 2 | | | | |
| 3 | | | | Total Number of Dominant Species Across All Strata: 5 (B) |
| 4 | | | | Openies Across Air Strata. |
| 5. | | | | Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/B) |
| • | | | | That Are OBL, FACW, or FAC:(A/B) |
| 6 | | | | Prevalence Index worksheet: |
| 7 | | | | Total % Cover of: Multiply by: |
| | · | = Total Cove | er 10 | OBL species 0 x 1 = 0 |
| 50% of total cover: | 20% of | total cover:_ | | FACW species |
| Sapling/Shrub Stratum (Plot size: 13) 1. Acer rubrum | 30 | Yes | FAC | FAC species115 |
| 2. Liquidambar styraciflua | 20 | Yes | FAC | FACU species5 |
| 3 Juniperus virginiana | 5 | No | FACU | UPL species0 x 5 =0 |
| | | | | Column Totals:(A)(B) |
| 4 | | | | |
| 5 | | - | - | Prevalence Index = B/A =3.04 |
| 6 | | | | Hydrophytic Vegetation Indicators: |
| 7 | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8 | | | | ✓ 2 - Dominance Test is >50% |
| 9 | | | | 3 - Prevalence Index is ≤3.0 ¹ |
| | | = Total Cove | | 4 - Morphological Adaptations ¹ (Provide supporting |
| 50% of total cover: | 27.5 20% of | total cover: | | data in Remarks or on a separate sheet) |
| Herb Stratum (Plot size: 5 | | | | Problematic Hydrophytic Vegetation¹ (Explain) |
| 1. Lonicera japonica | 10 | Yes | FAC | 1 Toblematic Trydrophytic Vegetation (Explain) |
| 2 | | | | Indicators of hydric soil and watland hydrology must |
| 3 | | | | ¹ Indicators of hydric soil and wetland hydrology must 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 |
| 7. | | | | more in diameter at breast height (DBH), regardless of height. |
| 8. | | | | |
| 9. | | | | Sapling/Shrub – Woody plants, excluding vines, less |
| | | | | than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. |
| 10 | | | | , ta |
| 11 | 10 | | | Herb – All herbaceous (non-woody) plants, regardless |
| FOO/ of total account | | = Total Cove | er 2 | of size, and woody plants less than 3.28 ft tall. |
| 50% of total cover: | 20% 01 | total cover: | | Woody vine - All woody vines greater than 3.28 ft in |
| Woody Vine Stratum (Plot size:) 1 Lonicera japonica | 5 | Yes | FAC | height. |
| - 11 <u></u> | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | Hydrophytic |
| 5 | | | | Vegetation |
| | | = Total Cove | | Present? Yes No No |
| 50% of total cover: | 2.5 20% of | total cover: | 1 | |
| Remarks: (Include photo numbers here or on a separ | ate sheet.) | | | |
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Sampling Point: nodic002

SOIL

| Profile Des | scription: (Describe | to the de | | | | or confirm | the absenc | e of indicators.) |
|--|---------------------------------------|---|---|-------------|-------------------|------------------|----------------------------------|--|
| Depth Matrix | | | Redox Features | | | | | |
| (inches) | Color (moist) | <u>%</u> | Color (moist) | % | Type ¹ | Loc ² | <u>Texture</u> CL | Remarks |
| 0-2 | 2.5 Y 4/4 | 100 | | | | | | <u> </u> |
| 2-5 | 2.5 Y 5/4 | 90 | 7.5 YR 4/6 | 10 | С | PL | CL | |
| 5-16 | 2.5 Y 5/3 | 90 | 7.5 YR 4/6 | 10 | С | PL | CL | |
| | · - | | | | | | | |
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| | | | | | | | | |
| ¹ Type: C=0 | Concentration, D=Dep | oletion, RM | =Reduced Matrix, M | S=Masked | d Sand Gr | ains. | ² Location: | PL=Pore Lining, M=Matrix. |
| | I Indicators: | • | , | | | | | cators for Problematic Hydric Soils ³ : |
| Histoso | ol (A1) | | Dark Surface | e (S7) | | | | 2 cm Muck (A10) (MLRA 147) |
| | Epipedon (A2) | | Polyvalue Be | | ce (S8) (I | /ILRA 147, | | Coast Prairie Redox (A16) |
| Black H | Histic (A3) | Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) | | | | | | |
| Hydrog | jen Sulfide (A4) | | Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) | | | | | |
| | ed Layers (A5) | | Depleted Matrix (F3) (MLRA 136, 147) | | | | | |
| 2 cm Muck (A10) (LRR N) Redox Dark Surface | | | | | | | | Very Shallow Dark Surface (TF12) |
| | ed Below Dark Surfac | e (A11) | Depleted Dark Surface (F7) Other (Explain in Remarks) | | | | | |
| | Dark Surface (A12) | Redox Depressions (F8) | | | | | | |
| | Mucky Mineral (S1) (I | LRR N, | Iron-Manganese Masses (F12) (LRR N, | | | | | |
| | A 147, 148) Gleyed Matrix (S4) | | MLRA 136) Umbric Surface (F13) (MLRA 136, 122) 3Indicators of hydrophytic vegetation and | | | | | |
| | Redox (S5) | Ombric Surface (F13) (MLRA 136, 122) Indicators of hydrophytic vegetation and Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, | | | | | | |
| - | d Matrix (S6) | Red Parent I | | | | | Inless disturbed or problematic. | |
| | Layer (if observed) | • | 1100 1 0101111 | wateriai (i | Z I) (III ZII | | 1 | inicos distarbed of problematic. |
| Type: | | - | | | | | | |
| | nches): | | | | | Hydric So | il Present? Yes No 🗸 | |
| Remarks: | iciles). | | | | | | riyuric 30 | in Fresent: TesNO |
| | il indicators were pre | sent | | | | | | |
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Photo 1 Non-water data point NODIC002 facing north



Photo 2 Non-water data point NODIC002 facing south



Non-Waterbody point nodim001 facing North



Non-Waterbody point nodim001 facing East



Non-water point NODIA400 facing north



Non-water point NODIA400 facing south



Non-water point NOBRC001 facing north



Non-water point NOBRC001 facing east



Non-water point NOBRC001 facing south



Non-water data point NOBRA400 facing northeast



Non-water data point NOBRA400 facing southwest



Non-water point NOBRA201 facing north



Non-water point NOBRA202 facing southwest



Non-water point nobro001 facing northwest. (NHD, not stream)



Non-water point nobro001 facing southeast. (NHD, not stream)

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

| Project/Site: Atlantic Coast Pipeline | | | City/ | County: Brunswick Cour | nty | Sampling Date: 11/20/2015 | | | |
|--|-----------------|--------------|-----------------------------|----------------------------|---|---------------------------------|--|--|--|
| Applicant/Owner: DOMINION | | | | | State: VA | Sampling Point: nobrc050 | | | |
| | | | | ion, Township, Range: N | | | | | |
| Landform (hillslope, terrace, etc.): Slope | | | | | | Slope (%):2 | | | |
| Subregion (LRR or MLRA): P | | | | | | Datum: WGS 1984 | | | |
| Soil Map Unit Name: Chewacla and Weha | | | ent slopes, | , frequently flooded | NWI classifi | cation: None | | | |
| Are climatic / hydrologic conditions on the | site typical fo | or this time | of year? | Yes No | (If no, explain in F | Remarks.) | | | |
| Are Vegetation, Soil, or Hy | drology | signific | cantly distu | ırbed? Are "Norma | al Circumstances" | present? Yes V No No | | | |
| Are Vegetation, Soil, or Hy | | | | | | | | | |
| SUMMARY OF FINDINGS – Atta | | | | | | | | | |
| Hydrophytic Vegetation Present? | | | | | | | | | |
| Hydric Soil Present? | Yes | | <u> </u> | Is the Sampled Area | V | No | | | |
| Wetland Hydrology Present? | Yes | | / | within a Wetland? | res | NO | | | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| HYDROLOGY | | | | | | | | | |
| Wetland Hydrology Indicators: | | | | | | ators (minimum of two required) | | | |
| Primary Indicators (minimum of one is re- | | | | | Surface Soi | | | | |
| Surface Water (A1) | | | atic Plants | | Sparsely Vegetated Concave Surface (B8) | | | | |
| High Water Table (A2) | | | Sulfide O | | _ | atterns (B10) | | | |
| Saturation (A3) | | | | res on Living Roots (C3) | | | | | |
| Water Marks (B1) | | | | ed Iron (C4) | | Water Table (C2) | | | |
| Sediment Deposits (B2) Drift Deposits (B3) | | | k Surface (| on in Tilled Soils (C6) | Crayfish Bu | /isible on Aerial Imagery (C9) | | | |
| Algal Mat or Crust (B4) | | | κ Suriace (κplain in Re | | | Stressed Plants (D1) | | | |
| Iron Deposits (B5) | | Outlot (Ex | .piaiii iii ito | manoj | | Position (D2) | | | |
| Inundation Visible on Aerial Imagery | (B7) | | | | Shallow Aqu | | | | |
| Water-Stained Leaves (B9) | ` ' | | | | Microtopographic Relief (D4) | | | | |
| Aquatic Fauna (B13) | | | | | FAC-Neutra | l Test (D5) | | | |
| Field Observations: | | | | | | | | | |
| Surface Water Present? Yes | _ No _ 🗸 | Depth (ir | nches): | | | | | | |
| Water Table Present? Yes | _ No _ 🗸 | Depth (ir | nches): | | | | | | |
| Saturation Present? Yes (includes capillary fringe) | _ No _ 🗸 | Depth (ir | nches): | Wetland | Hydrology Prese | nt? Yes No | | | |
| Describe Recorded Data (stream gauge, | monitoring v | well, aerial | photos, pr | evious inspections), if av | ailable: | | | | |
| Remarks: | | | | | | | | | |
| No hydrology indicatorspresent | | | | | | | | | |
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VEGETATION (Four Strata) – Use scientific names of plants.

| /EGETATION (Four Strata) – Use scientific na | ames of | plants. | | Sampling Point: nobrc050 |
|--|---------------|--------------------------------|---------------|--|
| | Absolute | Dominant | Indicator | Dominance Test worksheet: |
| <u>Tree Stratum</u> (Plot size:30) 1. Pinus taeda | % Cover 60 | Species? Yes | Status FAC | Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A) |
| 2. Quercus rubra | 20 | Yes | FACU | That Ald OBE, I AOW, OI I AO (A) |
| 3. Liquidambar styraciflua | 10 | No | FAC | Total Number of Dominant Species Agrees All Strate: 6 (P) |
| 4 | - | | | Species Across All Strata: (B) |
| _ | | | | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC: (A/B) |
| 6 | | · | | Prevalence Index worksheet: |
| 1 | 90 | | | Total % Cover of: Multiply by: |
| 50% of total cover: 45 | | = Total Cover: total cover: | er 18 | OBL species0 x 1 =0 |
| 15 | 20% 01 | total cover. | | FACW species0 |
| Sapling/Shrub Stratum (Plot size:) 1 llex opaca | 20 | Yes | FACU | FAC species 105 x 3 = 315 |
| 2. Liquidambar styraciflua | 15 | Yes | FAC | FACU species 50 x 4 = 200 |
| | | · —— | | UPL species $\begin{array}{ccc} 0 & x = 5 \\ x = 5 \\ y = 5$ |
| 3 | | | | Column Totals: 155 (A) 515 (B) |
| 4 | | | | Column Totals (A) (B) |
| 5 | | | | Prevalence Index = B/A =3.32 |
| 6 | | | | Hydrophytic Vegetation Indicators: |
| 7 | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8 | | | | 2 - Dominance Test is >50% |
| 9 | | | | 3 - Prevalence Index is ≤3.0 ¹ |
| | | = Total Cove | | 4 - Morphological Adaptations ¹ (Provide supporting |
| 50% of total cover:17.5 | 20% of | total cover: | 7 | data in Remarks or on a separate sheet) |
| Herb Stratum (Plot size: 5 | | | | Problematic Hydrophytic Vegetation¹ (Explain) |
| 1. Lonicera japonica | 20 | Yes | FAC | Froblematic Hydrophytic Vegetation (Explain) |
| 2. Polystichum acrostichoides | 10 | Yes | FACU | Indicators of hydric soil and watland hydrology must |
| 3 | | | | ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 4 | | | | Definitions of Four Vegetation Strata: |
| 5 | | . <u></u> | | |
| 6 | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of |
| 7 | | | | height. |
| 8. | | | | |
| 9. | | | | Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 |
| 10. | | | | m) tall. |
| 11. | | | | Hart All back as a confusion of a last a consideration |
| ··· | 30 | = Total Cove | | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 50% of total cover: 15 | | total cover: | | |
| Woody Vine Stratum (Plot size: 30) | | · - | <u> </u> | Woody vine – All woody vines greater than 3.28 ft in height. |
| 1 | | | | neight. |
| 2. | | | | |
| 3 | | | | |
| 4 | | | | |
| 5. | | | | Hydrophytic |
| 5 | 0 | Total Cov | | Vegetation Present? Yes No |
| 50% of total cover: 0 | | = Total Cover: total cover: | ^ | |
| 30 /0 01 total cover | | total cover. | | |
| Remarks: (Include photo numbers here or on a separate si | neet.) | | | |
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Sampling Point: nobrc050

| Profile Des | cription: (Describe t | the depth | | | | or confirm | the abse | ence of indicators.) |
|--------------------|-----------------------------------|---------------|----------------------|-------------|-------------------|------------------|--------------|--|
| Depth | Matrix | | Redo. | x Feature: | | 12 | . | December 1 |
| (inches) | Color (moist) | <u>%</u> _ | Color (moist) | % | Type ¹ | Loc ² | <u>Textu</u> | re Remarks |
| 0-18 | 2.5 Y 5/6 | 100 | | | | | SL | |
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| 1 _T 0 0 | | | Ladria al Matrico MG | | | -: | 21 | n. Di Dana Linina M Matrix |
| | concentration, D=Deplementations: | etion, Rivi=R | educed Matrix, Ms | s=iviasked | Sand Gr | ains. | | n: PL=Pore Lining, M=Matrix. ndicators for Problematic Hydric Soils ³ : |
| - | | | | (0-) | | | ., | |
| Histoso | | | Dark Surface | | /as: == | | - | 2 cm Muck (A10) (MLRA 147) |
| | pipedon (A2) | | Polyvalue Be | | | | 148) _ | Coast Prairie Redox (A16) |
| | istic (A3) | | Thin Dark Su | , , | • | 147, 148) | | (MLRA 147, 148) |
| | en Sulfide (A4) | | Loamy Gleye | | F2) | | _ | Piedmont Floodplain Soils (F19) |
| | d Layers (A5) | | Depleted Ma | | | | | (MLRA 136, 147) |
| | uck (A10) (LRR N) | | Redox Dark S | | | | _ | Very Shallow Dark Surface (TF12) |
| | d Below Dark Surface | (A11) | Depleted Dar | | | | _ | Other (Explain in Remarks) |
| | ark Surface (A12) | | Redox Depre | | | | | |
| | Mucky Mineral (S1) (L | RR N, | Iron-Mangan | | es (F12) (| LRR N, | | |
| | A 147, 148) | | MLRA 13 | - | | | | 2 |
| | Gleyed Matrix (S4) | | Umbric Surfa | | | | | ³ Indicators of hydrophytic vegetation and |
| | Redox (S5) | | Piedmont Flo | | | | | wetland hydrology must be present, |
| Stripped | d Matrix (S6) | | Red Parent N | 1aterial (F | 21) (MLR | A 127, 147 | 7) | unless disturbed or problematic. |
| Restrictive | Layer (if observed): | | | | | | | |
| Type: | | | <u></u> | | | | | |
| Depth (in | iches): | | | | | | Hydric | Soil Present? Yes No |
| Remarks: | | | | | | | , | |
| | Luuraant | | | | | | | |
| No hydric soi | present | | | | | | | |
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Photo 1 Non-water data point NOBRC050 facing north

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

| Project/Site: Atlantic Coast Pipeline | City/County: Brunswick | Sampling Date: 11/14/2014 | | | | |
|---|--|---|--|--|--|--|
| Applicant/Owner: Dominion | | State: VA Sampling Point: NOBRB001 | | | | |
| Investigator(s): TP, SP | Section, Township, Range: | | | | | |
| Landform (hillslope, terrace, etc.): hill slope | | | | | | |
| Subregion (LRR or MLRA): P | | | | | | |
| Soil Map Unit Name: Appling-Mattaponi complex, 2 | to 8 percent slopes | NWI classification: PFO1A | | | | |
| Are climatic / hydrologic conditions on the site typica | I for this time of year? Yes No | _ (If no, explain in Remarks.) | | | | |
| Are Vegetation, Soil, or Hydrology | significantly disturbed? Are "Norm | nal Circumstances" present? Yes No | | | | |
| Are Vegetation, Soil, or Hydrology | | | | | | |
| | | ions, transects, important features, etc. | | | | |
| Lindraphytic Vegetation Present? | ' No_ Is the Sampled Area | | | | | |
| Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes | No. 4/ | | | | | |
| | No within a Wetland? | Yes No | | | | |
| Remarks: | | | | | | |
| HADBOLOGA | | | | | | |
| HYDROLOGY | | Consider Indicators (minimum of two required) | | | | |
| Wetland Hydrology Indicators: | ook all that apply) | Secondary Indicators (minimum of two required) | | | | |
| Primary Indicators (minimum of one is required; che | | Surface Soil Cracks (B6) | | | | |
| Surface Water (A1) High Water Table (A2) | True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) | Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10) | | | | |
| | _ Trydrogen Suilide Odor (CT)_ Oxidized Rhizospheres on Living Roots (C3) | | | | | |
| | Presence of Reduced Iron (C4) | Dry-Season Water Table (C2) | | | | |
| Sediment Deposits (B2) | Recent Iron Reduction in Tilled Soils (C6) | Crayfish Burrows (C8) | | | | |
| Drift Deposits (B3) | Thin Muck Surface (C7) | Saturation Visible on Aerial Imagery (C9) | | | | |
| Algal Mat or Crust (B4) | Other (Explain in Remarks) | Stunted or Stressed Plants (D1) | | | | |
| Iron Deposits (B5) | | Geomorphic Position (D2) | | | | |
| Inundation Visible on Aerial Imagery (B7) | | Shallow Aquitard (D3) | | | | |
| Water-Stained Leaves (B9) | | Microtopographic Relief (D4) | | | | |
| Aquatic Fauna (B13) | | FAC-Neutral Test (D5) | | | | |
| Field Observations: | , | | | | | |
| | Depth (inches): | | | | | |
| | Depth (inches): | | | | | |
| Saturation Present? Yes No (includes capillary fringe) | Depth (inches): Wetland | Hydrology Present? Yes No | | | | |
| Describe Recorded Data (stream gauge, monitoring | g well, aerial photos, previous inspections), if a | vailable: | | | | |
| Remarks: | | | | | | |
| Remarks. | | | | | | |
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VEGETATION (Four Strata) – Use scientific names of plants.

| /EGETATION (Four Strata) – Use scientific na | ames of | plants. | | Sampling Point: NOBRB001 |
|---|---------------|-----------------|---------------|--|
| | Absolute | Dominant | Indicator | Dominance Test worksheet: |
| <u>Tree Stratum</u> (Plot size:) 1. Acer rubrum | % Cover 25 | Species? Yes | Status FAC | Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A) |
| 2. Liquidambar styraciflua | 20 | Yes | FAC | That Ale OBE, I AOW, OF AO(A) |
| 3. Pinus taeda | 15 | Yes | FAC | Total Number of Dominant |
| 4 | | | | Species Across All Strata: 8 (B) |
| 4 | | | | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC: 87.5 (A/B) |
| 6 | | | | Prevalence Index worksheet: |
| <i>1</i> | 60 | Tatal Cause | | Total % Cover of: Multiply by: |
| 50% of total cover: 30 | | = Total Cove | er 12 | OBL species0 x 1 =0 |
| 15 | 20% 01 | total cover: | | FACW species $0 \times 2 = 0$ |
| Sapiing/Shrub Stratum (Plot size:) | | ., | | 110 |
| 1. Acer rubrum | 15 | Yes | FAC | rac species x 3 = |
| 2. Liquidambar styraciflua | 15 | Yes | FAC | FACU species |
| 3. Ulmus alata | 10 | Yes | FACU | UPL species0 x 5 =0 |
| | | | | Column Totals:(A)(B) |
| 4 5. | | | | |
| | | | | Prevalence Index = B/A =3.08 |
| 6 | | | | Hydrophytic Vegetation Indicators: |
| 7 | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8 | | | | ✓ 2 - Dominance Test is >50% |
| 9. | | | | |
| | 40 | = Total Cove | | 3 - Prevalence Index is ≤3.0 ¹ |
| 50% of total cover: 20 | | total cover: | | 4 - Morphological Adaptations ¹ (Provide supporting |
| F | 20 /0 01 | total cover | | data in Remarks or on a separate sheet) |
| Herb Stratum (Plot size:) | | | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 1 | | | | |
| 2 | | | | The Management Charles and Landau |
| 3 | | | | ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| , | | | | |
| 4 | | | | Definitions of Four Vegetation Strata: |
| 5 | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 6 | | | | more in diameter at breast height (DBH), regardless of |
| 7 | | | | height. |
| 8 | | | | |
| 9. | | | | Sapling/Shrub – Woody plants, excluding vines, less |
| · | | | | than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. |
| 10 | | | | my tan. |
| 11 | | | | Herb – All herbaceous (non-woody) plants, regardless |
| | 0 | = Total Cove | er | of size, and woody plants less than 3.28 ft tall. |
| 50% of total cover:0 | 20% of | total cover: | 0 | Manda di Allamanda di anno manda da da 200 ft in |
| Woody Vine Stratum (Plot size:) | | | | Woody vine – All woody vines greater than 3.28 ft in height. |
| 1. Smilax rotundifolia | 10 | Yes | FAC | Height. |
| 2. Lonicera japonica | 10 | Yes | FAC | |
| | | | | |
| 3 | | | | |
| 4 | | | | Hydrophytic |
| 5. | | | | Vegetation |
| | 20 | = Total Cove | | Present? Yes No |
| 50% of total cover: 10 | | total cover: | 4 | |
| 0070 01 total 00vc1. | | total cover. | - | |
| Remarks: (Include photo numbers here or on a separate s | heet.) | | | |
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Sampling Point: NOBRB001

| INCHAe) | Matrix Color (maint) | 0/ | Redox F | | 102 | Ta | | D | _ | |
|----------------------|-----------------------|-------------|----------------------|---------------------------------|------------------|--------------------------|----------------|------------------|-------------|-----|
| inches) | Color (moist) | <u>%</u> | Color (moist) | % Type ¹ | Loc ² | Texture | | Remark | S | |
| 0-3 | 10 YR 3/3 | 100 | | | | SL | | | | |
| 3-12 | 10YR 5/6 | 100 | | | | SCL | | | | |
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| | | letion, RM= | Reduced Matrix, MS=N | Masked Sand Gra | ns. | ² Location: P | | | | _ |
| dric Soil | Indicators: | | | | | Indic | ators for Pro | blematic I | Hydric Soil | s°: |
| Histoso | l (A1) | | Dark Surface (S | 7) | | 2 | cm Muck (A | 10) (MLRA | 147) | |
| Histic E | pipedon (A2) | | Polyvalue Below | Surface (S8) (MI | _RA 147, 1 | 148) 0 | oast Prairie I | Redox (A1 | 6) | |
| Black H | listic (A3) | | Thin Dark Surfa | ce (S9) (MLRA 14 | 17, 148) | | (MLRA 147 | , 148) | | |
| Hydrog | en Sulfide (A4) | | Loamy Gleyed N | /latrix (F2) | | F | riedmont Floo | dplain Soi | ls (F19) | |
| Stratifie | ed Layers (A5) | | Depleted Matrix | (F3) | | | (MLRA 136 | , 147) | | |
| | uck (A10) (LRR N) | | Redox Dark Sur | | | V | ery Shallow I | | ce (TF12) | |
| | ed Below Dark Surfac | e (A11) | Depleted Dark S | | | | ther (Explain | | , , | |
| | ark Surface (A12) | ` , | Redox Depressi | | | | ` . | | , | |
| | Mucky Mineral (S1) (I | _RR N. | | Masses (F12) (L | RR N. | | | | | |
| | A 147, 148) | , | MLRA 136) | ,,, | , | | | | | |
| | Gleyed Matrix (S4) | | • | (F13) (MLRA 136 | 122) | 3Inc | icators of hyd | Ironhytic v | enetation a | nd |
| | Redox (S5) | | | plain Soils (F19) (| | | tland hydrolo | | - | |
| | d Matrix (S6) | | | erial (F21) (MLR<i>A</i> | | | less disturbe | | | |
| | Layer (if observed): | | Ned Falent Mat | eriai (i 2 i) (ivicit) | 127, 147) | uii | iess disturbe | a or proble | mano. | |
| | Layer (ii observed). | | | | | | | | | |
| Type: | | | | | | | | | | . , |
| | nches): | | | | | Hydric Soil | Present? | Yes | No' | _ |
| Depth (in | | | | | | | | | | |
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| Depth (ir emarks: | | | | | | | | | | |
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Photo 1Non-water data point nobrb001 facing southeast



Non-water point NOGRA010 facing northwest



Non-water data point NOGRC100 facing north

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

| Project/Site: Atlantic Coast Pipeline | City/C | County: Greensville | Sampling Date: 3/19/2015 | | | |
|--|---------------------------------------|------------------------------------|--|--|--|--|
| Applicant/Owner: DOMINION | | State: V | A Sampling Point: nogrc001 | | | |
| | | on, Township, Range: No PLSS in th | | | | |
| Landform (hillslope, terrace, etc.): Swale | | | | | | |
| Subregion (LRR or MLRA): P | Lat: 36.72001755 | Long: -77.62929256 | Datum: WGS 1984 | | | |
| Soil Map Unit Name: Fluvanna-Mattaponi | complex, 7 to 15 percent slopes | NWI c | classification: None | | | |
| Are climatic / hydrologic conditions on the | site typical for this time of year? Y | es No (If no, expla | ain in Remarks.) | | | |
| Are Vegetation, Soil, or Hy | drology significantly distur | bed? Are "Normal Circumsta | nces" present? Yes No | | | |
| Are Vegetation, Soil, or Hy | | | | | | |
| SUMMARY OF FINDINGS – Atta | | | | | | |
| Hudrophytia Vagotatian Brocont? | | | | | | |
| Hydrophytic Vegetation Present? Hydric Soil Present? | Yes No Yes No | Is the Sampled Area | 🗸 | | | |
| Wetland Hydrology Present? | Yes No | within a Wetland? Yes | No | | | |
| Remarks: | <u> </u> | <u> </u> | | | | |
| HYDROLOGY | | | | | | |
| Wetland Hydrology Indicators: | | Secondary | / Indicators (minimum of two required) | | | |
| Primary Indicators (minimum of one is red | quired: check all that apply) | | ce Soil Cracks (B6) | | | |
| Surface Water (A1) | True Aquatic Plants (| | ely Vegetated Concave Surface (B8) | | | |
| ✓ High Water Table (A2) | Hydrogen Sulfide Od | | age Patterns (B10) | | | |
| Saturation (A3) | Oxidized Rhizospher | | Trim Lines (B16) | | | |
| Water Marks (B1) | Presence of Reduced | | eason Water Table (C2) | | | |
| Sediment Deposits (B2) | Recent Iron Reduction | | sh Burrows (C8) | | | |
| Drift Deposits (B3) | Thin Muck Surface (0 | C7) Satura | ation Visible on Aerial Imagery (C9) | | | |
| Algal Mat or Crust (B4) | Other (Explain in Rer | marks) Stunte | ed or Stressed Plants (D1) | | | |
| Iron Deposits (B5) | | | norphic Position (D2) | | | |
| Inundation Visible on Aerial Imagery | (B7) | | w Aquitard (D3) | | | |
| Water-Stained Leaves (B9) | | | Microtopographic Relief (D4) FAC-Neutral Test (D5) | | | |
| Aquatic Fauna (B13) | | FAC-I | Neutral Test (D5) | | | |
| Field Observations: | | | | | | |
| | No Depth (inches): | 0 | | | | |
| | No Depth (inches): | | | | | |
| Saturation Present? Yes (includes capillary fringe) | No Depth (inches): | Wetland Hydrology | Present? Yes V No No | | | |
| Describe Recorded Data (stream gauge, | monitoring well, aerial photos, pre | evious inspections), if available: | | | | |
| | | | | | | |
| Remarks: | | | | | | |
| Hydrology indicators are present | | | | | | |
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VEGETATION (Four Strata) – Use scientific names of plants.

| /EGETATION (Four Strata) – Use scientific na | ames of | plants. | | Sampling Point: nogrc001 |
|--|----------|-------------------------------|--------|---|
| 22 | | Dominant I | | Dominance Test worksheet: |
| <u>Tree Stratum</u> (Plot size:) | | Species? | Status | Number of Dominant Species |
| 1 | | | | That Are OBL, FACW, or FAC:0 (A) |
| 2 | | · | | Total Number of Dominant |
| 3 | | | | Species Across All Strata: 2 (B) |
| 4 | | | | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC:0 (A/B) |
| 6 | | | | |
| 7 | | | | Prevalence Index worksheet: |
| | 0 | = Total Cove | r | Total % Cover of: Multiply by: |
| 50% of total cover: 0 | 20% of | total cover:_ | 0 | OBL species0 x 1 =0 |
| Sapling/Shrub Stratum (Plot size: 15 | | | | FACW species x 2 = |
| 1 | | | | FAC species x 3 = |
| 2 | | | | FACU species x 4 = 100 |
| 3 | | | | UPL species x 5 = |
| 4 | | | | Column Totals:(A)(B) |
| 5 | | | | Prevalence Index = B/A = 3.92 |
| 6 | | · | | Trevalence index = B/A = |
| 7 | | | | Hydrophytic Vegetation Indicators: |
| | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8 | | · | | 2 - Dominance Test is >50% |
| 9 | 0 | Total Cove | | 3 - Prevalence Index is ≤3.0 ¹ |
| 50% of total cover: | | = Total Cove total cover:_ | 0 | 4 - Morphological Adaptations ¹ (Provide supporting |
| Herb Stratum (Plot size: 5 | 20 /0 01 | total cover | | data in Remarks or on a separate sheet) |
| 1. Andropogon virginicus | 15 | Yes | FACU | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 2. Dichanthelium laxiflorum | 10 | Yes | FACU | |
| 3. Pinus taeda | 2 | No | FAC | ¹ Indicators of hydric soil and wetland hydrology must |
| · | | - | 170 | be present, unless disturbed or problematic. |
| 4 | | | | Definitions of Four Vegetation Strata: |
| 5 | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 6 | | · | | more in diameter at breast height (DBH), regardless of |
| 7 | | | | height. |
| 8 | | · | | Sapling/Shrub – Woody plants, excluding vines, less |
| 9 | | | | than 3 in. DBH and greater than or equal to 3.28 ft (1 |
| 10 | | | | m) tall. |
| 11 | | | | Herb – All herbaceous (non-woody) plants, regardless |
| 40.5 | | = Total Cove | | of size, and woody plants less than 3.28 ft tall. |
| 50% of total cover:13.5 | 20% of | total cover:_ | 5.4 | Woody vine – All woody vines greater than 3.28 ft in |
| Woody Vine Stratum (Plot size:) | | | | height. |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | Hydrophytic |
| 5 | | | | Vegetation |
| | 0 | = Total Cove | r | Present? Yes No |
| 50% of total cover:0 | 20% of | total cover:_ | 0 | |
| Remarks: (Include photo numbers here or on a separate si | heet.) | | | |
| | | | | |

Sampling Point: nogrc001

| Profile Desc | cription: (Describe t | o the dep | th needed to docun | nent the i | ndicator | or confirm | the absence | of indicators.) |
|------------------------|------------------------------|-----------|---------------------|-------------|-------------------|------------------|----------------|---|
| Depth | Matrix | | Redox | k Features | 3 | | | |
| (inches) | Color (moist) | <u>%</u> | Color (moist) | % | Type ¹ | Loc ² | <u>Texture</u> | Remarks |
| 0-4 | 10 YR 3/2 | 100 | | | | | LS | |
| 4-16 | 2.5 Y 6/4 | 98 | 2.5 Y 6/8 | 2 | С | M | S | |
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| ¹ Type: C=C | oncentration, D=Depl | etion, RM | =Reduced Matrix, MS | S=Masked | Sand Gr | ains. | | L=Pore Lining, M=Matrix. |
| Hydric Soil | Indicators: | | | | | | Indic | ators for Problematic Hydric Soils ³ : |
| Histosol | (A1) | | Dark Surface | (S7) | | | 2 | 2 cm Muck (A10) (MLRA 147) |
| | oipedon (A2) | | Polyvalue Be | | ce (S8) (N | /ILRA 147, | | Coast Prairie Redox (A16) |
| | stic (A3) | | Thin Dark Su | | | | - — | (MLRA 147, 148) |
| | en Sulfide (A4) | | Loamy Gleye | | | • | F | Piedmont Floodplain Soils (F19) |
| | d Layers (A5) | | Depleted Mat | | • | | | (MLRA 136, 147) |
| 2 cm Mu | uck (A10) (LRR N) | | Redox Dark S | Surface (F | 6) | | \ | /ery Shallow Dark Surface (TF12) |
| Depleted | d Below Dark Surface | e (A11) | Depleted Dar | k Surface | (F7) | | C | Other (Explain in Remarks) |
| Thick Da | ark Surface (A12) | | Redox Depre | ssions (F | 3) | | | |
| Sandy N | Mucky Mineral (S1) (L | RR N, | Iron-Mangane | | es (F12) (| LRR N, | | |
| | A 147, 148) | | MLRA 136 | 6) | | | | |
| | Gleyed Matrix (S4) | | Umbric Surfa | | | | | dicators of hydrophytic vegetation and |
| | Redox (S5) | | Piedmont Flo | | | | | etland hydrology must be present, |
| Stripped | l Matrix (S6) | | Red Parent M | laterial (F | 21) (MLR | A 127, 147 | 7) un | lless disturbed or problematic. |
| Restrictive | Layer (if observed): | | | | | | | |
| Type: | | | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soi | l Present? Yes No |
| Remarks: | , - | | | | | | 1 - | |
| No hydric soil | nresent | | | | | | | |
| 140 Hydric 30ii | present | | | | | | | |
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Photo 1 Non-water data point NOGRC001 facing north



Photo 2 Non-water data point NOGRC001 facing south

Environmental Field Surveys Non-water Point Photo Page



Non-water Point nogrp003 facing west. (NHD – no stream)



Non-water Point nogrp003 facing east. (NHD – no stream)



Non-water point NOGRA005 facing southwest



Non-water point NOGRA001 facing west



Non-water point NOGRA002 facing west



Non-water point NOGRA003 facing east



Non-water point NOGRA004 facing west



Non-water point NOGRA008 facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

| Project/Site: ALP City/C | County: Greensville Sampling Date: 5/25/16 |
|---|--|
| Applicant/Owner: Dominion | State: VA Sampling Point: 200001 |
| Investigator(s): ESI-L. Roper, S. Bryan Section | on, Township, Range: NDNE |
| Landform (hillslope, terrace, etc.): flut Local | relief (concave, convex, none): Slope (%): |
| - 1 2 - 1 0 D D 1 - 2 - 1 - 1 - 1 - 1 - 1 | 49 Jane - 71, 536 59 Datum: W6589 |
| Soil Map Unit Name: Woodington fine sandy | loom NW classification: NA |
| Are climatic / hydrologic conditions on the site typical for this time of year? | (os) No. (If no explain in Remarks.) |
| | |
| Are Vegetation, Soil, or Hydrology significantly distur | |
| Are Vegetation, Soil, or Hydrology naturally problem. | |
| SUMMARY OF FINDINGS – Attach site map showing san | npling point locations, transects, important features, etc. |
| Hydrophytic Vegetation Present? Yes No | Is the Sampled Area |
| Hydric Soil Present? Yes No | within a Wetland? Yes No |
| Wetland Hydrology Present? Yes No | |
| Remarks: | |
| | |
| | |
| | |
| HYDROLOGÝ | |
| 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) Aquatic Fauna (B13) | Sparsely Vegetated Concave Surface (B8) |
| High Water Table (A2) High Water Table (A2) Marl Deposits (B15) (LR) | |
| Saturation (A3) Hydrogen Sulfide Odor (I | |
| Water Marks (B1) Sediment Deposits (B2) Oxidized Rhizospheres at Presence of Reduced Iron | |
| Drift Deposits (B3) Recent Iron Reduction in | |
| Algal Mat or Crust (B4) Thin Muck Surface (C7) | Geomorphic Position (D2) |
| ☐ Iron Deposits (B5) ☐ Other (Explain in Remark | |
| Inundation Visible on Aerial Imagery (B7) | FAC-Neutral Test (D5) |
| Water-Stained Leaves (B9) | ☐ Sphagnum moss (D8) (LRR T, U) |
| Field Observations: | NA |
| Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): | |
| Saturation Present? Yes No Depth (inches): | >20 Wetland Hydrology Present? Yes No |
| (includes capillary fringe) | |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre | evious inspections), if available: |
| Remarks: | |
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| | No. of the contract of the con |

| | Absolute Deminent Indicator | Dominance Test worksheet: |
|--|--|--|
| Tree Stratum (Plot size: 30ff x 30ff) | Absolute Dominant Indicator % Cover Species? Status | |
| A CONTROL OF THE RESIDENCE OF THE PROPERTY OF | | Number of Dominant Species That Are OBL, FACW, or FAC: (A) |
| 1. Acer rubrum | | That Are OBL, FACW, or FAC: (A) |
| 2. Liquidambar styraciflua | 15 Y FAC | Total Number of Dominant 4 |
| 3. Pinus tueda | 10 N FAL | Species Across All Strata: (B) |
| 4. | | |
| 「日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日 | | Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/B) |
| 5. | | That Are OBL, FACW, or FAC: (A/B) |
| 6. | | |
| 7 | | Prevalence Index worksheet: |
| 8. | | Total % Cover of: Multiply by: |
| | EE TILE | OBL species x 1 = |
| 11 | 55 = Total Cover | FACW species x 2 = |
| | 5 20% of total cover: | CONTROL OF THE PROPERTY OF THE |
| Sapling/Shrub Stratum (Plot size: 30 F4 x 30 F4) | | FAC species x 3 = |
| 1. Aver rubrum | 10 Y FAC | FACU species x 4 = |
| | 10 Y FAC | UPL species x 5 = |
| 2. Pinus taeda | 10 / / | Column Totals: (A) (B) |
| 3. | | Coldmin rotals (7) (7) |
| 4. | | Prevalence Index = B/A = |
| | | 12. A control of the |
| 5 | | Hydrophytic Vegetation Indicators: |
| 6. | | 1 - Bapid Test for Hydrophytic Vegetation |
| 7. | | 2 - Dominance Test is >50% |
| 8. | | 3 - Prevalence Index is ≤3.0¹ |
| | 20 = Total Cover | |
| <u> </u> | | Problematic Hydrophytic Vegetation¹ (Explain) |
| 50% of total cover: | 20% of total cover: | |
| Herb Stratum (Plot size: 30ff x 30ff) | | ¹ Indicators of hydric soil and wetland hydrology must |
| To Bright and the contract of | | be present, unless disturbed or problematic. |
| Will through distance in patients, and come or recovery transport of the control | | Definitions of Four Vegetation Strata: |
| 2 | | Deminions of Four Vegetation Circuit. |
| 3 | | Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 4 | | more in diameter at breast height (DBH), regardless of |
| 5. | | height. |
| 1 TO A SECOND SE | | |
| 6. | | Sapling/Shrub – Woody plants, excluding vines, less |
| 7. | | than 3 in. DBH and greater than 3.28 ft (1 m) tall. |
| 8. | | Herb - All herbaceous (non-woody) plants, regardless |
| 9. | | of size, and woody plants less than 3.28 ft tall. |
| TO CONTRACT THE PROPERTY OF TH | | |
| 10. | | Woody vine - All woody vines greater than 3.28 ft in |
| 11. | | height. |
| 12. | | |
| | 0 = Total Cover | |
| 50% of total cover: | The set of the second s | |
| | 20% of total cover: | |
| Woody Vine Stratum (Plot size: 30f+ x 30f+) | | |
| 1. none | | |
| 2. | | |
| Maintenance to our server successfully this so appropriate and expensive dates better 5707. | | |
| 3 | | |
| 4. | | |
| 5. | | Hydrophytic |
| | 10 = Total Cover | |
| | Control page 1 - Control of Contr | Present? Yes No |
| 50% of total cover: | 20% of total cover: | |
| Remarks: (If observed, list morphological adaptations belo | ow). | |
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| | ription: (Describe | to the dep | | | | or confirm | the absence of in | all data is a |
|--|--|--------------------------|---|--|--|---|---|--|
| Depth (inches) | Matrix Color (moist) | % | Color (moist) | ox Features % | Type ¹ | Loc² | Texture | Remarks |
| 0 ~ 1 | 2.5/3/2 | 100 | Color (Indist) | | -1103 | | CI | |
| COLUMN A COLUMN | 2.5 15/3 | 90 | 10YR 3/8 | 10 | 0 | M | C. | |
| | 7. 20.1 | - | 10115 -18 | - 10 | | (A) (A) (A) (A) | | |
| 16-70 | | | . 1 =1. | 10.00 | | -44 | | |
| | 2.574/2 | 20 | 101K3/B | 16 | | _/^_ | | A PAGAMATA SANTA TANA MATANTANA |
| Type: C=C Sydric Soil Histosol Histic E Black H Hydroge Stratifier Organic 5 cm Mi Muck P 1 cm Mi Deplete Thick D Coast P Sandy N Sandy N Stripped | 2.5 y 5 3 2.5 y 4 2 2.5 y 4 2 concentration, D=Dep Indicators: (Applic | oletion, RMalable to all | Reduced Matrix, M. LRRs, unless other Polyvalue E. Thin Dark S. Loamy Muc. Loamy Gley Depleted M. Redox Dark Depleted D. Redox Depleted O. Iron-Manga M. Umbric Sur. Delta Ochri Reduced V. Piedmont F. | erwise note Selow Surface (S9) Sky Mineral (yed Matrix (I atrix (F3) c Surface (F ark Surface (LRR U) chric (F11) inese Massiface (F13) (ic (F17) (ML ertic (F18) (Cloodplain S | ed.) ce (S8) (L (LRR S, (F1) (LRR F2) 6) (F7) 6) (MLRA 1. es (F12) (LRR P, T RA 151) MLRA 15 oils (F19) | RR S, T, U T, U) O) 51) LRR O, P, , U) (MLRA 14 | Indicators for F 1) 1 cm Muck 2 cm Muck Reduced V Piedmont F Anomalous (MLRA 1: Red Parent Very Shallo Other (Expl | Material (TF2) w Dark Surface (TF12) lain in Remarks) s of hydrophytic vegetation and hydrology must be present, disturbed or problematic. |
| Туре: | Layer (if observed) | | | | | | Hydric Soil Pre | sent? Yes No V |
| | | | | | | | | |
| | | | | | | | | |

Environmental Field Surveys Non-water Point Photo Page



Non-water point nogro001 facing south. (NWI feature, not wetland)



Non-water point nogro001 facing north. (NWI feature, not wetland)

Photo Sheet 1 of 1



Non-water Point nogrp001 facing east. (NHD – no stream)



Non-water Point nogrp001 facing north. $(NHD-no\ stream)$

Photo Sheet 1 of 2

Environmental Field Surveys Non-water Point Photo Page



Non-water Point nogrp001 facing west. (NHD – no stream)



Non-water point NOGRA009 facing west

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

| Project/Site: Atlantic Coast Pip | peline | City/C | ounty: Greensville | | Sampling Date: 10/3/2014 | | |
|---|---|-----------------------------|---------------------------------------|--------------------------|---------------------------------|--|--|
| Applicant/Owner: Dominion | | , | State: VA | Sampling Point: nogra017 | | | |
| Investigator(s): GB, SP | | n, Township, Range: No | | | | | |
| Landform (hillslope, terrace, et | | | | | | | |
| Subragion (LDD or MLDA): P | | 36.56562227 | Long: -77.5 | 51848928 | Datum: WGS 1984 | | |
| Soil Man Unit Name. Bojac loa | my fine sand, 0 to 2 | percent slopes, frequently | flooded | NWI classifi | Datum: WGS 1984 | | |
| Are climatic / hydrologic condit | | | | | | | |
| | | | | | | | |
| | | | | | present? Yes No | | |
| Are Vegetation, Soil | , or Hydrology _ | naturally problema | tic? (If needed, e | explain any answe | ers in Remarks.) | | |
| SUMMARY OF FINDING | GS – Attach site | map showing sam | pling point location | ons, transects | s, important features, etc. | | |
| Hydrophytic Vegetation Prese | ent? Yes• | ✓ No | le the Compled Area | | | | |
| Hydric Soil Present? | Yes | No | Is the Sampled Area within a Wetland? | Yes | No | | |
| Wetland Hydrology Present? | Yes | No ✓ | Within a 110ac | | | | |
| Remarks: | | | | | | | |
| | Upland data point taken within a NWI wetland polygon located within a 15-year-old pine plantation, pines planted in ditch/berm system. Fails to meet criteria for hydrology and hydric soils. | | | | | | |
| | | | | | | | |
| HYDROLOGY | | | | | | | |
| Wetland Hydrology Indicato | ors: | | | Secondary Indica | ators (minimum of two required) | | |
| Primary Indicators (minimum | of one is required; ch | neck all that apply) | | Surface Soil | Cracks (B6) | | |
| Surface Water (A1) | | True Aquatic Plants (| B14) | Sparsely Ve | getated Concave Surface (B8) | | |
| High Water Table (A2) | - | Hydrogen Sulfide Odd | | Drainage Pa | | | |
| Saturation (A3) | - | | es on Living Roots (C3) | Moss Trim L | | | |
| Water Marks (B1) | | Presence of Reduced | | | Water Table (C2) | | |
| Sediment Deposits (B2) | - | Recent Iron Reductio | | Crayfish Bur | | | |
| Drift Deposits (B3) | - | Thin Muck Surface (C | | | risible on Aerial Imagery (C9) | | |
| Algal Mat or Crust (B4) | - | Other (Explain in Ren | narks) | | Stressed Plants (D1) | | |
| Iron Deposits (B5) | rial Imagany (P7) | | | | Position (D2) | | |
| Inundation Visible on Aer | , | | | Shallow Aqu | aphic Relief (D4) | | |
| Water-Stained Leaves (E Aquatic Fauna (B13) | 19) | | | FAC-Neutra | . , | | |
| Field Observations: | | | | I AC-Neulla | 1 1 est (D3) | | |
| Surface Water Present? | Yes No. 5 | Depth (inches): | | | | | |
| Water Table Present? | | Depth (inches): | | | | | |
| Saturation Present? | | Depth (inches): | | lvdrology Prese | nt? Yes No | | |
| (includes capillary fringe) | | | | | 103 <u></u> | | |
| Describe Recorded Data (stre | am gauge, monitorir | ng well, aerial photos, pre | vious inspections), if ava | ilable: | | | |
| Remarks: | | | | | | | |
| no hydrology indicators preser | nt | | | | | | |
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VEGETATION (Four Strata) – Use scientific names of plants.

| /EGETATION (Four Strata) – Use scientific na | ames of | plants. | | Sampling Point: nogra017 |
|---|---------------|-----------------|---------------|---|
| | Absolute | Dominant | Indicator | Dominance Test worksheet: |
| <u>Tree Stratum</u> (Plot size:) 1. Pinus taeda | % Cover 65 | Species? Yes | Status FAC | Number of Dominant Species That Are OBL, FACW, or FAC:5 (A) |
| 2. Liquidambar styraciflua | 5 | No | FAC | |
| 3 | | | | Total Number of Dominant Species Across All Strata: 7 (B) |
| 4. | | | | |
| 5 | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 71.42857142 (A/B) |
| 6. | | | | That Ale OBL, FACW, of FAC. (A/B) |
| 7 | | | | Prevalence Index worksheet: |
| | 70 | = Total Cove | er . | Total % Cover of: Multiply by: |
| 50% of total cover:35 | | total cover: | 14 | OBL species x 1 = 0 |
| Sapling/Shrub Stratum (Plot size: 15 | | | | FACW species x 2 = 0 |
| 1. Liquidambar styraciflua | 10 | Yes | FAC | FAC species x 3 = |
| 2. Liriodendron tulipifera | 10 | Yes | FACU | FACU species x 4 = 80 |
| 3. Ilex opaca | 10 | Yes | FACU | UPL species 0 x 5 = 0 |
| 4. Acer rubrum | 5 | No | FAC | Column Totals:153 (A) (B) |
| 5. Pinus taeda | 3 | No | FAC | Prevalence Index = R/A = 3.13 |
| 6 | | | | 1 Tevalence index = B/T(= |
| 7 | | | | Hydrophytic Vegetation Indicators: |
| 8. | | · | | 1 - Rapid Test for Hydrophytic Vegetation |
| 9. | | | | 2 - Dominance Test is >50% |
| | 38 | = Total Cove | <u></u> | 3 - Prevalence Index is ≤3.0¹ |
| 50% of total cover: 19 | 20% of | total cover: | 7.6 | 4 - Morphological Adaptations ¹ (Provide supporting |
| Herb Stratum (Plot size:) | | | | data in Remarks or on a separate sheet) |
| 1. Chasmanthium sessiliflorum | 30 | Yes | FAC | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 2 | | | | 1 |
| 3 | | | | ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 4 | | | | Definitions of Four Vegetation Strata: |
| 5. | | | | Definitions of Four Vegetation Strata. |
| 6 | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 7 | | | | more in diameter at breast height (DBH), regardless of height. |
| 8 | | | | |
| 9. | | | | Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 |
| 10. | | | | m) tall. |
| 11. | | | | Herb – All herbaceous (non-woody) plants, regardless |
| · | 30 | = Total Cove | er | of size, and woody plants less than 3.28 ft tall. |
| 50% of total cover: 15 | | total cover: | 6 | Was devices Allowed with a second of the O.O. fi |
| Woody Vine Stratum (Plot size:) | | | | Woody vine – All woody vines greater than 3.28 ft in height. |
| 1. Campsis radicans | 10 | Yes | FAC | g.m |
| 2. Smilax rotundifolia | 5 | Yes | FAC | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | <u> </u> | Hydrophytic Vegetation |
| <u> </u> | 15 | = Total Cove | er . | Present? Yes No |
| 50% of total cover:7.5 | | total cover: | 3 | |
| Remarks: (Include photo numbers here or on a separate sl | | - | | |
| Tromano. (molado prioto namboro noro di dir a doparato di | 1001) | | | |
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Sampling Point: nogra017

SOIL

| Depth | Matrix | | Redox Features | | |
|-----------|------------------------------|-----------------|--|---------------|--|
| (inches) | Color (moist) | <u>%</u> | Color (moist) % Type ¹ Loc ² | | Remarks |
| 0-6 | 10YR 3/2 | 100 | | SL | |
| 6-20 | 10YR 5/3 | 100 | | SL | |
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| | | | | 21 | DI D. III MAN |
| | | letion, RM=R | educed Matrix, MS=Masked Sand Grains. | | PL=Pore Lining, M=Matrix. |
| - | Indicators: | | | | cators for Problematic Hydric Soils ³ : |
| Histosol | | | Dark Surface (S7) | | 2 cm Muck (A10) (MLRA 147) |
| | pipedon (A2) | | Polyvalue Below Surface (S8) (MLRA 1 | | Coast Prairie Redox (A16) |
| | istic (A3) | | Thin Dark Surface (S9) (MLRA 147, 14 | • | (MLRA 147, 148) |
| | en Sulfide (A4) | | Loamy Gleyed Matrix (F2) | | Piedmont Floodplain Soils (F19) |
| | d Layers (A5) | | Depleted Matrix (F3) | | (MLRA 136, 147) |
| | uck (A10) (LRR N) | | Redox Dark Surface (F6) | | Very Shallow Dark Surface (TF12) |
| | d Below Dark Surface | e (A11) | Depleted Dark Surface (F7) | | Other (Explain in Remarks) |
| | ark Surface (A12) | | Redox Depressions (F8) | | |
| | Mucky Mineral (S1) (L | .RR N, | Iron-Manganese Masses (F12) (LRR N | , | |
| | A 147, 148) | | MLRA 136) | | |
| | Sleyed Matrix (S4) | | Umbric Surface (F13) (MLRA 136, 122) | | ndicators of hydrophytic vegetation and |
| | Redox (S5) | | Piedmont Floodplain Soils (F19) (MLRA | | vetland hydrology must be present, |
| | l Matrix (S6) | | Red Parent Material (F21) (MLRA 127, | 147) u | inless disturbed or problematic. |
| | Layer (if observed): | | | | |
| Type: no | ne | | <u>_</u> | | |
| Depth (in | | | | Hydric So | oil Present? Yes No 🚩 |
| Remarks: | | | | | |
| Ciliains. | | | | | |
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Photo 1 Non-water data point nogra017 facing north

| Project/Site: A CP | City/County: Greensville Sampling Date: 6/17/15 |
|--|---|
| Applicant/Owner: Dominion | State: VA Sampling Point: no grp 002 |
| Investigator(s): ESI LRoper, Markham) | Section, Township, Range: |
| Landform (hillslone terrace etc.): terrace | Local relief (concave convex none): MONP. Slone (%): (2 - 3) |
| Subregion (LRR or MLRA): LPR P Lat: 36.5 | 55691 Long: -77, 51320 Datum: N.6584 |
| Soil Map Unit Name: Willham sandy lown | 55691 Long: -77, 51320 Datum: 10584 -, 0-21, slopes NWI classification: NA |
| Are climatic / hydrologic conditions on the site typical for this time of ye | ear? Yes No (If no explain in Remarks) |
| Are Vegetation, Soil, or Hydrology significantly | |
| Are Vegetation, Soil, or Hydrology naturally pro | |
| | |
| SUMMARY OF FINDINGS – Attach site map showing | g sampling point locations, transects, important features, etc. |
| Hydrophytic Vegetation Present? Yes No | In the Counted Aven |
| Hydric Soil Present? Yes No | Is the Sampled Area within a Wetland? Yes No |
| Wetland Hydrology Present? Yes No No | Within a Metianus 162 140 V |
| Active soybean field | |
| 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) Aquatic Fauna (B | 13) Sparsely Vegetated Concave Surface (B8) |
| High Water Table (A2) Harl Deposits (B1 | |
| Saturation (A3) Hydrogen Sulfide | |
| | heres along Living Roots (C3) Dry-Season Water Table (C2) |
| Sediment Deposits (B2) Presence of Redu Presence of Redu Recent Iron Redu | uced Iron (C4) |
| Algal Mat or Crust (B4) Thin Muck Surface | |
| Iron Deposits (B5) Other (Explain in | |
| Inundation Visible on Aerial Imagery (B7) | FAC-Neutral Test (D5) |
| Water-Stained Leaves (B9) | Sphagnum moss (D8) (LRR T, U) |
| Field Observations: | . ~/ \times |
| Surface Water Present? Yes No Depth (inche | S: 177 |
| Water Table Present? Yes No Depth (inche | |
| Saturation Present? Yes No Depth (inche (includes capillary fringe) | |
| Describe Recorded Data (stream gauge, monitoring well, aerial pho | otos, previous inspections), if available: |
| | |
| Remarks: | |
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| | Abandula Danibant built | Sampling Point. |
|---|--|---|
| Tree Stratum (Plot size: 30ff x30ff) | Absolute Dominant Indicator <u>% Cover Species? Status</u> | Dominance Test worksheet: |
| 1. none | | Number of Dominant Species |
| | | That Are OBL, FACW, or FAC: (A) |
| 2 | | Total Number of Dominant |
| 3 | | Species Across All Strata: (B) |
| 4 | | Porcent of Deminent Occasion |
| 5 | | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) |
| 6 | | macric obe, i row, of roc. |
| 7 | | Prevalence Index worksheet: |
| | | Total % Cover of: Multiply by: |
| 8 | | OBL species x1= |
| | = Total Cover | |
| | 20% of total cover: | FACW species x 2 = |
| Sapling/Shrub Stratum (Plot size: 30 ft x 30 ft) | | FAC species x 3 = |
| 1. none | | FACU species x 4 = |
| | | UPL species |
| 2. | | Column Totals: 70 (A) 350 (B) |
| 3 | | , |
| 4 | | Prevalence Index = B/A = 5.0 |
| 5 | | Hydrophytic Vegetation Indicators: |
| 6 | | |
| 7 | | 1 - Rapid Test for Hydrophytic Vegetation |
| | | 2 - Dominance Test is >50% |
| 8 | | ☐ 3 - Prevalence Index is ≤3.01 |
| | = Total Cover | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 50% of total cover; | 20% of total cover: | |
| Herb Stratum (Plot size: 30ft x 30ft) | | ¹Indicators of hydric soil and wetland hydrology must |
| 1. Glycine max | 70 Y UPL | be present, unless disturbed or problematic. |
| | =" | |
| | | Definitions of Four Vegetation Strata: |
| 3 | | Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 4 | | more in diameter at breast height (DBH), regardless of |
| 5 | | height. |
| 6 | | Capling/Charle Mandy plants avaluating vince lace |
| | | Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. |
| 7 | | • |
| 8 | | |
| 9 | | of size, and woody plants less than 3.28 ft tall. |
| 10 | | Woody vine – All woody vines greater than 3.28 ft in |
| 11 | | height. |
| 12 | | |
| (4) | 70 | - |
| | 70 = Total Cover | |
| | 35 20% of total cover: 14 | - |
| Woody Vine Stratum (Plot size: 30 ft x 30 ft) | | |
| 1. none | | |
| 2. | | - |
| 1 | | - |
| 3 | | - [|
| 4 | | _ |
| 5 | | - Hydrophytic |
| | = Total Cover | Vegetation |
| 7004 | <u> </u> | Present? Yes No |
| | 20% of total cover: | |
| Remarks: (If observed, list morphological adaptations | below). | |
| | · | |
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| 1 | | |
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| 1 | | |

| Sampling Point: | noq | 200g |
|-----------------|-----|------|
| Sampling Point. | | |

| Profile Desc | ription: (Describe | to the depth | needed to docum | nent the ir | ndicator | or confirm | the absence of inc | dicators.) |
|-------------------|---|-----------------------|--------------------------|---------------|----------|------------|--------------------|--|
| Depth (inches) | Matrix Color (moist) | | Redo: Color (moist) | x Features | | Loc² | Tandone | D |
| 0-12 | 10 YP 3/3 | - - 1 06 - | Color (moist) | | Type | LOC | <u>Texture</u> | Remarks |
| | 10 10 H | | | · | | | <u> </u> | |
| 12-20 | 10 7 K 1/6 | 100_ | | | | | <u>sc</u> | |
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| | | | | | | | | |
| | | | | | | | | |
| ¹Type: C=Co | oncentration, D=Dep | oletion.RM=R | Reduced Matrix, MS | S=Masked | Sand Gra | ains. | ²Location: PL= | ore Lining, M=Matrix, |
| | Indicators: (Applic | | | | | | | roblematic Hydric Soils ³ : |
| Histosol | (A1) | | Polyvalue Be | | | | | (A9) (LRR O) |
| | oipedon (A2) | | Thin Dark Su | | | | | (A10) (LRR S) |
| | stic (A3) | | Loamy Muck | - | | (O) | | ertic (F18) (outside MLRA 150A,B) |
| | en Sulfide (A4) d Layers (A5) | | Loamy Gleye Depleted Ma | - | F2) | | | loodplain Soils (F19) (LRR P, S, T) |
| | Bodies (A6) (LRR F | P. T. U) | Redox Dark | | 6) | | (MLRA 1 | Bright Loamy Soils (F20) |
| 1 = | ıcky Mineral (A7) (L | | Depleted Da | • | • | | | Material (TF2) |
| Muck Pr | esence (A8) (LRR I | | Redox Depre | essions (F | | | | w Dark Surface (TF12) |
| 1 | ıck (A9) (LRR P, T) | | Marl (F10) (I | • | | | Uther (Expl | ain in Remarks) |
| | d Below Dark Surfac ark Surface (A12) | ce (A11) | Depleted Oc | | | | T) 31 | |
| = | rairie Redox (A16) (| MI RA 150A) | Iron-Mangar Umbric Surfa | | | | • | of hydrophytic vegetation and hydrology must be present, |
| | Mucky Mineral (S1) | | Delta Ochrid | | | , •, | | listurbed or problematic. |
| | Gleyed Matrix (S4) | | Reduced Ve | ertic (F18) (| (MLRA 1 | | | • |
| | Redox (S5) | | Piedmont FI | | | | | |
| | d Matrix (S6) | e + 10 | Anomalous | Bright Loa | my Soils | (F20) (MLR | RA 149A, 153C, 153 | BD) |
| | ırface (S7) (LRR P, Layer (if observed | | | | | | | |
| Type: | | | | | | | | |
| 1 | nches): | | | | | | Hydric Sail Pro | sent? Yes No |
| Remarks: | | | | | | | Tryuno con tre | 30110 169 140 |
| 110111011101 | | | | | | | | |
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Non-water Point nogrp002 facing northwest. (NWI - no wetland)



Non-water Point nogrp002 facing southwest. (NHD – no wetland)

Photo Sheet 1 of 1



Non-water point nosoo011 facing west. (upside of culvert, not a stream)



Non-water point nosoo011 facing east. (upside of culvert, not a stream)

Photo Sheet 1 of 2



Non-water point nosoo011 facing north. (upside of culvert, not a stream)



Non-water point nosoo008 facing east. (NHD, not a stream)



Non-water point nosoo008 facing north. (NHD, not a stream)



Non-water data point nosoa070 facing northeast

| Project/Site: ACP City/C Applicant/Owner: Dominion | State: VA Sampling Point: 10/8/15 |
|---|---|
| Investigator(s): J. Bonton Section | on, Township, Range: N/A |
| Landform (hillslope, terrace, etc.): Floodplain Local | |
| Subregion (LRR or MLRA): LRR P Lat: 36.6034 | |
| | |
| Soil Map Unit Name: Bibb Sandy loam, 0-2% slopes, fre | grently trooded NWI classification: N/A |
| Are climatic / hydrologic conditions on the site typical for this time of year? Ye | es No (If no, explain in Remarks.) |
| Are Vegetation, Soil, or Hydrology significantly disturt | bed? Are "Normal Circumstances" present? Yes X No |
| Are Vegetation, Soil, or Hydrology naturally problems | |
| | |
| SUMMARY OF FINDINGS – Attach site map showing sam | ipling point locations, transects, important features, etc. |
| Hydrophytic Vegetation Present? Yes No | Is the Sampled Area |
| Hydric Soil Present? Yes No | within a Wetland? Yes No _X |
| Wetland Hydrology Present? Yes No _X | within a Wehalld? |
| Remarks: | |
| | |
| HYDROLOGY | |
| Wetland Hydrology Indicators: | Secondary Indicators (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | Surface Soil Cracks (B6) |
| Surface Water (A1) Aquatic Fauna (B13) | Sparsely Vegetated Concave Surface (B8) |
| High Water Table (A2) Marl Deposits (B15) (LRF | R U) Drainage Patterns (B10) |
| Saturation (A3) Hydrogen Sulfide Odor (C | C1) Moss Trim Lines (B16) |
| Water Marks (B1) Oxidized Rhizospheres al | |
| Sediment Deposits (B2) Presence of Reduced Iron | n (C4) Crayfish Burrows (C8) |
| Drift Deposits (B3) Recent Iron Reduction in | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| Algal Mat or Crust (B4) Thin Muck Surface (C7) | Geomorphic Position (D2) |
| Iron Deposits (B5) Other (Explain in Remark | , |
| Inundation Visible on Aerial Imagery (B7) | X FAC-Neutral Test (D5) |
| Water-Stained Leaves (B9) | Sphagnum moss (D8) (LRR T, U) |
| Field Observations: | //Δ |
| Surface Water Present? Yes NoX Depth (inches): | |
| | 720 |
| Saturation Present? Yes No _X Depth (inches): | 720 Wetland Hydrology Present? Yes No |
| (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre- | vious inspections), if available: |
| | |
| Remarks: | |
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| | Absolute | Dominant | Indicator | Dominance Test worksheet: | \neg |
|--|----------|---|-----------|---|----------|
| Tree Stratum (Plot size: 30 × 30) | | Species? | | | |
| 1. Nussa sylvatica | 40 | | FAC | Number of Dominant Species That Are OBL, FACW, or FAC: (A) | |
| 1. NUSSA SYLVATION | -10 | | | That Are OBL, FACW, & FAC (A) | |
| 2. Carpinus caroliniana | 20 | 7 | FAC | Total Number of Dominant | - 1 |
| 3 | | , | | Species Across All Strata: | - 1 |
| The state of the s | | | | opedes Across Air otrata. | - 1 |
| 4 | | | | Percent of Dominant Species | - 1 |
| 5 | | | | That Are OBL, FACW, or FAC: (A/B | 3) [|
| | | | | | Ί. |
| 6 | | | | Prevalence Index worksheet: | |
| 7 | | | | | - 1 |
| 8 | | | | Total % Cover of:Multiply by: | - 1 |
| J 0. | 60 | | | OBL species x 1 = | - 1 |
| | | = Total Cov | | FACW species x 2 = | |
| 50% of total cover: 30 | 20% of | total cover | : 12_ | | |
| Sapling/Shrub Stratum (Plot size: 30 × 30) | . 40 | | - | FAC species x 3 = | |
| Saping/Shrub Stratum (Plot Size. 30 A 30) | 10 | V. | EAC | FACU species x 4 = | |
| 1. Ligustrum Sinense | 10 | | FAC | | |
| 2. Carpinus Caroliniana | 10 | 4 | FAC | UPL species x 5 = | |
| - Tlex costs | | | FAC | Column Totals: (A) (B) |) |
| 3. Ilex opaca | _5_ | 7 | TAC | 1.1. | |
| 4 | | - (| | Prevalence Index = B/A = | |
| | | 100000000000000000000000000000000000000 | | | \dashv |
| 5 | | | | Hydrophytic Vegetation Indicators: | |
| 6 | | | | 1 - Rapid Test for Hydrophytic Vegetation | |
| 7 | | | | ✓ 2 - Dominance Test is >50% | |
| | | | | | |
| 8 | | | | 3 - Prevalence Index is ≤3.01 | |
| | 25 | = Total Cov | /er | Problematic Hydrophytic Vegetation¹ (Explain) | |
| 50% of total cover: 12.5 | 20% 0 | total cover | . 5 | (Toblematic Hydrophytic regulation (Explain) | |
| | 20700 | total cover | | | |
| Herb Stratum (Plot size: 30 × 30) | | | | ¹ Indicators of hydric soil and wetland hydrology must | |
| 1. Microstegium vimineum | 25 | Y | FAC | be present, unless disturbed or problematic. | |
| a Acundinaria ain atea | 10 | 4 | FARM | Definitions of Four Vegetation Strata: | \neg |
| 2. Arundinaria gigantea | | - | 11/0 | Deminions of Four Vegetation Strata. | |
| 3 | | | | Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of | or I |
| 4 | | | | more in diameter at breast height (DBH), regardless of | |
| | | | | height. | " |
| 5 | | | | noigh. | |
| 6 | | | | Sapling/Shrub - Woody plants, excluding vines, less | . |
| | | | | than 3 in. DBH and greater than 3.28 ft (1 m) tall. | 200 |
| 7 | | | | | |
| 8 | | | | Herb - All herbaceous (non-woody) plants, regardless | s |
| 9 | | | | of size, and woody plants less than 3.28 ft tall. | |
| | | | | 1 () () () () () () () () () (| |
| 10 | | | | Woody vine - All woody vines greater than 3.28 ft in | |
| 11 | | | | height. | |
| 12 | | | | | |
| 12. | 7.5 | | | | |
| | | = Total Co | /er | 17.2000000000000000000000000000000000000 | |
| 50% of total cover: 17.5 | 20% of | total cover | : 7 | | |
| Woody Vine Stratum (Plot size: 30 × 30) | | | | | |
| | 1. | ×1 | EA- | | |
| 1. Lonicera japonica | 10 | 1 | IMC | | |
| 2. Vitis rotundifolia | 5 | y | FAC | | |
| 3. Toxicodendron radicans | Pro- | -1, | EAC | | |
| 3. TONICO GENOTOTI TAGICATIS | | 7 | INC | | |
| 4 | | | | | |
| 5. | | | | 1 | |
| J | 2 - | | | Hydrophytic | |
| | 20 | = Total Co | /er | Vegetation Present? Yes No | |
| 50% of total cover: | 20% of | f total cover | : 4 | Present? Yes No | |
| | | | | | _ |
| Remarks: (If observed, list morphological adaptations belo | w). | | | | |
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| Profile Description: (Describe to the dept | h needed to docum | ent the i | ndicator | or confirm | the absence of in | dicators.) |
|--|-----------------------------|-----------|----------|------------------|--------------------|--|
| Depth Matrix | | Features | | | <u></u> | |
| (inches) Color (moist) % | Color (moist) | % | Type | Loc ² | Texture | Remarks |
| 0-6 104R3/3 100 | | | | | <u> </u> | |
| 6-12 104R4/3 100 | | | 177-177- | | | |
| 12-16 104R 4/3 95 | 7.54R416 | 5 | | M | | |
| 16-20 10484/2 90 | 7.54R 4/6 | 10 | C | M | L | |
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| 1 | | | | | 2, ,, 5, 5 | No. of the target and target and the |
| Type: C=Concentration, D=Depletion, RM= Hydric Soil Indicators: (Applicable to all L | | | | ains. | | Pore Lining, M=Matrix. roblematic Hydric Soils ³ : |
| Histosol (A1) | Polyvalue Bel | | | PPSTII | | |
| Histic Epipedon (A2) | Thin Dark Sur | | | | | A10) (LRR S) |
| Black Histic (A3) | Loamy Mucky | | | | | rtic (F18) (outside MLRA 150A,B) |
| Hydrogen Sulfide (A4) | Loamy Gleyed | | | | Piedmont FI | oodplain Soils (F19) (LRR P, S, T) |
| Stratified Layers (A5) | Depleted Matr | | | | | Bright Loamy Soils (F20) |
| Organic Bodies (A6) (LRR P, T, U) | Redox Dark S | | | | (MLRA 15 | |
| 5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) | Depleted Dark Redox Depres | | 7 | | | Material (TF2) v Dark Surface (TF12) |
| 1 cm Muck (A9) (LRR P, T) | Marl (F10) (LF | | 3) | | | in in Remarks) |
| Depleted Below Dark Surface (A11) | Depleted Och | | (MLRA 1 | 51) | | |
| Thick Dark Surface (A12) | Iron-Mangane | | | | | of hydrophytic vegetation and |
| Coast Prairie Redox (A16) (MLRA 150A | | | | ', U) | | nydrology must be present, |
| Sandy Mucky Mineral (S1) (LRR O, S) | Delta Ochric (Reduced Vert | | | nA 150B) | | sturbed or problematic. |
| Sandy Gleyed Matrix (S4) Sandy Redox (S5) | Piedmont Floo | | | | | |
| Stripped Matrix (S6) | | | | | A 149A, 153C, 153I | 0) |
| Dark Surface (S7) (LRR P, S, T, U) | N 1 | | | | | |
| Restrictive Layer (if observed): | | | | | | |
| Туре: | _ | | | | | V |
| Depth (inches): | | | | | Hydric Soll Pres | ent? Yes No _X |
| Remarks: | | | | | | |
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Non-water point nosop001 facing northeast. (NWI, not a wetland)



Non-water point nosop001 facing southwest. (NWI, not a wetland)

| Project/Site: ACP City/C Applicant/Owner: Dominion | State: VA Sampling Point: 10/8/15 |
|---|---|
| Investigator(s): J. Bonton Section | on, Township, Range: N/A |
| Landform (hillslope, terrace, etc.): Floodplain Local | |
| Subregion (LRR or MLRA): LRR P Lat: 36.6034 | |
| | |
| Soil Map Unit Name: Bibb Sandy loam, 0-2% slopes, fre | grently trooded NWI classification: N/A |
| Are climatic / hydrologic conditions on the site typical for this time of year? Ye | es No (If no, explain in Remarks.) |
| Are Vegetation, Soil, or Hydrology significantly disturt | bed? Are "Normal Circumstances" present? Yes X No |
| Are Vegetation, Soil, or Hydrology naturally problems | |
| | |
| SUMMARY OF FINDINGS – Attach site map showing sam | ipling point locations, transects, important features, etc. |
| Hydrophytic Vegetation Present? Yes No | Is the Sampled Area |
| Hydric Soil Present? Yes No | within a Wetland? Yes No _X |
| Wetland Hydrology Present? Yes No _X | within a Wehalld? |
| Remarks: | |
| | |
| HYDROLOGY | |
| Wetland Hydrology Indicators: | Secondary Indicators (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | Surface Soil Cracks (B6) |
| Surface Water (A1) Aquatic Fauna (B13) | Sparsely Vegetated Concave Surface (B8) |
| High Water Table (A2) Marl Deposits (B15) (LRF | R U) Drainage Patterns (B10) |
| Saturation (A3) Hydrogen Sulfide Odor (C | C1) Moss Trim Lines (B16) |
| Water Marks (B1) Oxidized Rhizospheres al | |
| Sediment Deposits (B2) Presence of Reduced Iron | n (C4) Crayfish Burrows (C8) |
| Drift Deposits (B3) Recent Iron Reduction in | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| Algal Mat or Crust (B4) Thin Muck Surface (C7) | Geomorphic Position (D2) |
| Iron Deposits (B5) Other (Explain in Remark | , |
| Inundation Visible on Aerial Imagery (B7) | X FAC-Neutral Test (D5) |
| Water-Stained Leaves (B9) | Sphagnum moss (D8) (LRR T, U) |
| Field Observations: | //Δ |
| Surface Water Present? Yes NoX Depth (inches): | |
| | 720 |
| Saturation Present? Yes No _X Depth (inches): | 720 Wetland Hydrology Present? Yes No |
| (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre- | vious inspections), if available: |
| | |
| Remarks: | |
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| | Absolute | Dominant | Indicator | Dominance Test worksheet: | \neg |
|--|----------|---|-----------|--|----------|
| Tree Stratum (Plot size: 30 × 30) | | Species? | | | |
| 1. Nussa sylvatica | 40 | | FAC | Number of Dominant Species That Are OBL, FACW, or FAC: (A) | |
| 1. NUSSA SYLVATION | -10 | | | That Are OBL, FACW, & FAC (A) | |
| 2. Carpinus caroliniana | 20 | 7 | FAC | Total Number of Dominant | - 1 |
| 3 | | , | | Species Across All Strata: | - 1 |
| The state of the s | | | | opedes Across Air otrata. | - 1 |
| 4 | | | | Percent of Dominant Species | - 1 |
| 5 | | | | That Are OBL, FACW, or FAC: (A/B | 3) [|
| | | | | | Ί. |
| 6 | | | | Prevalence Index worksheet: | |
| 7 | | | | | - 1 |
| 8 | | | | Total % Cover of:Multiply by: | - 1 |
| J 0. | 60 | | | OBL species x 1 = | - 1 |
| | | = Total Cov | | FACW species x 2 = | |
| 50% of total cover: 30 | 20% of | total cover | : 12_ | | |
| Sapling/Shrub Stratum (Plot size: 30 × 30) | . 40 | | - | FAC species x 3 = | |
| Saping/Shrub Stratum (Plot Size. 30 A 30) | 10 | V. | EAC | FACU species x 4 = | |
| 1. Ligustrum Sinense | 10 | | FAC | | |
| 2. Carpinus Caroliniana | 10 | 4 | FAC | UPL species x 5 = | |
| - Tlex costs | | | FAC | Column Totals: (A) (B) |) |
| 3. Ilex opaca | _5_ | 7 | TAC | 1.1. | |
| 4 | | - (| | Prevalence Index = B/A = | |
| | | 100000000000000000000000000000000000000 | | | \dashv |
| 5 | | | | Hydrophytic Vegetation Indicators: | |
| 6 | | | | 1 - Rapid Test for Hydrophytic Vegetation | |
| 7 | | | | ✓ 2 - Dominance Test is >50% | |
| | | | | | |
| 8 | | | | 3 - Prevalence Index is ≤3.01 | |
| | 25 | = Total Cov | /er | Problematic Hydrophytic Vegetation¹ (Explain) | |
| 50% of total cover: 12.5 | 20% 0 | total cover | . 5 | (Toblematic Hydrophytic regulation (Explain) | |
| | 20700 | total cover | | | |
| Herb Stratum (Plot size: 30 × 30) | | | | ¹ Indicators of hydric soil and wetland hydrology must | |
| 1. Microstegium vimineum | 25 | Y | FAC | be present, unless disturbed or problematic. | |
| a Acundinaria ain atea | 10 | 4 | FARM | Definitions of Four Vegetation Strata: | \neg |
| 2. Arundinaria gigantea | | - | 11/0 | Deminions of Four Vegetation Strata. | |
| 3 | | | | Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of | or I |
| 4 | | | | more in diameter at breast height (DBH), regardless of | |
| | | | | height. | " |
| 5 | | | | noigh. | |
| 6 | | | | Sapling/Shrub - Woody plants, excluding vines, less | . |
| | | | | than 3 in. DBH and greater than 3.28 ft (1 m) tall. | 200 |
| 7 | | | | | |
| 8 | | | | Herb - All herbaceous (non-woody) plants, regardless | s |
| 9 | | | | of size, and woody plants less than 3.28 ft tall. | |
| | | | | The state of the s | |
| 10 | | | | Woody vine - All woody vines greater than 3.28 ft in | |
| 11 | | | | height. | |
| 12 | | | | | |
| 12. | 7.5 | | | | |
| | | = Total Co | /er | 17.2000000000000000000000000000000000000 | |
| 50% of total cover: 17.5 | 20% of | total cover | : 7 | | |
| Woody Vine Stratum (Plot size: 30 × 30) | | | | | |
| | 1. | ×1 | EA- | | |
| 1. Lonicera japonica | 10 | 1 | IMC | | |
| 2. Vitis rotundifolia | 5 | y | FAC | | |
| 3. Toxicodendron radicans | Pro- | -1, | EAC | | |
| 3. TONICO GENOTOTI TAGICATIS | | 7 | INC | | |
| 4 | | | | | |
| 5. | | | | 1 | |
| J | 2 - | | | Hydrophytic | |
| | 20 | = Total Co | /er | Vegetation Present? Yes No | |
| 50% of total cover: | 20% of | f total cover | : 4 | Present? Yes No | |
| | | | | | _ |
| Remarks: (If observed, list morphological adaptations belo | w). | | | | |
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| Profile Description: (Describe to the dept | h needed to docum | ent the i | ndicator | or confirm | the absence of in | dicators.) | | | |
|--|----------------------------|------------|----------|------------|-------------------|--|--|--|--|
| Depth Matrix | | Features | | | <u> </u> | | | | |
| (inches) Color (moist) % | Color (moist) | % | Type | Loc2 | Texture | Remarks | | | |
| 0-6 104R3/3 100 | | | | | | | | | |
| 6-12 104R4/3 100 | | | 177-177- | | | | | | |
| 12-16 104R 4/3 95 | 7.54R416 | 5_ | | M | | | | | |
| 16-20 10484/2 90 | 7.54R 4/6 | 10 | C | M | L_ | | | | |
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| 1 | | | | | 2, ,, ,, | | | | |
| Type: C=Concentration, D=Depletion, RM= Hydric Soil Indicators: (Applicable to all L | | | | ains. | | Pore Lining, M=Matrix. Problematic Hydric Soils ³ : | | | |
| | Polyvalue Bel | | | DD C T II | | | | | |
| Histosol (A1) Histic Epipedon (A2) | Thin Dark Sur | | | | | (A10) (LRR S) | | | |
| Black Histic (A3) | Loamy Mucky | | | | | ertic (F18) (outside MLRA 150A,B) | | | |
| Hydrogen Sulfide (A4) | Loamy Gleyed | | | | Piedmont FI | Piedmont Floodplain Soils (F19) (LRR P, S, T) | | | |
| Stratified Layers (A5) | Depleted Matr | | | | | Bright Loamy Soils (F20) | | | |
| Organic Bodies (A6) (LRR P, T, U) | Redox Dark S | | | | (MLRA 15 | | | | |
| 5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) | Depleted Dark Redox Depres | | 7 | | | Material (TF2) w Dark Surface (TF12) | | | |
| 1 cm Muck (A9) (LRR P, T) | Marl (F10) (LF | | , | | | ain in Remarks) | | | |
| Depleted Below Dark Surface (A11) | Depleted Och | | (MLRA 1 | 51) | | , | | | |
| Thick Dark Surface (A12) | Iron-Mangane | | | | | of hydrophytic vegetation and | | | |
| Coast Prairie Redox (A16) (MLRA 150A | | | | , U) | | hydrology must be present, | | | |
| Sandy Mucky Mineral (S1) (LRR O, S) | Delta Ochric (| | | OA 460B) | | isturbed or problematic. | | | |
| Sandy Gleyed Matrix (S4) Sandy Redox (S5) | Reduced Verti | | | | | | | | |
| Stripped Matrix (S6) | | | | | A 149A, 153C, 153 | D) | | | |
| Dark Surface (S7) (LRR P, S, T, U) | | | | | | | | | |
| Restrictive Layer (if observed): | | | | | | | | | |
| Туре: | | | | | | V | | | |
| Depth (inches): | | O. 115-10. | | | Hydric Soil Pres | ent? Yes No _X | | | |
| Remarks: | | | | | | | | | |
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| | | | | | | Asida ar II. | | | |
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Non-water point nosop001 facing northeast. (NWI, not a wetland)



Non-water point nosop001 facing southwest. (NWI, not a wetland)



NOSOA003 facing northwest

| Project/Site: Atlantic Coast Pipeline | City/Cou | nty: Southampton | Sai | mpling Date: 9/23/2014 | | | |
|---|---|-----------------------------|--|---------------------------|--|--|--|
| Applicant/Owner: Dominion | City/Cou | Sta | ate: VA Sar | mpling Point: nosoa002 | | | |
| Investigator(s): GB, TP Section, Township, Range: No PLSS in this area | | | | | | | |
| Landform (hillslope, terrace, etc.): slope | | | | Slope (%): ² | | | |
| | Lat: 36.62827407 | | | | | | |
| Soil Map Unit Name: Roanoke loam, 0 to 2 per | cent slopes, occasionally floode | d | NWI classification | n: PFO1A | | | |
| Are climatic / hydrologic conditions on the site to | voical for this time of year? Yes | ✓ No (If | no. explain in Rema | arks.) | | | |
| Are Vegetation, Soil, or Hydrolo | | | | ent? Yes No | | | |
| Are Vegetation, Soil, or Hydrolo | | | | | | | |
| SUMMARY OF FINDINGS – Attach | | | olain any answers in s. transects. im | | | | |
| | | 31 | -, | | | | |
| | No Is | the Sampled Area | | | | | |
| | Now | vithin a Wetland? | Yes | No | | | |
| Wetland Hydrology Present? Yes Remarks: | No 🔽 | | | | | | |
| | | | | | | | |
| HYDROLOGY | | | | | | | |
| Wetland Hydrology Indicators: | | <u>S</u> | econdary Indicators | (minimum of two required) | | | |
| Primary Indicators (minimum of one is required | d; check all that apply) | | _ Surface Soil Crac | ` ' | | | |
| | Aquatic Fauna (B13) | | | ted Concave Surface (B8) | | | |
| | Marl Deposits (B15) (LRR U | | Drainage Patterns (B10) | | | | |
| | Hydrogen Sulfide Odor (C1) | | Moss Trim Lines (B16) | | | | |
| Water Marks (B1) | Oxidized Rhizospheres alor | | | | | | |
| | Presence of Reduced Iron (Recent Iron Reduction in Til | | Crayfish Burrows (C8) | | | | |
| | Thin Muck Surface (C7) | ileu solis (Co) |) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) | | | | |
| | Other (Explain in Remarks) | - | Shallow Aquitard | | | | |
| Inundation Visible on Aerial Imagery (B7) | out (Explain in Romano) | _ | _ FAC-Neutral Tes | | | | |
| Water-Stained Leaves (B9) | | | _ Sphagnum moss | | | | |
| Field Observations: | | | | | | | |
| Surface Water Present? Yes No | Depth (inches): | | | | | | |
| Water Table Present? Yes No | Depth (inches): | | | | | | |
| Saturation Present? Yes No | Depth (inches): | Wetland Hyd | /etland Hydrology Present? Yes No | | | | |
| (includes capillary fringe) Describe Recorded Data (stream gauge, moni | toring wall garial photos provid | un inapartiana) if availa | hlo | | | | |
| Describe Recorded Data (stream gauge, mon | toring well, aerial photos, previo | ous inspections), if availa | bie: | | | | |
| Remarks: | | | | | | | |
| no hydrology indicators | | | | | | | |
| The ry mercy management | | | | | | | |
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| Troo Stratum (Plot size: 30 | | Dominant | | Dominance Test worksheet: |
|--|----------------------|-----------------|---------------|--|
| Diagratical (Flot Size) | <u>% Cover</u> 55 | Species? Yes | Status FAC | Number of Dominant Species |
| Lieudele neb en ek me ellikur | 15 | | | That Are OBL, FACW, or FAC:5 (A) |
| 2. Liquidambar styraciflua | | Yes | FAC | Total Number of Dominant |
| 3. Liriodendron tulipifera | 5 | No | FACU | Species Across All Strata: 7 (B) |
| 4 | | | | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC: 71.42857142 (A/B) |
| 6 | | | | |
| 7 | | | | Prevalence Index worksheet: |
| 8. | | | | Total % Cover of: Multiply by: |
| <u> </u> | 75 | = Total Cov | | OBL species0 x 1 =0 |
| 50% of total cover:37.5 | | total cover: | 15 | FACW species0 x 2 =0 |
| Sapling/Shrub Stratum (Plot size: 15) | 20 /0 01 | total cover. | | FAC species125 x 3 =375 |
| 1 Liquidambar styraciflua | 15 | Yes | FAC | FACU species35 x 4 =140 |
| 2. Pinus taeda | 10 | Yes | FAC | UPL species0 x 5 =0 |
| | | | | Column Totals: 160 (A) 515 (B) |
| 3. Acer rubrum | <u>5</u> | No No | FAC | (2) |
| 4. Ilex opaca | | No | FAC | Prevalence Index = B/A =3.21 |
| 5. Liriodendron tulipifera | 5 | No | FACU | Hydrophytic Vegetation Indicators: |
| 6 | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 7 | | | | ✓ 2 - Dominance Test is >50% |
| 8 | | | | 3 - Prevalence Index is ≤3.0 ¹ |
| | 4.0 | = Total Cov | er | Problematic Hydrophytic Vegetation¹ (Explain) |
| 50% of total cover: 20 | 20% of | total cover: | 8 | Problematic Hydrophytic Vegetation (Explain) |
| | | | | |
| TICID CITATATI | | | | ¹ Indicators of hydric soil and wetland hydrology must |
| 1 | | | | be present, unless disturbed or problematic. |
| 2 | | | | Definitions of Four Vegetation Strata: |
| 3 | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 4 | | | | more in diameter at breast height (DBH), regardless of |
| 5 | | | | height. |
| 6 | | | | Sapling/Shrub – Woody plants, excluding vines, less |
| 7 | | | | than 3 in. DBH and greater than 3.28 ft (1 m) tall. |
| 8. | | | | Hade All back as a configuration of the state of the stat |
| · · | | | | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| · · · | | - | | of size, and woody plants less than 5.25 it tall. |
| 10 | | | | Woody vine – All woody vines greater than 3.28 ft in |
| 11 | | | | height. |
| 12 | | | | |
| • | | = Total Cov | ^ | |
| 50% of total cover: 0 | 20% of | total cover: | 0 | |
| Woody Vine Stratum (Plot size: 30) | | | | |
| 1. Smilax rotundifolia | 20 | Yes | FAC | |
| 2. Lonicera japonica | 15 | Yes | FACU | |
| 3. Vitis aestivalis | 10 | Yes | FACU | |
| | | | | |
| | | | | |
| 5 | 45 | T 1 10 | | Hydrophytic |
| 22.5 | | = Total Cov | • | Vegetation Present? Yes No |
| 50% of total cover: 22.5 | 20% of | total cover: | | · · · · · · · · · · · · · · · · · · · |
| Remarks: (If observed, list morphological adaptations belo | w). | | | |
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SOIL Sampling Point: nosoa002

| | cription: (Describe t | o the depth | | | | or confirm | the absence of in | dicators.) | |
|-------------------|--|----------------|----------------------------|-----------|---------------|------------|-----------------------------|--|-----------------|
| Depth (inches) | Matrix Color (moist) | <u></u> % | | x Feature | - | Loc² | Toyturo | Domonico | |
| (inches) 0-10 | Color (moist) 10YR 4/3 | 100 | Color (moist) | % | _Type' | LUC | Texture SL | Remarks | <u> </u> |
| 10-20 | 10YR 4/2 | 100 | | | · | | SL | | |
| | | | | - | | | | | |
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| | | | | | | | | | - |
| ¹Type: C=C | oncentration, D=Depl | etion, RM=R | educed Matrix, M | S=Masked | d Sand Gr | ains. | ² Location: PL=I | Pore Lining, M=Ma | ntrix. |
| · - | Indicators: (Applica | able to all Li | | | | | | Problematic Hydri | c Soils³: |
| Histosol | | | Polyvalue Be | | | | | | |
| | pipedon (A2) istic (A3) | | Thin Dark Su Loamy Muck | | | | | (A10) (LRR S) ertic (F18) (outsid e | e MI RA 150A B) |
| | en Sulfide (A4) | | Loamy Gleye | - | | . 0, | | loodplain Soils (F1 | |
| | d Layers (A5) | | Depleted Ma | | ` , | | | Bright Loamy Soils | |
| - | Bodies (A6) (LRR P, | | Redox Dark | • | , | | (MLRA 15 | | |
| | ucky Mineral (A7) (LR | | Depleted Da | | | | | Material (TF2) w Dark Surface (TI | E12\ |
| | esence (A8) (LRR U) uck (A9) (LRR P, T) |) | Redox Depre | | 0) | | | w Dark Sunace (11 ain in Remarks) | F12) |
| | d Below Dark Surface | e (A11) | Depleted Oc | | (MLRA 1 | 51) | 00. (2/.p | , | |
| | ark Surface (A12) | | Iron-Mangan | | | | | of hydrophytic veg | |
| | rairie Redox (A16) (N | | | | | ', U) | | hydrology must be | |
| | Mucky Mineral (S1) (L Gleyed Matrix (S4) | KK (), (S) | Delta Ochric Reduced Ve | | | ΩΔ 150R) | uniess ai | isturbed or problen | natic. |
| | Redox (S5) | | Piedmont Flo | | | | 9A) | | |
| Stripped | Matrix (S6) | | | | | | A 149A, 153C, 153 | D) | |
| | rface (S7) (LRR P, S | , T, U) | | | | | T | | |
| | Layer (if observed): | | | | | | | | |
| Type: no | ches): | | | | | | Hydric Soil Pres | ent? Yes | No 🗸 |
| Remarks: | Ciles). | | | | | | nyunc 3011 Fres | ent: 1es | |
| rtemanto. | | | | | | | | | |
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Photo 1Non-water data point nosoa002 facing northwest

| Project/Site: A P City/Co | ounty: Southampton Sampling Date: 16/14/19 |
|--|--|
| Applicant/Owner: Dominion | State: VA Sampling Point: NOSOB 007 |
| | n, Township, Range: NA |
| | relief (concave, convex, none): 1000 Slope (%) |
| Subregion (LRR or MLRA): LRRT Lat: 34.63 | 5098 Long: - 77, 100460 Datum: W. O.S. |
| Soil Map Unit Name: SIMIL FINL MINON 100 | m. U to 2% NWI classification: UP and |
| 3 3 11 0 0 7 | 13 |
| Are climatic / hydrologic conditions on the site typical for this time of year? Ye | , |
| Are Vegetation, Soil, or Hydrology significantly disturb | |
| Are Vegetation, Soil, or Hydrology naturally problema | tic? (If needed, explain any answers in Remarks.) |
| SUMMARY OF FINDINGS - Attach site map showing sam | pling point locations, transects, important features, etc. |
| Hydrophytic Vegetation Present? Yes No | |
| Hydric Soil Present? Yes No | Is the Sampled Area |
| Wetland Hydrology Present? Yes No | within a Wetland? Yes No |
| Remarks: | |
| No. 10 Personal Property of the Control of the Cont | |
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| 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) Aquatic Fauna (B13) | Sparsely Vegetated Concave Surface (B8) |
| High Water Table (A2) Marl Deposits (B15) (LRR | |
| Saturation (A3) Hydrogen Sulfide Odor (C | |
| Water Marks (B1) Oxidized Rhizospheres ald | |
| Sediment Deposits (B2) Presence of Reduced Iron | |
| Drift Deposits (B3) Recent Iron Reduction in 1 | . N |
| Algal Mat or Crust (B4) Thin Muck Surface (C7) | Geomorphic Position (D2) |
| Iron Deposits (B5) Other (Explain in Remarks | |
| Inundation Visible on Aerial Imagery (B7) | FAC-Neutral Test (D5) |
| Water-Stained Leaves (B9) | Sphagnum moss (D8) (LRR T, U) |
| Field Observations: | |
| Surface Water Present? Yes No Depth (inches): | A |
| Water Table Present? Yes No X Depth (inches): > | 20 |
| | Wetland Hydrology Present? Yes No |
| (includes capillary fringe) | Treatment from the second field the seco |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ | ious inspections), if available: |
| Remarks: | |
| Trainana. | |
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VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 10500002

| Absolute Dominant Indicator | Dominance Test worksheet: |
|--|---|
| Tree Stratum (Plot size: 30 x 30 ft) % Cover Species? Status 1. ACCV PUBLISHED 20 Y FAC | Number of Dominant Species That Are OBL, FACW, or FAC: (A) |
| 2. Liquidambar (tyracitiua 70 y FAC) | Total Number of Dominant Species Across All Strata: (B) |
| 5 | Percent of Dominant Species That Are OBL, FACW, or FAC: 87.5 (A/B) |
| 6, | Prevalence Index worksheet: |
| 7 | Total % Cover of: Multiply by: |
| 8 | OBL species x1 = |
| 1 PTO = Total Cover | |
| 50% of total cover: 20% of total cover: | FACW species x 2 = |
| Sapling/Shrub Stratum (Plot size: 20 X 20 F) | FAC species x 3 = |
| 1. Ulmus nubra 30 Y PAC | FACU species x 4 = |
| 2 Acerrushum 20 4 FAC | UPL species x 5 = |
| 3 | Column Totals: (A) (B) |
| 4 | Prevalence Index = B/A = |
| 5 | Hydrophytic Vegetation Indicators: |
| 6 | 1 - Rapid Test for Hydrophytic Vegetation |
| 7 | 2 - Dominance Test is >50% |
| 8 | 3 - Prevalence index is ≤3.01 |
| 50= Total Cover | Problematic Hydrophytic Vegetation¹ (Explain) |
| 50% of total cover: 20% of total cover: | |
| Herb Stratum (Plot size: 30 X30C+) 1. LONICEVA 19190NICA 25 Y FACU | ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 2. Chasmanthium Jaxum S N FACW | Definitions of Four Vegetation Strata: |
| 3 Campsis tadicans 10 Y FAC | |
| 4 Toxicodendron radicans 6 N FAC | Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 7. | more in diameter at breast height (DBH), regardless of height. |
| 5. Erechtites hieraciifolius 5 N upl | noight. |
| 6 | Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. |
| 7 | |
| 8 | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 10 | Woody vine - All woody vines greater than 3.28 ft in |
| 11 | height. |
| 12 | |
| = Total Cover | |
| 50% of total cover: 25 20% of total cover: | |
| Woody Vine Stratum (Plot size: 30 X30Ft) | |
| 1. Smilax rotundatolia 5 Y FAC | |
| 2 VITIC VORUNDATOLIA IN Y PAC | |
| 2 | |
| 3 | |
| 4, | |
| 5 | Hydrophytic |
| TG Total Cover 3 | Vegetation Yes No |
| 50% of total cover: 7-9 20% of total cover: | |
| Remarks: (If observed, list morphological adaptations below). | |
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| | 0.7 |
| ANN ACTIVITIES BY PARK | |

| | needed to document the indicator or confirm | tile absence of mulcators.) |
|--|---|---|
| Depth Matrix (inches) Color (moist) % | Redox Features Color (moist) % Type Loc² | Texture Remarks |
| (inches) Color (moist) % 0-10 10 YR 2/2 100 | Color (moist) % Type Loc² | Texture Remarks |
| | | CCI |
| 10-20 104R3/1 100 | | SUL |
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| * | | |
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| | | |
| Type: C=Concentration, D=Depletion, RM=F | Reduced Matrix MS-Macked Sand Grains | ² Location: PL=Pore Lining, M=Matrix. |
| Hydric Soil Indicators: (Applicable to all L | RRs, unless otherwise noted.) | Indicators for Problematic Hydric Soils ³ : |
| Histosol (A1) | Polyvalue Below Surface (S8) (LRR S, T, U | |
| Histic Epipedon (A2) | Thin Dark Surface (S9) (LRR S, T, U) | 2 cm Muck (A10) (LRR S) |
| Black Histic (A3) | Loamy Mucky Mineral (F1) (LRR O) | Reduced Vertic (F18) (outside MLRA 150A,B) |
| Hydrogen Sulfide (A4) | Loamy Gleyed Matrix (F2) | Piedmont Floodplain Soils (F19) (LRR P, S, T) |
| Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) | Depleted Matrix (F3) Redox Dark Surface (F6) | Anomalous Bright Loamy Soils (F20) (MLRA 153B) |
| 5 cm Mucky Mineral (A7) (LRR P, T, U) | Depleted Dark Surface (F7) | Red Parent Material (TF2) |
| Muck Presence (A8) (LRR U) | Redox Depressions (F8) | Very Shallow Dark Surface (TF12) |
| 1 cm Muck (A9) (LRR P, T) | Marl (F10) (LRR U) | Other (Explain in Remarks) |
| Depleted Below Dark Surface (A11) | Depleted Ochric (F11) (MLRA 151) | T) 3le diseters of hydrophytic vagetation and |
| Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) | Iron-Manganese Masses (F12) (LRR O, P, Umbric Surface (F13) (LRR P, T, U) | Indicators of hydrophytic vegetation and wetland hydrology must be present, |
| Sandy Mucky Mineral (S1) (LRR O, S) | Delta Ochric (F17) (MLRA 151) | unless disturbed or problematic. |
| Sandy Gleyed Matrix (S4) | Reduced Vertic (F18) (MLRA 150A, 150B) | |
| Sandy Redox (S5) | Piedmont Floodplain Soils (F19) (MLRA 14 | |
| Stripped Matrix (S6) | Anomalous Bright Loamy Soils (F20) (MLR. | A 149A, 153C, 153D) |
| Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): | | |
| Type: | | |
| Depth (inches): | | Hydric Soil Present? Yes No X |
| Remarks: | | |
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Non-water point nosoo002 facing north. (NWI, not a wetland)



Non-water point nosoo002 facing southwest. (NWI, not a wetland)



Non-water point nosoo001 facing northwest. (NHD, not a stream)



Non-water point nosoo001 facing south. (NHD, not a stream)



Non-waterbody NHD data point nosol004 facing south



Non-waterbody NHD data point nosol004 facing north

| SE CALLED : 6 | Southampton Sampling Date: NOSOLOOS |
|--|--|
| | Sampling Date: 14999999 |
| Applicant/Owner: Dominion Transmission | State: VA Sampling Point: 08/20/2014 |
| Investigator(s): W. Mudlin, R. Sheridan Section, Township, | Range: NA |
| Landform (hillslope, terrace, etc.): disturbed slope Local relief (concave | e, convex, none): Convex Slope (%): O-2 |
| Subregion (LRR or MLRA): <u>LRR T</u> Lat: <u>36. 636853645</u> | _ Long: -77. 038446.802 Datum: NAD 19 |
| Soil Map Unit Name: Tarkoro loany Sond, O to 6% slopes | NWI classification:N/A |
| 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? | re "Normal Circumstances" present? Yes No |
| • • • | f needed, explain any answers in Remarks.) |
| SUMMARY OF FINDINGS - Attach site map showing sampling poin | t locations, transects, important features, etc. |
| Wetland Hydrology Present? Yes NoV | tland? Yes No |
| Remarks: This area is a mapped NWI polygon that an agricultural field. Mounded dirt has been put All 3 criteria are not Met. Area is not a | is a upland on the edge of shed into this area in the past. Wetland. |
| PHOTOS # 100-0699 to 0703 | |
| 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) Aquatic Fauna (B13) | Sparsely Vegetated Concave Surface (B8) |
| High Water Table (A2) Marl Deposits (B15) (LRR U) | Drainage Patterns (B10) |
| Saturation (A3) Hydrogen Sulfide Odor (C1) | Moss Trim Lines (B16) |
| Water Marks (B1) Oxidized Rhizospheres along Living Ro Sediment Deposits (B2) Presence of Reduced Iron (C4) | oots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) |
| Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C | - |
| Algal Mat or Crust (B4) Thin Muck Surface (C7) | Geomorphic Position (D2) |
| Iron Deposits (B5) Other (Explain in Remarks) | Shallow Aquitard (D3) |
| Inundation Visible on Aerial Imagery (B7) | FAC-Neutral Test (D5) |
| Water-Stained Leaves (B9) | Sphagnum moss (D8) (LRR T, U) |
| Field Observations: | |
| Surface Water Present? Yes No Depth (inches): | |
| Water Table Present? Yes No _i/_ Depth (inches): | ./ |
| Saturation Present? Yes No Depth (inches):NA (includes capillary fringe) | Wetland Hydrology Present? Yes No |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspection | ons), if available: |
| Pomarks: | |
| Hydrology criteria is not met. | |
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| | Absolute | Dominant | Indicator | Dominance Test worksheet: |
|--|-----------------|-------------------|----------------|--|
| Tree Stratum (Plot size: 30 ft) | | Species? | Status | |
| 1. Acer rubrum | 85 | Y | FAC | Number of Dominant Species That Are OBL, FACW, or FAC: (A) |
| 2 finns tauda | <u>65</u> | Ý | FAC | |
| | | | FACU | Total Number of Dominant Species Across All Strata: (B) |
| 3. Prinus Serotina | منآ | 1 | FACU | Species Across All Strata: 10 (B) |
| 4. Lirio dendron tuli pifera | TU | 12 | IMCO | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC: |
| 6 | | | | Prevalence Index worksheet: |
| | \$ 250 | = Total Cov | er | |
| 50% of total cover: | <u>≤</u> 20% o | f total cover: | 50 | Total % Cover of: Multiply by: |
| Sapling Stratum (Plot size: 15 F+) | | | | OBL species x 1 = |
| A CAC CALCUAA | 20 | Y | FAC | FACW species x 2 = |
| 2. Liriodendron tulipitera | 5 | Y | FACU | FAC species <u>365</u> x3 = <u>415</u> |
| • | | • | • | FACU species 110 x 4 = 440 |
| 3 | | | | UPL speciesO x 5 =O |
| 4 | | | | Column Totals: <u>8 4/5</u> (A) <u>11355</u> (B) |
| 5 | | | | |
| 6 | | | | Prevalence Index = B/A = 3.27 |
| | | = Total Cov | | Hydrophytic Vegetation Indicators: |
| 50% of total cover: 12 | <u>.5</u> 20% o | f total cover | :_5_ | Rapid Test for Hydrophytic Vegetation |
| Shrub Stratum (Plot size: 15 ft) | | | | 2 - Dominance Test is >50% |
| 1. Myrica cerifera | 10 | Y | FAC | 3 - Prevalence Index is ≤3.0¹ |
| 2. Acer subrum | 10 | Ý | FAC | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 3. Nyssa sylvatica | | · | FAC | Problematic Hydrophytic Vegetation (Explain) |
| 3. Nyssa Sylvatica | _ <u></u> | · — — | • - | |
| 4. 11ex opach | <u> 5</u> | . 7 | FAC | ¹ Indicators of hydric soil and wetland hydrology must |
| 5. Liquidamber Styracifling | | N | FAC | be present, unless disturbed or problematic. |
| 6 | | - | | Definitions of Five Vegetation Strata: |
| | | = Total Cov | | Tree – Woody plants, excluding woody vines, |
| 50% of total cover: | 20% c | of total cover | : <u> </u> | approximately 20 ft (6 m) or more in height and 3 in. |
| Herb Stratum (Plot size: 10 ft) | | | | (7.6 cm) or larger in diameter at breast height (DBH). |
| 1. Microstegium Vimineum | 85 | Y | FAC | Sapling – Woody plants, excluding woody vines, |
| 2. Chusmathum sessiliflorum | - 5 | 7 | FAC | approximately 20 ft (6 m) or more in height and less |
| 2. Chasmathum Sostilifier was | _ _ | . , , | FAC | than 3 in. (7.6 cm) DBH. |
| 3. Commelina commun.s | سع | . 10 | FACU | Shrub – Woody plants, excluding woody vines, |
| 4. Aspienium platyneurons | | . 7 | 1 ACO | approximately 3 to 20 ft (1 to 6 m) in height. |
| 5 | _ | - | | |
| 6 | | | | Herb – All herbaceous (non-woody) plants, including |
| 7 | _ | _ | | herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately |
| 8 | | _ | | 3 ft (1 m) in height. |
| 9 | | _ | | |
| 10 | | | | Woody vine – All woody vines, regardless of height. |
| | | - | | |
| 11 | 8 100 | - _ = Total Co | vor | |
| | <u>~ 100</u> | Total Co | vei - 7 - | |
| 50% of total cover: | 20% (| ot total cover | :_ <i>2</i> 0_ | |
| Woody Vine Stratum (Plot size: 33 Ft) | | . 1 | <i>-</i> . | |
| 1. Vitis rotundifolia | _ 10 | _ Y | FAC | |
| 2 | | _ | | |
| 3 | | _ | | |
| 4. | | _ | | |
| 5. | | | | Hydrophytic |
| · | 1 10 | - _ = Total Co | ver | Hydrophytic Vegetation |
| 50% of total cover: | | | | Present? Yes V No No |
| | | or lotal covel | · <u> </u> | |
| Remarks: (If observed, list morphological adaptations be | | | | |
| Hydrophytic vegetation criterio | i is n | ret. | | |
| 3 | | | | |

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) | | | | | | | | | |
|---|---|----------------|---|-------------|-------------------|------------------|------------------------------|----------------------------------|-----------------------|
| Depth Matrix Redox Features | | | | | | | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | Rer | marks |
| 0-4 | 10YR4/3 | 100 | | | _ | | 100m | | |
| 4-12 | 10YR 4/2 | 90_ | | | _ | | Sandy loan | Mixed | Matrix |
| | 10YR 7/4 | _10 | | - | _ | | Sandy lown | • | matrix |
| 12-20 | 10YR4/2 | 100 | | _ | - | _ | Sordy loans | | _ |
| - | | | | | | | | | |
| | | | | | • | | | | _ |
| | | | | | | | | | |
| 1 | | | | | | | | | |
| | oncentration, D=Depl Indicators: (Applica | | | · | | ains. | ² Location: PL= | | |
| Histosol | | ible to all Li | | | • | DD C T I | Indicators for I | | - |
| 1 — | pipedon (A2) | | Polyvalue Be Thin Dark Su | | | | | (A9) (LRR O) (A10) (LRR S | |
| | istic (A3) | | Loamy Muck | | | | | | rtside MLRA 150A,B) |
| | en Sulfide (A4) | | Loamy Gleye | | | , | | | s (F19) (LRR P, S, T) |
| | d Layers (A5) | | Depleted Mai | ٠, , | | | | Bright Loamy | |
| | Bodies (A6) (LRR P, | - | Redox Dark | • | , | | (MLRA 1 | - | |
| | ucky Mineral (A7) (LR resence (A8) (LRR U) | | Depleted Dar | | | | | Material (TF2 | ′ |
| | uck (A9) (LRR D) | | Redox Depre Marl (F10) (L | • | 5) | | | ow Dark Surfac lain in Remark | |
| | d Below Dark Surface | (A11) | Depleted Oct | | MLRA 1 | 51) | Other (Expi | alli ili Nelliaik | .5) |
| | ark Surface (A12) | , | Iron-Mangan | | | | , T) ³ Indicators | s of hydrophyti | ic vegetation and |
| 1 | rairie Redox (A16) (M | | Umbric Surfa | ce (F13) (| LRR P, T | , U) | | hydrology mu | |
| | /lucky Mineral (S1) (L | RR O, S) | Delta Ochric | | • | | | listurbed or pr | oblematic. |
| i | Gleyed Matrix (S4) | | Reduced Ver | | | | | | |
| . — | Redox (S5) I Matrix (S6) | | Piedmont Flo | | | | 49A) RA 149A, 153C, 153 | יחי | |
| . — | rface (S7) (LRR P, S | . T. U) | Anomalous L | night Loan | ily Golis (i | 20) (WILI | VA 149A, 1330, 133 | ,, | |
| | Layer (if observed): | , , , , | | | | | | | |
| Type: | NA | | | | | | | | |
| Depth (in | ches): NA | | <u> </u> | | | | Hydric Soil Pres | sent? Yes | |
| Remarks: | | | | | | | | | |
| | Hydric 50 | ils cr | iteria is | nat | Met | | | | |
| | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | ,, | • | | | |
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Non-waterbody NWI data point nosol005 facing north



Non-waterbody NWI data point nosol005 facing south



Non-waterbody NWI data point nosol005 soil sample



NOSOA006 facing north within NWI polygon



Non-water point nosol006 facing South



Non-water point nosol006 facing North



Non-water point nosol006 facing East



Non-water point nosol007 facing South



Non-water point nosol007 facing North



Non-water point nosol007 facing East



Non-water point nosol008 facing North



Non-water point nosol008 facing South



Non-water point nosol008 facing East



Non-water point NOSOC002 facing south



Non-water point NOSOC003 facing south



Non-water point NOSOC004 facing south

Environmental Field Surveys Non-Water Photo Page



Non-water point nosoo004 facing east. (NHD, not a stream)



Non-water point nosoo004 facing west. (NHD, not a stream)