### Photograph Log



## Feature Name: JD\_S\_009



### Photograph Direction North

Comments:

#### Photograph Direction South

Comments:

## Photograph Direction \_\_\_\_\_

Comments:

Photograph Direction

### RD\_S\_001 & RD\_S\_001\_EXT

STREAM ID	STREAM ID RD_S_001 STREAM NAME UT of West Neck Creek						
CLIENT Dominion PROJECT NAME Dom				inion CVOW			
LAT 36.7718	12 L(	ONG -76.03565	52 STATE Virgin	nia	COUNTY Virginia Beach		
INVESTIGATO	DRS R. De	elahunty			I	DATE 05/17/2021	
WATER TYPE	RPW 🗗	NRPW	FLOW REG Perennial		ittent 🗸	Ephemeral	
CHANNEL FEATURES       Estimate Measurements         Top of Bank Width:       8.0 ft         Top of Bank Height:       LB 1.0 ft       RB 2.0 ft         Water Depth:       0.00 in         Water Width:       0.0 ft         Ordinary High Water Mark (Width):       6.0 ft         Ordinary High Water Mark (Height):       6.0 in         Flow Direction:       East		Within Roadside Ditch        Yes       ✓ No         Culvert Present       Yes       ✓ No         Culvert Material:					
FLOW       Water Present         CHARACTERISTICS       No water, stream bed dry         Event       Stream bed moist         Standing water       Flowing water         Velocity       Fast         Stow       Moderate			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run         Pool       %         Turbidity          Clear          Other				
INOR		JBSTRATE CO d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type	1 (	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder		56 mm (10")		Detitua	pl	ant materials (CPOM)	
Cobble		mm (2.5"-10")		Muck-Mu	d bl	ack, very fine organic	
Gravel		nm (0.1"-2.5")			-	(FPOM)	
Sand		-2mm (gritty)	80				
Silt		4-0.06 mm	20	Marl	9	grey, shell fragments	
Clay < 0.004 mm (slick) Predominant Surrounding Landuse Floodplain Width							
WATERSHED FEATURES — Field/Pasture — Agricultural — ROW — Canopy Cover			Commercia ure Industrial al Residential     Other:	I	Wie	de > 30ft Modera rrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

### Photograph Log



Feature Name: RD\_S\_001

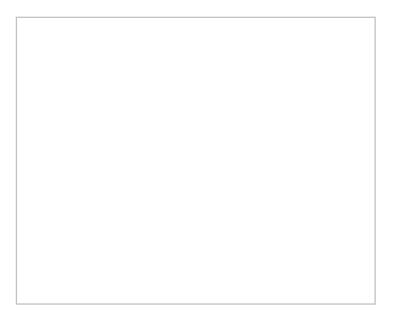


Photograph Direction North

Comments: View facing upstream.

Photograph Direction South

Comments: View facing downstream.



# Photograph Direction \_\_\_\_\_

Comments:

Photograph Direction

 $RD_S_002$ 

STREAM ID RD S 002 STREAM NA			AME UT of West Neck Creek				
CLIENT Dominion		PROJECT N	PROJECT NAME Dominion CVOW				
LAT 36.77036	58 L(	ONG -76.04202		nia	COUNTY Virginia Beach		
INVESTIGATO	DRS R. De	elahunty				DATE 05/18/2021	
WATER TYPE	RPW	NRPW	FLOW REG	IME Interm	nittent	Ephemeral 🗸	
		Estimate Measurements Top of Bank Width: <u>10.0</u> ft Top of Bank Height: LB <u>1.0</u> ft RB <u>1.0</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft			Sinuosity        ✓       Low       Medium       High         Gradient        ✓       Flat       Moderate       Severe         (0.5/100 ft)       (2 ft/100 ft)       (10 ft/100 ft)         Stream Erosion       ✓       None       Moderate       Heavy         Artificial, Modified or Channelized       Image: Comparison       Image: Comparison		
CHANNEL FEATURES Ordinary High Water Marl Ordinary High Water Marl Flow Direction: <u>North</u>			Water Mark (Width): Water Mark (Height):		0.0_ftYesNo		
FLOW       Water Present         CHARACTERISTICS       No water, stream bed dry         Bis Stream bed moist       Stream bed moist         Velocity       Flowing water         Velocity       Fast         Slow       Moderate			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other       Other				
INOR		JBSTRATE COI d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type		neter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area
Bedrock Boulder	> 25	i6 mm (10")		Detritus		sticks, wood, coarse plant materials (CPOM)	100
Cobble Gravel		mm (2.5"-10") 1m (0.1"-2.5")		Muck-Mu	d	black, very fine organic (FPOM)	
Sand		2mm (gritty)				()	
Sand		4-0.06 mm	40	Marl		grey, shell fragments	
Clay		4 mm (slick)	60			<i>5.5</i> , <i></i> , nugmono	
WATERSHED FEATURES		Predominant ✓ Forest	<u> </u>	I	V	d <b>plain Width</b> Vide > 30ft Modera Iarrow <15ft	te 15-30ft

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

#### Stream ID <u>RD\_S\_002</u> Date <u>05/18/2021</u>



Photograph Number \_\_\_\_\_

Photograph Direction North

Comments: Upstream



Photograph Number 2 Photograph Direction South

Comments: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	4	
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Photograph Direction \_\_\_\_\_

 $RD_S_003$ 

STREAM ID RD S 003 STREAM NAME UT of West Neck Creek							
CLIENT Dominion		PROJECT N	PROJECT NAME Dominion CVOW				
LAT 36.7702	91 Lo	<b>DNG</b> -76.04053			COUNTY Virginia Beach		
INVESTIGATO	DRS R. De	elahunty				DATE 05/18/2021	
WATER TYPE			FLOW REG	ME Interm	nittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>4.0</u> ft Top of Bank Height: LB <u>15.0</u> ft RB <u>15.0</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>4.0</u> ft Ordinary High Water Mark (Height): <u>6.0</u> in Flow Direction: <u>Northwest</u>			Sinuosity ✓ LowMedium High         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft)         Stream ErosionModerate Heavy         Artificial, Modified or Channelized YesNo         Within Roadside DitchYesNo         Culvert Present Yes ✓No         Culvert Material:         Culvert Size:in		
FLOW       Water Present         CHARACTERISTICS       Velocity         Flowing water       Velocity         Fast       Moderate         Slow       Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run         Pool       %         Turbidity          Clear          Other				
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock						sticks, wood, coarse	
Boulder	> 2	56 mm (10")		Detritus		plant materials (CPOM)	100
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	Ы	black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")			-	(FPOM)	
Sand	0.06	-2mm (gritty)					
Silt		4 <b>-</b> 0.06 mm	70	Marl		grey, shell fragments	
Clay	< 0.00	)4 mm (slick)	30				
WATERSHED FEATURES		🖌 Forest	<u> </u>	I		odplain Width Wide > 30ft Moderat Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Weak bed/bank shallow drainage feature from RD\_W4.

#### Stream ID <u>RD\_S\_003</u> Date <u>05/18/2021</u>



Photograph Number \_\_\_\_\_

Photograph Direction South

Comments: Downstream



Photograph Number 2 Photograph Direction North

Comments: Upstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	4	
0 1			

Photograph Direction

			STREAM NA	STREAM NAME UT of West Neck Creek			
CLIENT Dominion		PROJECT N	PROJECT NAME Dominion CVOW		VOW		
LAT 36.770497 LONG -76.043066			6 STATE Virgin			COUNTY Virginia Bead	ch 🛛
INVESTIGATO	DRS R. De	elahunty				DATE 05/18/2021	
WATER TYPE	RPW 🔽	NRPW	FLOW REG		nittent	Ephemeral	
CHANNEL FE	ATURES	Ordinary High Water Mark (Width): <u>8.0</u> ft Ordinary High Water Mark (Height): <u>18.0</u> in Flow Direction: <u>Northwest</u>			With the December 1.1 and the Direct		
FLOW       No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Flowing water         Velocity         Fast       Moderate         ✓ Slow				Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run       100 %         Pool       %         Turbidity       Clear       Slightly turbid       Turbid         Other			
INOR		UBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ate	Characteristic	% Composition in Samp <b>l</b> ing Area
Bedrock Boulder	> 2!	56 mm (10")		Detritus		sticks, wood, coarse plant materials (CPOM)	10
Cobble		6 mm (2.5"-10")				black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")		Muck-Mu	ıd	(FPOM)	
Sand	0.06	-2mm (gritty)					
Silt		4-0.06 mm	40	Marl		grey, shell fragments	
Clay	< 0.00	04 mm (slick)	60				
WATERSHED FEATURES		— Forest	<b>—</b> Other:	I	V	<b>dplain Width</b> Vide > 30ft Modera Jarrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Mallard Pair and minnows within stream channel observed.

#### Stream ID <u>RD\_S\_004</u> Date <u>05/18/2021</u>



Photograph Number \_\_\_\_\_

Photograph Direction West

Comments: Downstream

Photograph Number 2 Photograph Direction East

Comments: Upstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph	Number	4	
• ·			_

Photograph Direction

RD\_S\_005

STREAM ID RD S 005 STREAM NAME UNT of West Nec				st Neck Creek			
CLIENT Dominion PROJECT NAME Dor			AME Dom	inion CVOW			
		ONG -76.04712			COUNTY Virginia Beach		
INVESTIGAT	DRS R. De	elahunty				DATE 05/19/2021	5
			FLOW REG		nittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Estimate Measurements         Top of Bank Width:ft         Top of Bank Height:         LBft       RBft         Water Depth:in         Water Width:ft         Ordinary High Water Mark (Width):ft         Ordinary High Water Mark (Height):ft         Flow Direction: Southeast			Sinuosity ⊥ Low Medium High         Gradient ⊥ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft)         Stream Erosion ⊥ None Moderate Heavy         Artificial, Modified or Channelized ⊥ Yes No         Within Roadside Ditch Yes ⊥ No         Culvert Present Yes ⊥ No         Culvert Material:		
					Culv	vert Size:in	
FLOW CHARACTER	ISTICS	Water Present         ✓ No water, stream bed dry        Stream bed moist        Standing water        Flowing water         Velocity        Fast      Moderate         Slow		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       100       %         Pool       %       %         Turbidity        Clear       Slightly turbid          Other       Other       %			
INOR		JBSTRATE CO d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detnitus		plant materials (CPOM)	100
Cobble		mm (2.5"-10")		Muck-Mu	id	black, very fine organic	
Gravel		nm (0.1"-2.5")			_	(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm	40	Marl		grey, shell fragments	
WATERSHED       Field/Pasture          MATERSHED       Agricultural          ✓ ROW        Canopy Cover		Surrounding Landu — Commercia ure — Industrial al — Residential — Other:	I	_ \	d <b>plain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Cattails and sedges were observed within channel.

#### Feature ID RD S 005 Date05/19/2021



Photograph Number 1

Photograph Direction NE

Comments: Upstream



Photograph Number 2 Photograph Direction SW

Comments: Downstream



Photograph Number 3

Photograph Direction East

Comments:

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	_

Photograph Number \_\_\_\_\_

Photograph Direction \_\_\_\_\_

RD\_S\_006

STREAM ID RD S 006 STREAM NAME N/A							
CLIENT Dominion PROJECT NAME Don					inion CVOW		
		<b>DNG</b> -76.06318	1	nia	COUNTY Virginia Beach		
INVESTIGAT						DATE 05/19/2021	
			/ FLOW REG	IME Interm	ittent	<u> </u>	
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>3.0</u> ft Top of Bank Height: LB <u>1.0</u> ft RB <u>1.0</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>3.0</u> ft Ordinary High Water Mark (Height): <u>6.0</u> in Flow Direction: <u>Northeast</u>			Sinuosity        ✓       Low      Medium      High         Gradient        ✓       Flat      Moderate      Severe         (0.5/100 ft)       (2 ft/100 ft)       (10 ft/100 ft)         Stream Erosion       ✓       None      Moderate      Heavy         Artificial, Modified or Channelized		
FLOW          Water Present <ul> <li>✓ No water, stream bed dry             <ul></ul></li></ul>			Proportion of Reach Represented by Stream         Morphology Types       (Only enter if water present)         Riffle       %       Run       %         Pool       %       *       *         Turbidity        Clear        Slightly turbid        Turbid          Other       *       *       *       *       *				
INOR		JBSTRATE COI d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type		meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder		56 mm (10")		Denitus		plant materials (CPOM)	100
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")		3	-	(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm	40 60	Marl		grey, shell fragments	
Predominant Surround       ✓ Forest    0      Field/Pasture    1      Agricultural    F       FEATURES    0       Canopy Cover		Surrounding Landu — Commercia ure — Industrial al — Residential — Other:	I	\	d <b>plain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Significant leaf and pine needle litter observed within channel.

#### Stream ID \_\_RD\_S\_006 Date 05/19/2021



Photograph Number \_\_\_\_\_

Photograph Direction South

Comments: Downstream



Photograph Number 2\_\_\_\_\_ Photograph Direction NE\_\_\_\_\_

Comments: Upstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph	Number	4
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Photograph Direction \_\_\_\_\_

RD S 007

STREAM ID RD_S 007 STREAM NAME N/A							
CLIENT Dominion				PROJECT NAME Dominion CVOW			
LAT 36.770073 LONG -76.062926 STATE Virg				ia COUNTY Virginia Beach			:h
INVESTIGAT						DATE 05/19/2021	
WATER TYPE		-	FLOW REG	MF		IBAIL	
		NRPW	Perennial	Interm	ittent	Ephemeral 🗸	
				-			
CHANNEL FE	ATURES	Estimate Measurements         Top of Bank Width:ft         Top of Bank Height:         LBft         RBft         Water Depth:ft         Water Width:ft         Ordinary High Water Mark (Width):ft         Ordinary High Water Mark (Height):ft         Flow Direction: North			Sinuosity ⊥ Low Medium High         Gradient ⊥ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream Erosion ⊥ None Moderate Heavy         Artificial, Modified or Channelized ⊥ Yes No         Within Roadside Ditch Yes ⊥ No         Culvert Present Yes ⊥ No         Culvert Material:		
						vert Size:in	
FLOW CHARACTER	ISTICS	Water Present         ✓       No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Velocity         Fast       Moderate         Slow		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other       Other			
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 2	56 mm (10")		Detilitus		plant materials (CPOM)	75
Cobble	64-256	mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")			-	(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm	100	Marl		grey, shell fragments	
Clay	ay < 0.004 mm (slick) 100 Predominant Surrounding Landuse				Floo	odplain Width	
🖌 🖌 Forest			Commercia ure Industrial al Residential Other:	I			te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Significant leaf and pine needle litter observed. Banks were observed with 45 degree slopes.

## Stream ID RD\_S\_007 Date 05/19/2021



Photograph Number \_\_1\_\_\_

Photograph Direction South

Comments: Dpwnstream



Photograph Number 2 Photograph Direction North

Comments: Upstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	4
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Photograph Direction \_\_\_\_\_

RD\_S\_008

STREAM ID RD-S-008 STREAM NAME UNT of West Neck Creek							
CLIENT Dominion			PROJECT N	PROJECT NAME Dominion CVOW			
LAT 36.770496 LONG -76.048759 ST			59 STATE Virgin	STATE Virginia COUNTY Virginia Beach			ch
INVESTIGATO	DRS R. De	elahunty				DATE 05/20/2021	
WATER TYPE     FLOW REGIME       TNW     RPW     NRPW       Perennial     Intermittent   Ephemeral							
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>19.0</u> ft Top of Bank Height: LB <u>2.0</u> ft RB <u>2.0</u> ft Water Depth: <u>24.00</u> in Water Width: <u>12.0</u> ft Ordinary High Water Mark (Width): <u>18.0</u> ft Ordinary High Water Mark (Height): <u>36.0</u> in Flow Direction: <u>Southwest</u>			Sinuosity ✓ LowMedium High         Gradient ✓ Flat (0.5/100 ft)       Moderate Severe (2 ft/100 ft)         Stream Erosion None ✓ Moderate Heavy         Artificial, Modified or Channelized Yes ✓ No         Within Roadside Ditch Yes ✓ No         Culvert Present Yes ✓ No         Culvert Material:         Culvert Size:in		
FLOW      No water, stream bed dry        Stream bed moist      Stream bed moist        Stream bed moist      Stream bed moist			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run       %         Pool       100       %         Turbidity        Clear        Slightly turbid       ✓       Turbid          Other        Slightly turbid       ✓       Turbid				
INOR		JBSTRATE CO				ANIC SUBSTRATE COM	
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detriture		sticks, wood, coarse	-
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)	20
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu		black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")			м	(FPOM)	
Sand	0.06	-2mm (gritty)	100				
Silt	0.00	4-0.06 mm		Marl		grey, shell fragments	
Clay	< 0.00	)4 mm (slick)					
WATERSHED       Predominant Surrounding Landuse       Floodplain Width         Mattershed       Forest       Commercial       Wide > 30ft       Moderate 15-30ft         Mattershed       Field/Pasture       Industrial       Narrow <15ft					te 15-30ft		

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Minnows, mallards, and an eastern painted turtle were observed within the channel.

#### Stream ID RD\_S\_008 Date 05/20/2021



Photograph Number 1

Photograph Direction SW

Comments: Downstream



Photograph Number 2 Photograph Direction North

Comments: Upstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph	Number	4	
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Photograph Direction \_\_\_\_\_

RD\_S\_009

STREAM ID RD_S_009 STREAM NA				ME West Neck Creek			
CLIENT Don	ninion			PROJECT NAME Dominion CVOW			
LAT 36.770253 LONG -76.055783				STATE Virginia COUNTY Virginia Beach			ch
INVESTIGATO	DRS R. De	elahunty				DATE 05/20/2021	
WATER TYPE	RPW 🔽	NRPW	FLOW REG		iittent [	Ephemeral	
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>30.0</u> ft Top of Bank Height: LB <u>2.0</u> ft RB <u>2.0</u> ft Water Depth: <u>24.00</u> in Water Width: <u>25.0</u> ft Ordinary High Water Mark (Width): <u>30.0</u> ft Ordinary High Water Mark (Height): <u>48.0</u> in Flow Direction: <u>Southeast</u>			Sinuosity ⊥ LowMedium High         Gradient ⊥ Flat ModerateSevere (0.5/100 ft)(2 ft/100 ft)         Stream Erosion ⊥ None Moderate Heavy         Artificial, Modified or Channelized Yes ⊥ No         Within Roadside Ditch Yes ⊥ No         Culvert Present Yes ⊥ No         Culvert Material: in		
FLOW       No water, stream bed dry         Stream bed moist       Stream bed moist         Flowing water       Flowing water         Velocity       Fast Moderate         ✓ Slow       Stream bed moist			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run 100 %         Pool       %         Turbidity       Clear       Slightly turbid       ✓ Turbid         Other				
INOR		JBSTRATE CO				ANIC SUBSTRATE COM s not necessarily add up	
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area
Bedrock						sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble	64-256	5 mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")		WILCK-INIU	u	(FPOM)	20
Sand	0.06	2mm (gritty)	100				
Silt	0.00	4 <b>-</b> 0.06 mm		Marl		grey, shell fragments	
Clay	< 0.00	004 mm (slick)					
✓ Forest — Field/Pas — Agricultu FEATURES — ROW		✓ Forest — Field/Past — Agricultura — ROW Canopy Cove — Open	<u> </u>	I	XV	<b>dplain Width</b> Nide > 30ft Modera Narrow <15ft	te 15-30ft

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

#### Stream ID RD\_S\_009 Date 05/20/2021



Photograph Number \_\_\_\_\_

Photograph Direction South

Comments: Downstream



Photograph Number <u>2</u> Photograph Direction <u>NW</u>

Comments: Upstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	4

Photograph Direction

EF D 002

			1					
STREAM ID E				STREAM NAME UNK				
OLILINI	ninion			OJECT NAME Dominion CVOW				
LAT 36.71313		ONG -76.16822	1 STATE Virgin	nia	COUNTY Chesapeake			
INVESTIGATO	DRS E. Fo	ster			DATE 05/04/2022			
	RPW 🗸		FLOW REG	ME Intermiti	tent 🖌 Ephemeral 🗌			
CHANNEL FEATURES       Estimate Measurem         Top of Bank Width:       Top of Bank Height:         LB		idth: <u>10.0</u> ft eight: <u>RB 3.0</u> ft <u>3.00</u> in <u>5.0</u> ft Water Mark (Width): Water Mark (Height)	ft <u>7.0</u> ft : <u>4.0</u> in -	Mithin Deedeide Diteb				
FLOW       Water Present         CHARACTERISTICS       No water, stream         Velocity       Flowing water         Velocity       Fast       Mode         ✓ Slow       Slow       Mode		ream bed dry moist ater er		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       100       %         Pool       %         Turbidity        Clear <slightly td="" turbid<="">       ✓        Other       Other        </slightly>				
INOR		JBSTRATE COM d add up to 100			DRGANIC SUBSTRATE COM does not necessarily add u			
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area		
Bedrock				Detritus	sticks, wood, coarse			
Boulder	> 25	56 mm (10")		Detinua	plant materials (CPOM)			
Cobble	64-256	mm (2.5"-10")		Muck-Mud	black, very fine organic			
Gravel		nm (0.1"-2.5")			(FPOM)			
Sand		-2mm (gritty)	70	1.2				
Silt		4-0.06 mm	30	Marl	grey, shell fragments			
Clay	< 0.00	04 mm (slick)						
WATERSHED FEATURES		— Forest	— Other:	- I -	Floodplain Width ✓ Wide > 30ft Modera Narrow <15ft	te 15-30ft		

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

### Stream ID \_<u>EF D 002</u> Date 05/04/2022



Photograph Number \_\_\_\_

Photograph Direction East

Comments: Downstream



Photograph Number 2 Photograph Direction West

Comments: Upstream



Photograph Number 3

Photograph Direction West

Comments: Culvert locate northwest of study area

Photograph Number \_\_\_\_4\_\_\_\_

Photograph Direction \_\_\_\_\_

 $EF_D_004$ 

STREAM ID EF_D_004 STREAM				AME UNK			
CLIENT Dominion				PROJECT NAME Dominion CVOW			
LAT 36.712341 LONG -76.16816 S				STATE Pennsylvania COUNTY Chesapeake			
INVESTIGATO	DRS E. Fo	ster				DATE 05/04/2022	
WATER TYPE	RPW	NRPW	FLOW REG Perennial		ittent	Ephemeral	
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>4.0</u> ft Top of Bank Height: LB <u>1.5</u> ft RB <u>1.5</u> ft Water Depth: <u>4.00</u> in Water Width: <u>2.0</u> ft Ordinary High Water Mark (Width): <u>2.5</u> ft Ordinary High Water Mark (Height): <u>7.0</u> in Flow Direction: <u>North</u>			Sinuosity ✓ Low Medium High         Gradient ✓ Flat Moderate Severe (0.5/100 ft)         Stream Erosion None ✓ Moderate Heavy         Artificial, Modified or Channelized ✓ Yes No         Within Roadside Ditch Yes ✓ No         Culvert Present Yes ✓ No         Culvert Material:         Culvert Size:in		
FLOW CHARACTER	ISTICS	Water Present         No water, stream bed dry         Stream bed moist         Standing water         ✓ Flowing water         Velocity         Fast       Moderate         ✓ Slow		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run       100 %         Pool       %         Turbidity       Clear       Slightly turbid       ✓ Turbid         Other			
INOR		JBSTRATE CO d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder		56 mm (10")		Deinius		plant materials (CPOM)	
Cobble	64-256	mm (2.5"-10")		Muck-Mu	Ч	black, very fine organic	
Gravel	2-64 r	nm (0.1"-2.5")	70	mask wa	- 0	(FPOM)	
Sand		-2mm (gritty)	70				
Silt		4-0.06 mm	30	Marl		grey, shell fragments	
Clay	< 0.00	04 mm (slick)					
WATERSHED FEATURES ↓ Field/Pasture ✓ Agricultural — ROW Canopy Cover			Commercia ure Industrial al Residential     Other:	I	\	d <b>plain Width</b> Mide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Flows into EF\_D\_002

#### Stream ID EF D 004 Date 05/04/2022



Photograph Number \_\_\_\_

Photograph Direction North

Comments: Upstream



Photograph Number 2 Photograph Direction South

Comments: Downstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph	Number	

Photograph Direction

EF\_D\_013

STREAM ID EF_D_013				STREAM NAME UNT to Pocaty River				
CLIENT Dor	minion		PROJECT N	NAME Dominion CVOW				
LAT 36.70096	68 L	ONG -76.169879			COUNTY Chesapeake			
INVESTIGATO	ORS E. Fo	ster				DATE 05/04/2022		
	RPW 🔽	NRPW	FLOW REG	IME Intermit	tent	Ephemeral		
Estimate Measurem         Top of Bank Width:         Top of Bank Height:         LB			/idth: <u>15.0</u> ft eight: <u>RB 3.0</u> t <u>12.00</u> in <u>8.0</u> ft Water Mark (Width): Water Mark (Height)	<u>8.0</u> ft	Sinuosity ∠ Low		lerate Severe 100 ft) (10 ft/100 ft) Heavy elized	
FLOW       Water Present         CHARACTERISTICS       No water, stream bed moist         ✓       Standing water         ✓       Standing water         ✓       Flowing water         ✓       Velocity         —       Fast       Moderation         ✓       Slow		ream bed dry moist ater er		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run 100 %         Pool       %         Turbidity <clear< td=""> <slightly td="" turbid<="">       ✓<turbid< td=""> <other< td="">       Other      </other<></turbid<></slightly></clear<>				
INOR		JBSTRATE COM d add up to 100				ANIC SUBSTRATE COM		
Substrate Type		meter	% Composition in Sampling Reach	Substrate Type	- T	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Deultus		plant materials (CPOM)		
Cobble	64-256	mm (2.5"-10")		Muck-Mud		black, very fine organic		
Gravel	0.0000000000000000000000000000000000000	nm (0.1"-2.5")		THE HIGH		(FPOM)		
Sand	0.06	-2mm (gritty)	10	1000				
Silt		4-0.06 mm	30	Marl		grey, shell fragments		
Clay	< 0.00	04 mm (slick)						
WATERSHED FEATURES → Forest ✓ Field/Pas ✓ Agricultur → ROW		<ul> <li>Forest</li> <li>✓ Field/Pastu</li> <li>✓ Agricultura</li> <li>ROW</li> <li>Canopy Cove</li> <li>X Open</li> </ul>	Other:	d .	1	odplain Width Wide > 30ft Moderat Narrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

#### Stream ID <u>EF-D-0I3</u> Date <u>05/04/2022</u>



Photograph Number \_\_\_\_\_

Photograph Direction NW

Comments: Upstream

Photograph Number <u>2</u> Photograph Direction <u>SE</u>

Comments: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	

Photograph Direction

EF\_D\_2001

STREAM ID EF_D_2001 STREAM NAME UNT								
CLIENT Dom	ninion			ROJECT N		W		
LAT 36.69213		<b>ONG</b> -76.17130		TATE Virgir			COUNTY Chesapeake	
		ster, K. Shepher					DATE 06/07/2022	
WATER TYPE		-	F	<b>LOW REG</b>		nittent	·	
CHANNEL FE	ATURES	Ordinary High Water Mark (Width): <u>2.0</u> ft Ordinary High Water Mark (Height): <u>6.0</u> in Flow Direction: <u>No apparent direction</u> Water Present			Within Roadside Ditch         ✓       Yes         ✓       Yes         Culvert Present ✓       Yes         Culvert Material:       ves         Culvert Size:       24			
FLOW       Water Present         CHARACTERISTICS       No water, stream bed         ✓       Stream bed moist         —       Standing water         —       Flowing water         Velocity       —         —       Fast       Moderate         Slow       Slow		tream bed I moist /ater ter			Proportion of Reach Represented by Stream         Morphology Types       (Only enter if water present)         Riffle       %       Run       %         Pool       %       %       %         Turbidity        Clear        Slightly turbid        Turbidity          Other        %			
INOR		UBSTRATE COI		TS			NIC SUBSTRATE COM not necessarily add up	
Substrate Type	Dia	meter		position in ing Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock					Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")			Detilius		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")			Muck-Mu	ud	black, very fine organic	
Gravel		mm (0.1"-2.5")					(FPOM)	
Sand	0.06	-2mm (gritty)	35					
Silt		4-0.06 mm	30		Marl		grey, shell fragments	
Clay	< 0.00	04 mm (slick)	35					
WATERSHED FEATURES	Predominant Surrounding Landuse       Floodplain Width        Forest      Commercial      Wide > 30ft      Moderate 15-30ft        Field/Pasture      Industrial      Narrow <15ft							

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Large agricultural ditch/roadside ditch to which ag. ditches drain. Bottom is moist mud and contains mostly duck potato/saggitaria growing in the bottom. Very steep incised slopes. Not thought to be jurisdictional at this time- not holding water at this time.

### Stream EF\_D\_2001 Date 06/07/2022



Photograph Number 1

Photograph Direction West

Comments:



Photograph Number <u>2</u> Photograph Direction East

Comments:

Photograph Number 3

Photograph Direction

Comments:

Photograph I	Number	4
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Photograph Direction

## NC DWQ Stream Identification Form Version 4.11

Date: 4/6/2022	Project/Site: CV	/OW	Latitude: 36.70294		
Evaluator: KH, ED	County: City of	Chesapeake	Longitude: -76	Longitude: -76.16956	
<b>Total Points:</b> Stream is at least intermittent 16.5 if $\geq$ 19 or perennial if $\geq$ 30*		ination (circle one) ermittent Perennial	Other e.g. Quad Name:		
A. Geomorphology (Subtotal = 3)	Absent	Weak	Moderate	Strong	
1 <sup>a.</sup> Continuity of channel bed and bank	0	1	2	3	
2. Sinuosity of channel along thalweg	0	1	2	3	
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	
4. Particle size of stream substrate	0	1	2	3	
5. Active/relict floodplain	0	1	2	3	
6. Depositional bars or benches	0	1	2	3	
7. Recent alluvial deposits	0	1	2	3	
8. Headcuts	0	1	2	3	
9. Grade control	0	0.5	1	1.5	
10. Natural valley	0	0.5	1	1.5	
11. Second or greater order channel	N	o = 0	Yes = 3		
<sup>a</sup> artificial ditches are not rated; see discussions in manual					
B. Hydrology (Subtotal = <u>6.5</u> )					
12. Presence of Baseflow	0	1	2	3	
13. Iron oxidizing bacteria	0	1	2	3	
14. Leaf litter	1.5	1	0.5	0	
15. Sediment on plants or debris	0	0.5	1	1.5	
16. Organic debris lines or piles	0	0.5	1	1.5	
17. Soil-based evidence of high water table?	N	o = 0	Yes	= 3	
C. Biology (Subtotal =7)					
18. Fibrous roots in streambed	3	2	1	0	
19. Rooted upland plants in streambed	3	2	1	0	
20. Macrobenthos (note diversity and abundance)	0	1	2	3	
21. Aquatic Mollusks	0	1	2	3	
22. Fish	0	0.5	1	1.5	
23. Crayfish	0	0.5	1	1.5	
24. Amphibians	0	0.5	1	1.5	
25. Algae	0	0.5	1	1.5	
26. Wetland plants in streambed		FACW = 0.75; OE	BL = 1.5 Other = 0	)	
*perennial streams may also be identified using other method	ds. See p. 35 of manu	al.			
Notes:					

STREAM ID KH_D_002 STREAM NAME Un-named				med				
CLIENT Dominion PROJECT NAME CV				AME CVO	W			
LAT 36.70294 LONG -76.16956 STATE Virginia					COUNTY Chesapeake			
INVESTIGAT	DRS KH, I	ΞD				DATE 04/06/2022		
WATER TYPE	RPW	NRPW ,	FLOW REG		ittent	Ephemeral 🗸		
			Vidth: <u>4.0</u> ft			uosity ⊥ Low M dient ⊥ Flat Moo	derate <u> </u>	
		Top of Bank H LB <u>1.5</u> f Water Depth:	t RB <u>1.5</u>	ft		(0.5/100 ft) (2 ft/ cam Erosion <u>(</u> None Moderate )	, , , ,	
CHANNEL FE	ATURES	Water Width:	<u>3.0</u> ft		Artif	ficial, Modified or Chann	-	
		Ordinary High	Water Mark (Width): Water Mark (Height)		With	nin Roadside Ditch Yes No		
		Flow Direction	n: Southwest	-		vert Present Yes 🟒	ν No	
						vert Material:		
						/ert Size: in		
		Water Present         No water, stream bed dry         Stream bed moist         ✓ Standing water         Flowing water         Velocity		Proportion of Reach Represented by Stream         Morphology Types       (Only enter if water present)         Riffle       %       Run       %         Pool       100       %         Turbidity        Clear       ✓       Slightly turbid        Turbidity				
Fast Mode X Slow			. Moderate		_	Other		
INOR		UBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type	te	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder		56 mm (10")		2011100		plant materials (CPOM)	50	
Cobble		6 mm (2.5"-10")		Muck-Mu	d	black, very fine organic (FPOM)		
Gravel Sand		nm (0.1"-2.5") -2mm (gritty)						
Silt		-211111 (gritty) 04-0.06 mm	100	Marl		grey, shell fragments		
Clay		04 mm (slick)		man		groy, onon nagmonto		
Clay       < 0.004 mm (slick)				te 15-30ft				

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Rained the night before, crayfish burrows present, vegetation in channel

### Stream KH\_D\_002 Date <u>04/06/202</u>2



Photograph Number 1

Photograph Direction SW

Comments: Downstream



Photograph Number 2 Photograph Direction NE

Comments: Upstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	4

Photograph Direction

### NC DWQ Stream Identification Form Version 4.11

Date: 6/10/2022	Project/Site: CV	'OW	Latitude: 36.774437		
Evaluator: E.Deck, T. Conard	County: Virginia	Beach	Longitude: -76	.033177	
<b>Total Points:</b> Stream is at least intermittent 23.25 if $\geq$ 19 or perennial if $\geq$ 30*	Stream Determ Ephemeral Inte	ination (circle one) ermittent Perennial	Other e.g. Quad Name:		
A. Geomorphology (Subtotal = <u>9.5</u> )	Absent	Weak	Moderate	Strong	
1 <sup>a</sup> Continuity of channel bed and bank	0	1	2	3	
2. Sinuosity of channel along thalweg		1	2	3	
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	
4. Particle size of stream substrate	0	1	2	3	
5. Active/relict floodplain	0	1	2	3	
6. Depositional bars or benches	0	1	2	3	
7. Recent alluvial deposits	0	1	2	3	
8. Headcuts	0	1	2	3	
9. Grade control	0	0.5	1	1.5	
10. Natural valley	0	0.5	1	1.5	
11. Second or greater order channel	N	o = 0	Yes = 3		
<sup>a</sup> artificial ditches are not rated; see discussions in manual					
B. Hydrology (Subtotal = 5_)					
12. Presence of Baseflow	0	1	2	3	
13. Iron oxidizing bacteria	0	1	2	3	
14. Leaf litter	1.5	1	0.5	0	
15. Sediment on plants or debris	0	0.5	1	1.5	
16. Organic debris lines or piles	0	0.5	1	1.5	
17. Soil-based evidence of high water table?	N	o = 0	Yes	= 3	
C. Biology (Subtotal = 8.75)					
18. Fibrous roots in streambed	3	2	1	0	
19. Rooted upland plants in streambed	3	2	1	0	
20. Macrobenthos (note diversity and abundance)	0	1	2	3	
21. Aquatic Mollusks	0	1	2	3	
22. Fish	0	0.5	1	1.5	
23. Crayfish	0	0.5	1	1.5	
24. Amphibians	0	0.5	1	1.5	
25. Algae	0	0.5	1	1.5	
26. Wetland plants in streambed		FACW = 0.75; OE	BL = 1.5 Other = 0	)	
*perennial streams may also be identified using other met	hods. See p. 35 of manua	al.			

Sketch:

TC\_D\_1001

STREAM ID TC_D_1001 STREAM NAME UT								
CLIENT Dominion PROJECT NAME CV					W			
LAT 36.774437 LONG -76.033177 STATE Virginia					COUNTY Virginia Beach			
INVESTIGATO						DATE 06/10/2022		
WATER TYPE			FLOW REG		ittent			
CHANNEL FEATURES       Estimate Measurements         Top of Bank Width:       20.0 ft         Top of Bank Height:       LB			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or Channelized XNo         Within Roadside DitchYesNo         Culvert Present ✓ YesNo         Culvert Material:Concrete         Culvert Size:48in					
FLOW       Mater Present         CHARACTERISTICS       No water, stream         ✓       Stream bed mois         Standing water       Standing water         ✓       Flowing water         ✓       Velocity         —       Fast       Mod         Slow       Slow		tream bed dry   moist  ater ter			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       90       %         Pool       %         Turbidity        Slightly turbid          Other       Other			
INOR		JBSTRATE COI d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate			% Composition in	Substra			% Composition in	
Туре	Dia	meter	Sampling Reach	Туре		Characteristic	Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detitus		plant materials (CPOM)	40	
Cobble	64-256	mm (2.5"-10")		Muck-Mu	4	black, very fine organic		
Gravel	2-64 r	nm (0.1"-2.5")			ч	(FPOM)		
Sand	0.06	-2mm (gritty)	25					
Silt	0.00	4-0.06 mm	60	Marl		grey, shell fragments		
Clay	< 0.00	4 mm (slick)	15					
Clay       < 0.004 mm (slick)       15       Floodplain Width         Predominant Surrounding Landuse       — Forest       — Commercial       — Wide > 30ft       _ Moderate 15-30ft         WATERSHED       — Field/Pasture       — Industrial       — Residential       _ Narrow <15ft					te 15-30ft			

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

tadpoles observed in areas where standing water present. Bed is moist with a few pockets of standing water.

# Stream TC\_D\_1001 Date 06/10/2022



Photograph Number 1

Photograph Direction South

Comments: Down

Downstream



Photograph Number <u>2</u> Photograph Direction North

Comments: Upstream

Photograph Number 3

Photograph Direction

Comments:

	Photograph	Number	4
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Photograph Direction

STREAM ID ED_D_004 ED D 004	STREAM NAME Un-named Trib				
CLIENT Dominion	PROJECT NAME CVOW				
LAT 36.691956 LONG -76.171270	STATE Virginia	COUNTY Chesapeake			
INVESTIGATORS E. Foster, T. Conard, E. De	ck	DATE 03/30/2022			
WATER TYPE       TNW       RPW       NRPW	FLOW REGIME Perennial Intermittent	Ephemeral 🗸			

CHANNEL FE	Estimate Measurements         Top of Bank Width:10.0ft         Top of Bank Height:         LB3.0ft       RB3.0ft         Water Depth:2.00 in         Water Width:5.0ft         Ordinary High Water Mark (Width):6.0ft         Ordinary High Water Mark (Height):12.0_ in         Flow Direction: Southeast		With Deside Ditab				
FLOW CHARACTERISTICS		Water Present         No water, stream bed dry         Stream bed moist         ✓ Standing water         Flowing water         Velocity         Fast       Moderate         Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       100         Pool       %         Turbidity          Clear       ✓         Other		
INORGANIC SUBSTRATE COMPO (should add up to 100%)				ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type		meter	% Composition in Sampling Reach	Substrat Type	ate Characteristic % Compos		
Bedrock				Detritus	sticks, wood, coarse		
Boulder		56 mm (10")			plant materials (CPOM)		
Cobble		6 mm (2.5"-10")		Muck-Muc	d black, very fine organic (FPOM)		
Gravel		nm (0.1"-2.5")		2			
Sand Silt		-2mm (gritty) )4-0.06 mm	100	Marl	grey, shell fragments		
Clay		04 mm (slick)	100		grey, shell lagilletits		
Pred — F — F — F — F — F FEATURES ✓ F Canc ✓ C		Predominant	Other:	l	Floodplain Width Wide > 30ft Modera ✓ Narrow <15ft	ate 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Located in the roadside. Likely non-jurisdictional.

#### Stream ID ED D Of Date 03/30/2022



Photograph Number 1

Photograph Direction East

Comments:

Upstream



Photograph Number 2 Photograph Direction West

Comments: Do

ts: Downstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph	Number	4
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Photograph Direction

ED\_D\_1001

STREAM ID ED_D_1001 STREAM NAME UNT								
CLIENT Dominion				PROJECT NAME CVOW				
LAT 36.691168 LONG -76.185320 STATE Virgini					COUNTY Chesapeake			
		ck, T. Conard, K				DATE 06/09/2022		
			FLOW REG		nittent	Ephemeral 🗸		
CHANNEL FEATURES Water Depth: 0.00 Water Width: 0.0 Ordinary High Water Ordinary High Water Flow Direction: South			Vidth: <u>2.0</u> ft Height: t RB <u>1.0</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height)	2.0ftGradient $\checkmark$ Fla (0.5/100 flRB1.0ft_ in $\checkmark$ None_ ftStream Erosion_ ft $\checkmark$ NoneMark (Width):0.0Mark (Height):0.0in $\checkmark$ YesCulvert Present			Moderate Heavy odified or Channelized <sup>No</sup> dside Ditch No sent Yes ⊥_ No arial:	
FLOW CHARACTERISTICS		eam bed dry moist iter er		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity       Clear       Slightly turbid       Turbid         Other				
INOR		JBSTRATE CO d add up to 100		ORGANIC SUBSTRATE COMPO (does not necessarily add up to				
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock						sticks, wood, coarse		
Boulder	> 2	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble	64-256	mm (2.5"-10")		Muck-Mu		black, very fine organic		
Gravel		nm (0.1"-2.5")				(FPOM)		
Sand		2mm (gritty)						
Silt		4-0.06 mm		Marl		grey, shell fragments		
Clay	< 0.00	04 mm (slick)						
Forest     Field/Pasture     ✓ Agricultural		<b></b> Other:	I	V	<b>dplain Width</b> Nide > 30ft <u>✓</u> Modera Narrow <15ft	te 15-30ft		

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Swale next to an existing gravel road. Vegetation present through out swale.

Feature ID: <u>ED\_D\_1001</u>



Photograph Number \_\_\_\_1

Photograph Direction NW

Comments: D

Downstream



Photograph Number 2

Photograph Direction SE

Comments: Upstream

Photograph Number 3\_ Pho Photograph Direction Pho Comments: Com

Photograph Number \_\_\_\_4

Photograph Direction

STREAM ID	EF D 001		STREAM NA	ME UNT				
CLIENT Don			PROJECT N		W			
		ONG -76.16736				COUNTY City of Chesa	apeake	
INVESTIGAT					DATE 04/28/2021			
			FLOW REG		nittent	•		
Estimate Measurements         Top of Bank Width: ft         Top of Bank Height:         LB ft       RB         Water Depth: 0.00 in         Water Width: ft       R         Ordinary High Water Mark (Widd)         Ordinary High Water Mark (Widd)         Flow Direction: West				<u>✓</u> None <u>Moderate</u> Heavy <u>Artificial, Modified or Channelized</u> <u>✓</u> Yes <u>No</u>			derate <u>Severe</u> 100 ft) (10 ft/100 ft) Heavy helized	
FLOW       Water Present         ✓       No water, str         Stream bed r       Stream bed r         Standing wate       Flowing wate         Velocity       Fast         Slow       Slow		ream bed dry moist ater		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Riffle       %         Pool       %         Turbidity         < Clear				
INOR		UBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock						sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble	64-256	6 mm (2.5"-10")		Musle Mi	d	black, very fine organic		
Gravel	2-64 r	mm (0.1"-2.5")		Muck-Mu	u	(FPOM)		
Sand	0.06	-2mm (gritty)						
Silt	0.00	4-0.06 mm		Marl		grey, shell fragments		
Clay	< 0.00	04 mm (slick)						
— Field/Pasture — ✓ Agricultural —			Commercia ure Industrial al Residential     Other:	I	<u> </u>	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Maintained non-jurisdictional agricultural ditch draining uplands.

Date: \_\_\_\_\_

Feature ID: <u>EF\_D\_001</u>



Photograph Number \_\_\_\_1

Photograph Direction West

Comments: Downstream



Photograph Number 2

Photograph Direction East

Comments: Upstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number \_\_\_\_4\_\_\_

Photograph Direction \_\_\_\_\_

STREAM ID	EF_D_003		STREAM NA	STREAM NAME UNT				
CLIENT Don	ninion		PROJECT N	AME CVO	W			
		ONG -76.16736				COUNTY City of Chesa	apeake	
INVESTIGATO	DRS E. Fo	ster				DATE 04/28/2021		
	RPW	NRPW	FLOW REG	FLOW REGIME Perennial Intermittent Ephemeral 🗸				
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>5.0</u> ft Top of Bank Height: LB <u>1.2</u> ft RB <u>1.2</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>3.5</u> ft Ordinary High Water Mark (Height): <u>3.0</u> in Flow Direction: <u>West</u>			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         ✓ YesNo         Within Roadside DitchYes ✓No         Culvert PresentYes ✓No         Culvert Size:in			
LOW CHARACTERISTICS ✓ No water, Stream be Standing v Flowing w Velocity Fast		<ul> <li>✓ No water, s</li> <li>Stream bec</li> <li>Standing w</li> <li>Flowing wa</li> </ul>	tream bed dry moist ater er		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other			
INOR		JBSTRATE CO				ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type	te	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble		6 mm (2.5"-10")		Muck-Mu	d	black, very fine organic		
Gravel		nm (0.1"-2.5")				(FPOM)		
Sand		2mm (gritty)						
Silt Clay		4-0.06 mm )4 mm (slick)		Marl		grey, shell fragments		
Predominant Surro Forest Field/Pasture Agricultural			Other:	I	<u>√</u> V	d <b>plain Width</b> Vide > 30ft Modera Iarrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Maintained non-jurisdictional agricultural ditch draining uplands.

Date: \_\_\_\_\_

Feature ID: EF\_D\_003



Photograph Number \_\_\_\_1

Photograph Direction West

Comments: Downstream



Photograph Number 2

Photograph Direction East

Comments: Upstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number \_\_\_\_4

Photograph Direction

STREAM ID EF_D_005 STREAM NAME					UNT			
CLIENT Don			PROJECT N		W			
		ONG -76.16806				COUNTY City of Chesapeake		
INVESTIGAT						DATE 04/29/2021		
		NRPW .	FLOW REG		nittent	·		
CHANNEL FE	ATURES	Ordinary High Water Mark (Width): <u>1.0</u> ft Ordinary High Water Mark (Height): <u>2.0</u> in Flow Direction: <u>Southeast</u> Water Present			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         ✓ YesNo         Within Roadside DitchYesNo         Culvert Present ✓ YesNo         Culvert Material: Concrete         Culvert Size: 24in			
FLOW CHARACTERISTICS ↓ Velocity		ream bed dry moist ater		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other				
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock				Dotriture		sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	ЧТ	black, very fine organic		
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")			<u> </u>	(FPOM)		
Sand	0.06	-2mm (gritty)						
Silt		4-0.06 mm		Marl		grey, shell fragments		
Clay	< 0.00	)4 mm (slick)						
			al <u> </u>	I	<u> </u>	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Ephemeral ditch, disturbed by heavy equipment.

Date: \_\_\_\_\_

Feature ID: <u>EF\_D\_005</u>



Photograph Number \_\_\_\_1

Photograph Direction SE

Comments: Downstream



Photograph Number 2

Photograph Direction NW

Comments: Upstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number <u>4</u>

Photograph Direction

STREAM ID	EF_D_006		STREAM NA	ME UNT			
CLIENT Don	ninion		PROJECT N	AME CVO	W		
LAT 36.6884 <sup>-</sup>	72 L	ONG -76.18602				COUNTY City of Chesa	apeake
INVESTIGATO	ORS E. Fo	oster				DATE 05/03/2021	
	RPW _	NRPW 🗸	FLOW REG	ME Interm	nittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Ordinary High Water Mark (Width): <u>0.0</u> ft Ordinary High Water Mark (Height): <u>0.0</u> in Flow Direction: <u>Southeast</u> Water Present			Sinuosity ✓ LowMediumHigh         Gradient ✓ Flat (0.5/100 ft)       ModerateSevere (2 ft/100 ft)         Stream Erosion ✓ NoneModerateHeavy         Artificial, Modified or Channelized ✓ YesNo         Within Roadside Ditch ✓ YesNo         Culvert Present ✓ YesNo         Culvert Size:36in		
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water Velocity — Fast — Mo Slow		tream bed dry I moist vater ter			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other		
INOR		UBSTRATE CO Id add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus	T	sticks, wood, coarse	
Boulder		56 mm (10")		Dounda		plant materials (CPOM)	
Cobble		6 mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)		Mari		annu ah all fra musicut	
Silt Clay		04-0.06 mm 04 mm (slick)		Marl		grey, shell fragments	
WATERSHED       Predominant Surrounding Landus         WATERSHED       Forest       Commercial         WATERSHED       Field/Pasture       Industrial         ✓       Agricultural       Residential         —       ROW       Other:         Canopy Cover       ✓       Open         Shaded       Shaded				I	<u> </u>	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date: <u>5/3/21</u>

Feature ID: EF\_D\_006



Photograph Number \_\_\_\_1

Photograph Direction North

Comments: Upstream



Photograph Number 2 Photograph Direction South

Comments:

Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number \_\_\_\_4

Photograph Direction

STREAM ID	EF_D_007		STREAM NA	ME UNT				
CLIENT Don	ninion		PROJECT N	AME CVO	W			
LAT 36.6888	85 L	ONG -76.18773				COUNTY City of Chesa	apeake	
INVESTIGATO	DRS E. Fo	oster			DATE 05/03/2021			
	RPW _		FLOW REG		nittent	Ephemeral 🗸		
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>3.5</u> ft Top of Bank Height: LB <u>2.0</u> ft RB <u>2.0</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>0.0</u> ft Ordinary High Water Mark (Height): <u>0.0</u> in Flow Direction: <u>Northeast</u>			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         YesNo         Within Roadside DitchYesNo         Culvert PresentYesNo         Culvert Size:in			
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing wate Velocity — Fast Slow		ream bed dry moist ater er		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear      < Slightly turbid				
INOR		UBSTRATE CO Id add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 2	56 mm (10")		Deulius		plant materials (CPOM)		
Cobble		6 mm (2.5"-10")		Muck-Mu	d	black, very fine organic		
Gravel		nm (0.1"-2.5")			-	(FPOM)		
Sand		-2mm (gritty)						
Silt		04-0.06 mm		Marl		grey, shell fragments		
Clay       < 0.004 mm (slick)       Floodplain Width         Predominant Surrounding Landuse       Floodplain Width        < Forest								

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Maintained non-jurisdictional agricultural ditch

Date: <u>5/3/21</u>

Feature ID: <u>EF\_D\_007</u>



Photograph Number \_\_\_\_1

Photograph Direction NE

Comments:

Downstream



Photograph Number 2 Photograph Direction South

Comments: Upstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number 4

Photograph Direction

STREAM ID	EF_D_010	I	STREAM NA	ME UNT			
CLIENT Don	ninion		PROJECT N	AME CVO	W		
		ONG -76.17017				COUNTY City of Chesa	apeake
INVESTIGAT	ORS E. Fo	oster				DATE 05/04/2021	
	RPW	NRPW 🗗	FLOW REG	ME Interm	nittent	Ephemeral 🗸	
CHANNEL FE	Estimate Measurements         Top of Bank Width: 4.0 ft         Top of Bank Height:         LB 1.2 ft       RB 1.2 ft         Water Depth: 0.00 in         Water Width: 0.0 ft         Ordinary High Water Mark (Width): 3.0 ft         Ordinary High Water Mark (Height): 2.0 in         Flow Direction: Southeast         Water Present				Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         ✓ YesNo         Within Roadside DitchNo         ✓ YesNo         Culvert PresentYes ✓No         Culvert Size:in		
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water Velocity Slow		tream bed dry I moist vater ter	ist		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear      < Slightly turbid		
INOR		UBSTRATE COI			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus	T	sticks, wood, coarse	
Boulder		56 mm (10")		Bounda		plant materials (CPOM)	
Cobble		6 mm (2.5"-10")		Muck-Mu	ıd	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt		04-0.06 mm		Marl		grey, shell fragments	
Clay       < 0.004 mm (slick)				I DSIDE DIT	_	odplain Width Wide > 30ft _∕_ Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Roadside ditch, some emergent vegetation.

Date: <u>5/4/21</u>

Feature ID: EF\_D\_010



Photograph Number \_\_\_\_1

Photograph Direction NW

Comments: Upstream



Photograph Number 2

Photograph Direction SE

Comments: Downstream

Photograph Number 3 Photograph Direction \_\_\_\_\_ Comments:

Photograph Number \_\_\_\_4

Photograph Direction

STREAM ID	EF_D_011		STREAM NA	ME UNT				
CLIENT Don	ninion		PROJECT N	AME CVO	W			
LAT 36.7003	67 L	<b>ONG</b> -76.16983				COUNTY City of Chesa	apeake	
INVESTIGATO	DRS E. Fo	oster				DATE 05/04/2021		
WATER TYPE	RPW	NRPW 🗸	FLOW REG		ittent	Ephemeral 🗸		
CHANNEL FE	ATURES	Estimate Measurements         Top of Bank Width:       3.5 ft         Top of Bank Height:         LB       1.5 ft         RES       Restrict the term of the term of			Sinuosity ⊥ LowMediumHigh         Gradient ⊥ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft)         Stream Erosion ⊥ NoneModerateHeavy         Artificial, Modified or Channelized ⊥ YesNo         Within Roadside DitchYes ⊥ No         Culvert PresentYes ⊥ No         Culvert Material:in			
FLOW       ✓       No water, strear         CHARACTERISTICS       ✓       Standing water         Velocity       —       Fast       Mo         Slow       Slow       Slow       Slow		tream bed dry I moist vater ter			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other			
INOR		JBSTRATE COI d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	-	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder		56 mm (10")		Dealitus		plant materials (CPOM)		
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic		
Gravel		nm (0.1"-2.5")				(FPOM)		
Sand		-2mm (gritty)		N.4		man al al d		
Silt		4-0.06 mm )4 mm (slick)		Marl		grey, shell fragments		
WATERSHED <ul> <li>Features</li> <li>ROW</li> <li>ROW</li> <li>Canopy Cover</li> </ul>			al <u> </u>	I	<u>√</u> \	dplain Width Nide > 30ft Modera Narrow <15ft	te 15-30ft	

### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Dry Ag ditch, some emergent vegetation.

No photos available

STREAM ID EF_D_012 STREAM NAME UNT							
CLIENT Don	ninion		PROJECT N	AME CVO	W		
		ONG -76.17009				COUNTY City of Chesa	apeake
INVESTIGATO	ORS E. Fo	oster				DATE 05/04/2021	
	RPW _		FLOW REG		nittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>3.5</u> ft Top of Bank Height: LB <u>1.5</u> ft RB <u>1.5</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>0.0</u> ft Ordinary High Water Mark (Height): <u>0.0</u> in Flow Direction: <u>Northeast</u>			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         ✓ YesNo         Within Roadside DitchYesNo         Culvert PresentYesNo         Culvert Size:in		
FLOW CHARACTERISTICS ↓ Velocity		tream bed dry I moist /ater			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other		
INOR		UBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detritus	İ	sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detilitus		plant materials (CPOM)	
Cobble		6 mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		mm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt		14-0.06 mm		Marl		grey, shell fragments	
Clay       < 0.004 mm (slick)       File         Predominant Surrounding Landuse							

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Dry ag ditch.

Date: <u>5/4/21</u>

Feature ID: <u>EF\_D\_012</u>



Photograph Number \_\_\_\_1

Photograph Direction SE

Comments: Do

Downstream



Photograph Number 2

Photograph Direction NW

Comments: Upstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number 4

Photograph Direction

STREAM ID	EF_D_014		STREAM NA	ME UNT				
CLIENT Don	ninion		PROJECT N	AME CVO	W			
LAT 36.7012	14 Lo	<b>DNG</b> -76.16977				COUNTY City of Chesa	apeake	
INVESTIGATO	ORS E. Fo	ster				DATE 05/04/2021		
WATER TYPE	RPW	NRPW 🗗	FLOW REG	ME Interm	nittent	Ephemeral 🗸		
CHANNEL FE	Estimate Measurements         Top of Bank Width: <u>3.5</u> ft         Top of Bank Height:         LB <u>1.5</u> ft         LB <u>1.5</u> ft         Water Depth: <u>0.00</u> in         Water Width: <u>0.0</u> ft         Ordinary High Water Mark (Width): <u>0.0</u> ft         Ordinary High Water Mark (Height): <u>0.0</u> in         Flow Direction: North				Sinuosity ✓ LowMediumHigh         Gradient ✓ Flat (0.5/100 ft)       ModerateSevere (2 ft/100 ft)         Stream Erosion ✓ NoneModerateHeavy         Artificial, Modified or Channelized ✓ YesNo         Within Roadside DitchYesNo         Culvert PresentYesNo         Culvert Size:in			
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water Velocity — Fast — M Slow		tream bed dry I moist vater ter	st		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear      < Slightly turbid			
INOR		JBSTRATE CO d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area	
Bedrock				Detritus	T	sticks, wood, coarse		
Boulder		56 mm (10")		Dounda		plant materials (CPOM)		
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic		
Gravel		nm (0.1"-2.5")				(FPOM)		
Sand		-2mm (gritty)		Mari		analy also il factoria and		
Silt Clay		4-0.06 mm )4 mm (slick)		Marl		grey, shell fragments		
WATERSHED       ✓       Predominant Surrou         WATERSHED       ✓       Field/Pasture         FEATURES       ✓       Agricultural         Canopy Cover       ✓			Commercia ure Industrial al Residential     Other:	I	<u>√</u> \	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft	

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date: \_\_\_\_\_

Feature ID: EF\_D\_014



Photograph Number \_\_\_\_1

Photograph Direction North

Comments: Downstream



Photograph Number 2 Photograph Direction South

Comments: Upstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph	Number	4
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Photograph Direction

STREAM ID EF_D_015 STREAM NAME					UNT			
CLIENT Don			PROJECT N		W			
		<b>DNG</b> -76.17006				COUNTY City of Chesa	apeake	
INVESTIGATO						DATE 05/04/2021		
		NRPW 🖡	FLOW REG		nittent			
CHANNEL FE	ATURES	Estimate Measurements         Top of Bank Width:			Sinuosity ✓ LowMediumHigh         Gradient ✓ Flat (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         YesNo         Within Roadside DitchYesNo         Culvert PresentYes ✓No         Culvert Material:in			
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS		tream bed dry I moist vater ter	noist ter r		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear      < Slightly turbid			
INOR		JBSTRATE COI d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detilitus		plant materials (CPOM)		
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic		
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")			<u> </u>	(FPOM)		
Sand	0.06	2mm (gritty)						
Silt	0.00	4-0.06 mm		Marl		grey, shell fragments		
Clay	< 0.00	4 mm (slick)						
WATERSHED       Field/Pasture       I         ✓ Agricultural       I         ✓ ROW       C         Canopy Cover			Commercia ure Industrial al Residential     Other:	I	√_ ۱	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft	

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date: \_\_\_\_\_

Feature ID: <u>EF\_D\_015</u>



Photograph Number \_\_\_\_1

Photograph Direction NE

Comments: Dow

Downstream



Photograph Number 2

Photograph Direction SE

Comments:

s: Upstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number 4

Photograph Direction

STREAM ID	F D 034		STREAM NA					
CLIENT Don					w			
		<b>DNG</b> -76.16822				COUNTY Chesapeake		
INVESTIGAT						DATE 04/29/2021		
		5101				DATE 04/29/2021		
	RPW	NRPW	FLOW REG       Perennial	Interm	ittent	Ephemeral 🗸		
CHANNEL FEATURES		Estimate Measurements         Top of Bank Width: <u>5.0</u> ft         Top of Bank Height:         LB <u>3.0</u> ft       RB <u>3.0</u> ft         Water Depth: <u>0.00</u> in         Water Width: <u>0.0</u> ft         Ordinary High Water Mark (Width): <u>0.0</u> ft         Ordinary High Water Mark (Height): <u>0.0</u> in         Flow Direction: <u>South</u>		Sinuosity ⊥ LowMedium High         Gradient ⊥ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft)         Stream Erosion ⊥ None Moderate Heavy         Artificial, Modified or Channelized ⊥ Yes No         Within Roadside Ditch Yes ⊥ No         Culvert Present Yes ⊥ No				
					Cul	vert Material:in		
FLOW CHARACTERISTICS			tream bed dry I moist vater ter	noist ter r		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other		
INOR		JBSTRATE CO d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	-	neter	% Composition in Sampling Reach	Substra Type	te	Characteristic	% Composition in Sampling Area	
Bedrock Boulder	> 25	56 mm (10")		Detritus		sticks, wood, coarse plant materials (CPOM)		
Cobble Gravel		mm (2.5"-10") nm (0.1"-2.5")		Muck-Mu	d	black, very fine organic (FPOM)		
Sand		-2mm (gritty)						
Silt		4-0.06 mm		Marl		grey, shell fragments		
Clay	< 0.00	)4 mm (slick)						
Predominant Surrounding Landuse       Floodplain Width        Forest      Commercial       ✓ Wide > 30ft       Moderate 15-30ft        Field/Pasture      Industrial      Narrow <15ft					te 15-30ft			

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Ephemeral abandoned ditch.

STREAM ID EF_D_061 STREAM NAME UNT							
CLIENT Dominion PROJECT NAME CVC					W		
LAT 36.770576 LONG -76.067173 STATE Virginia				COUNTY City of Virginia Beach			
INVESTIGATO						DATE 05/14/2021	
		NRPW	FLOW REG	IME Interm	nittent	·	
Estimate Measurements         Top of Bank Width:ft         Top of Bank Height:         LBft         RBft         Water Depth:in         Ordinary High Water Mark (Width):in         Ordinary High Water Mark (Height):in         Flow Direction: Northeast			Sinuosity ✓ LowMediumHigh Gradient ✓ FlatModerateSevere (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft) Stream Erosion ✓ NoneModerateHeavy Artificial, Modified or Channelized ✓ YesNo Within Roadside Ditch Yes ✓ No Culvert PresentYes ✓ No Culvert Material: Culvert Size:in Propertion of Baseb Basebaseted by Stream				
FLOW       Water Present         Y       No water, stream bed dry         Stream bed moist       Stream bed moist         Standing water       Flowing water         Velocity       Fast         Slow       Moderate		tream bed dry I moist vater ter		Mor Riffl Poo Tur		r if water present) %	
INOR		JBSTRATE CO d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock Boulder	> 2!	56 mm (10")		Detritus		sticks, wood, coarse plant materials (CPOM)	
Cobble Gravel	64-256	mm (2.5"-10") nm (0.1"-2.5")		Muck-Mu	d	black, very fine organic (FPOM)	
Sand		2mm (gritty)				. ,	
Silt		4-0.06 mm		Marl		grey, shell fragments	
Clay	< 0.00	)4 mm (slick)					
WATERSHED       Predominant Surrounding Landuse       Floodplain Width         WATERSHED       Field/Pasture       Industrial       Wide > 30ft       Moderate 15-30         WATERSHED       Field/Pasture       Industrial       Narrow <15ft			te 15-30ft				

### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Non jurisdictional ditch begins in easement, emergent vegetation in ditch bottom. Develops emergergent wetland characteristics downstream outside project area. Juncus effuses and carex lurida

Date: \_\_\_\_\_

Feature ID: EF\_D\_061



Photograph Number \_\_\_\_1

Photograph Direction NE

Comments: Downstream

Photograph Number 2

Photograph Direction SE

Comments: Upstream



Photograph Number 3

Photograph Direction

Comments:

Substrate

Photograph Number 4

Photograph Direction

STREAM ID EF_D_062 STREAM NAME UNT				ME UNT			
CLIENT Don	ninion			PROJECT NAME CVOW			
LAT 36.770538 LONG -76.066641 STATE Virginia				COUNTY City of Virginia Beach			
INVESTIGAT	ORS E. Fo	ster	•			DATE 05/14/2021	
			/ FLOW REG		nittent	Ephemeral 🗸	
Estimate Measurements         Top of Bank Width:			<u>0.0</u> ft	0.0_in Within Roadside DitchYes   ✓_No Culvert PresentYes  ✓_No Culvert Material: Culvert Size:in			
FLOW		tream bed dry I moist vater ter		Mor Riffle Pool Turl		r if water present) %	
INOR		JBSTRATE CO				ANIC SUBSTRATE COM s not necessarily add up	
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock Bou <b>l</b> der	> 2!	56 mm (10")		Detritus		sticks, wood, coarse plant materials (CPOM)	
Cobble Gravel	64-256	mm (2.5"-10") nm (0.1"-2.5")		Muck-Mu	ıd	black, very fine organic (FPOM)	
Sand		-2mm (gritty)				. ,	
Silt		4-0.06 mm		Marl		grey, shell fragments	
Clay	< 0.00	)4 mm (s <b>l</b> ick)					
WATERSHED       Predominant Surrounding Landu: — Forest Commercial ✓ Field/Pasture Industrial — Agricultural Residential — ROW Other: Canopy Cover Open Partly shade Shaded			I	۷ کے	o <b>dplain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft	

### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Nonjurisdictional man made ditch draining uplands. Some emergent vegetation in channel. Juncus effuses and carex lurida.

Date: <u>5/14/21</u>

Feature ID: <u>EF\_D\_062</u>



Photograph Number \_\_\_\_1

Photograph Direction NE

Comments: Downstream



Photograph Number 2

Photograph Direction SW

Comments: Upstream



Photograph Number 3

Photograph Direction

Comments:

Substrate

Photograph Number 4

Photograph Direction

STREAM ID EF_D_063 STREAM NAME UNT				ME UNT			
CLIENT Don	ninion			PROJECT NAME CVOW			
LAT 36.770498 LONG -76.066192 STATE Virginia				COUNTY Virginia Beach			
INVESTIGAT	DRS E. Fo	ster				DATE 05/14/2021	
	RPW	NRPW	FLOW REG		nittent	Ephemeral ✓	
CHANNEL FE	ATURES	Ordinary High Water Mark (Width): <u>0.0</u> ft Ordinary High Water Mark (Height): <u>0.0</u> in Flow Direction: <u>Northeast</u>			Sinuosity ✓ LowMedium High Gradient ✓ FlatModerateSevere (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft) Stream Erosion ✓ NoneModerateHeavy Artificial, Modified or Channelized ✓ YesNo Within Roadside Ditch YesNo Culvert PresentYes ✓ No Culvert Material: Culvert Size:in		
FLOW       No water, stream bed dry         GHARACTERISTICS       Stream bed moist         Standing water       Flowing water         Velocity       Fast       Moderate         Slow       Slow		stream bed dry d moist vater ter		Morr Riffle Pool Turb		r if water present) %	
INOR		JBSTRATE CO				ANIC SUBSTRATE COM s not necessarily add up	
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder		56 mm (10")				plant materials (CPOM)	
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)		N 4		and the life and the	
Silt		4-0.06 mm		Marl		grey, shell fragments	
Clay       < 0.004 mm (slick)		I	V	d <b>plain Width</b> Vide > 30ft Moderai Narrow <15ft	te 15-30ft		

### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Nonjurisdictional ditch man made draining easement uplands. Some carex lurida in channel bottom.

Date: \_\_\_\_\_

Feature ID: EF\_D\_063



Photograph Number \_\_\_\_1

Photograph Direction NE

Comments: Downstream



Photograph Number 2

Photograph Direction SW

Comments: Upstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number 4

Photograph Direction

STREAM ID EF_D_064 STREAM NAME UNT							
CLIENT Dominion PROJECT NAME CVC				AME CVO	W		
LAT 36.770356 LONG -76.065873 STATE Virginia				COUNTY Virginia Beach			
INVESTIGAT	DRS E. Fo	ster				DATE 05/14/2021	
			FLOW REG	IME Interm	iittent	<u> </u>	
CHANNEL FE	Estimate Measurements         Top of Bank Width:			Sinuosity ✓ LowMedium High Gradient ✓ FlatModerateSevere (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft) Stream Erosion ✓ NoneModerateHeavy Artificial, Modified or Channelized ✓ YesNo Within Roadside Ditch Yes ✓ No Culvert PresentYes ✓ No Culvert Material: Culvert Size:in			
FLOW       Water Present         CHARACTERISTICS       Moderate         Velocity       Fast         Moderate       Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity       Clear       Slightly turbid       Turbid         Other				
INOR		JBSTRATE CO d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type		neter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detilius		plant materials (CPOM)	
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")				(FPOM)	
Sand		2mm (gritty)					
Silt		4-0.06 mm		Marl		grey, shell fragments	
WATERSHED — Forest — Field/Pasture — Agricultural		Other:	I		odplain Width Wide > 30ft ⊻ Modera Narrow <15ft	te 15-30ft	

### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Nonjurisdictional ditch draining uplands in power line easement. Juncus effuses and carex lurida in channel bottom.

Date: 5/14/21

Feature ID: EF\_D\_064



Photograph Number \_\_\_\_1

Photograph Direction NE

Comments:

Northeast



Photograph Number 2

Photograph Direction SW

Comments: Downstream



Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Substrate

Photograph Number 4

Photograph Direction \_\_\_\_\_

STREAM ID EF_D_065 STREAM NAME UNT				ME UNT				
CLIENT Don	ninion		PROJECT N	AME CVO	ME CVOW			
					COUNTY Virginia Beach			
INVESTIGAT	ORS E. Fo	ster				DATE 05/14/2021		
	RPW	NRPW	/ FLOW REG		ittent [	Ephemeral 🗸		
Estimate Measureme         Top of Bank Width:         Top of Bank Height:         LB			Vidth: <u>8,0</u> ft Height: t RB <u>3.0</u> ft <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height):	<u>0.0</u> ft : <u>0.0</u> in	Grad Stre ⊥ Artif ⊥ With Culv	iosity        ✓       Low       Node         dient        ✓       Flat       Mode         (0.5/100 ft)       (2 ft/)         am Erosion       Moderate         None       Moderate          Yes       No         Yes       No         Yes       ✓       No         ert Present       Yes       ✓         rert Material:	derate <u>Severe</u> 100 ft) (10 ft/100 ft) Heavy relized	
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water - Flowing water Velocity - Fast _ Moderate Slow		stream bed dry 1 moist vater tter		Morr Riffle Pool Turk		r if water present) %		
INOR		JBSTRATE CO d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type	te	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder		56 mm (10")		Dealad		plant materials (CPOM)		
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic		
Gravel		nm (0.1"-2.5")		2	-	(FPOM)		
Sand		-2mm (gritty)						
Silt Clay		4-0.06 mm		Marl		grey, shell fragments		
Predominant Sur Forest		Other:	I	V	dplain Width Nide > 30ft <u>✓</u> Modera Narrow <15ft	te 15-30ft		

### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Man made ditch draining uplands in power line easement. Juncus effuses and carex lurida in channel bottom.

Date: \_\_\_\_\_

Feature ID: <u>EF\_D\_065</u>



Photograph Number \_\_\_\_1

Photograph Direction NE

Comments: Downstream



Photograph Number 2

Photograph Direction SW

Comments: Upstream



Photograph Number 3

Photograph Direction

Comments:

Substrate

Photograph Number	4

Photograph Direction

	STREAM ID EF D 2002 STREAM NAME						
CLIENT Don					N		
		ONG -76.17090			COUNTY City of Chesapeake		
		ster, K. Shepher			DATE 06/07/2022	apouno	
			FLOW REG		DATE 00/07/2022		
	RPW	NRPW .			ittent 📃 Ephemeral 🖌		
·							
		Estimate Mea	<b>asurements</b> Vidth: 5.0 ft		Sinuosity <u>√</u> Low I	Vledium <u> </u>	
		Top of Bank F			Gradient <u>√</u> Flat Mo (0.5/100 ft) (2 ft	derate Severe (100 ft) (10 ft/100 ft)	
		LB 2.5 ff	RB <u>2.5</u>	ft	Stream Erosion		
		Water Depth:			None Moderate	Heavy	
		Water Width:			Artificial, Modified or Chan	nelized	
CHANNEL FE	ATURES	-	Water Mark (Width):	15 ft	✓ Yes No	l de la companya de l	
			Water Mark (Height)		Within Roadside Ditch		
			n: South		🖌 Yes No	1	
				-	Culvert Present <u>√</u> Yes _	No	
					Culvert Material:concrete		
					Culvert Size: _24in		
		Water Preser			Proportion of Reach Represented by Stream		
		<ul> <li>✓ No water, stream bed dry</li> <li>Stream bed moist</li> <li>Standing water</li> <li>Flowing water</li> <li>Velocity</li> <li>Fast Moderate</li> <li>Slow</li> </ul>			Morphology Types (Only enter if water present)Riffle%Pool%		
FLOW CHARACTER	ISTICS						
ONARAGIER	51105				TurbidityClearSlightly turbidTurbid		
					Other		
INOR		UBSTRATE CO	MPONENTS		ORGANIC SUBSTRATE COMPONENTS		
	(shou	ld add up to 10			(does not necessarily add u	p to 100%)	
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type	te Characteristic	% Composition in Sampling Area	
Bedrock				Detritue	sticks, wood, coarse		
Boulder	> 2:	56 mm (10")		Detritus	plant materials (CPOM)		
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	d black, very fine organic		
Gravel		nm (0.1"-2.5")			(FPOM)		
Sand		-2mm (gritty)	35 🗖				
Silt		04-0.06 mm	30 🔽	Marl	grey, shell fragments		
Clay	< 0.00	04 mm (slick)	35 🔽		The ended as the Militable		
Predominant Surrounding Landuse       Floodplain Width         Forest       Commercial       Wide > 30ft       Moderate 15-33				ate 15-30ft			
			ure <u>     Industrial</u>		Narrow <15ft		
WATERSHED		Agricultura					
FEATURES		ROW	<u> </u>				
		Canopy Cove	er				
		🖌 Open	Partly shade	ed			
Shaded							

### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Ephemeral ag ditch. Dry substrate, cracking and slight algal crust.

## **Photograph Page**

# Stream ID <u>EF\_D\_2002</u> Date <u>06/07/2022</u>



Photograph Number 1

Photograph Direction North

Comments: Upstream



Photograph Number 2 Photograph Direction South

Comments: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	4
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Photograph Direction

	STREAM ID EF_D_2003 STREAM NAME UNT							
CLIENT Dom				PROJECT NAME CVOW				
LAT 36.693124 LONG -76.171366 STATE Virginia					COUNTY Chesapeake			
		oster, K. Shepha		lia	DATE 06/07/2022			
		Ster, R. Shepha			DATE 00/07/2022			
	RPW		FLOW REG		ittent Ephemeral 🗸			
·		Estimate Mea	asurements	1	Sinuosity _∕_ Low N	Vedium High		
		Top of Bank V	Vidth: <u>5.0</u> ft		Gradient ✓ Flat Mo	derate <u> </u>		
		Top of Bank ⊢ LB <u>2.5</u> ft	eignt. : RB <u>2.5</u> 1	ft	(0.5/100 ft) (2 ft/ Stream Erosion	100 ft) (10 ft/100 ft)		
		Water Depth:	<u>0.00</u> in		None 🛛 🗹 Moderate	<u> </u>		
CHANNEL FE	ATURES	Water Width:		45 8	Artificial, Modified or Chanr √ Yes No			
			Water Mark (Width): Water Mark (Height)		Within Roadside Ditch			
			1: South	. <u>- <del></del></u>	✓ Yes No			
			···	-	Culvert Present 🗹 Yes 🗕	No		
					Culvert Material:concrete			
					Culvert Size: <u>24</u> in			
Water Present				Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run       %         Pool       %         Turbidity       Slightly turbid       Turbidity				
		<ul> <li>✓ No water, stream bed dry</li> <li>Stream bed moist</li> <li>Standing water</li> <li>Flowing water</li> <li>Velocity</li> </ul>						
FLOW								
CHARACTER	ISTICS							
		Fast Moderate			Other			
		Slow						
INOR		UBSTRATE CO Id add up to 100		ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)				
Substrate	Dia	meter	% Composition in	Substra	te Characteristic	% Composition in Sampling Area		
Type Bedrock			Sampling Reach	Туре	sticks, wood, coarse			
Boulder	> 2	56 mm (10")		Detritus	plant materials (CPOM)			
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	d black, very fine organic			
Gravel		mm (0.1"-2.5")		WIGCK-ING	(FPOM)			
Sand		-2mm (gritty)	35 🗖					
Silt		04-0.06 mm	30	Marl	grey, shell fragments			
Clay	< 0.00	04 mm (slick)	35 🔽		The ender hairs 10/2 althe			
Predominant Surrounding Land					Floodplain Width Wide > 30ftModera	te 15-30ft		
			ure Industrial		Narrow <15ft			
WATERSHED		🖌 Agricultura						
FEATURES		ROW	— Other:					
		Canopy Cove						
		✓ Open	Partly shade	ed				
Shaded								

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Ephemeral ag ditch. Dry substrate, cracking and slight algal crust.

### **Photograph Page**

### Stream ID <u>EF\_D\_2003</u> Date <u>06/07/2022</u>



Photograph Number 1

Photograph Direction North

Comments:

Upstream



Photograph Number 2 Photograph Direction South

Comments:

Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	
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Photograph Direction

STREAMID	STREAM ID EF_D_2005 STREAM NAME UNT						
CLIENT Dor			PROJECT NA		W		
LAT 36.76894		ONG -76.07431			COUNTY City of Virgin	ia Beach	
1		oster, E. Deck, T.			DATE 06/15/2022	-	
WATER TYPE			FLOW REG	IME			
	RPW	NRPW 🗸			nittent 🔄 Ephemeral 🗸		
	r		'				
		Estimate Mea Top of Bank V	<b>asurements</b> Vidth: <u>3.0</u> ft		Sinuosity 🖌 Low M		
		Top of Bank H	leight:		Gradient <u>√</u> Flat <u></u> Mo (0.5/100 ft) (2 ft/	derate Severe 100 ft) (10 ft/100 ft)	
			t RB <u>2.0</u> f	ft	Stream Erosion ✓ None Moderate		
		Water Depth:					
CHANNEL FE	ATURES	Water Width:			Artificial, Modified or Chanr √ Yes No		
			Water Mark (Width):				
			Water Mark (Height):		Within Roadside Ditch YesNo		
		Flow Direction	n: Southeast	-	Culvert Present Yes		
						—	
					Culvert Material: Culvert Size:in		
		Water Presen	-4		Proportion of Reach Represented by Stream		
		No water, s			Morphology Types (Only ente	ented by Stream er if water present)	
		Stream bed moist Standing water Flowing water			Riffle % Run 💌 %		
FLOW					Pool %		
CHARACTERI	ISTICS				Turbidity Clear Slightly turbid Turbid		
					Other		
		Slow		<b>I</b>			
INUK		UBSTRATE CON Id add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate			% Composition in	Substra	ite	% Composition in	
Туре	Dia	imeter	Sampling Reach	Туре	Characteristic	Sampling Area	
Bedrock	<u> </u>		<u>                                     </u>	Detritus	sticks, wood, coarse		
Boulder		56 mm (10")			plant materials (CPOM)	30 🔽	
Cobble Gravel		6 mm (2.5"-10") mm (0.1"-2.5")		Muck-Mu	d black, very fine organic (FPOM)		
Sand		-2mm (gritty)			((,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	 	
Silt		04-0.06 mm		Marl	grey, shell fragments		
Clay		04 mm (slick)			g.cy, e.c		
		Predominant	Surrounding Landu		 Floodplain Width _√_ Wide > 30ft Modera	ute 15-30ft	
		L ✓ Forest	ure <u> </u>	1	Narrow <15ft	ite 15-50it	
		Agricultura					
WATERSHED FEATURES		🖌 ROW	— Other:				
		Canopy Cove	~ =				
		Open	er Partly shade	ed			
Shaded							

### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Trees and vegetation growing in bottom of the channel, suspected previous agriculture ditch. No water observed.

## Photograph Page

### Stream ID EF\_D\_2005 Date 06/15/2022



Photograph Number 1

Photograph Direction <u>NW</u>

Comments:

Upstream



Photograph Number <u>2</u> Photograph Direction <u>SE</u>

Comments: Dow

Downstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number	4
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Photograph Direction

STREAM ID	IA D 001		STREAM NA	ME UNT			
CLIENT Dominion     PROJECT NAME CVOW							
LAT 36.787471 LONG -76.021665 STATE Virginia					COUNTY Virginia Beach		
INVESTIGATO						DATE 04/20/2022	
		NRPW 🗸	FLOW REG	I <b>ME</b> Interm	ittent	•	
CHANNEL FE	ATURES	Estimate Measurements         Top of Bank Width:       8.0 ft         Top of Bank Height:       LB         LB       4.0 ft       RB       4.0 ft         Water Depth:       0.00 in       in         Water Width:       0.0 ft       Ordinary High Water Mark (Width):       2.0 ft         Ordinary High Water Mark (Height):       6.0 in       Flow Direction:       Southwest			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         YesNo         Within Roadside DitchYesNo         Culvert PresentYesNo         Culvert Size:in		
FLOW       No water, stream bed dry         Stream bed moist       Standing water         Flowing water       Flowing water         Velocity       Fast       Moderate         Slow       Slow       Moderate			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Pool       %         Turbidity          Clear         < Other				
INOR		JBSTRATE CON d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type		meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detilitus		plant materials (CPOM)	
Cobble	64-256	mm (2.5"-10")		Muck-Mu	Ь	black, very fine organic	
Gravel	2-64 r	nm (0.1"-2.5")		Maon-Mu	<u> </u>	(FPOM)	
Sand	0.06	2mm (gritty)					
Silt		4-0.06 mm		Marl		grey, shell fragments	
Clay	< 0.00	4 mm (slick)					
WATERSHED FEATURES		🖌 Forest	Other:	I	\	b <b>dplain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Feature ID: <u>JA\_D\_001</u>



Photograph Number \_\_\_\_1

Photograph Direction NE

Comments: Upstream



Photograph Number 2

Photograph Direction SE

Comments: Downstream

Photograph Number 3 Photograph Direction Comments:

Photograph Number \_\_\_\_4

Photograph Direction

JA\_D\_001B

STREAM ID JA_D_001B STREAM NAME UNT							
CLIENT Dominion PROJECT NAME C				W			
LAT 36.793357 LONG -76.019887 STATE Virginia				COUNTY Virginia Beach			
INVESTIGAT						DATE 04/12/2022	
			FLOW REG	ME Interm	iittent		
CHANNEL FE	ATURES	Ordinary High Water Mark (Width): <u>3.0</u> ft Ordinary High Water Mark (Height): <u>6.0</u> in Flow Direction: <u>Southeast</u>			Sinuosity ✓ Low Medium High         Gradient ✓ Flat Moderate Severe (0.5/100 ft)         Stream Erosion None Moderate Heavy         Artificial, Modified or Channelized Yes No         Within Roadside Ditch Yes No         Culvert Present Yes ✓ No         Culvert Material: in		
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water Velocity — Fast _ N Slow		tream bed dry I moist vater ter	r r		Proportion of Reach Represented by Stream         Morphology Types       (Only enter if water present)         Riffle       %       Run       %         Pool       %       %       %         Turbidity        Clear        Slightly turbid        Turbid          Other        %		
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 2	56 mm (10")		Detilius		plant materials (CPOM)	
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)		N.4 1		and the life of the	
Silt		4-0.06 mm		Marl		grey, shell fragments	
Clay       < 0.004 mm (slick)			<u> </u>	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft		

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date: \_\_\_\_

Feature ID: <u>JA\_D\_001B</u>



Photograph Number

Photograph Direction NE

Comments:

Upstream



Photograph Number 2

Photograph Direction SE

Comments: D

s: Downstream

Photograph Number <u>3</u>

Photograph Direction

Comments:

Photograph Number 4

Photograph Direction

STREAM ID JA_D_003 STREAM NAME UNT							
CLIENT Dominion PROJE			PROJECT N	NAME CVOW			
LAT 36.786034 LONG -76.022039 STATE Virginia				COUNTY Virginia Beach			
INVESTIGAT	ORS J. Ah	n				DATE 04/20/2022	
WATER TYPE		NRPW .	FLOW REG	IME Interm	ittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>5.0</u> ft Top of Bank Height: LB <u>2.0</u> ft RB <u>2.0</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>4.0</u> ft Ordinary High Water Mark (Height): <u>12.0</u> in Flow Direction: <u>Southwest</u>			Sinuosity ⊥ Low Medium High         Gradient ⊥ Flat Moderate Severe (0.5/100 ft) (10 ft/100 ft)         Stream Erosion ⊥ None Moderate Heavy         Artificial, Modified or Channelized ⊥ Yes No         Within Roadside Ditch Yes ⊥ No         Culvert Present Yes ⊥ No         Culvert Material:		
FLOW CHARACTER	Water Present ✓ No water, stream bed dry Stream bed moist Standing water Flowing water Velocity Fast Moderate Slow			Culvert Size:in         Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run         Pool       %         Turbidity       Slightly turbid       Turbid         Other			
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area
Bedrock						sticks, wood, coarse	
Boulder	> 2	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")		IVIUCK-IVIU	ч	(FPOM)	
Sand	0.06	-2mm (gritty)					
Silt	0.00	4-0.06 mm		Marl		grey, shell fragments	
Clay	< 0.00	)4 mm (slick)					
WATERSHED FEATURES		🖌 Forest	<u> </u>	I		o <b>dplain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Feature ID: <u>JA\_D\_003</u>



Photograph Number \_\_\_\_1

Photograph Direction  $\underline{NE}$ 

Comments: Upstream



Photograph Number 2

Photograph Direction SW

Comments: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number \_\_\_\_4

Photograph Direction

STREAM ID JA_D_004 STREAM NAME UNT							
CLIENT Dominion		PROJECT N	PROJECT NAME CVOW				
				TATE Virginia COUNTY Virginia Beach			ch
INVESTIGATO	ORS J. Ah	n				DATE 04/12/2022	
WATER TYPE	RPW	NRPW 🖡	FLOW REG	IME Interm	nittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Ordinary High Water Mark (Width): <u>1.0</u> ft Ordinary High Water Mark (Height): <u>6.0</u> in Flow Direction: <u>South</u>			Sinuosity ✓ Low Medium High         Gradient ✓ Flat Moderate Severe (0.5/100 ft)         Stream Erosion None Moderate Heavy         Artificial, Modified or Channelized Yes No         Within Roadside Ditch Yes No         Culvert Present Yes ✓ No         Culvert Material: in		
FLOW       Water Present         CHARACTERISTICS       Moderate         Velocity       Fast         Moderate       Slow		tream bed dry I moist vater ter		Proportion of Reach Represented by Streat         Morphology Types (Only enter if water present         Riffle       %         Pool       %         Turbidity          Clear          Other		r if water present) %	
INOR		JBSTRATE COI			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	-	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder		56 mm (10")		Doantas		plant materials (CPOM)	
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)		N 4		and the life of the second second	
Silt Clay		4-0.06 mm )4 mm (slick)		Marl		grey, shell fragments	
WATERSHED		Predominant Forest	Other:	I	<u> </u>	d <b>plain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed. (No pictures for this feature)

STREAM ID JA_D_005 STREAM NAME UNT							
CLIENT Dominion PROJECT NAME CVC					W		
LAT 36.784952 LONG -76.023530 STATE Virginia			COUNTY Virginia Beach				
INVESTIGAT	ORS J. Ah	n				DATE 04/21/2022	
		NRPW	FLOW REG		nittent		
CHANNEL FE	ATURES	Ordinary High Water Mark (Width): <u>3.0</u> ft Ordinary High Water Mark (Height): <u>12.0</u> in Flow Direction: <u>Southeast</u>			Sinuosity ✓ Low Medium High         Gradient ✓ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft)         Stream Erosion Moderate Heavy         Artificial, Modified or Channelized Yes No         Within Roadside Ditch Yes No         Culvert Present Yes No         Culvert Size: in		
FLOW CHARACTER	FLOW       Water Present         CHARACTERISTICS       No water, stream bed dry         Stream bed moist       Stream bed moist         Flowing water       Flowing water         Velocity       Fast       Moderate         Slow       Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other			
INOR		UBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock Boulder	< <u>)</u>	56 mm (10")		Detritus		sticks, wood, coarse plant materials (CPOM)	
Cobble		6 mm (2.5"-10")				,	
Gravel		mm (0.1"-2.5")		Muck-Mu	ıd	black, very fine organic (FPOM)	
Sand		-2mm (gritty)				. ,	
Silt		04-0.06 mm		Marl		grey, shell fragments	
Clay		)4 mm (slick)		•••••		5 - <b>J</b> ,	
WATERSHED FEATURES		🖌 Forest	<b>—</b> Other:	I		odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date: 4/2	21/	22
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Feature ID: <u>JA\_D\_005</u>

Photograph Number1	Photograph Number 2
Photograph Direction North	Photograph Direction
Comments: Upstream	Comments:
Photograph Number 3	Photograph Number 4
Photograph Direction	Photograph Direction
Comments:	Comments:

STREAM ID JA_D_006 STREAM NAME UNT				ME UNT			
CLIENT Dominion PRO				PROJECT NAME CVOW			
LAT 36.784907 LONG -76.024479 STATE Virginia				COUNTY Virginia Beach			
INVESTIGAT	ORS J. Ah	n				DATE 04/21/2022	
WATER TYPE	RPW	NRPW	FLOW REG	IME Interm	iittent [	Ephemeral ✓	
CHANNEL FE	ATURES	Ordinary High Water Mark (Width): <u>3.0</u> ft Ordinary High Water Mark (Height): <u>12.0</u> in Flow Direction: <u>Southeast</u>			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         YesNo         Within Roadside DitchYesNo         Culvert PresentYes ✓No         Culvert Material:in		
FLOW       No water, stream bed dry         Stream bed moist       Stream bed moist         Standing water       Flowing water         Flowing water       Stream bed moist         Standing water       Stream bed moist         Flowing water       Stream bed moist         Flowing water       Stream bed moist         Stream bed moist       Stream bed moist         Stream bed moist		tream bed dry I moist vater ter		Proportion of Reach Represented by Stream         Morphology Types       (Only enter if water present)         Riffle       %         Pool       %         Turbidity          Clear      < Slightly turbid			
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	-	meter	% Composition in Sampling Reach	Substra Type	te	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")			-	(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm		Marl		grey, shell fragments	
Forest Commercial 🛛 🖌 W			d <b>plain Width</b> Nide > 30ft Moderat Narrow <15ft	te 15-30ft			

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date <sup>, 2</sup>	1/21/22
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Feature ID: <u>JA\_D\_006</u>

Photograph Number1	Photograph Number 2
Photograph Direction <u>SE</u>	Photograph Direction
Comments: Downstream	Comments:
Photograph Number <u>3</u>	Photograph Number <u>4</u>
Photograph Direction	Photograph Direction
Comments:	Comments:

STREAM ID JA_D_007 STREAM NAME UNT							
CLIENT Dominion PROJECT NAME CVC					W		
LAT 36.783884 LONG -76.024101 STATE Virginia			COUNTY Virginia Beach				
INVESTIGAT						DATE 04/21/2022	
		NRPW 🗸	FLOW REG	ME Interm	nittent	•	
CHANNEL FE	ATURES	Ordinary High Water Mark (Width): <u>1.0</u> ft Ordinary High Water Mark (Height): <u>2.0</u> in Flow Direction: <u>Southeast</u>			Sinuosity ⊥ Low Medium High         Gradient ⊥ Flat Moderate Severe (0.5/100 ft)(10 ft/100 ft)         Stream Erosion ⊥ None Moderate Heavy         Artificial, Modified or Channelized ⊥ Yes No         Within Roadside Ditch Yes ⊥ No         Culvert Present Yes ⊥ No         Culvert Material: in		
FLOW       Vater Present         CHARACTERISTICS       No water, stream bed dry         Bit Standing water       Standing water         Velocity       Fast         Moderate       Slow			Proportion of Reach Represented by Stream         Morphology Types       (Only enter if water present)         Riffle       %       Run       %         Pool       %       *       *         Turbidity        Clear      < Slightly turbid				
INOR		JBSTRATE CO d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 2!	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble	64-256	mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")			-	(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm		Marl		grey, shell fragments	
Clay	< 0.00	)4 mm (slick)					
Forest Commercial Wide >			odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft			

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date: 4/21/22

\_\_\_\_\_ Feature ID: <u>JA\_D\_007</u>

Photograph Number1	Photograph Number 2
Photograph Direction North	Photograph Direction
Comments: Upstream	Comments:
Photograph Number <u>3</u>	Photograph Number4
Photograph Direction	Photograph Direction
Comments:	Comments:

STREAM ID JA_D_008 STREAM NAME UNT							
CLIENT Don			-	PROJECT NAME CVOW			
LAT 36.783481 LONG -76.024590 STATE Virginia				COUNTY Virginia Beach			
						DATE 04/21/2022	
WATER TYPE			FLOW REG	ME			
	RPW				nittent	Ephemeral 🗸	
4							
		Estimate Mea	<b>asurements</b> Vidth: <u>3.5</u> ft		Sinu	u <b>osity _∕</b> LowN	ledium <u> </u>
		·			Gra	dient 🖌 Flat _ Moo	
		Top of Bank H	-			(0.5/100 ft) (2 ft/	100 ft) (10 ft/100 ft)
			RB <u>1.0</u> 1	rt		e <b>am Erosion</b> / None Moderate,	Hoom
		Water Depth:					,
CHANNEL FE	ATURES	Water Width:	<u>0.0</u> ft			ficial, Modified or Chann Yes No	elized
		Ordinary High	Water Mark (Width):	<u>3.0</u> ft		- —	
		Ordinary High	Water Mark (Height)	: <u>12.0</u> in		hin Roadside Ditch	
		Flow Direction	n: Southeast	_		_Yes _✓ No	
						vert Present Yes 🟒	
					Culv	vert Material:	
					Culv	/ert Size:in	
	Water Present No water, stream bed dry				Proportion of Reach Represented by Stream		
		Stream bec			Morphology Types (Only enter if water present)Riffle%Pool%		
		Standing w					
FLOW CHARACTER	STICS	Flowing wa	ter				
					Turbidity Clear Slightly turbid Turbid		
		Velocity	Moderate		Other		
		Slow	moderate				
INOR		UBSTRATE CO				ANIC SUBSTRATE COM	
	(shou	d add up to 100			<u> </u>	s not necessarily add up	
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock			Camping Roadin	1,00		sticks, wood, coarse	oumping / rou
Boulder	> 2!	56 mm (10'')		Detritus		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")			.	black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")		Muck-Mud (FPOM)			
Sand	0.06	-2mm (gritty)					
Silt	0.00	4-0.06 mm		Marl grey, shell fragments			
Clay	< 0.00	04 mm (slick)					
			Surrounding Landu			odplain Width Wide > 30ft Modera	45.000
		— Forest Field/Past	ure <u> </u>	I		Narrow <15ft	te 15-30ft
		Agricultura					
WATERSHED FEATURES		ROW	Other:				
		Conorri Cras					
		Canopy Cove ✓ Open	er Partly shade	ed			
		Shaded					

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Feature ID: <u>JA\_D\_008</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:

Upstream



Photograph Number 2

Photograph Direction SE

Comments: Dow

s: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number <u>4</u>

Photograph Direction

STREAM ID JA_D_009 STREAM NAME UNT							
CLIENT Dominion PROJECT NAME CVC				w			
LAT 36.782922 LONG -76.024861 STATE Virginia			COUNTY Virginia Beach				
						DATE 04/21/2022	
WATER TYPE			FLOW REG	ME		DATE OFFETTEDEE	
	RPW	NRPW 🖡		Interm	ittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Estimate Measurements         Top of Bank Width: <u>3.5</u> ft         Top of Bank Height:         LB <u>0.8</u> ft       RB <u>0.8</u> ft         Water Depth: <u>0.00</u> in         Water Width: <u>0.0</u> ft         Ordinary High Water Mark (Width): <u>3.0</u> ft         Ordinary High Water Mark (Height): <u>8.0</u> in         Flow Direction: Southeast			Sinuosity ⊥ Low Medium High         Gradient ⊥ Flat Moderate Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)         Stream Erosion ⊥ None Moderate Heavy         Artificial, Modified or Channelized ⊥ Yes No         Within Roadside Ditch Yes ⊥ No         Culvert Present Yes ⊥ No         Culvert Material:		
						/ert Material:in	
FLOW CHARACTER	ISTICS	Water Present         ✓       No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Velocity         Fast       Moderate         Slow			Mor Riffle Poo Turl		r if water present) %
INOR		JBSTRATE CO d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Dennus		plant materials (CPOM)	
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm	0.06 mm Marl grey, shell fragments				
Clay	< 0.00	.004 mm (slick)					
WATERSHED FEATURES		— Forest	<b></b> Other:	I	<u>`_</u> ۱	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

# Date: \_\_\_\_\_

Feature ID: <u>JA\_D\_009</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:

Upstream



Photograph Number 2

Photograph Direction SE

Comments: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number <u>4</u>

Photograph Direction

Comments:

Tetra Tech Photo Log Form

STREAM ID	IA D 010		STREAM NA	ME UNT			
CLIENT Dominion P		-	PROJECT NAME CVOW				
LAT 36.782377 LONG -76.025157 STATE Virginia				COUNTY Virginia Beach			
				-		DATE 04/21/2022	
WATER TYPE			FLOW REG	ME			
	RPW	NRPW	/ Perennial		ittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Estimate Measurements         Top of Bank Width:ft         Top of Bank Height:         LBft         RBft         Water Depth:in         Water Width:ft         Ordinary High Water Mark (Width):ft         Ordinary High Water Mark (Height):in         Flow Direction: Southeast			Sinuosity ⊥ Low Medium High         Gradient ⊥ Flat Moderate Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)         Stream Erosion ⊥ None Moderate Heavy         Artificial, Modified or Channelized ⊥ Yes No         Within Roadside Ditch Yes ⊥ No         Culvert Present Yes ⊥ No         Culvert Material:         Culvert Size: in		
FLOW CHARACTER	ISTICS	Water Present         ✓       No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Velocity         Fast       Moderate         Slow			Prop Morp Riffle Pool Turb	ortion of Reach Repres bhology Types (Only ente % Run	r if water present) %
INOR		JBSTRATE CO d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area
Bedrock						sticks, wood, coarse	2
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble	64-256	mm (2.5"-10")		NALLS IN A		black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")		Muck-Mu	a	(FPOM)	
Sand	0.06	-2mm (gritty)					
Silt	0.00	4-0.06 mm		Marl grey, shell fragments			
Clay	< 0.00	04 mm (slick)					
WATERSHED       Predominant Surrounding Landuse       Floodplain Width         Forest       Commercial       ✓ Wide > 30ft         Field/Pasture       Industrial       Narrow <15ft			Vide > 30ft Modera	te 15-30ft			

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Feature ID: <u>JA\_D\_010</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:

Upstream



Photograph Number 2

Photograph Direction SE

Comments: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number 4

Photograph Direction

STREAM ID JA_D_011 STREAM NAME UNT							
CLIENT Dominion PROJECT NAME CVC				w			
LAT 36.781869 LONG -76.025503 STATE Virginia			COUNTY Virginia Beach				
INVESTIGAT						DATE 04/21/2022	
WATER TYPE			FLOW REG	ME		DATE OFFETEELE	
	RPW				nittent	Ephemeral 🗸	
1		1					
		Estimate Mea			Sinu	iosity _∕ Low N	/ledium High
			Vidth: <u>4.0</u> ft		Grad	dient 🖌 Flat Moo	derate <u> </u>
		Top of Bank H	0			(0.5/100 ft) (2 ft/	100 ft) (10 ft/100 ft)
			t RB <u>2.0</u> 1	t		am Erosion _ None Moderate	Hoovy
		Water Depth:					•
CHANNEL FE	ATURES	Water Width:	<u>0.0</u> ft			icial, Modified or Chann Yes No	lelized
		Ordinary High	Water Mark (Width):	<u>3.5</u> ft			
		Ordinary High	Water Mark (Height)	: <u>12.0</u> in		iin Roadside Ditch _ Yes No	
		Flow Direction	n: <u>Southeast</u>	-		vert Present Yes ⊥	
						ert Material:	
					Culvert Size:in		
		Water Preser No water, s			Proportion of Reach Represented by Stream Morphology Types (Only enter if water present)		
		Stream bec	d moist		Riffle % Run %		
FLOW		Standing w			Pool	%	
CHARACTER	ISTICS	Flowing wa	lter		Turbidity		
		Velocity			Clear Slightly turbid Turbid		
			Moderate		Other		
		Slow					
INOR		UBSTRATE CO Id add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate	Dia	meter	% Composition in	Substra		Characteristic	% Composition in
Type Bedrock			Sampling Reach	Туре			Sampling Area
Boulder	> ?!	56 mm (10'')		Detritus		sticks, wood, coarse plant materials (CPOM)	
Cobble		6 mm (2.5"-10")				black, very fine organic	
Gravel		nm (0.1"-2.5")		Muck-Mu	d	(FPOM)	
Sand	0.06	-2mm (gritty)					
Silt	0.00	4-0.06 mm					
Clay	< 0.00	04 mm (slick)					
			Surrounding Landu			<b>dplain Width</b> Vide > 30ft Modera	to 15-30ft
				Vide > 3010 Wodera Varrow <15ft	le 15-501		
		∠ Agricultura					
WATERSHED FEATURES		ROW	<u> </u>				
		Canopy Cove	er				
		✓ Open	Partly shade	ed			
Shaded							

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Feature ID: <u>JA\_D\_011</u>



1 Photograph Number

Photograph Direction North

Comments: Upstream



Photograph Number 2

Photograph Direction SE

Comments:

Downstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number \_\_\_\_4

Photograph Direction

STREAM ID JA_D_012 STREAM NAME UNT							
CLIENT Dominion PROJECT NAME CVC			AME CVO	W			
LAT 36.781466 LONG -76.025990 STATE Virginia			COUNTY Virginia Beach				
INVESTIGAT	ORS J. Ah	n	•			DATE 04/21/2022	
		NRPW .	FLOW REG	IME Interm	nittent	<u> </u>	
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>3.0</u> ft Top of Bank Height: LB <u>1.0</u> ft RB <u>1.0</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>2.0</u> ft Ordinary High Water Mark (Height): <u>12.0</u> in Flow Direction: <u>Southeast</u>			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         YesNo         Within Roadside DitchYesNo         Culvert PresentYesNo         Culvert Size:in		
FLOW CHARACTER	ISTICS	Water Present         ✓       No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Velocity         Fast       Moderate         Slow			Mor Riffl Poo Tur		r if water present) %
INOR		UBSTRATE CO				ANIC SUBSTRATE COM	
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 2	56 mm (10")		Deulius		plant materials (CPOM)	
Cobble		6 mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm		Marl		grey, shell fragments	
Clay       < 0.004 mm (slick)				te 15-30ft			

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Feature ID: <u>JA\_D\_012</u>



Photograph Number 1

Photograph Direction North

Comments:

Upstream



Photograph Number 2

Photograph Direction SE

Comments:

s: Downstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number	4
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Photograph Direction

STREAM ID JA_D_013 STREAM NAME UNT							
CLIENT Dominion PROJECT NAME CVO			N				
LAT 36.78092		ONG -76.02629			COUNTY Virginia Beach		
INVESTIGATO	ORS J. Ah	n				DATE 04/21/2022	
	RPW _		FLOW REG	ME Interm	iittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>2.0</u> ft Top of Bank Height: LB <u>0.5</u> ft RB <u>0.5</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>0.5</u> ft Ordinary High Water Mark (Height): <u>0.0</u> in Flow Direction: <u>Southeast</u>			Within Roadside Ditch        Yes       ✓ No         Culvert Present       Yes       ✓ No         Culvert Material:		
FLOW CHARACTER	ISTICS	Water Present         ✓ No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Velocity         — Fast       Moderate         Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear      < Slightly turbid		
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area
Bedrock				Dotriture		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	ч   _	black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")			-	(FPOM)	
Sand	0.06	-2mm (gritty)					
Silt		4-0.06 mm		Marl		grey, shell fragments	
Clay	< 0.00	)4 mm (slick)					
Predominant Surrounding Landuse       Floodplain Width         Forest       Commercial       ✓ Wide > 30ft       Moderate 15-30ft         Field/Pasture       Industrial       Residential       Narrow <15ft			te 15-30ft				

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

# Date: \_\_\_\_\_

Feature ID: <u>JA\_D\_013</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:

Upstream



Photograph Number 2

Photograph Direction SE

Comments:

Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number 4

Photograph Direction

STREAM ID JA_D_014 STREAM NAME UNT							
CLIENT Dominion PROJECT NAME CVO			W				
LAT 36.780566 LONG -76.026779 STATE Virginia			COUNTY Virginia Beach				
INVESTIGATO		n				DATE 04/21/2022	
		NRPW	FLOW REG	IME Interm	iittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>3.0</u> ft Top of Bank Height: LB <u>1.5</u> ft RB <u>1.5</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>1.0</u> ft Ordinary High Water Mark (Height): <u>12.0</u> in Flow Direction: <u>Southeast</u>			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         YesNo         Within Roadside DitchYesNo         Culvert Present ✓ YesNo         Culvert Material: Concrete         Culvert Size:48in		
FLOW CHARACTER	ISTICS	Water Present         ✓ No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Velocity         — Fast       Moderate         Slow			Mor Riffle Poo Turl	l % bidity	
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 2	56 mm (10")		Detilius		plant materials (CPOM)	
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm					
Clay WATERSHED FEATURES		— Forest	<b></b> Other:	I	<u>\</u>	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed, (no photos of feature, only culvert)

Date: \_\_\_\_\_

Feature ID: <u>JA\_D\_014</u>

Photograph Number1	Photograph Number 2
Photograph Direction <u>SE</u>	Photograph Direction
Comments: Culvert	Comments:
Downstream	
Photograph Number <u>3</u>	Photograph Number 4
Photograph Direction	Photograph Direction
Comments:	Comments:

STREAM ID JA_D_015 STREAM NAME UNT							
CLIENT Dominion PROJECT NAME CVOW				W			
LAT 36.7801		ONG -76.02717			COUNTY Virginia Beach		
INVESTIGATO	DRS J. Ah	n				DATE 04/21/2022	
		NRPW	FLOW REG	IME Interm	nittent	<u> </u>	
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>2.0</u> ft Top of Bank Height: LB <u>0.5</u> ft RB <u>0.5</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>1.0</u> ft Ordinary High Water Mark (Height): <u>6.0</u> in Flow Direction: <u>Southeast</u>			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         YesNo         Within Roadside DitchYesNo         Culvert Present ✓ YesNo         Culvert Material: Concrete         Culvert Size: in		
FLOW CHARACTER	ISTICS	Water Present         ✓       No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Velocity         Fast       Moderate         Slow			Mor Riffl Poo Tur		r if water present) %
INOR		UBSTRATE CO				ANIC SUBSTRATE COM s not necessarily add up	
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel	2 <b>-</b> 64 r	mm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm	Marl grey, shell fragments				
Clay       < 0.004 mm (slick)				te 15-30ft			

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed, culvert at south end of ditch.

Feature ID: <u>JA\_D\_015</u>



Photograph Number 1

Photograph Direction North

Comments:

Upstream



Photograph Number 2 Photograph Direction South

Comments: Down

s: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	4
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Photograph Direction

STREAM ID JA_D_016 STREAM NAME UNT							
CLIENT Dominion PROJECT NAME CVOW							
LAT 36.779714 LONG -76.027562				STATE Virginia		COUNTY Virginia Beach	
INVESTIGATORS J. Ahn						DATE 04/21/2022	
WATER TYPE     FLOW REGIME       TNW     RPW     NRPW							
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>2.0</u> ft Top of Bank Height: LB <u>1.0</u> ft RB <u>1.0</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>1.0</u> ft Ordinary High Water Mark (Height): <u>6.0</u> in Flow Direction: <u>Southeast</u>			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         ✓ YesNo         Within Roadside DitchYesNo         Culvert PresentYes ✓No         Culvert Size:in		
FLOW CHARACTERISTICS		Water Present         ✓       No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Velocity         Fast       Moderate         Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other		
INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) 0			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)				
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 2!	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt Clay		4-0.06 mm )4 mm (slick)		Marl	grey, shell fragments		
Predominant Forest		Commercia     Industrial     Al     Commercia     Industrial     Considential     Other:	Residential Other:				

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

# Date: \_\_\_\_\_

Feature ID: <u>JA\_D\_016</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments: Upstream



Photograph Number 2

Photograph Direction SE

Comments:

Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number	4
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Photograph Direction \_\_\_\_\_

STREAM ID JA_D_017 STREAM NAME UNT								
CLIENT Dominion			PROJECT NAME CVOW					
LAT 36.77931 LONG -76.028021				STATE Virginia		COUNTY Virginia Beach		
INVESTIGATORS J. Ahn						DATE 04/21/2022		
WATER TYPE     FLOW REGIME       TNW     RPW     NRPW					ntermittent Ephemeral			
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>3.0</u> ft Top of Bank Height: LB <u>1.5</u> ft RB <u>1.5</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>1.0</u> ft Ordinary High Water Mark (Height): <u>18.0</u> in Flow Direction: <u>Southeast</u>			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         ✓ YesNo         Within Roadside DitchYesNo         Culvert PresentYesNo         Culvert Size:in			
FLOW CHARACTERISTICS ✓ No w. Strea — Stand — Flowi Velocity — Fast		Stream bec Standing w Flowing wa	No water, stream bed dry Stream bed moist Standing water Flowing water <b>locity</b> Fast <u>Moderate</u>		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other       Other			
INORGANIC SUBSTRATE COMPONENTS (should add up to 100%) 0				ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)				
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detilius		plant materials (CPOM)		
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic		
Gravel		nm (0.1"-2.5")			(FPOM)			
Sand		-2mm (gritty)						
Silt Clay		4-0.06 mm )4 mm (slick)		Marl	grey, shell fragments			
WATERSHED       Predominant Surrounding Landuse Forest Commercial Field/Pasture Industrial Agricultural Residential ROW Other:       Floodplain Width Wide > 30ft Moderate 15-30ft Narrow <15ft			te 15-30ft					

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

# Date: \_\_\_\_\_

Feature ID: <u>JA\_D\_017</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:

Upstream



Photograph Number 2

Photograph Direction SE

Comments: Downstream

Photograph Number 3\_\_\_\_\_ Photograph Direction \_\_\_\_\_

Photograph Number \_\_\_\_\_4

Photograph Direction

STREAM ID JA_D_018			STREAM NA	STREAM NAME UNT				
CLIENT Dominion				PROJECT NAME CVOW				
LAT 36.778951 LONG -76.028567				STATE Virginia		COUNTY Virginia Beach		
INVESTIGATORS J. Ahn						DATE 04/21/2022		
	RPW	FLOW REG	FLOW REGIME					
CHANNEL FEATURES		Vidth: <u>2.0</u> ft Height: t RB <u>0.5</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height) h: <u>Southeast</u>	ith: <u>2.0</u> ft ght: RB <u>0.5</u> ft <u>0.00</u> in <u>0.0</u> ft /ater Mark (Width): <u>1.0</u> ft /ater Mark (Height): <u>6.0</u> in		Sinuosity $\checkmark$ Low       Medium       High         Gradient $\checkmark$ Flat       Moderate       Severe         (0.5/100 ft)       (2 ft/100 ft)       (10 ft/100 ft)         Stream Erosion $\checkmark$ None       Moderate       Heavy         Artificial, Modified or Channelized $\checkmark$ Yes       No         Within Roadside Ditch $\checkmark$ Yes       No         Culvert Present $\checkmark$ Yes       No         Culvert Size:       24       in			
- FLOW CHARACTERISTICS -		Water Present ✓ No water, stream bed dry Stream bed moist Standing water Flowing water Velocity Fast Moderate Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other			
INORGANIC SUBSTRATE COMPO (should add up to 100%)					ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type	te	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder		56 mm (10")				plant materials (CPOM)		
Cobble		6 mm (2.5"-10")		Muck-Mu	d	black, very fine organic (FPOM)		
Gravel		nm (0.1"-2.5")						
Sand		-2mm (gritty)		Mori	grey, shell fragments			
Silt Clay		04-0.06 mm 04 mm (slick)		Marl				
Predominant Surre Forest Field/Pasture		al <u> </u>	I	<u>~</u> v	dplain Width Nide > 30ft Modera Narrow <15ft	te 15-30ft		

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed, culvert on south end of ditch.

Date: \_\_\_\_

Feature ID: <u>JA\_D\_018</u>



1 Photograph Number

Photograph Direction North

Comments:

Upstream



Photograph Number 2

Photograph Direction SE

Comments: Downstream



Photograph Number 3

Photograph Direction SE

Comments:

culvert

Downstream

Photograph Number	4	

Photograph Number 4

Photograph Direction

JA\_D\_019

STREAM ID 、	JA_D_019		STREAM NA	TREAM NAME UNT				
CLIENT Don	ninion		PROJECT N	AME CVO	W			
LAT 36.7784		<b>DNG</b> -76.02890				COUNTY Virginia Bead	ch	
INVESTIGATO	ORS J. Ah	n				DATE 04/21/2022		
		NRPW 🖡	FLOW REG	IME Interm	nittent	Ephemeral 🗸		
Estimate Measurements         Top of Bank Width:4.0 ft         Top of Bank Height:         LB2.0 ft       RB2.0 ft         Water Depth:0.00 in         Water Width:0.0 ft         Ordinary High Water Mark (Width):1.5         Ordinary High Water Mark (Height):1.5         Flow Direction: Southeast			<u>1.5</u> ft	Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         ✓ YesNo         Within Roadside DitchYesNo         Culvert Present ✓ YesNo         Culvert Material: Concrete         Culvert Size: _24in				
FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water Velocity — Fast — M Slow			tream bed dry I moist ⁄ater		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear      < Slightly turbid			
INOR		JBSTRATE COI d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble		mm (2.5"-10")		Muck-Mu	ы	black, very fine organic		
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")			_	(FPOM)		
Sand		-2mm (gritty)						
Silt		4-0.06 mm		Marl		grey, shell fragments		
			— Other:	Commercial ✓ Wide > 30ft Moderate 15-30 Industrial Narrow <15ft Residential			te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed, culvert on south end of ditch

# Date: \_\_\_\_

Feature ID: <u>JA\_D\_019</u>



1 Photograph Number

Photograph Direction North

Comments:

Upstream



Photograph Number 2

Photograph Direction SE

Comments: Downstream



Photograph Number 3

Photograph Direction SE

Comments:

culvert

Downstream



Photograph Direction

STREAM ID JA_D_020			STREAM NA	STREAM NAME				
CLIENT Dor	minion		PROJECT N	AME CVC	OW			
		ONG -76.02166	54 STATE Virgi	nia	COUNTY			
INVESTIGATO	DRS J. D'A	Augustine			DATE 04/21/2021			
WATER TYPE	RPW	NRPW 🗗	FLOW REG		nittent Ephemeral 🗸			
CHANNEL FEATURES CHANNEL FEATURES Top of Bank H LB <u>4.0</u> ft Water Depth: Water Width:_ Ordinary High Ordinary High			Vidth: <u>8.0</u> ft Height: t RB <u>4.0</u> <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height) h: <u>South</u>	<u>2.0</u> ft	Mildle In Deserved a Labor Differen			
FLOW CHARACTERISTICS ✓ No wate 		<ul> <li>✓ No water, s</li> <li>Stream bed</li> <li>Standing w</li> <li>Flowing wa</li> </ul>	tream bed dry I moist vater ter		Proportion of Reach Represented by Stream         Morphology Types       (Only enter if water present)         Riffle       %         Pool       %         Turbidity         < Clear			
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type	Characteristic			
Bedrock				Detritus	sticks, wood, coarse			
Boulder		56 mm (10")		Donius	plant materials (CPOM)			
Cobble		mm (2.5"-10")		Muck-Mu	d black, very fine organic			
Gravel		nm (0.1"-2.5")			(FPOM)			
Sand		-2mm (gritty)		Mari	analy all first and the			
Silt Clay		4-0.06 mm )4 mm (slick)		Marl	grey, shell fragments			
WATERSHED FEATURES WATERSHED FEATURES WATERSHED FEATURES Predominant Surro Forest Forest Agricultural ROW Canopy Cover			Other:	al	Floodplain Width Wide > 30ft Moderate 15-30ft ✓ Narrow <15ft			

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed

Date: \_\_\_\_

Feature ID: <u>JA\_D\_020</u>



Photograph Number \_\_\_\_1

Photograph Direction NW

Comments: Upstream



Photograph Number 2

Photograph Direction SE

Comments: Downstream

Photograph Number 3 Photograph Direction \_\_\_\_\_ Comments:

Photograph Number \_\_\_\_4

Photograph Direction \_\_\_\_\_

JA\_D\_4

STREAM ID JA_D_4 STREAM NAME N/A								
CLIENT Don					\ <b>\</b> /			
LAT 36.71624		ONG -76.16774	38 STATE Virgin		••	COUNTY Chesapeake		
				lia				
		11				<b>DATE</b> 04/21/2022		
TNW	RPW	NRPW	FLOW REG       Perennial		ittent	Ephemeral 🗸		
CHANNEL FEATURES Water Depth: 0.00 Water Width: 0.0 Ordinary High Water			Vidth: <u>5.0</u> ft Height: t RB <u>18.0</u> ft <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height)	5.0 ft RB <u>18.0</u> ft in ft · Mark (Width): <u>1.0</u> ft · Mark (Height): <u>12.0</u> in		Sinuosity ⊥ Low Medium High         Gradient ⊥ Flat Moderate Severe (0.5/100 ft)         Stream Erosion ⊥ None Moderate Heavy         Artificial, Modified or Channelized ⊥ Yes No         Within Roadside Ditch ⊥ Yes No         Culvert Present ⊥ Yes No         Culvert Material: Concrete		
FLOW       Water Present         ✓       No water, stream         Stream bed mois       Stream bed mois         Standing water       Flowing water         ✓       Flowing water         ✓       Flowing water         ✓       Flowing water         ✓       Standing water         ✓       Standing water         ✓       Standing water			tream bed dry I moist vater ter		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity         < Clear			
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	te	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	Ч	black, very fine organic		
Gravel	2-64 r	nm (0.1"-2.5")			ч	(FPOM)		
Sand	0.06	-2mm (gritty)						
Silt	0.00	4-0.06 mm		Marl		grey, shell fragments		
Clay	Clay < 0.004 mm (slick)							
WATERSHED       Field/Pasture Indust         Agricultural       Resid         ROW       Other:         Canopy Cover			ure <u> </u>	I	V	dplain Width Vide > 30ft Moderat Iarrow <15ft	e 15-30ft	

Date: \_\_\_\_\_

Feature ID: <u>JA\_D\_4</u>



Photograph Number \_\_\_\_1

Photograph Direction East

Comments: Upstream Culvert



Photograph Number 2 Photograph Direction West

Comments: Downstream Culvert



Photograph Number 3

Photograph Direction East

Comments:

Water Stained Leaves

Photograph Number <u>4</u>

Photograph Direction \_\_\_\_\_

JC\_D\_301

STREAM ID JC_D_301 STREAM NA							
CLIENT Don					w		
		<b>DNG</b> -76.11076				COUNTY Virginia Bead	•h
						DATE 05/31/2022	
		UK .	FLOW REG	ME		DATE 00/01/2022	
	RPW	NRPW			nittent	Ephemeral 🗸	
CHANNEL FEATURES Water Depth: 1.00 Water Width: 1.0 Ordinary High Water			Vidth: <u>4.0</u> ft Height: t RB <u>2.0</u> ft <u>1.00</u> in <u>1.0</u> ft Water Mark (Width): Water Mark (Height):	<u>1.0</u> ft	Sinuosity ✓ LowMedium High Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft) Stream Erosion ✓ NoneModerateHeavy Artificial, Modified or Channelized ✓ YesNo Within Roadside Ditch ✓ YesNo Culvert PresentYes ✓ No Culvert Material:Concrete Culvert Size:in		
FLOW       Water Present         ✓       No water, strear         ✓       Stream bed moi         ✓       Flowing water         ✓       Flowing water         ✓       Flowing water         ✓       Fast       Mo         Slow       Slow       Slow			tream bed dry I moist /ater		Proportion of Reach Represented by Stream         Morphology Types       (Only enter if water present)         Riffle       %       Run       %         Pool       %       %       %         Turbidity        Clear        Slightly turbid        Turbid          Other        %		
INOR		JBSTRATE CO d add up to 100		ORGANIC SUBSTRATE CC		ANIC SUBSTRATE COM s not necessarily add up	
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detnus		plant materials (CPOM)	
Cobble	64-256	mm (2.5"-10")		Muck-Mu		black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand	0.06	2mm (gritty)					
Silt		4-0.06 mm		Marl		grey, shell fragments	
Clay	< 0.00	94 mm (slick)				_	
WATERSHED       Predominant Surrounding Landu         Forest       Commercia         Field/Pasture       Industrial         Agricultural       ✓ Residential         ROW       Other:         Canopy Cover       Open       Partly shadu         Shaded			I	∙۱	o <b>dplain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

No photographs

Jcros\_D\_006

STREAM ID	Jcros D 0	06	STREAM NA	ME UNT			
CLIENT Don			PROJECT N		w		
		<b>ONG</b> -76.01912				COUNTY Virginia Bead	ch
INVESTIGAT						DATE 05/19/2021	
			FLOW REG	ME Interm	iittent	<u> </u>	
Estimate Measurements         Top of Bank Width:4.0         Top of Bank Height:         LB0.5ftRB_         Water Depth:0.00in         Water Width:0.0ft         Ordinary High Water Mark         Ordinary High Water Mark         Flow Direction: South			Vidth: <u>4.0</u> ft Height: t RB <u>0.5</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height)	_ft Stream Erosion Moderate He 			derate Severe 100 ft) (10 ft/100 ft) Heavy helized
FLOW CHARACTER	ISTICS	Water Present ✓ No water, stream bed dry Stream bed moist Standing water Flowing water Velocity — Fast Moderate Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity       Clear       Slightly turbid       Turbid         Other		
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 2	56 mm (10")		Detilius		plant materials (CPOM)	
Cobble	64-256	mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm		Marl		grey, shell fragments	
Clay     < 0.004 mm (slick)			al <u> </u>	I	<u>√</u> \	b <b>odplain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed

Date: 5/19/21

Feature ID: <u>Jcros\_D\_006</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments: Upstream



Photograph Number 2 Photograph Direction South

Comments: Downstream

Photograph Number 3 Photograph Direction Comments:

Photograph Number \_\_\_\_4

Photograph Direction

Jcros\_D\_007

STREAM ID	Jcros D 0	07	STREAM NA	ME UNT				
CLIENT Don			PROJECT N		w			
		<b>ONG</b> -76.01848				COUNTY Virginia Bead	ch	
INVESTIGAT						DATE 05/19/2021		
			FLOW REG	ME Interm	iittent			
Estimate Measurements         Top of Bank Width:4.01         Top of Bank Height:         LB0.5ft RB0.         Water Depth:0.00 in         Water Width:0.0 ft         Ordinary High Water Mark (We         Ordinary High Water Mark (He         Flow Direction: South			Vidth: <u>4.0</u> ft Height: t RB <u>0.5</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height) h: <u>South</u>	<u>0.0</u> ft	Within Deedeide Ditch			
FLOW CHARACTER	ISTICS	Water Present ✓ No water, stream bed dry Stream bed moist Standing water Flowing water Velocity Fast Moderate Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other			
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type	te	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 2	56 mm (10")		Detilius		plant materials (CPOM)		
Cobble	64-256	mm (2.5"-10")		Muck-Mu	d	black, very fine organic		
Gravel		nm (0.1"-2.5")				(FPOM)		
Sand		-2mm (gritty)						
Silt		4-0.06 mm		Marl		grey, shell fragments		
Clay     < 0.004 mm (slick)			al <u> </u>	I	<u> </u>	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed

Date: \_\_\_\_\_

Feature ID: <u>Jcros\_D\_007</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:

Upstream



Photograph Number 2 Photograph Direction South

Comments: Downstream

Photograph Number <u>3</u> Photograph Direction \_\_\_\_\_ Comments:

Photograph Number \_\_\_\_\_4

Photograph Direction

Jcros\_D\_008

STREAM ID Jcros_D_008 STREAM NAME UNT								
CLIENT Don			PROJECT N		w			
LAT 36.79273		<b>ONG</b> -76.01779				COUNTY Virginia Bead	ch	
						DATE 05/19/2021		
			FLOW REG	ME Interm	ittent			
CHANNEL FEATURES Water Depth: 0.00 Water Width: 0.0 Ordinary High Water Ordinary High Water Flow Direction: Sout			Vidth: <u>4.0</u> ft Height: t RB <u>0.5</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height):	<u>0.0</u> ft	Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         ✓ YesNo         Within Roadside DitchYesNo         Culvert PresentYesNo         Culvert Size:in			
FLOW CHARACTERISTICS			stream bed dry d moist vater		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear      < Slightly turbid			
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	ч 🗌	black, very fine organic		
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")		Muon-iviu	۲ 	(FPOM)		
Sand		-2mm (gritty)						
Silt	0.00	4-0.06 mm		Marl		grey, shell fragments		
Clay	< 0.00	)4 mm (slick)						
Forest ✓ Field/Pasture Agricultural			al <u> </u>	I	\	odplain Width Wide > 30ft ⊻ Modera Narrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed

Date: <u>5/19/21</u>

Feature ID: <u>Jcros\_D\_008</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:

Upstream



Photograph Number 2 Photograph Direction South

Comments: Downstream

Photograph Number <u>3</u>

Photograph Direction

Comments:

Photograph Number <u>4</u>

Photograph Direction

Jcros\_D\_009

STREAM ID	lcros D 0	09	STREAM NA	ME UNT				
CLIENT Don					W			
		<b>ONG</b> -76.01714				COUNTY Virginia Bead	ch	
INVESTIGAT						DATE 05/19/2021		
WATER TYPE		, 	FLOW REG	ME		DATE CONTOREDET		
	RPW		/ Perennial		nittent	Ephemeral 🗸		
CHANNEL FEATURES			Vidth: <u>4.0</u> ft Height: t RB <u>0.5</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height)	idth: <u>4.0</u> ft sight: <u>RB_0.5</u> ft <u>0.00</u> in <u>0.0</u> ft Vater Mark (Width): <u>0.0</u> ft Vater Mark (Height): <u>0.0</u> in		Within Roadside Ditch YesNo Culvert PresentYesNo		
					Culvert Material: Culvert Size:in			
FLOW CHARACTERISTICS			tream bed dry I moist vater ter		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other       Other			
INOR		JBSTRATE CO		ORGANIC SUBSTRATE COMPONENT (does not necessarily add up to 100%				
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detilius		plant materials (CPOM)		
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	ы   _	black, very fine organic		
Gravel		nm (0.1"-2.5")				(FPOM)		
Sand	0.06	-2mm (gritty)						
Silt		4-0.06 mm		Marl		grey, shell fragments		
Clay	< 0.00	)4 mm (slick)						
Predominant Surrounding Landuse       Floodplain Width         Forest       Commercial       ∠ Wide > 30ft       Moderate 15-30         Field/Pasture       Industrial       Narrow <15ft				te 15-30ft				

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed

Date: <u>5/19/21</u>

Feature ID: <u>Jcros\_D\_009</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:

Upstream



Photograph Number 2 Photograph Direction South

Comments: Downstream

Photograph Number <u>3</u> Photograph Direction \_\_\_\_\_

Comments:

Photograph Number 4

Photograph Direction

Jcros\_D\_010

<b></b>								
		10	STREAM NA					
CLIENT Don			PROJECT N		W			
LAT 36.7921	42 L	ONG -76.01654	8 STATE Virgin	nia		COUNTY Virginia Beach		
INVESTIGATO	ORS Jeros	5				DATE 05/19/2021		
	RPW	NRPW	FLOW REG		nittent	Ephemeral 🗸		
CHANNEL FEATURES			Vidth: <u>4.0</u> ft leight: RB <u>0.5</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height):	<u>0.0</u> ft	Sinuosity ✓ LowMediumHigh Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft) Stream Erosion ✓ NoneModerateHeavy Artificial, Modified or Channelized ✓ YesNo Within Roadside Ditch Yes ✓ No Culvert PresentYes ✓ No Culvert Material: Culvert Size:in			
FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water Velocity — Fast — M Slow			tream bed dry I moist vater ter	t		Proportion of Reach Represented by Stream         Morphology Types       (Only enter if water present)         Riffle       %       Run       %         Pool       %       %       %         Turbidity        Clear        Slightly turbid        Turbid          Other        %		
INOR		JBSTRATE CO				PONENTS to 100%)		
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock			-	D at 1		sticks, wood, coarse	-	
Boulder	> 2!	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble	64-256	mm (2.5"-10")				black, very fine organic		
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")		Muck-Mu	d	(FPOM)		
Sand	0.06	-2mm (gritty)						
Silt		4-0.06 mm		Marl		grey, shell fragments		
Clay	< 0.00	)4 mm (slick)						
			al <u> </u>	I	V	<b>dplain Width</b> Nide > 30ft <u>√</u> Modera Narrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed (no photos for this feature)

Jcros\_D\_011

STREAM ID	Icros D 0	11	STREAM NA	ME UNT				
CLIENT Don			PROJECT N		w			
		<b>DNG</b> -76.01800				COUNTY Virginia Bead	ch	
INVESTIGAT						DATE 05/19/2021		
		NRPW	FLOW REG	ME Interm	ittent	·		
CHANNEL FEATURES		Estimate Measurements         Top of Bank Width:0ft         Top of Bank Height:         LB0.5ft         RB0.5ft         Water Depth:0.00in         Water Width:0.0ft         Ordinary High Water Mark (Width):0.0ft         Ordinary High Water Mark (Height):0.0in         Flow Direction: West			Sinuosity ✓ Low Medium High         Gradient ✓ Flat Moderate Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)         Stream Erosion Moderate Heavy         Artificial, Modified or Channelized Yes No         Within Roadside Ditch Yes No         Culvert Present Yes No			
						vert Material:in		
FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing wa Velocity — Fast Slow			tream bed dry I moist vater ter		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other			
INOR		JBSTRATE CO d add up to 10			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	-	neter	% Composition in Sampling Reach	Substra Type	· .	Characteristic	% Composition in Sampling Area	
Bedrock Boulder	> 2	56 mm (10")		Detritus		sticks, wood, coarse plant materials (CPOM)		
Cobble Gravel		mm (2.5"-10") nm (0.1"-2.5")		Muck-Mu	d	black, very fine organic (FPOM)		
Sand		2mm (gritty)				. ,		
Silt		4-0.06 mm		Marl		grey, shell fragments		
Clay	< 0.00	4 mm (slick)				5 77 6		
WATERSHED       Predominant Surrounding Landuse       Floodplain Width         ✓       Forest       Commercial         ✓       Forest       Moderate 15-30         ✓       Field/Pasture       Industrial         ✓       Agricultural       Residential         ✓       ROW       Other:         Canopy Cover       Open       Partly shaded         ✓       Shaded       Shaded				te 15-30ft				

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed

Date: \_\_\_\_\_

Feature ID: <u>Jcros\_D\_011</u>



Photograph Number \_\_\_\_1

Photograph Direction East

Comments: Upstream



Photograph Number 2 Photograph Direction West

Comments: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number \_\_\_\_4

Photograph Direction

STREAM ID	ID_D_001		STREAM NA	ME				
CLIENT Don	ninion		PROJECT N	AME CVO	W			
LAT 36.6889	85 LO	<b>DNG</b> -76.18696				COUNTY		
INVESTIGAT	ORS J. Au	gustine				DATE 05/03/2021		
	RPW _	NRPW	FLOW REG		iittent	Ephemeral 🗸		
CHANNEL FE	ATURES	Ordinary High Water Mark (Width): <u>0.0</u> ft Ordinary High Water Mark (Height): <u>0.0</u> in Flow Direction: <u>Southwest</u> Water Present			Sinuosity ✓ LowMediumHigh         Gradient ✓ Flat (0.5/100 ft)ModerateSevere (2 ft/100 ft)Severe (2 ft/100 ft)         Stream Erosion ✓ NoneModerateHeavy         Artificial, Modified or Channelized ✓ YesNo         Within Roadside DitchYes ✓ No         Culvert PresentYes ✓ No         Culvert Size:in			
FLOW CHARACTERISTICS Vel		Water Present ✓ No water, stream bed dry Stream bed moist Standing water Flowing water Velocity Fast Moderate Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear      < Slightly turbid			
INOR		JBSTRATE CO d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	Dia	neter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 25	6 mm (10")		Dennus		plant materials (CPOM)		
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic		
Gravel		nm (0.1"-2.5")				(FPOM)		
Sand		2mm (gritty)		N 4		and the life of the second second		
Silt Clay		4-0.06 mm 4 mm (slick)		Marl		grey, shell fragments		
Predominant Surro Forest Field/Pasture Agricultural			Other:	I	<u>&lt;                                    </u>	dplain Width Nide > 30ft Modera Narrow <15ft	te 15-30ft	

Date: <u>5/3/21</u>

Feature ID: <u>JD\_D\_001</u>



Photograph Number \_\_\_\_1

Photograph Direction NE

Comments:

Upstream



Photograph Number 2

Photograph Direction SW

Comments: Downstream

Photograph Number 3\_\_\_\_\_ Photograph Direction \_\_\_\_\_ Comments:

Photograph Number \_\_\_\_\_4

Photograph Direction

STREAM ID	JD D 013	STREAM NA	STREAM NAME N/A					
CLIENT Dominion			-	PROJECT NAME CVOW				
LAT 36.7674				COUNTY Virginia Beach				
INVESTIGAT					DATE 05/11/2021			
WATER TYPE		laguolino	FLOW REG	ME		DATE CONTINECT		
	RPW	NRPW		Interm	ittent	Ephemeral 🗸		
		Estimate Mea	asurements		Sin	uosity 🖌 Low 🔄 N	ledium <u> </u>	
		Top of Bank V	Vidth: <u>5.0</u> ft		0	diant / Flat Mar	lavata Cavara	
		Top of Bank ⊦	leight:		Gra	dient <u>√</u> Flat <u>Mod</u> (0.5/100 ft) (2 ft/-	100 ft) (10 ft/100 ft)	
		LB <u>1.0</u> ft	t RB <u>1.0</u>	ft	Stre	eam Erosion		
		Water Depth:	<u>0.00</u> in		<u>_</u>	✓ None Moderate .	Heavy	
CHANNEL FE		Water Width:	<u>0.0</u> ft			ficial, Modified or Chann	elized	
CHANNEL FE	ATURES	Ordinary High	Water Mark (Width):	0.0 ft	_	Yes No		
		Ordinary High	Water Mark (Height)	: in		hin Roadside Ditch		
		Flow Direction	n: East			_Yes <u>√</u> No		
		How Direction. Last				vert Present Yes ⊥⁄	_ No	
						Culvert Material:		
					Culvert Size:in			
		Water Preser			Proportion of Reach Represented by Stream			
		<ul> <li>✓ No water, stream bed dry</li> <li>Stream bed moist</li> <li>Standing water</li> <li>Flowing water</li> <li>Velocity</li> <li>Fast Moderate</li> <li>Slow</li> </ul>			Morphology Types (Only enter if water present)         Riffle       %         Pool       %         Turbidity          Clear          Other			
FLOW CHARACTER	ISTICS							
INOR		UBSTRATE CO	MPONENTS		ORG	ANIC SUBSTRATE COM	PONENTS	
	(shou	d add up to 100			<u> </u>	s not necessarily add up		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type	te	Characteristic	% Composition in Sampling Area	
Bedrock			Cumping Routin	1,900		sticks, wood, coarse	Camping / Tou	
Boulder	> 2	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble		6 mm (2.5"-10")		N	_	black, very fine organic		
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")		Muck-Mu	a	(FPOM)		
Sand	0.06	-2mm (gritty)						
Silt	0.00	4-0.06 mm		Marl		grey, shell fragments		
Clay	< 0.00	04 mm (slick)						
			Surrounding Landu			odplain Width Wide > 30ft ✓ Moderat	te 15-30ft	
		Forest Commercial ✓ Field/Pasture Industrial				Wide > 30ft		
WATERSHED		Agricultura						
FEATURES		ROW	<u> </u>					
		Canopy Cove	er					
		Open	Partly shade	ed				
Shaded								

Date: \_\_\_\_

Feature ID: <u>JD\_D\_013</u>



Photograph Number 1

Photograph Direction North

Comments:

Upstream



Photograph Number 2 Photograph Direction South

Comments: Do

Downstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number	4
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Photograph Direction

STREAM ID JD_D_014			STREAM NA	STREAM NAME UNT			
CLIENT Don	ninion		PROJECT N	PROJECT NAME CVOW			
LAT 36.7666	6 STATE Virgin	STATE Virginia COUNTY Virginia Bea			ch		
INVESTIGAT	DRS J. D'	Augustine				DATE 05/11/2021	
	RPW	NRPW 🗸	FLOW REG	IME Interm	nittent	Ephemeral 🗸	
CHANNEL FE	Estimate Measurem         Top of Bank Width:         Top of Bank Height:         LB			<u>0.0</u> ft	Sinuosity ⊥ LowMediumHigh         Gradient ⊥ Flat (0.5/100 ft)      ModerateSevere (2 ft/100 ft)         Stream Erosion ⊥ NoneModerateHeavy         Artificial, Modified or Channelized ⊥ YesNo         Within Roadside DitchYes ⊥No         Culvert PresentYes ⊥No         Culvert Material:         Culvert Size:in		
		Water Present         ✓       No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Velocity         Fast       Moderate         Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity       Clear       Slightly turbid       Turbid         Other		
INOR		JBSTRATE COI d add up to 100		ORGANIC SUBSTRATE COMPON (does not necessarily add up to 1			
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus	Τ	sticks, wood, coarse	
Boulder		56 mm (10")		Dounda		plant materials (CPOM)	
Cobble		mm (2.5"-10")		Muck-Mu	ıd	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)		Mar		arov, shall frammarts	
Silt		4-0.06 mm		Marl		grey, shell fragments	
			al <u> </u>	I		odplain Width Wide > 30ft ✓ Modera Narrow <15ft	te 15-30ft



# Feature Name: JD\_D\_014

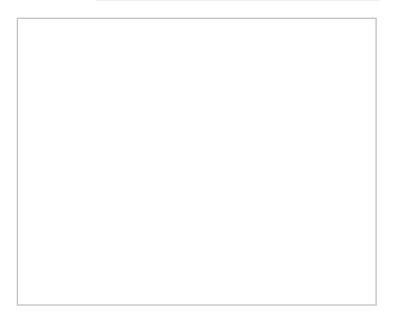


### Photograph Direction North

Comments: Upstream.

Photograph Direction South

ownstream.



# Photograph Direction

Comments:

Photograph Direction

STREAM ID	STREAM NA	STREAM NAME N/A					
CLIENT Don				PROJECT NAME CVOW			
LAT 36.7650			COUNTY Virginia Beach				
INVESTIGAT						DATE 05/11/2021	
			FLOW REG	IME Interm	iittent		
CHANNEL FEATURES			Vidth: <u>4.0</u> ft leight: : RB <u>2.0</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height)	<u>0.0</u> ft	Sinuosity ⊥ LowMediumHigh         Gradient ⊥ Flat (0.5/100 ft)      ModerateSevere (2 ft/100 ft)         Stream Erosion ⊥ NoneModerateHeavy         Artificial, Modified or Channelized ⊥ YesNo         Within Roadside DitchYes ⊥ No         Culvert PresentYes ⊥ No         Culvert Material:         Culvert Size:in		
FLOW CHARACTERISTICS		Water Present         ✓       No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Velocity         Fast       Moderate         Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other		
INOR		UBSTRATE CO				ANIC SUBSTRATE COM s not necessarily add up	
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	te	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 2!	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble		6 mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		mm (0.1"-2.5")			-	(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm		Marl		grey, shell fragments	
Clay       < 0.004 mm (slick)       Predominant Surrounding Landuse       Floodplain Width         Forest       Commercial       Moderate 15-30ft       Moderate 15-30ft         Field/Pasture       Industrial       Residential       Narrow <15ft					te 15-30ft		

Feature ID: <u>JD\_D\_016</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:

Upstream



Photograph Number 2 Photograph Direction South

Comments: Dow

bownstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number <u>4</u>

Photograph Direction

STREAM ID	ID D 017	STREAM NA	STREAM NAME N/a						
CLIENT Dominion				PROJECT NAME CVOW					
LAT 36.7642			COUNTY Virginia Beach						
INVESTIGAT						DATE 05/11/2021			
WATER TYPE		lugustine	FLOW REG	ME		DATE 00/11/2021			
	RPW	NRPW		Interm	ittent	Ephemeral 🗸			
T T CHANNEL FEATURES		Estimate Measurements Top of Bank Width: <u>4.0</u> ft Top of Bank Height: LB <u>2.0</u> ft RB <u>2.0</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>0.0</u> ft Ordinary High Water Mark (Height): <u>0.0</u> in Flow Direction: <u>East</u>		Sinuosity ⊥ LowMedium High         Gradient ⊥ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream Erosion ⊥ None Moderate Heavy         Artificial, Modified or Channelized ⊥ Yes No         Within Roadside Ditch Yes ⊥ No         Culvert Present Yes ⊥ No         Culvert Material:					
						Culvert Material: Culvert Size:in			
FLOW CHARACTERISTICS		Water Present         ✓       No water, stream bed dry        Stream bed moist        Standing water        Flowing water         Velocity        Fast      Moderate        Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear      < Slightly turbid				
INOR		UBSTRATE CO Id add up to 100		ENTS		ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	· .	Characteristic	% Composition in Sampling Area		
Bedrock				Dotrituc		sticks, wood, coarse			
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)			
Cobble		6 mm (2.5"-10")		Muck-Mu	ч 🗌	black, very fine organic			
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")		Muon-Mu	~	(FPOM)			
Sand	0.06	-2mm (gritty)							
Silt	0.00	4-0.06 mm	m Marl			grey, shell fragments			
Clay	< 0.00	04 mm (slick)							
Forest			<b></b> Other:	I	<u>۲</u> ۱	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft		

Date: \_\_\_\_\_

Feature ID: <u>JD\_D\_017</u>



Photograph Number \_\_\_\_1

Photograph Direction NE

Comments: Down

Downstream



Photograph Number <u>2</u> Photograph Direction SW

Comments: Upstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number <u>4</u>

Photograph Direction

STREAM ID JD_D_018 STREAM NAME N/A							
CLIENT Dominion PROJECT				AME CVOW			
LAT 36.763822 LONG -76.087297 STATE Virgir							
INVESTIGATO	DRS J. D'	Augustine				DATE 05/11/2021	
	WATE <u>R T</u> YPE FLOW REGIME					Ephemeral 🗸	
CHANNEL FEATURES			Vidth: <u>1.0</u> ft leight: <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height): <u>s: Southwest</u>	<u>0.0</u> ft	Sinuosity $\checkmark$ LowMediumHighGradient $\checkmark$ FlatModerateSevere(0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)Stream Erosion $\checkmark$ NoneModerateHeavyArtificial, Modified or Channelized $\checkmark$ YesNoWithin Roadside Ditch $\checkmark$ YesNoCulvert Present $\checkmark$ YesNoCulvert Size:24in		
FLOW CHARACTERISTICS		Water Present         ✓       No water, stream bed dry        Stream bed moist        Standing water        Flowing water         Velocity        Fast      Moderate         Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run       %         Pool       %         Turbidity       Clear       Slightly turbid       Turbid         Other		
INOR		UBSTRATE COI		ORGANIC SUBSTRATE COMPONE (does not necessarily add up to 10			
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type	te	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	ч  _	black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")			-	(FPOM)	
Sand		-2mm (gritty)					
Silt		94-0.06 mm		Marl		grey, shell fragments	
Clay	< 0.00	)4 mm (slick)				- I - I - 1 - 1 AP - I C	
Forest			Other:	I	<u> </u>	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft

Feature ID: <u>JD\_D\_018</u>



Photograph Number \_\_\_\_1

Photograph Direction East

Comments: Culvert

Upstream



Photograph Number 2

Photograph Direction East

Comments: Culvert

Upstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number <u>4</u>

Photograph Direction

STREAM ID JD_D_019 STREAM NAME N/a							
CLIENT Dominion PROJECT NAME Don					inion		
LAT 36.762774 LONG -76.088512 STATE Virginia					COUNTY Virginia Bead	ch	
INVESTIGAT	DRS J. D'	Augustine	•			DATE 05/11/2021	
WATE <u>R T</u> YPE FLOW REGIME					ittent	·	
Estimate Measurement         Top of Bank Width:4         Top of Bank Height:         LB2.0ft         R         Water Depth:0.00         Water Width:0.0ft         Ordinary High Water M         Ordinary High Water M         Flow Direction: East			Vidth: <u>4.0</u> ft Height: t RB <u>2.0</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height)	<u>0.5</u> ft	Sinuosity ✓ LowMedium High         Gradient ✓ Flat (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream Erosion ✓ None Moderate Heavy         Artificial, Modified or Channelized ✓ Yes No         Within Roadside Ditch Yes ✓ No         Culvert Present Yes ✓ No         Culvert Material: in		
FLOW CHARACTERISTICS		Water Present         ✓       No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Velocity         Fast       Moderate         Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear      < Slightly turbid		
INOR		UBSTRATE CO		ORGANIC SUBSTRATE COMPO (does not necessarily add up to			
Substrate Type		meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 2	56 mm (10")		Detilius		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel	2 <b>-</b> 64 r	mm (0.1"–2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt		04-0.06 mm		Marl		grey, shell fragments	
Forest			<b></b> Other:	I	\	od <b>plain Width</b> Wide > 30ft ⊻ Modera Narrow <15ft	te 15-30ft

Date: <u>5/11/21</u>

Feature ID: <u>JD\_D\_019</u>



Photograph Number \_\_\_\_1

Photograph Direction NE

Comments: Do

Downstream



Photograph Number 2

Photograph Direction SW

Comments: Upstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number <u>4</u>

Photograph Direction

STREAM ID JD_D_020			STREAM NA	STREAM NAME N/A				
CLIENT Don	ninion		PROJECT N	PROJECT NAME CVOW				
LAT 36.7616	15 L(	<b>ONG</b> -76.09041			COUNTY Virginia Beach			
INVESTIGATO	DRS J. D'A	Augustine				DATE 05/11/2021		
WATER TYPE	RPW	NRPW	FLOW REG		nittent	Ephemeral ✔		
CHANNEL FEATURES Water Depth:0. Water Width:0. Ordinary High Wa			Vidth: <u>3.0</u> ft Height: RB <u>1.0</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height):	r <u>3.0</u> ft t: RB <u>1.0</u> ft <u>0</u> in <u>1</u> ft er Mark (Width): <u>0.0</u> ft er Mark (Height): <u>0.0</u> in		Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)         (2 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         YesNo         Within Roadside DitchYesNo         Culvert Present ✓ YesNo         Culvert Material:         Concrete         Culvert Size:in		
FLOW CHARACTERISTICS		Water Present         ✓ No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Velocity         Fast       Moderate         Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other       Other			
INOR		JBSTRATE CO				NIC SUBSTRATE COM not necessarily add up		
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic		
Gravel		nm (0.1"-2.5")				(FPOM)		
Sand		-2mm (gritty)						
Silt		4-0.06 mm		Marl		grey, shell fragments		
Clay < 0.004 mm (slick)						daleia Width		
WATERSHED - FEATURES -		— Forest	Other:	I	<u>√</u> v	d <b>plain Width</b> Vide > 30ft Modera Iarrow <15ft	te 15-30ft	

Date: <u>5/11/2</u>1

Feature ID: <u>JD\_D\_020</u>



Photograph Number \_\_\_\_1

Photograph Direction NW

Comments: Upstream



Photograph Number 2

Photograph Direction SE

Comments:

Downstream



Photograph Number 3

Photograph Direction <u>NE</u>

Comments:

culvert

Photograph Number 4

Photograph Direction

STREAM ID JD_D_053			STREAM NA	STREAM NAME UNT			
CLIENT Dominion				PROJECT NAME CVOW			
LAT 36.768875			COUNTY Virginia Beach				
INVESTIGATORS						DATE 05/11/2021	
WATE <u>R T</u> YPE		NRPW	FLOW REG		nittent [	Ephemeral 🗸	
CHANNEL FEAT	Estimate Measuren         Top of Bank Width: _         Top of Bank Height:         LB			<u>0.0</u> ft	Sinuosity ✓ LowMediumHigh         Gradient ✓ Flat (0.5/100 ft)      ModerateSevere (2 ft/100 ft)         Stream Erosion ✓ NoneModerateHeavy         Artificial, Modified or Channelized ✓ YesNo         Within Roadside DitchYes ✓ No         Culvert PresentYes ✓ No         Culvert Material:         Culvert Size:in		
FLOW CHARACTERISTICS		Water Present         ✓       No water, stream bed dry        Stream bed moist        Standing water        Flowing water         Velocity        Fast      Moderate        Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other		
		IBSTRATE COI d add up to 100				ANIC SUBSTRATE COM s not necessarily add up	
Substrate Type		neter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	6 mm (10")		Detilitus		plant materials (CPOM)	
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")			-	(FPOM)	
Sand		2mm (gritty)					
Silt		04-0.06 mm Marl				grey, shell fragments	
Clay	< 0.00	4 mm (slick)				alas la Sa VA/Lal41	
WATERSHED FEATURES — Field/Pasture — Indu — Agricultural — Res — ROW — Other Canopy Cover			Commercia ure Industrial al Residential     Other:	I	\	d <b>plain Width</b> Nide > 30ft <u>✓</u> Moderai Narrow <15ft	te 15-30ft

Date: 5/11/21

Feature ID: <u>JD\_D\_053</u>



Photograph Number \_\_\_\_1

Photograph Direction NW

Comments: Upstream



Photograph Number 2

Photograph Direction East

Comments: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number \_\_\_\_4

Photograph Direction

STREAM ID	STREAM ID JD_D_054 STREAM NAME UNT							
CLIENT Don	ninion		PROJECT N	AME CVO	W			
		ONG -76.09421				COUNTY Virginia Bead	ch i	
INVESTIGAT	Drs JD, E	F	•			DATE 05/14/2021		
WATER TYPE			FLOW REG	IME Interm	nittent	<u> </u>		
CHANNEL FE	ATURES	asurements Vidth: <u>8.0</u> ft Height: RB <u>2.0</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height) South	<u>0.0</u> ft	Gra Stre ∠ Arti _ Witi Cul Cul	uosity _✓ Low Moderate Flat Mod (0.5/100 ft) (2 ft/ eam Erosion ∠ None Moderate ficial, Modified or Chann ∠ Yes No hin Roadside Ditch Yes No vert Present Yes _∠ vert Material:in	derate <u>Severe</u> 100 ft) (10 ft/100 ft) Heavy helized		
FLOW       Water Present         CHARACTERISTICS       Multiple         Flowing water       Flowing water         Velocity       Fast         Multiple       Slow			tream bed dry I moist vater ter		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Pool       %         Turbidity          Clear      < Slightly turbid			
INOR		UBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 2:	56 mm (10")		Detnus		plant materials (CPOM)		
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	цΤ	black, very fine organic		
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")			<u> </u>	(FPOM)		
Sand	0.06	-2mm (gritty)	20					
	Silt 0.004-0.06 mm			Marl		grey, shell fragments		
Clay	< 0.00	)4 mm (slick)	40					
Predominant Surrounding Landuse       Floodplain Width         Forest       Commercial       Wide > 30ft       ✓ Moderate 1         Field/Pasture       Industrial       Narrow <15ft					te 15-30ft			

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date: \_\_\_\_\_

Feature ID: <u>JD\_D\_054</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:

Upstream



Photograph Number 2 Photograph Direction South

Comments: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number 4

Photograph Direction \_\_\_\_\_

STREAM ID	ID_D_055		STREAM NA	ME UNT				
CLIENT Don			PROJECT N		W			
LAT 36.7606		ONG -76.09517				COUNTY Virginia Bead	ch i	
INVESTIGAT						DATE 05/14/2021		
WATER TYPE		NRPW 🖡	FLOW REG	IME Interm	nittent	Ephemeral 🗸		
CHANNEL FE	ATURES	Asurements Vidth: <u>10.0</u> ft Height: RB <u>3.0</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height) South	<u>0.0</u> ft	Sinuosity ✓ Low Medium High Gradient ✓ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft) Stream Erosion ✓ None Moderate Heavy Artificial, Modified or Channelized ✓ Yes No Within Roadside Ditch Yes No Culvert Present Yes ✓ No Culvert Material: Culvert Size: in				
FLOW       _✓ No water, stream         CHARACTERISTICS       _✓ Standing water         Velocity       Fast         Fast       Mode         Slow			tream bed dry I moist vater ter	ed dry Morphology Ty Riffle Pool Turbidity Clear			ented by Stream r if water present) % rbid Turbid	
INOR		UBSTRATE COI			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ate	Characteristic	% Composition in Sampling Area	
Bedrock			~	Detritus		sticks, wood, coarse	-	
Boulder		56 mm (10")				plant materials (CPOM)		
Cobble Gravel		6 mm (2.5"-10")		Muck-Mu	id	black, very fine organic (FPOM)		
		nm (0.1"-2.5")	20			(ITOM)		
Sand Silt		-2mm (gritty)	30 40	Marl		grey, shell fragments		
Clay				IVIAII		grey, shen nagments		
Clay       < 0.004 mm (slick)       30       Floodplain Width         Predominant Surrounding Landuse       Floodplain Width       Moderate 15-30ft         Forest       Commercial       Wide > 30ft       Moderate 15-30ft         Field/Pasture       Industrial       Residential       Narrow <15ft						te 15-30ft		

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date: \_\_\_\_\_

Feature ID: <u>JD\_D\_055</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:

Upstream



Photograph Number 2 Photograph Direction South

Comments: Downstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number 4

Photograph Direction

STREAM ID	ID D 056		STREAM NA	ME UNT				
CLIENT Don			PROJECT N		W			
LAT 36.7605		ONG -76.09620				COUNTY Virginia Bead	ch	
INVESTIGAT				DATE 05/14/2021				
			FLOW REG		Intermittent Ephemeral 🗸			
CHANNEL FE	ATURES	Asurements Vidth: <u>10.0</u> ft Height: RB <u>3.0</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height) South	<u>0.0</u> ft	Sinuosity ∠ Low Medium High Gradient ∠ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft) Stream Erosion ∠ None Moderate Heavy Artificial, Modified or Channelized ∠ Yes No Within Roadside Ditch Yes ∠ No Culvert Present Yes ∠ No Culvert Material: Culvert Size: in				
FLOW       No water, stream         ✓ Stream bed mo       Stream bed mo         — Standing water       Flowing water         Velocity       Fast       Mo         Slow       Slow       No			tream bed dry I moist vater ter		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Pool       %         Turbidity          Clear      < Slightly turbid			
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock				Dotrituc		sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu		black, very fine organic		
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")			<u> </u>	(FPOM)		
Sand	0.06	2mm (gritty)	33					
Silt	0.00	4-0.06 mm	33	Marl		grey, shell fragments		
Clay	< 0.00	33						
Predominant Surrounding Landuse       File         Forest       Commercial				\	odplain Width Wide > 30ft _✓_ Modera Narrow <15ft	te 15-30ft		

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date: \_\_\_\_\_

Feature ID: <u>JD\_D\_056</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:

Upstream



Photograph Number 2 Photograph Direction South

Comments: Downstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number 4

Photograph Direction

STREAM ID	JD D 057		STREAM NA	ME UNT			
CLIENT Don			PROJECT N		w		
LAT 36.7602		ONG -76.09725				COUNTY Virginia Bead	ch
INVESTIGATO						DATE 05/14/2021	
			FLOW REG	ME Interm	iittent		
CHANNEL FE	ATURES	Top of Bank H LB <u>3.0</u> ft Water Depth: Water Width:_ Ordinary High	Vidth: <u>10.0</u> ft Height: t RB <u>3.0</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height):	<u>0.0</u> ft	Sinuosity ✓ Low Medium High         Gradient ✓ Flat Moderate Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)         Stream Erosion Moderate Heavy         ✓ None Moderate Heavy         Artificial, Modified or Channelized Yes No         Within Roadside Ditch Yes No         Culvert Present Yes No         Culvert Size: in		
FLOW CHARACTERISTICS			tream bed dry I moist vater ter		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run         Pool       %         Turbidity          Clear      < Slightly turbid		
INOR		JBSTRATE CO				ANIC SUBSTRATE COM	
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	ч  _	black, very fine organic	
Gravel		nm (0.1"-2.5")			-	(FPOM)	
Sand		-2mm (gritty)	33				
Silt		4 <b>-</b> 0.06 mm	33	Marl		grey, shell fragments	
Clay	< 0.00	)4 mm (slick)	33				
WATERSHED FEATURES		Surrounding Landu Commercia ure Industrial al Residential Other: er Partly shade	I		odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date: <u>5/14/21</u>

Feature ID: <u>JD\_D\_057</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:

Upstream



Photograph Number 2 Photograph Direction South

Comments:

Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number \_\_\_\_4

Photograph Direction

STREAM ID	JD D 058		STREAM NA	ME UNT			
CLIENT Don			PROJECT N		w		
LAT 36.7601		ONG -76.09853				COUNTY Virginia Bead	ch
INVESTIGAT				DATE 05/14/2021			
			FLOW REG	ME Interm	ittent	·	
CHANNEL FE	ATURES	Top of Bank H LB <u>3.0</u> ff Water Depth: Water Width: Ordinary High Ordinary High Flow Directior	Vidth: <u>8.0</u> ft Height: t RB <u>3.0</u> f <u>1.00</u> in <u>4.0</u> ft Water Mark (Width): Water Mark (Height) n: <u>Southwest</u>	<u>4.0</u> ft	Sinuosity ✓ Low Medium High         Gradient ✓ Flat Moderate Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)         Stream Erosion None Moderate Heavy         Artificial, Modified or Channelized Yes No         Within Roadside Ditch Yes No         Culvert Present Yes ✓ No         Culvert Material: in		
FLOW CHARACTERISTICS FLOW CHARACTERISTICS			tream bed dry I moist vater tter		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run 95 %         Pool       5 %         Turbidity       Clear       ✓ Slightly turbid       Turbid         Other		
INOR		UBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	-	meter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area
Bedrock				Dotriture		sticks, wood, coarse	
Boulder	> 2	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	ч 🗌	black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")		widen-wid	~	(FPOM)	
Sand	0.06	-2mm (gritty)	33				
Silt	0.00	4-0.06 mm	33	Marl		grey, shell fragments	
Clay	< 0.00	04 mm (slick)	33				
WATERSHED       Predominant Surrounding Landuse         Forest       Commercial         Field/Pasture       Industrial         Agricultural       Residential         ROW       Other:         Canopy Cover       Open         Shaded       Partly shaded					odplain Width Wide > 30ft _✓_ Modera Narrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date: \_\_\_\_\_

Feature ID: <u>JD\_D\_058</u>



Photograph Number \_\_\_\_1

Photograph Direction NE

Comments: Upstream



Photograph Number 2

Photograph Direction SW

Comments: Downstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number \_\_\_\_4

Photograph Direction \_\_\_\_\_

STREAM ID			STREAM NA	STREAM NAME UNT				
CLIENT Don	ninion		PROJECT N	AME CVO	W	-		
LAT 36.77454	42 L	ONG -76.03353	5 STATE Virgin	nia		COUNTY Virginia Beac	ch	
INVESTIGATO	<b>drs</b> JD, E	F				DATE 05/14/2021		
	RPW	NRPW	FLOW REG		nittent	Ephemeral 🗸		
CHANNEL FE	ATURES	asurements Vidth: <u>3.0</u> ft Height: : RB <u>1.0</u> <u>0.00</u> in <u>0.00</u> ft Water Mark (Width): Water Mark (Height) n:	<u>0.0</u> ft	Sinuosity ✓ Low Medium High         Gradient ✓ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft)         Stream Erosion None ✓ Moderate Heavy         Artificial, Modified or Channelized Yes No         Within Roadside Ditch Yes ✓ No         Culvert Present Yes ✓ No         Culvert Material: in				
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water Velocity — Fast — Mod Slow			tream bed dry I moist /ater		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Pool       %         Turbidity       Clear       Slightly turbid       Turbid         Other			
INOR		UBSTRATE CO				ANIC SUBSTRATE COM		
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock			-	Detriture		sticks, wood, coarse	-	
Boulder	> 2:	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu		black, very fine organic		
Gravel		mm (0.1"-2.5")		iviuen-iviu		(FPOM)		
Sand	0.06	-2mm (gritty)	33					
Silt	0.00	4-0.06 mm	33	Marl		grey, shell fragments		
Clay	< 0.00	04 mm (slick)	33					
WATERSHED FEATURES		🖌 Forest	<b></b> Other:	I		o <b>dplain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date: \_\_\_\_\_

Feature ID: <u>JD\_D\_059</u>



Photograph Number \_\_\_\_1

Photograph Direction East

Comments: Downstream

Photograph Number 2 Photograph Direction West

Comments: Upstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number 4

Photograph Direction

STREAM ID	ID_D_060		STREAM NA	ME UNT			
CLIENT Don	ninion		PROJECT N	AME CVO	W		
		ONG -76.03314				COUNTY Virginia Beac	ch
INVESTIGAT	Drs JD, E	F				DATE 05/14/2021	
WATER TYPE		NRPW		FLOW REGIME Perennial Intermittent Ephemeral 🗸			
CHANNEL FE	ATURES	asurements Vidth: <u>3.0</u> ft Height: : RB <u>1.0</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height): h: <u>East</u>	<u>0.0</u> ft	Sinuosity ✓ Low Medium High         Gradient ✓ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream Erosion None ✓ Moderate Heavy         Artificial, Modified or Channelized Yes No         Within Roadside Ditch Yes ✓ No         Culvert Present Yes ✓ No         Culvert Size: in			
FLOW       ✓       No water, stream         CHARACTERISTICS       ✓       Standing water         Velocity       —       Fast       Mode         Slow       Slow       Slow       Slow			tream bed dry I moist vater ter	ed dry Morphology Types (Only en Riffle % Run Pool % Turbidity Clear Slightly			%
INOR		UBSTRATE CO Id add up to 100				ANIC SUBSTRATE COM s not necessarily add up	
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock			-	Detritus		sticks, wood, coarse	-
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu		black, very fine organic	
Gravel		mm (0.1"-2.5")		WUCK-IVIU		(FPOM)	
Sand	0.06	-2mm (gritty)	40				
Silt				Marl		grey, shell fragments	
, , ,			40				
WATERSHED FEATURES	Surrounding Landu Commercia ure Industrial al Residential Other: er Partly shade	I	V	<b>dplain Width</b> Nide > 30ft Moderai Narrow <15ft	te 15-30ft		

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed

No photos available

STREAM ID	ID_D_061		STREAM NA	STREAM NAME UNT				
CLIENT Don	ninion		PROJECT N	AME CVO	W			
LAT 36.77534		ONG -76.03269				COUNTY Virginia Bead	ch	
INVESTIGATO	Drs JD, E	F				DATE 05/14/2021		
WATER TYPE		NRPW	FLOW REG	IME Interm	iittent	Ephemeral 🗸		
CHANNEL FE	ATURES	Top of Bank H LB <u>1.0</u> ft Water Depth: Water Width: <u></u> Ordinary High Ordinary High Flow Directior	Vidth: <u>3.0</u> ft leight: t RB <u>1.0</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height): <u>1</u> : East	<u>0.0</u> ft	Sinuosity ✓ Low Medium High Gradient ✓ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft) Stream Erosion None ✓ Moderate Heavy Artificial, Modified or Channelized ✓ Yes No Within Roadside Ditch Yes ✓ No Culvert Present Yes ✓ No Culvert Material: Culvert Size: in			
FLOW       Water Present         CHARACTERISTICS       No water, streat         Mathematical Stream bed mode       Stream bed mode         Stream bed mode       Stream bed mode         Stream bed mode       Stream bed mode         FLOW       Stream bed mode         CHARACTERISTICS       Flowing water         Velocity       Fast         Slow       Slow			tream bed dry I moist vater ter		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Pool       %         Turbidity          Clear      < Slightly turbid			
INOR		JBSTRATE CO		ORGANIC SUBSTRATE COMPO (does not necessarily add up to				
Substrate Type	-	meter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area	
Bedrock			-	Dotrituc		sticks, wood, coarse	-	
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	ч   _	black, very fine organic		
Gravel		nm (0.1"-2.5")				(FPOM)		
Sand		-2mm (gritty)	40					
	Silt 0.004-0.06 mm			Marl		grey, shell fragments		
, , , ,			20			- I - I - 1 - 1 AP - I C		
WATERSHED FEATURES	Surrounding Landu Commercia ure Industrial al Residential Other: er Partly shade	I	\	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft			

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

STREAM ID	JD_D_062		STREAM NA	STREAM NAME UNT				
CLIENT Don	ninion		PROJECT N	AME CVO	W			
LAT 36.7757		ONG -76.03224				COUNTY Virginia Bead	ch 🛛	
INVESTIGAT	<b>drs</b> JD, E	F				DATE 05/14/2021		
	RPW _	NRPW 🗗	FLOW REG		iittent	Ephemeral 🗸		
CHANNEL FE	ATURES	Top of Bank H LB <u>1.0</u> ft Water Depth: Water Width:_ Ordinary High	Vidth: <u>3.0</u> ft Height: t RB <u>1.0</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height)	<u>0.0</u> ft	Sinuosity ✓ Low Medium High         Gradient ✓ Flat Moderate Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)         Stream Erosion None ✓ Moderate Heavy         Artificial, Modified or Channelized Yes No         Within Roadside Ditch Yes ✓ No         Culvert Present Yes ✓ No         Culvert Material: in			
FLOW       _✓ No water, stream         CHARACTERISTICS       _✓ Standing water         Velocity       Fast         Slow       Slow			tream bed dry I moist vater ter		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Pool       %         Turbidity          Clear      < Slightly turbid			
INOR		JBSTRATE CO d add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 2	56 mm (10")		Dennus		plant materials (CPOM)		
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic		
Gravel		nm (0.1"-2.5")				(FPOM)		
Sand		-2mm (gritty)	33					
Silt         0.004-0.06 mm           Clay         < 0.004 mm (slick)			33 33	Marl		grey, shell fragments		
Clay WATERSHED FEATURES		Predominant ✓ Forest	Surrounding Landu Commercia ure Industrial al Residential Other:	I	V	d <b>plain Width</b> Nide > 30ft Modera Narrow <15ft	te 15-30ft	

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

STREAM ID	ID_D_063	1	STREAM NA	ME UNT			
CLIENT Don	ninion		PROJECT N	AME CVO	W		
LAT 36.7761	48 Lo	ONG -76.03165		nia		COUNTY Virginia Beac	ch
INVESTIGAT	<b>drs</b> JD, E	F				DATE 05/14/2021	
	RPW _	NRPW	FLOW REG		nittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Asurements Vidth: <u>3.0</u> ft Height: : RB <u>1.0</u> <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height) n: East	<u>0.0</u> ft	Gra Stre 	uosity _ Low _ N dient _ Flat _ Mod (0.5/100 ft) (2 ft/ eam Erosion _ None _ Moderate . ficial, Modified or Chann _ Yes _ No hin Roadside Ditch _ Yes _ No vert Present _ Yes _ vert Material: in	derate Severe 100 ft) (10 ft/100 ft) Heavy nelized	
FLOW       ✓       No water, stream         CHARACTERISTICS       ✓       Standing water         Velocity       —       Fast       Mode         Slow       Slow       Slow       Slow			tream bed dry I moist /ater		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Pool       %         Turbidity          Clear      < Slightly turbid		
INOR		UBSTRATE CO Id add up to 100				ANIC SUBSTRATE COM	
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Dotriture		sticks, wood, coarse	-
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu		black, very fine organic	
Gravel		mm (0.1"-2.5")		WIGHT-IVIU		(FPOM)	
Sand	0.06	-2mm (gritty)	33				
Silt 0.004-0.06 mm			33	Marl		grey, shell fragments	
Clay	< 0.00	04 mm (slick)	33				
WATERSHED FEATURES		🖌 Forest	<b></b> Other:	I		o <b>dplain Width</b> Wide > 30ft Moderai Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

STREAM ID	STREAM ID JD_D_064 STREAM NAME UNT							
CLIENT Don			PROJECT N		w			
LAT 36.7764		<b>ONG</b> -76.03114				COUNTY Virginia Bead	ch	
INVESTIGAT						DATE 05/14/2021		
			FLOW REG	ME Interm	nittent			
CHANNEL FE	ATURES	asurements Vidth: <u>3.0</u> ft leight: : RB <u>1.0</u> <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height) <u>:</u> East	<u>0.0</u> ft	Gra Stre 	uosity _ Low _ N dient _ Flat _ Mod (0.5/100 ft) (2 ft/ eam Erosion _ None _ Moderate _ ficial, Modified or Chann _ Yes _ No hin Roadside Ditch _ Yes _ No vert Present _ Yes _ vert Material:in	derate <u>Severe</u> 100 ft) (10 ft/100 ft) Heavy helized		
FLOW       Water Present         ✓       No water, stream         Stream bed moi       Stream bed moi         Standing water       ✓         Flowing water       ✓         Velocity       —         Fast       Mo         Slow       Slow			tream bed dry I moist vater ter	Riffle % Run Pool % Turbidity ClearSlight			r if water present) %	
INOR		UBSTRATE CO Id add up to 100			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder		56 mm (10")		Dounus		plant materials (CPOM)		
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	d	black, very fine organic		
Gravel		mm (0.1"-2.5")				(FPOM)		
Sand		-2mm (gritty)	33					
Silt		4-0.06 mm	33	Marl		grey, shell fragments		
Clay	< 0.00	)4 mm (slick)	33					
Predominant Surrounding Landuse       Floodplain Width         ✓       Forest       Commercial         ✓       Forest       Industrial         ✓       Field/Pasture       Industrial         ✓       Agricultural       Residential         ✓       ROW       Other:         Canopy Cover       Open       Partly shaded         ✓       Shaded					te 15-30ft			

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

STREAM ID	ID_D_065		STREAM NA	ME UNT			
CLIENT Don	ninion		PROJECT N	AME CVO	1		i
LAT 36.77704	49 L(	ONG -76.03054				γ Virginia Bead	ch
INVESTIGATO	<b>drs</b> JD, E	F			DATE C	5/14/2021	
	RPW	NRPW	FLOW REG	IME Interm	ient 📃 E	phemeral 🗸	
CHANNEL FE	Estimate Measuren         Top of Bank Width:         Top of Bank Height:         LB       1.0         ILB       1.0         Mater Depth:       0.00         Water Width:       0.0         Ordinary High Water         Ordinary High Water         Flow Direction:         East         Mater Present         ( No water stream)			<u>0.0</u> ft	Sinuosity ✓ Low Medium High         Gradient ✓ Flat Moderate Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft)         Stream Erosion None ✓ Moderate Heavy         Artificial, Modified or Channelized Yes No         Within Roadside Ditch Yes ✓ No         Culvert Present Yes ✓ No         Culvert Material:         Culvert Size: in		
FLOW CHARACTERISTICS			tream bed dry I moist /ater		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Pool       %         Turbidity          Clear      < Slightly turbid		
INOR		JBSTRATE CO				STRATE COM	
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type			% Composition in Sampling Area
Bedrock				Detritus		/ood, coarse	
Boulder	> 25	56 mm (10")		Detritus	plant mate	erials (CPOM)	
Cobble		6 mm (2.5"-10")		Muck-Mu		y fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")			(F	POM)	
Sand	0.06	-2mm (gritty)	33				
Silt		4-0.06 mm	33	Marl	grey, she	ell fragments	
Clay < 0.004 mm (slick)			33			.141.	
Forest			<b>—</b> Other:	I	Floodplain Wi Wide > 30f ✓ Narrow <15	t Modera	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Date: <u>5/14/21</u>

Feature ID: <u>JD\_D\_065</u>



Photograph Number \_\_\_\_1

Photograph Direction East

Comments: Down

Downstream



Photograph Number 2 Photograph Direction West

Comments: Upstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number 4

Photograph Direction

STREAM ID	ID_D_066		STREAM NA	ME UNT			
CLIENT Don	ninion		PROJECT N	AME CVO	W		
LAT 36.7774	71 L	ONG -76.02996				COUNTY Virginia Bead	ch
INVESTIGATO	Drs JD, E	F			<b>DATE</b> 05/14/2021		
			FLOW REG	ME Interm	nittent	·	
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>2.0</u> ft Top of Bank Height: LB <u>1.0</u> ft RB <u>1.0</u> ft Water Depth: <u>0.00</u> in Water Width: <u>0.0</u> ft Ordinary High Water Mark (Width): <u>0.0</u> ft Ordinary High Water Mark (Height): <u>0.0</u> in Flow Direction: <u>Southeast</u>			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         YesNo         Within Roadside DitchYesNo         Culvert PresentYesNo         Culvert Size:in		
FLOW       ✓       No water, stream bed dry         Stream bed moist       Standing water         Flowing water       ✓         Velocity       Fast         Moderate       Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other       Other				
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	μТ	black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")		WIGGR-IVIU	u	(FPOM)	
Sand	0.06	-2mm (gritty)	33				
Silt	0.00	4-0.06 mm	33	Marl		grey, shell fragments	
Clay	< 0.00	)4 mm (slick)	33				
WATERSHED FEATURES		— Forest	<b>—</b> Other:	I		o <b>dplain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

STREAM ID JD_D_067			STREAM NA	STREAM NAME UNT			
CLIENT Don	ninion		PROJECT N	AME CVO	W		
LAT 36.7779	29 L	ONG -76.02945				COUNTY Virginia Bead	ch
INVESTIGAT	<b>drs</b> JD, E	F		DATE 05/14/2021			
	RPW		FLOW REG	IME Interm	iittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Top of Bank H LB <u>1.0</u> fi Water Depth: Water Width: <u></u> Ordinary High	Vidth: <u>2.0</u> ft Height: t RB <u>1.0</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height)	<u>0.0</u> ft	Gra Stre  Arti  Wittl  Cult	uosity _ Low _ N dient _ Flat _ Nor (0.5/100 ft) (2 ft/ eam Erosion None _ Moderate _ ificial, Modified or Chann Yes _ No hin Roadside Ditch _ Yes _ No vert Present _ Yes _ vert Material: in	derate <u>Severe</u> 100 ft) (10 ft/100 ft) Heavy helized
FLOW       Water Present         CHARACTERISTICS       Moderate         Velocity       Fast         Moderate       Slow		tream bed dry I moist vater ter		Mor Riffl Poo Tur		r if water present) %	
INOR		JBSTRATE CO				ANIC SUBSTRATE COM	
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	<u> </u>	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")			-	(FPOM)	
Sand		-2mm (gritty)	33				
Silt		4-0.06 mm	33	Marl		grey, shell fragments	
Clay WATERSHED FEATURES		— Forest	<b></b> Other:	I		b <b>dplain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft

MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

STREAM ID	STREAM ID JD_D_083 STREAM NAME UNT						
CLIENT Don	ninion		PROJECT N	AME CVO	W		
LAT 36.7703		ONG -76.04403			COUNTY Virginia Beach		
INVESTIGAT	DRS JD				DATE 05/19/2021		
		NRPW	FLOW REG	IME Interm	nittent	<u> </u>	
CHANNEL FE	ATURES	Ordinary High Water Mark (Width): <u>1.0</u> ft Ordinary High Water Mark (Height): <u>1.0</u> in Flow Direction: <u>South</u>			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft) (10 ft/100 ft)         Stream ErosionNone ✓ ModerateHeavy         Artificial, Modified or ChannelizedYes ✓ No         Within Roadside DitchYes ✓ No         Culvert PresentYes ✓ No         Culvert Material:         Culvert Size:in		
FLOW       No water, stream bed dry         Stream bed moist         Standing water         Flowing water         Velocity         Fast       Moderate         Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run         Pool       %         Turbidity         < Clear				
INOR		UBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detnus		plant materials (CPOM)	
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	Ы	black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")			<u> </u>	(FPOM)	
Sand	0.06	-2mm (gritty)	33				
Silt	0.00	4-0.06 mm	33	Marl		grey, shell fragments	
Clay	< 0.00	04 mm (slick)	33				
WATERSHED FEATURES		🖌 Forest	<b></b> Other:	I		odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

	STREAM ID JD_D_086 STREAM NAME N/A						
CLIENT Dor			PROJECT N		W		
LAT 36.7607		<b>ONG</b> -76.09331			COUNTY Virginia Bead	ch	
INVESTIGAT					DATE 05/14/2021		
WATER TYPE		-1	FLOW REG		DATE CONTRIECT		
	RPW	NRPW	/ Perennial	Interm	ittent Ephemeral 🗸		
		Estimate Mar			Cinuccity ( Low	Andium Llinh	
		Estimate Mea			Sinuosity <u>√</u> Low N	neaium <u> </u>	
		Top of Bank Width: <u>8.0</u> ft Top of Bank Height:			Gradient ✓ Flat Mor (0.5/100 ft) (2 ft/	derate Severe 100 ft) (10 ft/100 ft)	
			RB <u>2.0</u>	ft	Stream Erosion		
CHANNEL FEATURES		Water Depth:	<u>0.00</u> in		✓ None Moderate	-	
		Water Width:	<u>0.0</u> ft		Artificial, Modified or Chann		
		Ordinary High	Water Mark (Width):	ft	✓ Yes No		
		Ordinary High	Water Mark (Height)	: <u>0.0</u> in	Within Roadside Ditch		
		Flow Direction	South	_	YesNo		
					Culvert Present Yes		
					Culvert Material:		
					Culvert Size:in		
		Water Preser <u>√</u> No water, s			Proportion of Reach Repres		
		Stream bec			Morphology Types         (Only enter if water present)           Riffle         %         Run         %		
FLOW		Standing water Flowing water Velocity			Pool %		
CHARACTER	ISTICS				Turbidity		
					Clear Slightly turbid Turbid		
		Fast Moderate			Other		
		Slow					
INOR		UBSTRATE CO Id add up to 100			ORGANIC SUBSTRATE COM (does not necessarily add up		
Substrate	Dia	meter	% Composition in	Substrat	te Characteristic	% Composition in	
Туре	Dia		Sampling Reach	Туре		Sampling Area	
Bedrock		56 mm (10")		Detritus	sticks, wood, coarse plant materials (CPOM)		
Boulder Cobble		56 mm (10") 5 mm (2.5"-10")			, ,		
Gravel		nm (0.1"-2.5")		Muck-Mu	d black, very fine organic (FPOM)		
Sand		-2mm (gritty)					
Silt		4-0.06 mm	50	Marl	grey, shell fragments		
Clay	< 0.00	04 mm (slick)	50		0,00		
	I	Predominant	Surrounding Landu	ise	Floodplain Width		
		Forest	<u> </u>	l	Wide > 30ft <u>√</u> Modera Narrow <15ft	te 15-30ft	
		Agricultura	ure <u> </u>				
WATERSHED FEATURES	)	ROW	Other:				
		Canopy Cove <u>✓</u> Open	er Partly shade	ed			
		Shaded					

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

No macroinvertebrates observed

Date: \_\_\_\_\_

Feature ID: <u>JD\_D\_086</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments: Upstream



Photograph Number 2 Photograph Direction South

Comments: Downstream

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number \_\_\_\_4

Photograph Direction \_\_\_\_\_

KH\_D\_006

STREAMID KH_D_006			STREAM NAME Unnamed agricultural ditch				
CLIENT Don	ninion		PROJECT N	AME CVO	W Cor	W Commercial	
LAT 36.7040	13 L	ONG -76.16981				COUNTY Chesapeake	
INVESTIGATO	ORS K. Ho	bisington, K. Bur	dick	DATE 04/08/2022			
	RPW	NRPW 🖡	FLOW REG	IME Interm	nittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Top of Bank H LB <u>1.5</u> ft Water Depth: Water Width:_ Ordinary High	Vidth: <u>5.0</u> ft leight: RB <u>1.5</u> f <u>4.00</u> in <u>4.0</u> ft Water Mark (Width): Water Mark (Height):	<u>4.0</u> ft	Gra Stre  Arti  With  Cult	uosity _ Low _ N dient _ Flat _ Mod (0.5/100 ft) (2 ft/ eam Erosion ✓ None _ Moderate _ ficial, Modified or Chann ✓ Yes _ No hin Roadside Ditch _ Yes _ No vert Present _ Yes _ vert Material:in	derate <u>Severe</u> 100 ft) (10 ft/100 ft) Heavy helized
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water ✓ Flowing water Velocity — Fast — Mode		tream bed dry I moist vater ter		Mor Riffl Poo Tur	portion of Reach Repres rphology Types (Only ente e % Run 100 l % bidity Clear Slightly tu Other	r if water present) %	
INOR		JBSTRATE CO d add up to 100				ANIC SUBSTRATE COM	
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder		56 mm (10")		Detritus		plant materials (CPOM)	50
Cobble		mm (2.5"-10")		Muck-Mu	ıd	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm	100	Marl		grey, shell fragments	
Clay WATERSHED FEATURES		— Forest	Other:	I		od <b>plain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

## **Photograph Page**

### Stream ID KH D 006 Date 04/08/2022



Photograph Number 1

Photograph Direction West

Comments: Upstream



Photograph Number 2

Photograph Direction East

Comments: Downstream

Photograph Number 3 Photograph Direction Comments:

Photograph Number \_\_\_\_\_

Photograph Direction \_\_\_\_\_

KH\_D\_007

STREAM ID KH_D_007 STREAM N				ME Unna	med a	agricultural ditch	
CLIENT Don			PROJECT N				
LAT 36.7044		ONG -76.16979				COUNTY Chesapeake	
		bisington, K. Bur		DATE 04/08/2022			
			FLOW REG	IME Interm	nittent		
CHANNEL FEATURES		Top of Bank V Top of Bank H LB <u>2.5</u> ft Water Depth: Water Width: <u>-</u> Ordinary High	Estimate Measurements Fop of Bank Width: <u>3.0</u> ft Fop of Bank Height: .B <u>2.5</u> ft RB <u>2.5</u> ft Nater Depth: <u>4.00</u> in Nater Width: <u>2.0</u> ft Drdinary High Water Mark (Width): <u>2.0</u> ft Drdinary High Water Mark (Height): <u>6.0</u> in		Within Deedeide Ditch		
					Within Roadside Ditch Yes   ✓_No Culvert PresentYes  ✓_No Culvert Material: Culvert Size: in		
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water ✓ Flowing water ✓ Velocity — Fast — Mode		tream bed dry I moist vater ter		Mor Riffl Poc Tur	portion of Reach Repres rphology Types (Only ente le % Run 100 ol % bidity Clear Slightly tu Other	r if water present) %	
INOR		JBSTRATE CO				SANIC SUBSTRATE COM	
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock Boulder	> 2!	56 mm (10")		Detritus		sticks, wood, coarse plant materials (CPOM)	20
Cobble Gravel		mm (2.5"-10") nm (0.1"-2.5")		Muck-Mu	ıd	black, very fine organic (FPOM)	
Sand	0.06	-2mm (gritty)					
Silt	0.00	4-0.06 mm	100	Marl		grey, shell fragments	
Clay	< 0.00	)4 mm (slick)					
WATERSHED FEATURES		— Forest	<b></b> Other:	I		odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

## **Photograph Page**

### Stream ID KH\_D\_007 Date 04/08/2022



Photograph Number 1

Photograph Direction West

Comments: Upstream



Photograph Number 2 Photograph Direction East

Comments: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	

Photograph Direction

KH\_D\_008

STREAM ID					amed agricultural ditch		
CLIENT Don	ninion		PROJECT N	AME CVO	W Cor	nmercial	
LAT 36.7048 <sup>-</sup>	72 L(	ONG -76.16978				COUNTY Chesapeake	
INVESTIGATO	ORS K. Ho	oisington, K. Burd	dick			DATE 04/08/2022	
	RPW	NRPW 🗸	FLOW REG		nittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Top of Bank H LB <u>2.0</u> ft Water Depth: _ Water Width:_ Ordinary High	Vidth: <u>4.0</u> ft leight: <u>RB 2.0</u> f <u>4.00</u> in <u>3.0</u> ft Water Mark (Width): Water Mark (Height):	<u>3.0</u> ft	Grad Stre 	uosity _✓ Low Moderate Flat Mod (0.5/100 ft) (2 ft/ eam Erosion Moderate ficial, Modified or Chann Yes No hin Roadside Ditch Yes _✓ No vert Present Yes _✓ /ert Material:in	derate <u>Severe</u> 100 ft) (10 ft/100 ft) Heavy helized
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water ✓ Flowing water Velocity — Fast — Mode ✓ Slow		tream bed dry moist ater ter		Mor Riffle Poo Turl ✓		r if water present) %	
INOR		JBSTRATE COM d add up to 100				ANIC SUBSTRATE COM s not necessarily add up	
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder		56 mm (10")		Doniuo		plant materials (CPOM)	40
Cobble		6 mm (2.5"-10")		Muck-Mu	ıd	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)	400	Maril		analy also il far any and	
Silt Clay		4-0.06 mm )4 mm (slick)	100	Marl		grey, shell fragments	
WATERSHED		Predominant Forest	Other:	I	\	od <b>plain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Frogs, rooted plants in bed

### **Photograph Page**

### Stream ID KH\_D\_008 Date 04/08/2022



Photograph Number 1

Photograph Direction West

Comments: Upstream



Photograph Number 2 Photograph Direction East

Comments:

Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	4
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Photograph Direction

KH\_D\_009

STREAM ID KH_D_009 STREAM NAME				ME Unna	med ag	gricultural ditch	
CLIENT Don					W Commercial		
LAT 36.7053		ONG -76.16969				COUNTY Chesapeake	
INVESTIGAT		bisington, K. Bur		DATE 04/08/2022			
WATER TYPE	RPW _	NRPW	FLOW REG		nittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Estimate Measurements Top of Bank Width: <u>2.5</u> ft Top of Bank Height: LB <u>3.0</u> ft RB <u>3.0</u> ft Water Depth: <u>2.00</u> in Water Width: <u>1.0</u> ft Ordinary High Water Mark (Width): <u>1.0</u> ft Ordinary High Water Mark (Height): <u>6.0</u> in Flow Direction: <u>Northeast</u>		Within Roadside Ditch        Yes       ✓ No         Culvert Present       Yes       ✓ No         Culvert Material:          Culvert Size:      in			
FLOW       ✓       No water, stream bed dry         CHARACTERISTICS       ✓       Stream bed moist         ✓       Flowing water         ✓       Store         ✓       Store		tream bed dry I moist vater ter		Mor Riffle Pool Turt	portion of Reach Represe phology Types (Only enter e % Run 100 I % bidity Clear Slightly tu Other	if water present) %	
INOR		JBSTRATE CO d add up to 100				ANIC SUBSTRATE COM s not necessarily add up	
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder		56 mm (10")		Dealities		plant materials (CPOM)	60
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm	100	Marl		grey, shell fragments	
Clay WATERSHED FEATURES		Forest	<b>—</b> Other:	I	\	d <b>plain Width</b> Wide > 30ft Moderat Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Frogs, crayfish burrows, rooted plants in bed

### **Photograph Page**

#### Stream ID KH\_D\_009 Date 04/08/2022



Photograph Number 1

Photograph Direction West\_

Comments: Upstream



Photograph Number 2

Photograph Direction East

Comments: Downstream

Photograph Number 3 Photograph Direction \_\_\_\_\_ Comments: Comments:

Photograph Number 4

Photograph Direction \_\_\_\_\_

KH\_D\_010

STREAM ID KH_D_010 STREAM NAME				ME Unna	Jnnamed agricultural ditch		
CLIENT Don			PROJECT N				
		<b>DNG</b> -76.17020				COUNTY Chesapeake	
		bisington, K. Bur			DATE 04/08/2022		
		NRPW 🗸	FLOW REG		nittent	Ephemeral 🗸	
Estimate Measurements         Top of Bank Width:		Within Deedeide Ditch					
FLOW       Stream bed moist         CHARACTERISTICS       ✓ Flowing water         Velocity       Fast       Moderate         ✓ Slow       Stow       Moderate		tream bed dry I moist vater ter		Mor Riffl Poo Tur	r <b>phology Types</b> (On <b>l</b> y ente e           %     Run  100	r if water present) %	
INOR		JBSTRATE COI d add up to 100				ANIC SUBSTRATE COM	
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock				Detritus	T	sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Donius		plant materials (CPOM)	60
Cobble		mm (2.5"-10")		Muck-Mu	ıd	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm	100	Marl		grey, shell fragments	
Clay WATERSHED FEATURES		— Forest	Other:	I		od <b>plain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft

### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Frogs, crayfish burrows, rooted plants in bed. Path of ditch has been altered by overgrowth of trees and shrubs on north bank

### **Photograph Page**

### Stream ID KH\_D\_010 Date 04/08/2022



Photograph Number 1

Photograph Direction East

Comments: Dow

Downstream



Photograph Number <u>2</u> Photograph Direction <u>West</u>

Comments: Upstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number	4
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Photograph Direction

KH\_D\_011

STREAM ID KH D 011 STREAM NAME Unnamed agricultural ditch									
CLIENT Don			PROJECT NAME CVOW Commercial						
LAT 36.705687 LONG -76.170202				STATE Virginia		COUNTY Chesapeake			
						DATE 04/08/2022			
INVESTIGATORS K. Hoisington, K. Burdick     DATE     04/08/2022       WATER TYPE TNW     RPW     NRPW     FLOW REGIME Perennial     Intermittent     Ephemeral									
		Estimate Measurements Top of Bank Width: <u>7.0</u> ft			Sinuosity 🖌 Low Medium High				
		Top of Bank Height:			Gradient ✓ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)				
		LB <u>3.0</u> ft RB <u>3.0</u> ft			Stream Erosion				
		Water Depth: <u>2.00</u> in			🖌 None 🔄 Moderate 🔄 Heavy				
		Water Width: 2.0 ft			Artificial, Modified or Channelized				
CHANNEL FEATURE		Ordinary High Water Mark (Width): <u>2.5</u> ft			<u>√</u> YesNo				
		Ordinary High Water Mark (Height): <u>4.0</u> in			Within Roadside Ditch				
		Flow Direction: Northeast			Yes _ <b>√</b> No				
					Culvert Present Yes 🗹 No				
					Culvert Material:				
					Culvert Size:in				
		Water Present			Proportion of Reach Represented by Stream				
		No water, stream bed dry			Morphology Types (Only enter if water present) Riffle % Run 100 %				
		Stream bed moist			Pool % Turbidity Slightly turbid Turbid				
FLOW CHARACTER		✓ Flowing water							
CHARACTER									
		Velocity ✓ Fast Moderate Slow			Other				
								INOR	MPONENTS
(should add up to 100%					(does not necessarily add up to 100%)				
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area		
Bedrock				1,100		sticks, wood, coarse	Camping / roa		
Boulder	> 2	56 mm (10")		Detritus		plant materials (CPOM)	5		
Cobble		6 mm (2.5"-10")				black, very fine organic	-		
Gravel	2 <b>-</b> 64 ı	mm (0.1"-2.5")	10	Muck-Mu	ıd	(FPOM)			
Sand	0.06	-2mm (gritty)	30						
Silt	0.00	)4-0.06 mm		Marl		grey, shell fragments			
Clay	< 0.00	04 mm (s <b>l</b> ick)							
			Surrounding Landu			odplain Width	to 15 20#		
		Forest Commercial Wide > 30ft Moderate 15-30ft ✓ Field/Pasture Industrial Narrow <15ft							
		Agricultural Residential							
WATERSHED FEATURES		ROW Other:							
		0							
		Canopy Cover ✓ Open Partly shaded							
		Shaded							

### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Concrete channel running along tree line. Some sediment and gravel accumulated in channel bed. Small fish present.

### Photograph Page

### Stream ID KH\_D\_011 Date 04/08/2022



Photograph Number 1

Photograph Direction West

Comments:

Upstream



Photograph Number <u>2</u> Photograph Direction <u>East</u>

Comments: Downstree

ments: Downstream

2 0 11100 0 0011

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	
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Photograph Direction

STREAM ID	KH D 0	STREAM NA	STREAM NAME Unnamed agricultural ditch				
CLIENT Don			PROJECT N				
		<b>DNG</b> -76.16908				COUNTY Chesapeake	
		bisington, K. Bur				DATE 04/08/2022	
		FLOW REG	ME Interm	nittent	Ephemeral 🗸		
Estimate Measurements         Top of Bank Width:       6.0       ft         Top of Bank Height:       LB       2.0       ft         LB       2.0       ft       RB       2.0       ft         Water Depth:       4.00       in       Water Width:       2.0       ft         Ordinary High Water Mark (Width):       4.0       ft       Ordinary High Water Mark (Height):       6.0       in         Flow Direction:       Northeast       Northeast       Northeast       Northeast			n Within Roadside Ditch Yes  _✓_No Culvert PresentYes  ✓_No Culvert Material: Culvert Size:in				
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water ✓ Flowing water Velocity — Fast — Moder ✓ Slow		tream bed dry I moist vater ter		Mor Riff Poc Tur	portion of Reach Repres rphology Types (Only enter le % Run 100 ol % bidity Clear Slightly tu Other	r if water present) %	
INOR		JBSTRATE CO d add up to 100				SANIC SUBSTRATE COM	
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)	60
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel		nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm	100	Marl		grey, shell fragments	
🖌 Field/Pasture 🛄 Iı			ure <u>Industrial</u>			odplain Width Wide > 30ft Moderai Narrow <15ft	te 15-30ft
WATERSHED FEATURES		Agricultura	<b>—</b> Other:	ed			

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Frogs, crayfish burrows, rooted plants in bed.

### Stream ID KH\_D\_012 Date 04/08/2022



Photograph Number 1

Photograph Direction West

Comments: Upstream



Photograph Number 2 Photograph Direction East

Comments:

Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph I	Number	4
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Photograph Direction

STREAM ID KH_D_013 STREAM				TREAM NAME Unnamed agricultural ditch			
CLIENT Don			PROJECT N	AME CVO	W Cor	mmercial	
LAT 36.7089	57 L	<b>ONG</b> -76.16915				COUNTY Chesapeake	
INVESTIGATORS K. Hoisington, K. Burdick			dick			DATE 04/08/2022	
	RPW	NRPW 🖡	FLOW REG	IME Interm	nittent	Ephemeral 🗸	
Estimate Measurements         Top of Bank Width:			<u>1.0</u> ft	Gra Stre  Arti  Wittl  Cult	uosity _ Low _ N dient _ Flat _ Moderate (0.5/100 ft) (2 ft/ eam Erosion ✓ None _ Moderate ificial, Modified or Chann ✓ Yes _ No hin Roadside Ditch _ Yes ✓ No vert Present _ Yes ✓ vert Material: in	derate <u>Severe</u> 100 ft) (10 ft/100 ft) Heavy helized	
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water ✓ Flowing water Velocity — Fast — Mode		tream bed dry I moist vater ter		Mor Riffle Poo Turl	portion of Reach Repres rphology Types (Only ente e % Run 75 ol 25 % bidity Clear Slightly tu Other	r if water present) %	
INOR		JBSTRATE CO d add up to 100				ANIC SUBSTRATE COM	
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder		56 mm (10")				plant materials (CPOM)	20
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic (FPOM)	
Gravel		nm (0.1"-2.5")					
Sand Silt		-2mm (gritty) 4-0.06 mm	100	Mor		arov shall from monto	
Clay		14-0.06 mm 04 mm (slick)	100	Marl		grey, shell fragments	
Predominant Surro Forest Field/Pasture Agricultural			al <u> </u>	I	'	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Frogs, crayfish burrows, rooted plants in bed.

### Stream ID KH\_D\_013 Date 04/08/2022



Photograph Number 1

Photograph Direction West

Comments: Upstream



Photograph Number 2 Photograph Direction East

Comments: Downstream

Photograph Number 3 Photograph Number \_\_\_\_\_ Photograph Direction Photograph Direction Comments: Comments:

STREAM ID KH_D_014 STREAM NAME Unnamed agricultural ditch							
CLIENT Don	ninion		PROJECT N	AME CVO	W Commercial		
						COUNTY Chesapeake	
INVESTIGATORS K. Hoisington, K. Burdick			dick			DATE 04/08/2022	
WATER TYPE     FLOW REGIME       TNW     RPW     NRPW					nittent	Ephemeral 🗸	
CHANNEL FE	ATURES	Estimate Measurements         Top of Bank Width:			Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         ✓ YesNo         Within Roadside DitchYes _✓_ No         Culvert PresentYes _✓_ No         Culvert Size:in         Proportion of Reach Represented by Stream		
FLOW       Water Present        No water, stream bed dry        Stream bed moist        Standing water         ✓         Velocity        Fast      Moderate         ✓       Slow		tream bed dry I moist vater ter		Mor Riffle Poo Tur	phology Types (Only ente	r if water present) %	
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 25	56 mm (10")		Detilitus		plant materials (CPOM)	20
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")				(FPOM)	
Sand		-2mm (gritty)					
Silt		4-0.06 mm	100	Marl		grey, shell fragments	
Clay       < 0.004 mm (slick)         Predominant Surrounding Landuse         Forest       Commercial         ✓ Field/Pasture       Industrial         Agricultural       Residential         ROW       Other:         Canopy Cover       ✓ Open       Partly shaded         Shaded			'	d <b>plain Width</b> Wide > 30ft Modera Narrow <15ft	te 15-30ft		

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Frogs, tadpoles, algae, rooted plants in bed.

### Stream ID KH\_D\_014 Date 04/08/2022



Photograph Number 1

Photograph Direction West

Comments: Upstream



Photograph Number 2 Photograph Direction East

Comments: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	4
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Photograph Direction \_\_\_\_\_

STREAM ID KH_D_015 STREAM NAME Unnamed					med agricultural ditch		
CLIENT Don				PROJECT NAME CVOW Commercial			
LAT 36.7079		ONG -76.16930			COUNTY Chesapeake		
INVESTIGATO		pisington, K. Bur			DATE 04/08/2022		
	WATER TYPE TNW RPW NRPW ✓			IME Interm	nittent Ephemeral 🗸		
		Estimate Measurements Top of Bank Width: <u>4.0</u> ft Top of Bank Height:			Sinuosity         ✓         Low         Medium         High           Gradient         ✓         Flat         Moderate         Severe           (0.5/100 ft)         (2 ft/100 ft)         (10 ft/100 ft)		
		UB <u>2.0</u> ft Water Depth:	t RB <u>2.0</u> 1 <u>3.00</u> in	tt	Stream Erosion		
		Water Width:			Artificial, Modified or Channelized		
CHANNEL FE	ATURES	-	Water Mark (Width):	3.0 ft	✓ Yes No		
			Water Mark (Height)		Within Roadside Ditch		
		Flow Direction		. <u> </u>	Yes _ <u>√</u> No		
				-	Culvert Present Yes ⊥∕_ No		
					Culvert Material:		
					Culvert Size:in		
Water Present         No water, str         Stream bed r         Standing water         CHARACTERISTICS		stream bed dry 1 moist vater		Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run       50 %         Pool       50 %			
		Velocity Fast _√_ Slow	. Moderate		Turbidity Clear Slightly turbid Turbid Other		
INOR		UBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS		
Substrate	(snou	Id add up to 100	% Composition in	Substra	(does not necessarily add up to 100%) ate % Composition in		
Type	Dia	meter	Sampling Reach	Type			
Bedrock				<b>D</b> ( )	sticks, wood, coarse		
Boulder	> 2!	56 mm (10")		Detritus	plant materials (CPOM) 40		
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	black, very fine organic		
Gravel	2 <b>-</b> 64 r	mm (0.1" <b>-</b> 2.5")		WILCK-IVIU	(FPOM)		
Sand	0.06	-2mm (gritty)					
Silt	0.00	04-0.06 mm	100	Marl	grey, shell fragments		
Clay	< 0.00	04 mm (slick)					
WATERSHED FEATURES		— Forest	<b></b> Other:	I	Floodplain Width Wide > 30ft Moderate 15-30ft ✓ Narrow <15ft		

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Frogs, rooted plants in bed. H2S sheen present throughout with faint odor in places of standing water.

### Stream ID KH\_D\_015 Date 04/08/2022



Photograph Number 1

Photograph Direction West

Comments: Upstream



Photograph Number 2 Photograph Direction East

Comments: Downstream



Photograph Number 3

Photograph Direction

Comments:

Photograph Number 4

Photograph Direction

STREAM ID KH D 016 STREAM NAME Unn					med agricultural ditch			
CLIENT Don	ninion		PROJECT N	AME CVO	W Coi	mmercial		
LAT 36.707486 LONG -76.169373 STATE Virgir					COUNTY Chesapeake			
INVESTIGATO	DRS K. Ho	oisington, K. Bur	dick			DATE 04/08/2022		
WATE <u>R T</u> YPE FLOW REGIME				ME Interm	nittent	Ephemeral 🗸		
CHANNEL FE	ATURES	Ordinary High Water Mark (Width): <u>1.0</u> ft Ordinary High Water Mark (Height): <u>6.0</u> in Flow Direction: <u>Northeast</u>			Sinuosity ✓ Low Medium High Gradient ✓ Flat Moderate Severe (0.5/100 ft) (2 ft/100 ft) (10 ft/100 ft) Stream Erosion ✓ None Moderate Heavy Artificial, Modified or Channelized ✓ Yes No Within Roadside Ditch Yes No Culvert Present Yes ✓ No Culvert Material: Culvert Size: in			
FLOW       ✓       No water, stream bed dry         CHARACTERISTICS       ✓       Stream bed moist         ✓       Flowing water         ✓       Slow		tream bed dry I moist vater ter		Mor Riff Poo Tur	portion of Reach Repres rphology Types (Only enter e % Run 100 bl 0 % bidity Clear <u>√</u> Slightly tu Other	r if water present) %		
INOR		JBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock				Detritus		sticks, wood, coarse		
Boulder	> 25	56 mm (10")		Detilitus		plant materials (CPOM)	20	
Cobble		mm (2.5"-10")		Muck-Mu	d	black, very fine organic		
Gravel	2 <b>-</b> 64 r	nm (0.1"–2.5")				(FPOM)		
Sand		-2mm (gritty)						
Silt		4-0.06 mm	100	Marl		grey, shell fragments		
Clay       < 0.004 mm (slick)			I		odplain Width Wide > 30ft Moderai Narrow <15ft	te 15-30ft		

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Infested with invasive bladder snails, tadpoles and algae present

### Stream ID KH\_D\_016 Date 04/08/2022



Photograph Number 1

Photograph Direction West

Comments: Upstream



Photograph Number 2 Photograph Direction East

Comments: Downstream

Photograph Number 3 Photograph Direction Comments: Comments:

Photograph Number \_\_\_\_\_

Photograph Direction

STREAMID	KH_D_0	STREAM NA	STREAM NAME Unnamed agricultural ditch				
CLIENT Don	ninion		PROJECT N				
LAT 36.7070	09 LO	ONG -76.16945				COUNTY Chesapeake	
INVESTIGATO	DRS K. Ho	bisington, K. Bur	dick			DATE 04/08/2022	
WATER TYPE TNW RPW NRPW			FLOW REG	ME Interm	nittent	Ephemeral 🗸	
CHANNEL FE	Ordinary High Water Mark (Width): <u>1.0</u> ft Ordinary High Water Mark (Height): <u>6.0</u> in Flow Direction: <u>Northeast</u>			Sinuosity ✓ LowMedium High         Gradient ✓ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft)         Stream Erosion Moderate Heavy         ✓ None Moderate Heavy         Artificial, Modified or Channelized Yes No         Within Roadside Ditch Yes No         Culvert Present Yes No         Culvert Material: culvert Size: in			
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water ✓ Flowing water Velocity — Fast — Modera		tream bed dry I moist vater ter		Mo Riff Poc Tur	portion of Reach Repres rphology Types (Only ente le % Run 100 ol 0 % rbidity Clear Slightly tu Other	r if water present) %	
INOR		JBSTRATE CO				SANIC SUBSTRATE COM	
Substrate Type	•	meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock		C		Detritus		sticks, wood, coarse plant materials (CPOM)	20
Boulder Cobble		56 mm (10") 5 mm (2.5"-10")					20
Gravel		nm (0.1"-2.5")		Muck-Mu	ıd 🛛	black, very fine organic (FPOM)	
Sand		-2mm (gritty)				(····)	
Silt		4-0.06 mm	100	Marl		grey, shell fragments	
Clay		)4 mm (slick)	100	Wall		grey, onen nagmento	
WATERSHED FEATURES		Predominant	<b></b> Other:	I		odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Faint H2S odor. Tadpoles and crayfish present. Rooted plants in streambed.

#### Stream ID \_KH\_D\_017 Date 04/08/2022



Photograph Number 1

Photograph Direction West

Comments: Upstream



Photograph Number 2 Photograph Direction East

Comments: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	4
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Photograph Direction

STREAM ID KH_D_018 STREAM NAME Unr				ME Unna	amed agricultural ditch		
CLIENT Dom	inion		PROJECT N	PROJECT NAME CVOW Commercial			
LAT 36.70651	17 L(	<b>ONG</b> -76.16951				COUNTY Chesapeake	
INVESTIGATO	RS K. Ho	bisington, K. Bur	dick			DATE 04/08/2022	
WATE <u>R T</u> YPE FLOW R <u>EGI</u> ME				IME Interm	nittent	Ephemeral 🗸	
		Top of Bank ⊦	Vidth: <u>4.0</u> ft	ft	Sinuosity ✓ Low Medium High Gradient ✓ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft) (10 ft/100 ft) Stream Erosion		
CHANNEL FE	ATURES	Water Depth: Water Width:	<u>3.0</u> ft	20 <del>4</del>	Art	NoneModerate . ificial, Modified or Chann ∕_ YesNo	-
			Water Mark (Width): Water Mark (Height) <sub>n:</sub> <u>Northeast</u>		Wit		_ No
					Cul	lvert Material:in	
FLOW CHARACTERISTICS FLOW CHARACTERISTICS FLOW CHARACTERISTICS Flowing water ✓ Flowing water Velocity		tream bed dry I moist vater ter		Mo Riff Poc Tur		r if water present) %	
		Fast _✓ Slow	Moderate				
INOR		JBSTRATE CO		ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)			
Substrate Type	Dia	meter	% Composition in Sampling Reach	Substra Type		Characteristic	% Composition in Sampling Area
Bedrock Boulder	> 25	56 mm (10'')		Detritus		sticks, wood, coarse plant materials (CPOM)	40
Cobble		mm (2.5"-10")		Muck-Mu	ıd	black, very fine organic (FPOM)	
Gravel		nm (0.1"-2.5") -2mm (gritty)			-+		
Sand Silt		-2mm (gritty) 4-0.06 mm	100	Marl		grey, shell fragments	
Clay		)4 mm (slick)	100	Mari		grey, shen nagments	
WATERSHED FEATURES		Predominant	<b></b> Other:	I		odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Iron oxidizing bacteria Rooted plants and algae in streambed.

### Stream ID KH\_D\_018 Date 04/08/2022



Photograph Number 1

Photograph Direction West

Comments: Upstream



Photograph Number 2 Photograph Direction East

Comments: Downstream

Photograph Number 3 Photograph Number \_\_\_\_\_ Photograph Direction Photograph Direction \_\_\_\_\_ Comments: Comments:

RD\_D\_002

STREAM ID RD_D_002 STREAM NAME UNT							
CLIENT Don	ninion		PROJECT N		W		
LAT 36.772771 LONG -76.034824 STATE Virginia						COUNTY Virginia Bead	ch
	INVESTIGATORS RD				DATE 05/17/2021		
WATE <u>R T</u> YPE FLOW REGIME					nittent		
Estimate Measurements         Top of Bank Width:ft         Top of Bank Height:         LBft         RBft         Water Depth:in         Water Width:ft         Ordinary High Water Mark (Width):ft         Ordinary High Water Mark (Height):in         Flow Direction: South				Within Deceletele Ditch			
FLOW       ✓       No water, stream bed dry			Mor Riffle Poo Turl	phology Types (Only ente e % Run 100	r if water present) D %		
INOR		UBSTRATE CO			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area
Bedrock				Detritus		sticks, wood, coarse	
Boulder	> 2	56 mm (10")		Detritus		plant materials (CPOM)	
Cobble		6 mm (2.5"-10")		Muck-Mu	Ы	black, very fine organic	
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")			~	(FPOM)	
Sand	0.06	-2mm (gritty)	33				
Silt	0.00	4-0.06 mm	33	Marl		grey, shell fragments	
Clay	< 0.00	04 mm (slick)	33				
WATERSHED       Predominant Surrounding Landuse         ✓       Forest       Commercial         —       Field/Pasture       Industrial         —       Agricultural       Residential         —       ROW       Other:         Canopy Cover       Open       Partly shaded         ✓       Shaded			\	odplain Width Wide > 30ft Modera Narrow <15ft	te 15-30ft		

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed

### Photograph Log

Date: 5/17/21

Feature ID: <u>RD\_D\_002</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments: Upstream



Photograph Number 2 Photograph Direction South

Comments: Downstream



Photograph Number 3

Photograph Direction

Comments:

Photograph Number 4

Photograph Direction \_\_\_\_\_

RD\_D\_004

STREAM ID RD_D_004 STREAM NAME UNT									
CLIENT Don				PROJECT NAME CVOW					
LAT 36.7703		ONG -76.06330				COUNTY Virginia Beach			
				DATE 05/19/2021					
WATER TYPE			FLOW REG	ME		DATE CONTONEDET			
				Interm	ittent	Ephemeral 🗸			
		Estimate Measurements Top of Bank Width: <u>8.0</u> ft Top of Bank Height: LB <u>3.0</u> ft RB <u>3.0</u> ft Water Depth: <u>6.00</u> in				Sinuosity ✓ Low Medium High         Gradient ✓ Flat Moderate Severe (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream Erosion None _✓ Moderate Heavy			
Ordinal Ordinal			Water Width: <u>4.0</u> ft Ordinary High Water Mark (Width): <u>4.5</u> ft Ordinary High Water Mark (Height): <u>8.0</u> in Flow Direction: <u>South</u>			Within Deedeide Ditch			
FLOW CHARACTER	ISTICS	Water Present         No water, stream bed dry         Stream bed moist         Standing water         ✓ Flowing water         Velocity         Fast       Moderate         ✓ Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run       100 %         Pool       %         Turbidity       Clear       ✓ Slightly turbid       Turbid         Other				
INOR		JBSTRATE CO				ANIC SUBSTRATE COM s not necessarily add up			
Substrate Type	-	meter	% Composition in Sampling Reach	Substra Type	te	Characteristic	% Composition in Sampling Area		
Bedrock Boulder	> 2!	56 mm (10")		Detritus		sticks, wood, coarse plant materials (CPOM)	20		
Cobble		mm (2.5"-10")			.	black, very fine organic			
Gravel	2 <b>-</b> 64 r	nm (0.1"-2.5")		Muck-Mu	α	(FPOM)			
Sand	0.06	-2mm (gritty)	33						
Silt	0.00	4-0.06 mm	33	Marl		grey, shell fragments			
Clay	< 0.00	)4 mm (slick)	33						
WATERSHED FEATURES		— Forest	<b></b> Other:	I	\	odplain Width Wide > 30ft Moderai Narrow <15ft	te 15-30ft		

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

None observed

## Photograph Log

Date: <u>5/19/21</u>

Feature ID: <u>RD\_D\_004</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments: Upstream



Photograph Number 2 Photograph Direction South

Comments: Downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph Number \_\_\_\_4

Photograph Direction

TC\_D\_002

STREAM ID	002	STREAM NA	ME						
CLIENT Don	ninion		PROJECT N	PROJECT NAME CVOW					
LAT 36.7691	06 L(	ONG -76.07363	88 STATE Virgi	STATE Virginia COUNTY Virginia					
INVESTIGAT	ORS T. Co	nard, E. Foster				DATE 05/31/2022			
WATER TYPE	NRPW .	FLOW REG		nittent	Ephemeral 🗸				
Estimate Measurements         Top of Bank Width: <u>5.0</u> ft         Top of Bank Height:         LB <u>2.0</u> ft       RB <u>2.0</u> ft         Water Depth: <u>0.50</u> in         Water Width: <u>1.0</u> ft         Ordinary High Water Mark (Width): <u>3.0</u> Ordinary High Water Mark (Height): <u>2.0</u> Flow Direction: Northwest			<u>3.0</u> ft	✓ None Moderate Heavy         Artificial, Modified or Channelized          ✓ Yes No         Within Roadside Ditch          ✓ Yes No         Culvert Present ✓ Yes No         Culvert Material: metal         Culvert Size: _24 in					
FLOW CHARACTER	ISTICS	Water Present         No water, stream bed dry         Stream bed moist         ✓ Standing water         Flowing water         Velocity         Fast       Moderate         Slow				Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       % Run       5 ▼ %         Pool       95 ▼ %         Turbidity       Clear       ✓ Slightly turbid       Turbid         Other			
INOR		JBSTRATE CO				ANIC SUBSTRATE COM s not necessarily add up			
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area		
Bedrock				Detritus		sticks, wood, coarse			
Boulder		56 mm (10")		Demus		plant materials (CPOM)			
Cobble		mm (2.5"-10")		Muck-Mu	ıd	black, very fine organic			
Gravel		nm (0.1"-2.5")			_	(FPOM)			
Sand		-2mm (gritty)		N4- 1		and the life of the			
Silt		4-0.06 mm	35 <b>•</b> 30 <b>•</b>	Marl		grey, shell fragments			
🖌 Fores			Surrounding Landu Commercia ure Industrial Al X Residential Other:	al I	\	<b>dplain Width</b> Mide > 30ft <u>√</u> Modera Narrow <15ft	te 15-30ft		

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

Small ephemeral ditch, some areas have ponded water, most of the ditch is completely dry. To east becomes completely dry, to west contains some ponded water near junction with TC\_D\_001.

### Stream ID <u>TC\_D\_002</u> Date <u>05/31/202</u>2



Photograph Number 1

Photograph Direction NW

Comments: Facing upstream

Photograph Number 2

Photograph Direction SE

Comments: Facing downstream

Photograph Number 3

Photograph Direction

Comments:

Photograph	Number	4
0 1		

Photograph Direction

STREAM ID TC_D_005			STREAM NA	STREAM NAME un-named Trib				
CLIENT Don	ninion		PROJECT N	PROJECT NAME CVOW				
LAT 36.7605	38, <b>L</b>	ONG -76.10178				COUNTY Virginia Beac	ch i	
INVESTIGATO	ORS T. Co	onard, E. Deck		DATE 06/02/2022				
	RPW	FLOW REG	ME Interm	nittent	Ephemeral 🗸			
CHANNEL FEATURES			Vidth: <u>12.0</u> ft leight: : RB <u>3.5</u> f <u>0.00</u> in <u>0.0</u> ft Water Mark (Width): Water Mark (Height):	<u>0.0</u> ft	Sinuosity ✓ LowMediumHigh         Gradient ✓ FlatModerateSevere (0.5/100 ft)(2 ft/100 ft)(10 ft/100 ft)         Stream ErosionModerateHeavy         Artificial, Modified or ChannelizedNo         YesNo         Within Roadside DitchYesNo         Culvert Present ✓ YesNo         Culvert Material: Concrete         Culvert Size:in			
د – FLOW CHARACTERISTICS		Water Present ✓ No water, stream bed dry _ Stream bed moist _ Standing water _ Flowing water Velocity _ Fast Moderate Slow			Proportion of Reach Represented by Stream         Morphology Types (Only enter if water present)         Riffle       %         Run       %         Pool       %         Turbidity          Clear          Other			
INOR		JBSTRATE CO				ANIC SUBSTRATE COM		
Substrate Type		meter	% Composition in Sampling Reach	Substra Type	ite	Characteristic	% Composition in Sampling Area	
Bedrock				Detritue		sticks, wood, coarse	-	
Boulder	> 25	56 mm (10")		Detritus		plant materials (CPOM)		
Cobble	64-256	6 mm (2.5"-10")		Muck-Mu	ьΤ	black, very fine organic		
Gravel		nm (0.1"-2.5")			-	(FPOM)		
Sand		-2mm (gritty)						
Silt		4-0.06 mm		Marl		grey, shell fragments		
Forest     ✓ Field/Pasture     Agricultural			al <u> </u>	I		odplain Width Wide > 30ft ⊻ Modera Narrow <15ft	te 15-30ft	

#### MACROINVERTEBRATES/OTHER WILDLIFE OBSERVED OR OTHER NOTES AND OBSERVATIONS

No water present. Vegetation growing on side slopes and bottom of feature.

### Photograph Log

Date: \_\_\_\_\_

Feature ID: TC\_D\_005



Photograph Number \_\_\_\_1

Photograph Direction  $\underline{NE}$ 

Comments: Upstream



Photograph Number 2 Photograph Direction SW

Comments: Downstream

Photograph Number 3 Photograph Direction \_\_\_\_\_ Comments:

Photograph Number \_\_\_\_4

Photograph Direction

**APPENDIX D-2: WETLAND DATASHEETS AND PHOTOLOG** 



U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf See ERDC/EL TR-07-24; the proponent agency is CE	- (////////////////////////////////////
Project/Site: CVOW City/County	y: <u>City of Chesapeake</u> Sampling Date: <u>4/11/2022</u>
Applicant/Owner: Dominion Energy	
Investigator(s): Justin Ahn Section, Townsh	hip, Range: N/A
Landform (hillside, terrace, etc.): Depression Local relief (concar	
Subregion (LRR or MLRA): LRR T, MLRA 153B Lat: 36.6866792361667	
Soil Map Unit Name: Acredale silt loam, 0-1% slopes	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are	
	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po         Hydrophytic Vegetation Present?       Yes       X       No       Is the Sampling po         Hydric Soil Present?       Yes       X       No       within a We         Wetland Hydrology Present?       Yes       X       No       within a We	pled Area
Remarks: Area located within an open depressional area within a powerline right-of-way. Standin identified as a PEM wetland	ng water was observed within the mapped wetland. Area
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)
X Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)

	Aqualic Faulia (B13)	Sparsely vegetated Concave Sunace (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)	X Oxidized Rhizospheres on Living Ro	ots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils	(C6) Saturation Visible on Aerial Imagery (C9)
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 (B	7)	X FAC-Neutral Test (D5)
Water-Stained Leaves (B9)		Sphagnum Moss (D8) (LRR T,U)
Field Observations:		
Surface Water Present? Yes X	No Depth (inches): 4	
Water Table Present? Yes	No X Depth (inches):	
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present? Yes X No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, mo	۔ onitoring well, aerial photos, previous inspe	ections), if available:
Remarks:		

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

Sampling Point: <u>ED\_W\_0</u>01-001B

3.       Total Number of Dominant       4.       Species Across All Strata:     2	A) B) A/B)
2.	В)
2.	В)
4.           Total Number of Dominant           5.          Species Across All Strata:         2	
4 Species Across All Strata: (	
	A/B)
	<del>д</del> ар)
=Total Cover Prevalence Index worksheet:	
50% of total cover: 20% of total cover: Total % Cover of: Multiply by:	-
Sapling Stratum         (Plot size:)         OBL species x 1 =	-
1.	_
2 FAC species x 3 =	_
3 FACU species x 4 =	_
4 UPL species x 5 =	_
5 Column Totals: (A)	(B)
6. Prevalence Index = B/A =	-
=Total Cover Hydrophytic Vegetation Indicators:	
50% of total cover: 20% of total cover: 1 - Rapid Test for Hydrophytic Vegetation	
Shrub Stratum (Plot size:)     X 2 - Dominance Test is >50%	
1 3 - Prevalence Index is ≤3.0 <sup>1</sup>	、
2 Problematic Hydrophytic Vegetation <sup>1</sup> (Explain	)
3	
4	
<sup>5.</sup> <sup>1</sup> Indicators of hydric soil and wetland hydrology m	ust be
6 present, unless disturbed or problematic.	
=Total Cover Definitions of Five Vegetation Strata:	
50% of total cover: 20% of total cover: Tree – Woody plants, excluding woody vines,	
Herb Stratum (Plot size: 5' radius ) approximately 20 ft (6 m) or more in height and 3	
1. Juncus effusus 50 Yes OBL (7.6 cm) or larger in diameter at breast height (DB	H).
2.       Phalaris arundinacea       25       Yes       OBL       Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or more in height approximately 20 ft (6 m) or mor	ss
then 2 in (7.6 cm) DBH	
4. Alternantinera prinozeroides 15 No OBL	
5.       Ludwigia alternifolia       5       No       OBL       Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
7. <u>Rubus argutus</u> 5 No FAC <b>Herb</b> – All herbaceous (non-woody) plants, includ	ng
8 herbaceous vines, regardless of size, and woody	
9. plants, except woody vines, less than approximate	ily 3
10 ft (1 m) in height.	
11. Woody Vine – All woody vines, regardless of height	ht.
125 =Total Cover	
50% of total cover: 63 20% of total cover: 25	
Woody Vine Stratum (Plot size: )	
2	
3	
4	
5 Hydrophytic	
=Total Cover Vegetation	
50% of total cover: 20% of total cover: Present? Yes X No	
Remarks: (If observed, list morphological adaptations below.)	

Depth	Matrix		Redo	x Featur	es					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Te	xture		Remarks
0-20	10YR 4/1	85	7.5YR 4/6	15	C	<u>PL</u>	Loamy	//Clayey	Silt	y Clay Loam
		·				·				
Type: C=Cc	ncentration, D=Depl	etion, RM	=Reduced Matrix, I	MS=Mas	ked Sanc	Grains.		<sup>2</sup> Location: PL		
lydric Soil I	ndicators: (Applica	ble to all	LRRs, unless oth	erwise n	oted.)			Indicators fo	r Problematio	c Hydric Soils <sup>3</sup> :
Histosol			Thin Dark S						ck (A9) <b>(LRR</b> )	
	ipedon (A2)		Barrier Islan		-	12)			ck (A10) <b>(LRR</b>	
Black His			(MLRA 1				Coast Prairie Redox (A16)			
_ · ·	n Sulfide (A4)		Loamy Muc	•		RR O)		•	e MLRA 150A	A)
	Layers (A5)		Loamy Gley				Reduced Vertic (F18)			
Organic I	Bodies (A6) <b>(LRR, P</b>	, T, U)	X Depleted Matrix (F3)				(outside MLRA 150A, 150B)			
5 cm Mu	cky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	Surface	(F6)		Piedmont Floodplain Soils (F19) (LRR P,			oils (F19) <b>(LRR P, T</b> )
Muck Pre	esence (A8) (LRR U)		Depleted Da	Depleted Dark Surface (F7)				Anomalous Bright Floodplain Soils (F20)		
1 cm Mu	ck (A9) <b>(LRR P, T)</b>		Redox Depr	essions	(F8)		(MLRA 153B)			
Depleted	Below Dark Surface	e (A11)	Marl (F10) <b>(</b>	LRR U)			Red Parent Material (F21)			21)
Thick Da	rk Surface (A12)		Depleted Oc	chric (F1	1) <b>(MLRA</b>	A 151)		Very Sha	llow Dark Sur	face (F22)
Coast Pr	airie Redox (A16) ( <b>M</b>	LRA 150	A) Iron-Mangar	nese Ma	sses (F12	2) (LRR C	), P, T)	(outsid	e MLRA 138,	152A in FL, 154)
Sandy M	ucky Mineral (S1) <b>(L</b>	RR O, S)	Umbric Surf	ace (F13	3) (LRR P	P, T, U)		Barrier Is	lands Low Ch	roma Matrix (TS7)
Sandy G	leyed Matrix (S4)		Delta Ochrid	c (F17) <b>(</b>	MLRA 15	1)		(MLRA	153B, 153D)	
Sandy R	edox (S5)		Reduced Ve	ertic (F18	8) <b>(MLRA</b>	150A, 15	50B)	Other (Ex	plain in Rema	arks)
Stripped	Matrix (S6)		Piedmont Fl	oodplain	i Soils (F	19) <b>(MLR</b>	A 149A)			
Dark Sur	face (S7) <b>(LRR P, S</b>	, T, U)	Anomalous	Bright Fl	oodplain	Soils (F2	0)			
Polyvalue	e Below Surface (S8	)	(MLRA 14	<b>19A</b> , 153	C, 153D)			<sup>3</sup> Indicator	s of hydrophy	tic vegetation and
(LRR S	S, T, U)		Very Shallov (MLRA 13		`	,			d hydrology m disturbed or p	ust be present, problematic.
Restrictive I	ayer (if observed):		•							
Type:										
							L harders's		10 V	X Na
Depth (In	iches):						Hyaria	: Soil Present	r Yes	<u>X</u> No

### Feature ID: ED\_W\_001-001B Date 04/11/2022



Photograph Number \_\_\_\_\_

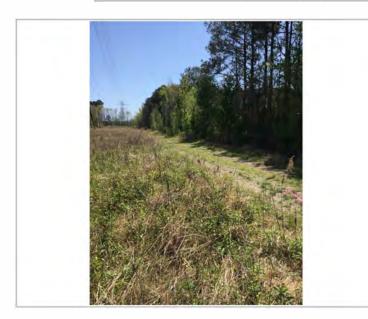
Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

WETLAND DETERMINATION DAT	rmy Corps of Engineers TA SHEET – Atlantic and Gulf Coast 24; the proponent agency is CECW-C	•	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW	City/County: City o	f Chesapeake	Sampling Date: 4/11/2022
Applicant/Owner: Dominion Energy		State: VA	Sampling Point: ED_W_001-001E
Investigator(s): Justin Ahn	Section, Township, Ran	ge: N/A	
Landform (hillside, terrace, etc.): Plain	Local relief (concave, conv	ex. none): None	Slope (%): 0
Subregion (LRR or MLRA): LRR T, MLRA 153E		g: -76.1824252735	Datum: NAD83
Soil Map Unit Name: Acredale silt loam, 0-1% s			ation: None
	·		
Are climatic / hydrologic conditions on the site ty			, explain in Remarks.)
Are Vegetation, Soil, or Hydrolog		al Circumstances" preser	
Are Vegetation, Soil, or Hydrolog	ynaturally problematic? (If needed	explain any answers in F	Remarks.)
SUMMARY OF FINDINGS – Attach si	te map showing sampling point loc	ations, transects, i	mportant features, etc.
, , , , ,			No <u>X</u>
HYDROLOGY			
Wetland Hydrology Indicators:			s (minimum of two required)
Primary Indicators (minimum of one is required		Surface Soil Cra	· · ·
Surface Water (A1)	Aquatic Fauna (B13)		ated Concave Surface (B8)
High Water Table (A2) Saturation (A3)	Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1)	Drainage Pattern Moss Trim Lines	( )
Water Marks (B1)	Oxidized Rhizospheres on Living Roots (C3)		( )
Sediment Deposits (B2)	Presence of Reduced Iron (C4)	Crayfish Burrow	
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils (C6)	·	e on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C7)	Geomorphic Pos	••• •
Iron Deposits (B5)	Other (Explain in Remarks)	Shallow Aquitare	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Te		

 No
 X
 Depth (inches):

 No
 X
 Depth (inches):

 No
 X
 Depth (inches):

l	(includes capillary fringe)	
	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp	ections), if available:

**Field Observations:** 

Surface Water Present?

Water Table Present? Saturation Present?

Remarks:

Water-Stained Leaves (B9)

Yes

Yes\_

Yes

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

Sphagnum Moss (D8) (LRR T,U)

Wetland Hydrology Present?

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

Sampling Point: <u>ED\_W\_001-00</u>1B\_UP

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	% Cover	Species?	Status	Dominance Test worksheet:
1. Pinus taeda	40	Yes	FAC	Number of Dominant Species
2. Alnus serrulata	35	Yes	FACW	That Are OBL, FACW, or FAC: 4 (A)
3.				
				Total Number of Dominant         Species Across All Strata:       6         (B)
5.				Percent of Dominant Species
6				That Are OBL, FACW, or FAC:66.7% (A/B)
	75	=Total Cover		Prevalence Index worksheet:
50% of total cover: 38	3 20%	of total cover:	15	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
2				FACU species x 4 =
4.				UPL species x 5 =
5				·
				Column Totals: (A) (B)
6				Prevalence Index = B/A =
		=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	20%	of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				X 2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
4. 5.				
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6				present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		Tree – Woody plants, excluding woody vines,
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				approximately 20 ft (6 m) or more in height and 3 in.
1. Quercus alba	5	Yes	FACU	(7.6 cm) or larger in diameter at breast height (DBH).
2. Solidago canadensis	5	Yes	FACU	Sapling – Woody plants, excluding woody vines,
3. Toxicodendron radicans	5	Yes	FAC	approximately 20 ft (6 m) or more in height and less
4. Rumex crispus	5	Yes	FAC	than 3 in. (7.6 cm) DBH.
		103	140	<b>Chrub</b> Weady Dianta avaluding weady vince
5				<b>Shrub</b> - 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
8				herbaceous vines, regardless of size, <u>and</u> woody
9				plants, except woody vines, less than approximately 3
10				ft (1 m) in height.
11.				Woody Vine – All woody vines, regardless of height.
	20	=Total Cover		
50% of total cover: 10		of total cover:	4	
	<u> </u>	or total cover.	4	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4.				
5.				
		=Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation Present? Yes X No
Remarks: (If observed, list morphological adaptation	is below.)			

Depth	Matrix		Redo	x Featur	es						
nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Тех	ture	Re	marks	
0-20	10YR 3/3	90	7.5YR 5/6	10	C	PL_	Loamy	/Clayey	Silty C	lay Loam	
						·					
	oncentration, D=Depl					d Grains.		<sup>2</sup> Location: PL=F			
Histosol			Thin Dark Surface (S9) (LRR S, T, U)					1 cm Muck (A9) <b>(LRR O)</b>			
Histic Ep	bipedon (A2)		Barrier Islands 1 cm Muck (S12)					2 cm Muck (A10) (LRR S)			
Black Hi	stic (A3)	(MLRA 153B, 153D)					Coast Prairi	e Redox (A16)	)		
Hydroge	n Sulfide (A4)	Loamy Mucky Mineral (F1) (LRR O)						MLRA 150A)			
_ ´ `	Layers (A5)	Loamy Gleyed Matrix (F2)					Reduced Ve				
	Bodies (A6) (LRR, P	Depleted Matrix (F3)						/ILRA 150A, 1	50B)		
-	icky Mineral (A7) <b>(LR</b>	Redox Dark Surface (F6)							(F19) <b>(LRR P, 1</b>		
	esence (A8) <b>(LRR U)</b>	Depleted Dark Surface (F7)						•	ain Soils (F20)		
1 cm Muck (A9) (LRR P, T)			Redox Depressions (F8)					(MLRA 15			
	d Below Dark Surface	. (Δ11)	Marl (F10) (LRR U)					•	Material (F21)		
	ark Surface (A12)		Depleted Ochric (F11) (MLRA 151)					Very Shallow Dark Surface (F22)			
	rairie Redox (A16) ( <b>M</b>								( )		
	lucky Mineral (S1) <b>(L</b>	Umbric Surface (F13) (LRR P, T, U)					P, T) (outside MLRA 138, 152A in FL, 154) Barrier Islands Low Chroma Matrix (TS7)				
	Bleyed Matrix (S4)	Delta Ochric (F17) (MLRA 151)					(MLRA 153B, 153D)				
		Reduced Vertic (F18) (MLRA 150A, 150B)									
						· -			<b>&gt;</b> )		
Stripped Matrix (S6)Piedmont Floodplain Soils (F19) (MI						<i>,</i> ,					
Dark Surface (S7) (LRR P, S, T, U) Anomalous Bright Floodplain Soils (F						`	.0)	<sup>3</sup> Indicators of	of bydropbytic	vegetation and	
Polyvalue Below Surface (S8) (MLRA 149A, 153C, 15 (LRR S, T, U) Very Shallow Dark Surface								-			
	3, 1, 0)	Very Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)					wetland hydrology must be present, unless disturbed or problematic.				
Postrictivo I	Layer (if observed):					- ''					
Type:	Layer (il observeu).										
Depth (ir	nches).						L) where a	Soil Present?	Yes	No X	
Remarks:	iones).						Hyund	Son Fresent?	165	NoX	

### Feature ID: ED\_W\_001-001B\_UP Date 04/11/2022



Photograph Number \_\_\_\_\_

Photograph Direction North\_\_\_

Comments:



Photograph Number \_\_\_\_\_ Photograph Direction East\_\_\_\_

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

U.S. A WETLAND DETERMINATION DA See ERDC/EL TR-07-	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)							
Project/Site: CVOW	City/County: Chesap	eake	Sampling Date: 06/09/2022					
Applicant/Owner: Dominion								
Investigator(s): E.Deck, K. Shephard, T. Conar	d Section, Township, Range	):						
Landform (hillside, terrace, etc.): Terrace	Local relief (concave, conve	, none): Concave	Slope (%): 0-1%					
Subregion (LRR or MLRA): LRR T, MLRA 153		-76.191623	Datum: WGS84					
Soil Map Unit Name: Acredale silt loam, 0 to 1		NWI classific						
Are climatic / hydrologic conditions on the site to	· · · · · ·		, explain in Remarks.)					
Are Vegetation X , Soil X , or Hydrolog		Circumstances" preser						
		explain any answers in F						
Are Vegetation, Soil, or Hydrolog								
SUMMARY OF FINDINGS – Attach s	ite map showing sampling point loca	tions, transects, i	mportant features, etc.					
Hydric Soil Present? Ye	es x No Is the Sampled Area es X No within a Wetland?	YesX_	No					
Remarks: Disturbed easement								
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicators	s (minimum of two required)					
Primary Indicators (minimum of one is required	icks (B6)							
X Surface Water (A1)		ated Concave Surface (B8)						
High Water Table (A2)	Drainage Patter	( ,						
Saturation (A3)	Moss Trim Lines	Lines (B16)						
	Water Marks (B1) X Oxidized Rhizospheres on Living Roots (C3) Dry-Season V							
Sediment Deposits (B2)	Crayfish Burrow	Crayfish Burrows (C8)						

Recent Iron Reduction in Tilled Soils (C6)

0

Thin Muck Surface (C7)

Other (Explain in Remarks)

Depth (inches):

Depth (inches):

Depth (inches):

Remarks:

Standing water present in tire ruts.

Drift Deposits (B3)

Iron Deposits (B5)

Field Observations: Surface Water Present?

Water Table Present?

(includes capillary fringe)

Saturation Present?

Algal Mat or Crust (B4)

Water-Stained Leaves (B9)

Inundation Visible on Aerial Imagery (B7)

Yes

Yes

Yes

Х

No

No X

No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Saturation Visible on Aerial Imagery (C9)

Yes X No

Geomorphic Position (D2)

Sphagnum Moss (D8) (LRR T,U)

Shallow Aquitard (D3)

X FAC-Neutral Test (D5)

Wetland Hydrology Present?

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

Sampling Point: ED\_W\_1001

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
1.				Number of Dominant Species
2.				That Are OBL, FACW, or FAC: 2 (A)
3.				Total Number of Dominant
4				Species Across All Strata: 2 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
7.				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		=Total Cover		OBL species 30 x 1 = 30
50% of total cover:		of total cover:		FACW species 0 x 2 = 0
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =0
1				FACU species 0 x 4 = 0
2				UPL species 0 x 5 = 0
3				Column Totals: <u>30</u> (A) <u>30</u> (B)
4.				Prevalence Index = B/A = 1.00
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8				X 3 - Prevalence Index is $\leq 3.0^{1}$
		=Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30FT )				
1. Carex lurida	10	Yes	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
2. Juncus effusus	15	Yes	OBL	present, unless disturbed or problematic.
3. Typha latifolia	5	No	OBL	Definitions of Four Vegetation Strata:
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of
6				height.
7				Conting (Charthe Mission and States and States
8				<b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9.				
10.				
11				<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
12.				
	30	=Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 1	5 20%	of total cover:	6	height.
Woody Vine Stratum (Plot size: )				
1				
2.				
3.				
5				
J		=Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation           Present?         Yes X         No
Remarks: (If observed, list morphological adaptation mowed and maintained ROW. Appears recently mo				
nowed and maintained NOW. Appears recently mo				
1				

Depth	cription: (Describe Matrix			x Featu						/		
(inches)	Color (moist)	%	Color (moist)	% N 1 eatu	Type <sup>1</sup>	Loc <sup>2</sup>	Text	ure		Remark	٨s	
0-6	10YR 3/2	100					San	dy		silty sand		
6-20	10YR 4/1	95	10YR 4/6	5	С	PL	Loamy/0	Clayey	Prom	inent redox co	oncentrations	
	·					·						
Type: C=C	oncentration, D=Depl	letion, RM	=Reduced Matrix, I	MS=Mas	sked Sand	d Grains.	<sup>2</sup> L	.ocation: P	PL=Pore I	_ining, M=Ma	trix.	
lydric Soil	Indicators: (Applica	ble to all	LRRs, unless othe	erwise r	noted.)		Ir	dicators f	or Proble	ematic Hydri	c Soils <sup>3</sup> :	
Histoso	(A1)		Thin Dark S	urface (S	S9) <b>(LRR</b>	S, T, U)		1 cm Mu	uck (A9) <b>(</b>	(LRR O)		
Histic E	pipedon (A2)		Barrier Islan	Muck (S	12)		2 cm Muck (A10) <b>(LRR S)</b>					
Black H	istic (A3)		(MLRA 15			Coast Prairie Redox (A16)						
Hydroge	en Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR O)					(outsi	de MLRA	A 150A)		
Stratifie	d Layers (A5)	Loamy Gleyed Matrix (F2)					Reduced	d Vertic (	F18)			
X Organic	Bodies (A6) (LRR, P	X Depleted Matrix (F3)					outsi	de MLRA	A 150A, 150B	3)		
5 cm Mi	ucky Mineral (A7) <b>(LR</b>	Redox Dark Surface (F6)					Piedmor	nt Floodp	lain Soils (F1	9) (LRR P, T)		
Muck P	resence (A8) (LRR U)	)	Depleted Da			Anomalous Bright Floodplain Soils (F20)						
1 cm M	uck (A9) <b>(LRR P, T)</b>		Redox Depr	(F8)		_	(MLRA 153B)					
Deplete	d Below Dark Surface	e (A11)	Marl (F10) <b>(</b> I				Red Parent Material (F21)					
Thick D	ark Surface (A12)		Depleted Ochric (F11) (MLRA 151)					Very Shallow Dark Surface (F22)				
Coast P	rairie Redox (A16) ( <b>N</b>	ILRA 150	A) Iron-Mangar	nese Ma	sses (F1	2) (LRR O	), P, T)	(outsi	de MLRA	A 138, 152A i	n FL, 154)	
Sandy M	/lucky Mineral (S1) <b>(L</b>	RR O, S)	Umbric Surf	3) (LRR F	P, T, U)		Barrier Islands Low Chroma Matrix (TS7)					
Sandy (	Gleyed Matrix (S4)		Delta Ochric	Delta Ochric (F17) (MLRA 151)					(MLRA 153B, 153D)			
Sandy Redox (S5) Reduced Vertic (F18) (MLRA 19						150A, 15	50B)	Other (E	xplain in	Remarks)		
Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (ML						19) <b>(MLR</b>	A 149A)					
Dark Su	urface (S7) (LRR P, S	, T, U)	Anomalous	Bright F	loodplain	Soils (F20	0)					
	ue Below Surface (S8	(MLRA 14	(MLRA 149A, 153C, 153D)					<sup>3</sup> Indicators of hydrophytic vegetation and				
(LRR S, T, U) Very Shallow Dark Surf					Surface (F	22)		wetland hydrology must be present,				
			(MLRA 13	8, 152A	in FL, 1	54)		unles	s disturbe	ed or problem	atic.	
Restrictive	Layer (if observed):											
Type:												
	Depth (inches):						Hydric Soil Present? Yes X No					

### Photograph Log

Feature ID: ED\_W\_1001



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_ Photograph Direction West\_\_\_

WETLAND DETERMINATION	S. Army Corps of Engi DATA SHEET – Atlant -07-24; the proponent ag	ic and Gulf Coasta	-	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)		
Project/Site: CVOW		City/County: Ches	apeake	Sampling Date: 06/09/2022		
Applicant/Owner: Dominion			State: VA	Sampling Point: ED_W_1001 & 1002_UP		
Investigator(s): E.DeckK.Shephard, T.Cor	nard So	ection, Township, Rang	e:			
Landform (hillside, terrace, etc.): Terrace	e Loca	al relief (concave, conve	x, none): None	Slope (%): 0-1%		
Subregion (LRR or MLRA): LRR T, MLRA			: -76.192427	Datum: WGS84		
Soil Map Unit Name: Arcedale silt loam, 0				ation: Upland		
Are climatic / hydrologic conditions on the	· · ·	? Yes X		explain in Remarks.)		
Are Vegetation X , Soil X , or Hyd	,, , , , , , , , , , , , , , , , , , ,		`	it? Yes X No		
Are Vegetation, Soil, or Hyd			explain any answers in F			
SUMMARY OF FINDINGS – Attac	ch site map showing sa	ampling point loca	itions, transects, il	mportant features, etc.		
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes No x Yes No x	Is the Sampled Area within a Wetland?		No_X		
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators	s (minimum of two required)		
Primary Indicators (minimum of one is rec	quired; check all that apply)		Surface Soil Cra			
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegeta	getated Concave Surface (B8)		
High Water Table (A2)	Marl Deposits (B15) (L		Drainage Pattern	( )		
Saturation (A3)	Hydrogen Sulfide Odo		Moss Trim Lines			
Water Marks (B1)		s on Living Roots (C3)		Vater Table (C2)		
Sediment Deposits (B2) Drift Deposits (B3)	Presence of Reduced Recent Iron Reduction	( )	Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Geomorphic Position (D2)					
Iron Deposits (B5)	Shallow Aquitare					
Inundation Visible on Aerial Imagery	Other (Explain in Rem (B7)	,	X FAC-Neutral Tes			
Water-Stained Leaves (B9)			Sphagnum Moss	s (D8) <b>(LRR T,U)</b>		
Field Observations:						
Surface Water Present? Yes	No x Depth (inches	·				
Water Table Present? Yes	No x Depth (inches			<b>v</b>		
Saturation Present? Yes	No x Depth (inches	s): Wetlan	d Hydrology Present?	Yes <u>No x</u>		

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology indicators noted.

(includes capillary fringe)

Sampling Point: ED\_W\_1001 & 1002\_UP

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Liquidambar styraciflua	10	Yes	FAC	
2. Pinus taeda	10	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
3.	10	163		
4.				Total Number of Dominant Species Across All Strata: 4 (B)
5.				
				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 75.0% (A/B) Prevalence Index worksheet:
7				
8		T-t-l Cover		Total % Cover of: Multiply by:
FOO/ of total actions		=Total Cover	A	$\begin{array}{c c} OBL \text{ species} & 10 & x \ 1 = & 10 \\ \hline FACW \text{ species} & 0 & y \ 2 = & 0 \\ \end{array}$
	10 20%	of total cover:	4	FACW species $0   x^2 = 0$
Sapling/Shrub Stratum (Plot size: 30ft	)		= 1.0	FAC species <u>45</u> x 3 = <u>135</u>
1. Morella cerifera	5	Yes	FAC	FACU species $0   x 4 = 0$
2.				UPL species $0 \times 5 = 0$
3				Column Totals: <u>55</u> (A) <u>145</u> (B)
4				Prevalence Index = B/A = 2.64
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8				X 3 - Prevalence Index is $\leq 3.0^1$
	5	=Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	3 20%	of total cover:	1	1
Herb Stratum (Plot size: 30ft )				
1. Rubus pensilvanicus	10	No	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
2. Juncus effusus	10	No	OBL	present, unless disturbed or problematic.
3. Smilax rotundifolia	10	No	FAC	Definitions of Four Vegetation Strata:
4. Grass sp.	40	Yes	ND	<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
6.				height.
7.				
8.				Sapling/Shrub – Woody plants, excluding vines, less
9.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
10				
				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12	70	T-t-L Cover		All sub-Miss All used wines moster than 2.20 ft in
		=Total Cover	4.4	<b>Woody Vine</b> – All woody vines greater than 3.28 ft in height.
	35 20%	of total cover:	14	neight.
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptatio	ons below.)			
Vegetation is disturbed due to maintenance of the e				

SOIL

Depth	ription: (Describe Matrix			x Feature					outor 5.j	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Re	marks
0-20	7.5YR 3/2	100					Sandy		silty	/ sand
	oncentration, D=Depl	lotion PM-	Reduced Matrix			Craina	<sup>2</sup> Locatio		ore Lining, M:	-Motrix
51	Indicators: (Applica	,	,			Grains.			-	ydric Soils <sup>3</sup> :
Histosol			Thin Dark Su			S. T. U)			(9) (LRR O)	yano oono .
Histic Epipedon (A2)			Barrier Islands 1 cm Muck (S12)					2 cm Muck (A10) <b>(LRR S)</b>		
Black Histic (A3)		(MLRA 15		``	,		•	Redox (A16)		
Hydrogen Sulfide (A4)		Loamy Muck			RR O)	(c	utside M	LRA 150A)		
Stratified Layers (A5)		Loamy Gleye	ed Matrix	(F2)	,	Red	luced Ver	tic (F18)		
Organic Bodies (A6) (LRR, P, T, U)		Depleted Matrix (F3)					utside M	LRA 150A, 1	50B)	
5 cm Mu	cky Mineral (A7) (LR	R P, T, U)	 Redox Dark	Surface	(F6)		Pie	dmont Flo	odplain Soils	(F19) <b>(LRR P, 1</b>
	esence (A8) (LRR U)		Depleted Da							ain Soils (F20)
1 cm Mu	ck (A9) (LRR P, T)		Redox Depre	essions (	F8)		()	ILRA 153	B)	
Depleted	Below Dark Surface	e (A11)	Marl (F10) (L	.RR U)	,		Red	Parent N	Iaterial (F21)	
Thick Da	ark Surface (A12)		Depleted Oc	hric (F11	) (MLRA	151)	Ver	y Shallow	Dark Surfac	e (F22)
Coast Pr	airie Redox (A16) ( <b>N</b>	ILRA 150A	) Iron-Mangan	ese Mas	ses (F12	) (LRR O, F	P, T) (0	utside M	LRA 138, 15	2A in FL, 154)
Sandy M	lucky Mineral (S1) <b>(L</b>	.RR O, S)	Umbric Surfa	ace (F13	(LRR P	, T, U)	Bar	rier Island	s Low Chron	na Matrix (TS7)
Sandy G	ileyed Matrix (S4)		Delta Ochric	I)	(N	(MLRA 153B, 153D)				
Sandy R	edox (S5)		Reduced Ve	rtic (F18)	(MLRA	150A, 150E	<b>3)</b> Oth	er (Explai	n in Remarks	3)
Stripped	Matrix (S6)		Piedmont Flo	odplain	Soils (F1	9) <b>(MLRA</b> <sup>-</sup>	149A)			
Dark Sur	face (S7) <b>(LRR P, S</b>	, T, U)	Anomalous I	Bright Flo	odplain	Soils (F20)				
Polyvalu	e Below Surface (S8	)	(MLRA 14	9A, 1530	C, 153D)		<sup>3</sup> Inc	icators of	hydrophytic	vegetation and
(LRR S, T, U) Very S		Very Shallov	/ Dark Si	urface (F	22)	wetland hydrology must be present,				
			(MLRA 13	8, 152A	in FL, 1	4)	u	nless dist	urbed or prol	olematic.
Restrictive I	_ayer (if observed):									
Туре:										
	nches):						Hydric Soil Pi	+-2	Yes	No x

Date: \_\_\_\_

Feature ID: <u>ED\_W\_1001-1002\_UP</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_\_

Photograph Direction West

Comments:

U.S. Army Corps of Eng WETLAND DETERMINATION DATA SHEET – Atlan See ERDC/EL TR-07-24; the proponent a	ntic and Gulf Coastal Plain Region	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW	City/County: Chesapeake	Sampling Date: 06/09/2022
Applicant/Owner: Dominion	State: Va	Sampling Point: ED_W_1002
Investigator(s): E. Deck, K. Shephard, T. Conard	Section, Township, Range:	
Landform (hillside, terrace, etc.): Flat Loc	ocal relief (concave, convex, none): Concave	Slope (%): 0-2%
Subregion (LRR or MLRA): LRR T, MLRA 153B Lat: 36.691853	Long: -76.192901	Datum: WGS84
Soil Map Unit Name: Munden fine sandy loam, 0 to 2 percent slopes	NWI classifica	ation: PEM
Are climatic / hydrologic conditions on the site typical for this time of year	ear? Yes X No (If no,	explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology X significantly dis		t? Yes <u>X</u> No
Are Vegetation, Soil, or Hydrologynaturally proble		
SUMMARY OF FINDINGS – Attach site map showing s		nportant features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area	
Hydric Soil Present? Yes X No	within a Wetland? Yes X	No
Wetland Hydrology Present?   Yes X   No		
Remarks:		

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is requi	Surface Soil Cracks (B6)				
Surface Water (A1)	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 on Living Ro	oots (C3)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Presence of Reduced Iron (C4)		Crayfish Burrows (C8)		
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils	s (C6)	Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		X Geomorphic Position (D2)		
Iron Deposits (B5)	Other (Explain in Remarks)		Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B	7)		X FAC-Neutral Test (D5)		
Water-Stained Leaves (B9)			Sphagnum Moss (D8) <b>(LRR T,U)</b>		
Field Observations:					
Surface Water Present? Yes	No X Depth (inches):				
Water Table Present? Yes	No X Depth (inches):				
Saturation Present? Yes	No X Depth (inches):	Wetland	Hydrology Present? Yes X No		
(includes capillary fringe)					
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, previous inspe	ections), if a	available:		
Remarks:					

Sampling Point: <u>ED\_W\_1002</u>

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
1 2.				Number of Dominant SpeciesThat Are OBL, FACW, or FAC:2(A)
3.				Total Number of Dominant
4				Species Across All Strata: 2 (B)
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
6.				That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
o		=Total Cover		$\begin{array}{c c c c c c c c c c c c c c c c c c c $
50% of total cover:		of total cover:		FACW species $35 \times 2 = 70$
Sapling/Shrub Stratum (Plot size:)	2078			
				FAC species         0         x 3 =         0           FACU species         0         x 4 =         0
2.				UPL species $0 \times 5 = 0$
3.				Column Totals: 85 (A) 120 (B)
4				Prevalence Index = B/A =1.41
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8.				X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	:	=Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 )				
1. Eleocharis obtusa	30	Yes	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
2. Diodia virginiana	35	Yes	FACW	present, unless disturbed or problematic.
3. Carex lurida	10	No	OBL	Definitions of Four Vegetation Strata:
4. Juncus effusus	10	No	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
6.				height.
7.				
8.				<b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9.				
10.				
11.				Herb – All herbaceous (non-woody) plants, regardless
12.				of size, and woody plants less than 3.28 ft tall.
	85	Total Cover		Woody Vine – All woody vines greater than 3.28 ft in
50% of total cover: 43		of total cover:	17	height.
Woody Vine Stratum (Plot size: )				
3 4.				
5				
5.		Total Cavar		Hydrophytic
E00/ of total cover		=Total Cover		Vegetation Present? Yes X No
50% of total cover:	20%	of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation	is below.)			

SOIL

Depth inches)	Matrix Color (moist)	%	Color (moist)	x Features % Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
inches/		70		70 Туре	LUC	Texture	
0-20	7.5YR 3/2	100				Sandy	Silty Sand
	ncentration, D=Dep				nd Grains.		L=Pore Lining, M=Matrix.
-	ndicators: (Applica	ble to all LF					or Problematic Hydric Soils <sup>3</sup> :
Histosol (	,			urface (S9) (LRF			ick (A9) <b>(LRR O)</b>
	pedon (A2)			ds 1 cm Muck (S	512)		ick (A10) <b>(LRR S)</b>
Black His				53B, 153D)			rairie Redox (A16)
	n Sulfide (A4)			ky Mineral (F1) <b>(</b> I	LRR ()	•	de MLRA 150A)
	Layers (A5)	<b>T</b> 10	Depleted Ma	ed Matrix (F2)			d Vertic (F18) <b>de MLRA 150A, 150B)</b>
	Bodies (A6) (LRR, P			( )		•	, ,
	cky Mineral (A7) <b>(LR</b>			Surface (F6)			nt Floodplain Soils (F19) <b>(LRR P,</b>
	esence (A8) <b>(LRR U</b> )		-	ark Surface (F7) essions (F8)			ous Bright Floodplain Soils (F20) A 153B)
	ck (A9) <b>(LRR P, T)</b> Below Dark Surface	. (A11)	Marl (F10) (I	( )		•	ent Material (F21)
	rk Surface (A12)	; (ATT)		chric (F11) <b>(MLR</b>	A 151)		allow Dark Surface (F22)
	airie Redox (A16) ( <b>N</b>			nese Masses (F1			de MLRA 138, 152A in FL, 154)
	ucky Mineral (S1) <b>(L</b>	· · ·	_	ace (F13) <b>(LRR</b>			slands Low Chroma Matrix (TS7)
	eyed Matrix (S4)			c (F17) <b>(MLRA 1</b>			A 153B, 153D)
-	edox (S5)			ertic (F18) (MLR/			Explain in Remarks)
	Matrix (S6)			oodplain Soils (F			sterie in terraine)
	face (S7) <b>(LRR P, S</b>	. T. U)		Bright Floodplair			
	e Below Surface (S8			19A, 153C, 153D		<u> </u>	ors of hydrophytic vegetation and
(LRR \$		,		w Dark Surface (			nd hydrology must be present,
	,			88, 152A in FL, 1			s disturbed or problematic.
Restrictive L	ayer (if observed):						
Type:							
Depth (in	ches).					Hydric Soil Preser	nt? Yes X No
Remarks:							
Remarks: Fill present							
in prosont							

Date: \_\_\_\_

Feature ID: ED\_W\_1002



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_ Photograph Direction West\_\_\_

Comments:

Project/Site: Dominion CVOW	City/County: Virginia Beach/	Chesapeake	Sampling Date:	4/28/2021
Applicant/Owner: Dominion		State: <u>VA</u>	Sampling Point:EF	W_001_PEM
Investigator(s): Emily Foster, Debbie Painter	Section, Township, Range:			
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex	none): <u>Concave</u>	Slope (%):	0-5
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.720744 Long: _		<u>-76.166528</u> Datum: <u>W</u>	VGS84
Soil Map Unit Name: Dorovan-Belhaven complex, 0 to 1 percent slopes, freque	ntly flooded	NWI classific	ation: Upland	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u>×</u> No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	resent? Yes <u>x</u> N	<b>1</b> 0
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs 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 <u>×</u> No Yes <u>×</u> No Yes <u>×</u> No	Is the Sampled Area within a Wetland? Yes	× No			
Remarks:			<b>Observed Classifications:</b>			
Disturbed existing powerline easement. Becomes inacessible to the NE due to inundated conditions.						

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
x Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
× High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
x Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)
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)	X FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present?         Yesx         No         Depth (inches): 0-4	
Water Table Present? Yes <u>x</u> No <u>Depth</u> (inches): 0	
Saturation Present? Yes <u>×</u> No <u>Depth</u> (inches): <u>0</u> Wetland (includes capillary fringe)	Hydrology Present? Yes <u>×</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av	ailable:
Remarks:	
Inundated portion of existing powerline easement.	
······································	
	1

#### Sampling Point: EF W 001 PEM

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft</u> )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				· 、 /
5				Percent of Dominant Species That Are OBL_EACW or EAC <sup>-</sup> 100.0% (A/B)
				That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
6				Prevalence Index worksheet:
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 0	20% o	f total cover	:0	OBL species $y = \frac{1}{2}$ x 1 =
Sapling Stratum (Plot size: <u>30 ft</u> )				FACW species $5$ $x^2 = 10$
1				
2				FAC species <u>10</u> x 3 = <u>30</u>
3				FACU species x 4 =
4				UPL species x 5 =0
				Column Totals: <u>110</u> (A) <u>135</u> (B)
5				
6				Prevalence Index = B/A =1.23
		= Total Cov		Hydrophytic Vegetation Indicators:
50% of total cover: 0	20% o	f total cover	:0	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: <u>30 ft</u> )				X 2 - Dominance Test is >50%
1				$\frac{x}{3}$ - Prevalence Index is $\leq 3.0^{1}$
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				1
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				
6				Definitions of Five Vegetation Strata:
	0	= Total Cov	/er	Tree – Woody plants, excluding woody vines,
50% of total cover: 0	20% o	f total cover	:	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )				(7.6 cm) or larger in diameter at breast height (DBH).
1. Typha latifolia, Broad-Leaf Cat-Tail	75	Yes	OBL	Sapling – Woody plants, excluding woody vines,
2. Saururus cernuus, Lizard's-Tail	10	No	OBL	approximately 20 ft (6 m) or more in height and less
3. Carex vulpinoidea, Common Fox Sedge			FACW	than 3 in. (7.6 cm) DBH.
4. Juncus effusus, Lamp Rush				Shrub – Woody plants, excluding woody vines,
				approximately 3 to 20 ft (1 to 6 m) in height.
5. <u>Sagittaria latifolia, Duck-Potato</u>				
6. <u>Solidago sp.</u>	5	No	<u>ND</u>	Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and 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				
		= Total Cov		
50% of total cover:52.5				
	20% 0	r total cover		
Woody Vine Stratum (Plot size: <u>30 ft</u> )			_	
1. Rubus pensilvanicus, Pennsylvania Blackberry	10	Yes	FAC	
2				
3				
4				
5				Hydrophytic
		= Total Cov		Hydrophytic Vegetation
50% of total cover: <u>5</u>				Present? Yes <u>×</u> No
		i total cover		
Remarks: (If observed, list morphological adaptations belo	W).			

Depth	Matrix		Redo	ox Features				
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10yr 3/1	100%					Silty clay loam	No H2S odor, top layer of muck
6-12	7.5yr 4/4	100%					Loamy sand	Metallic odor
12-18	7.5yr 4/4	100%					Loamy sand	
		·		- <u> </u>				
Type: C=0	- Concentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked S	Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Black H Hydrog Stratifie Crganin 5 cm M Muck F X 1 cm M Deplete Thick D Coast F Sandy Sandy Sandy Strippe	ol (A1) Epipedon (A2) Histic (A3) ed Layers (A5) c Bodies (A6) (LRR F Lucky Mineral (A7) (LI Presence (A8) (LRR L Luck (A9) (LRR P, T) ed Below Dark Surfac Dark Surface (A12) Prairie Redox (A16) (I Mucky Mineral (S1) (I Gleyed Matrix (S4) Redox (S5) H Matrix (S6) urface (S7) (LRR P, S	RR P, T, U) J) MLRA 150A LRR O, S)	Delta Ochric Reduced Ve Piedmont Fl	urface (S9) ( cy Mineral (F ed Matrix (F3) Surface (F6 rrk Surface ( essions (F8) LRR U) chric (F11) (I ese Masses ace (F13) (L c (F17) (MLR rtic (F18) (N oodplain So	(LRR S, <sup>E1</sup> ) (LRR S, <sup>E1</sup> ) (LRR 2) <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup> <sup>(F7)</sup>	T, U) O) LRR O, P, U) 0A, 150B (MLRA 14	2 cm M Reduct Piedma (MLF Red Pa Very S X Other ( ST) <sup>3</sup> Indic wet	Muck (A9) (LRR O) Muck (A10) (LRR S) ed Vertic (F18) (outside MLRA 150A, ont Floodplain Soils (F19) (LRR P, S, alous Bright Loamy Soils (F20) RA 153B) arent Material (TF2) shallow Dark Surface (TF12) (Explain in Remarks) eators of hydrophytic vegetation and land hydrology must be present, ess disturbed or problematic.
Restrictive Type:	Layer (if observed)	:						

Disturbed soils from heavy equipment access to powerline easement.



Photograph Number

Photograph Direction South

Comments: View of PEM wetland to the South.

Feature Name: EF\_W\_001\_PEM



Photograph Number \_\_\_\_\_ Photograph Direction North

Comments: View of PEM wetland to the North.



Photograph Number

Photograph Direction East

Comments:

View of PEM wetland to the East.



Photograph Number

Photograph Direction West

Comments: View of PEM wetland to the West.

Project/Site: Dominion CVOW	City/County: Virginia Beach/Chesapeake	Sampling Date: 4/28/2021				
Applicant/Owner: Dominion	State: VA	Sampling Point: EF_W_001_PF0				
Investigator(s): Emily Foster, Debbie Painter	Section, Township, Range:					
Landform (hillslope, terrace, etc.): Flatwoods	Local relief (concave, convex, none): Con	cave Slope (%): 0-5				
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.720143 Long:	-76.166504 Datum: WGS84				
Soil Map Unit Name: Munden loamy fine sand, 2 to 8 percent slopes	NWI cl	assification: PFO1C				
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>x</u> No (If no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstar	nces" present? Yes <u>x</u> No				
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any a	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 <u>×</u> No Yes <u>×</u> No Yes <u>×</u> No	Is the Sampled Area within a Wetland? Yes	× No
Remarks:			<b>Observed Classifications:</b>
Forested wetland located on E side	e of powerline easement, and cont	inuing outside of the survey area.	Cowardin: PFO

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
<u>×</u> Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
X Saturation (A3) X Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along	Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C	4) Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tille	ed Soils (C6) Saturation Visible on Aerial Imagery (C9)
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)	X FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes <u>x</u> No Depth (inches): <u>0-4</u>	
Water Table Present? Yes <u>x</u> No Depth (inches): 0	
Saturation Present? Yes <u>x</u> No Depth (inches): 0	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previou	s inspections), if available:
Remarks:	
	-

#### Sampling Point: EF W 001 PFO

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	% Cover	Species?	Status	Number of Dominant Species
1. <u>Acer rubrum, Red Maple</u>	20	Yes	FAC	That Are OBL, FACW, or FAC:6 (A)
2. Fraxinus pennsylvanica, Green Ash	15	Yes	FACW	Total Number of Dominant
3. <u>Ulmus americana, American Elm</u>	10	No	FAC	Species Across All Strata: 6 (B)
4. Liguidambar styraciflua, Sweet-Gum		No	FAC	(=,
5. Taxodium distichum, Southern Bald-Cypress				Percent of Dominant Species
				That Are OBL, FACW, or FAC:(A/B)
6	60			Prevalence Index worksheet:
		= Total Cov		Total % Cover of:Multiply by:
50% of total cover: <u>30</u>	20% of	total cover	:12	$\begin{array}{c} \hline
<u>Sapling Stratum</u> (Plot size: <u>30 ft</u> )				FACW species $x = 50$
1. Ulmus americana, American Elm	5	Yes	FAC	
2. Liquidambar styraciflua, Sweet-Gum	5	Yes	FAC	FAC species <u>55</u> x 3 = <u>165</u>
3. <u>Acer rubrum, Red Maple</u>	5	Yes	FAC	FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: <u>110</u> (A) <u>245</u> (B)
6				Prevalence Index = B/A =2.23
	15	= Total Cov	/er	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of	total cover	:3	1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: <u>30 ft</u> )				X 2 - Dominance Test is >50%
1				$\frac{x}{3}$ - Prevalence Index is $\leq 3.0^{1}$
2.				
				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	0	= Total Cov	/er	The state of the s
50% of total cover:0				Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )			·	(7.6 cm) or larger in diameter at breast height (DBH).
	25	Vac		
1. <u>Glyceria septentrionalis, Floating Manna Grass</u>				Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
2. Osmundastrum cinnamomeum, Cinnamon Fern				than 3 in. (7.6 cm) DBH.
3. <u>Arundinaria gigantea, Giant Cane</u>	5	No	FACW	
4				Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6				Herb – All herbaceous (non-woody) plants, including
7.				herbaceous vines, regardless of size, and woody
				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				in the set of the set
11				
		= Total Cov	/er	
50% of total cover: <u>17.5</u>		total cover	. 7	
Woody Vine Stratum (Plot size: 30 ft )			·	
1				
2				
3				
4				
5				Hydrophytic
		= Total Co		Vegetation
50% of total cover: 0				Present? Yes <u>×</u> No
		iotal cover		
Remarks: (If observed, list morphological adaptations belo	W).			

epth	Matrix		Redox	Features			
nches)	Color (moist)	%	Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10yr 2/1	100%				Muck	
6-18	10yr 2/1	100%				Loamy sand	
	concentration, D=Dep Indicators: (Applic				ains.		=Pore Lining, M=Matrix. Problematic Hydric Soils <sup>3</sup> :
Black H Hydrogo Stratifie Organic 5 cm Mi Muck P 1 cm Mi Deplete Thick D	pipedon (A2) iistic (A3) en Sulfide (A4) d Layers (A5) : Bodies (A6) (LRR P ucky Mineral (A7) (LI resence (A8) (LRR U uck (A9) (LRR P, T) d Below Dark Surfac ark Surface (A12) Prairie Redox (A16) (I	P, T, U) RR P, T, U) J) e (A11)	Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark Redox Depres Marl (F10) (LF Depleted Ochi Iron-Mangane Umbric Surfac	ace (S9) <b>(LRR S</b> , Mineral (F1) <b>(LRI</b> Matrix (F2) ix (F3) urface (F6) Surface (F6) sions (F8) <b>:R U)</b> ic (F11) <b>(MLRA 1</b> se Masses (F12) e (F13) <b>(LRR P</b> , T	T, U) 2 O) 51) LRR O, P, <sup>-</sup>	2 cm Mucl Reduced V Piedmont Anomalou (MLRA Red Parer Very Shall Other (Exp	k (A9) <b>(LRR O)</b> k (A10) <b>(LRR S)</b> Vertic (F18) <b>(outside MLRA 150A</b> Floodplain Soils (F19) <b>(LRR P, S,</b> s Bright Loamy Soils (F20) <b>153B)</b> nt Material (TF2) low Dark Surface (TF12) olain in Remarks) rs of hydrophytic vegetation and d hydrology must be present,
Sandy ( Sandy F Stripped	Mucky Mineral (S1) <b>(I</b> Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) <b>(LRR P, \$</b>		Reduced Verti	F17) <b>(MLRA 151)</b> c (F18) <b>(MLRA 1</b> 4 dplain Soils (F19) ight Loamy Soils (	(MLRA 149		disturbed or problematic. 3D)
	Layer (if observed):						
	iches):		-			Hydric Soil Pre	esent? Yes <u>×</u> No
emarks:							

# Date: <u>4/28/21</u>



Photograph Number \_\_\_\_

Photograph Direction East

Comments: View of PFO wetland to the East.

Feature Name: EF\_W\_001\_PFO



Photograph Number \_\_\_\_\_ Photograph Direction North

Comments: View of PFO wetland to the North.



Photograph Number

Photograph Direction West

Comments:

View of PFO wetland to the West.



Photograph Number

Photograph Direction South

Comments: View of PFO wetland to the South.

Project/Site: Dominion CVOW	City/County: Chesapeake	Sampling Date: 4/28/2021				
Applicant/Owner: Dominion		State: VA	Sampling Point: <u>EF_W_001_UP</u>			
Investigator(s): Emily Foster, Debbie Painter	Section, Township, Range: _					
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex	, none): <u>Convex</u>	Slope (%): 0-5			
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.720057 Long:		-76.166515 Datum: WGS84			
Soil Map Unit Name: Munden loamy fine sand, 2 to 8 percent slopes		NWI classific	cation: PFO1C			
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>x</u> No (If no, explain in Remarks.)						
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	oresent? Yes <u>×</u> No			
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	ers 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 Yes Yes	No <u>x</u> No <u>x</u> No <u>x</u>	Is the Sampled Area within a Wetland?	Yes Nox
Remarks:				Observed Classifications:
				Cowardin: Upland
HYDROLOGY				
Wetland Hydrology Indicators:				Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is	required; chec	k all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)	Aq	uatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	Ma	arl Deposits (B15) <b>(LR</b>	RU)	Drainage Patterns (B10)
Saturation (A3)	Hy	drogen Sulfide Odor	(C1)	Moss Trim Lines (B16)

_	Water Marks (B1)	_	Oxidized Rhizospheres along Living Roots (C3)	 Dry-Season Water Table (C2)
_	Sediment Deposits (B2)	_	Presence of Reduced Iron (C4)	 Crayfish Burrows (C8)
	Drift Deposits (B3)		Recent Iron Reduction in Tilled Soils (C6)	 Saturation Visible on Aerial Imagery (C9)
_	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)

Sphagnum moss (D8) (LRR T, U)
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_	- /	
Field Observations:		
Surface Water Present?	Yes No Depth (inches):	
Water Table Present?	Yes No Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes No Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:		

\_ Water Marks (B1)

\_\_\_\_ Water-Stained Leaves (B9)

Sampling Point: EF\_W\_001\_UP

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	% Cover	Species?	Status	Number of Dominant Species
1. Liriodendron tulipifera, Tuliptree	30	Yes	FACU	That Are OBL, FACW, or FAC: (A)
2. <u>Acer rubrum, Red Maple</u>	25	Yes	FAC	Tabl Number of Dentioned
3. Liguidambar styraciflua, Sweet-Gum				Total Number of Dominant Species Across All Strata: 8 (B)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 25.0% (A/B)
6				Prevalence Index worksheet:
		= Total Cov		Total % Cover of:Multiply by:
50% of total cover: <u>32.5</u>	20% of	total cover	: <u>13</u>	OBL species         0         x1 =         0
Sapling Stratum (Plot size: <u>30 ft</u> )				
1. <u>Acer rubrum, Red Maple</u>	10	Yes	FAC	FACW species x 2 =
2. Liriodendron tulipifera, Tuliptree				FAC species X 3 = 135
3. Oxydendrum arboreum, Sourwood	-	Yes		FACU species <u>85</u> x 4 = <u>340</u>
				UPL species x 5 =
4				Column Totals: <u>130</u> (A) <u>475</u> (B)
5				
6				Prevalence Index = B/A =3.65
		= Total Cov		Hydrophytic Vegetation Indicators:
50% of total cover: <u>12.5</u>	20% of	total cover	:	1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: <u>30 ft</u> )				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				
6				Definitions of Five Vegetation Strata:
		= Total Cov		Tree – Woody plants, excluding woody vines,
50% of total cover: 0	20% of	total cover	:0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )				(7.6 cm) or larger in diameter at breast height (DBH).
1. Lonicera japonica, Japanese Honeysuckle	15	Yes	FACU	Sapling – Woody plants, excluding woody vines,
2. Stellaria media, Common Chickweed	10	Yes	FACU	approximately 20 ft (6 m) or more in height and less
3. Parthenocissus quinquefolia, Virginia-Creeper				than 3 in. (7.6 cm) DBH.
4. Podophyllum peltatum, May-Apple			FACU	Shrub – Woody plants, excluding woody vines,
				approximately 3 to 20 ft (1 to 6 m) in height.
5				
6				Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
7				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				
		= Total Cov	/er	
50% of total cover: <u>20</u>				
	20% 0	total cover		
Woody Vine Stratum (Plot size: <u>30 ft</u> )				
1				
2				
3				
4				
5				Hudson butis
		= Total Cov		Hydrophytic Vegetation
E00/ -51-1-1				Present? Yes No ×
50% of total cover: 0		total cover		
Remarks: (If observed, list morphological adaptations belo	w).			

#### SOIL

epth	cription: (Describe Matrix			lox Features				ssioucolog
nches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	2.5y 2.5/1	100%					Silty loam	
6-12	10yr 4/3	80%	10yr 8/3	20%	C	PL	Sandy clay loam	
12-18	7.5yr 6/2	100%					Sand	
ype: C=C ydric Soil Histoso Histic E Black H Hydroge Stratifie Organic 5 cm Me 0 Grganic 1 cm Me 1 cm Me Deplete Thick D	Concentration, D=Dep Indicators: (Applic I (A1) pipedon (A2) listic (A3) en Sulfide (A4) d Layers (A5) e Bodies (A6) (LRR P ucky Mineral (A7) (LI resence (A8) (LRR U uck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12)	 able to all able to all RR P, T, U) RR P, T, U)	LRRs, unless oth Polyvalue E Thin Dark S Loamy Muc Loamy Gley Depleted M Redox Dark Depleted D Redox Dep Marl (F10) f Iron-Manga	erwise note Below Surface Surface (S9) Sky Mineral ( yed Matrix (F latrix (F3) c Surface (F ark Surface ressions (F (LRR U) chric (F11) nese Masse	ed.) ce (S8) (L (LRR S, (F1) (LRF F2) 6) (F7) 3) (MLRA 1: es (F12) (	RR S, T, T, U) ○O) 51) LRR O, P	<sup>2</sup> Location: Indicators U) 1 cm M 2 cm M Pieduce Pieduce Pieduce Pieduce Reduce Pieduce Very S Other ( 2, T) <sup>3</sup> Indic	PL=Pore Lining, M=Matrix. for Problematic Hydric Soils <sup>3</sup> : Muck (A9) (LRR O) Muck (A10) (LRR S) ed Vertic (F18) (outside MLRA 150, ont Floodplain Soils (F19) (LRR P, S alous Bright Loamy Soils (F20) RA 153B) arent Material (TF2) shallow Dark Surface (TF12) (Explain in Remarks) eators of hydrophytic vegetation and
Sandy N Sandy (	Prairie Redox (A16) <b>(I</b> Mucky Mineral (S1) <b>(I</b> Gleyed Matrix (S4)		Delta Ochri	c (F17) <b>(ML</b> ertic (F18) <b>(</b>	RA 151) MLRA 15	0A, 150B	unle 3)	land hydrology must be present, ess disturbed or problematic.
Stripped	Redox (S5) d Matrix (S6)		Piedmont F Anomalous	•	4 P		49A) RA 149A, 153C,	, 153D)
	urface (S7) (LRR P, S Layer (if observed):							
Type:								
	iches):						Hydric Soil	Present? Yes Nox



Photograph Number

Photograph Direction South

Comments:

Feature Name: EF\_W\_001\_UP



Photograph Number \_\_\_\_\_ Photograph Direction East

Comments:



Photograph Number

Photograph Direction North

Comments:



Photograph Number \_\_\_\_\_ Photograph Direction West

Comments:

Project/Site: Dominion CVOW	City/County: Chesapeake		Sampling Date: 4/2	28/2021
Applicant/Owner: Dominion		State: VA	Sampling Point: <u>EF_W_00</u>	<u>)2_PEN</u>
Investigator(s): Emily Foster, Debbie Painter	Section, Township, Range: _			
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex	none): <u>Concave</u>	Slope (%): 0-	5
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.718325 Long:		-76.16744 Datum: WGS	584
Soil Map Unit Name: Tomotley-Bertie complex, 0 to 2 percent slopes		NWI classific	ation: Upland	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u>×</u> No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	oresent? Yes <u>x</u> No	
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs 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 <u>×</u> No Yes <u>×</u> No Yes <u>×</u> No	Is the Sampled Area within a Wetland? Yes	× No
Remarks: Recently disturbed by heavy equipn vegetation.	nent in power line easement. Tor	n up soil and recently mowed	Observed Classifications: Cowardin: <u>PEM</u>

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 O	dor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosphe	res along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduce	ed Iron (C4) <u>x</u> Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduct	on in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	C7) Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Re	emarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	X 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 Depth (inches):	
Saturation Present? Yes <u>No X</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo:	s, previous inspections), if available:
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Remarks:	

Sampling Point: <u>EF\_W\_002\_</u>PEM

<u>% Cover</u>	Species?	Status	Number of Dominant Species
			That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant Species Across All Strata:3(B)
			Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)
= 1	Total Cover		Prevalence Index worksheet:
20% of to	tal cover: _	0	Total % Cover of: Multiply by:
			OBL species <u>30</u> x 1 = <u>30</u>
			FACW species $0 x 2 = 0$
			FAC species $0 \times 3 = 0$
			FACU species         0         x 4 =         0           UPL species         0         x 5 =         0
			Column Totals: $30$ (A) $30$ (B)
			$\begin{bmatrix} \text{Column rotars.} & \underline{30} & (A) & \underline{30} & (B) \\ \end{bmatrix}$
			Prevalence Index = B/A =1.00
			Hydrophytic Vegetation Indicators:
20% OT to	tai cover: _	0	1 - Rapid Test for Hydrophytic Vegetation
			$\frac{x}{x}$ 2 - Dominance Test is >50%
			$\frac{x}{2}$ 3 - Prevalence Index is $\leq 3.0^{1}$
			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			Definitions of Five Vegetation Strata:
	Total Cove		
			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).
15	Yes	ND	Sapling – Woody plants, excluding woody vines,
			approximately 20 ft (6 m) or more in height and less
15	Yes	OBL	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, <u>and</u> woody plants, except woody vines, less than approximately
			3 ft (1 m) in height.
			Woody vine – All woody vines, regardless of height.
	Total Cove		
5 20% of to	tal cover: _	9	
_	-		
			Hydrophytic
= 1	Total Cover		Vegetation
20% of to	tal cover: _	0	Present? Yes <u>×</u> No
	sturbed sc	il.	
	$ \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$	0       = Total Cover         20% of total cover:	0 = Total Cover $20% of total cover: 0$ $0 = Total Cover$

#### SOIL

Depth	Matrix			ox Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	7.5yr 4/3	75%	7.5yr 5/6	25%	C	PL	Clay loam	
6-12	10yr 5/2	75%	7.5yr 4/6	25%	C	PL	Clay loam	
12-18	10yr 4/2	65%	7.5 yr 5/8	35%	C	PL	Clay loam	
	Concentration, D=De I Indicators: (Appli					ains.		Pore Lining, M=Matrix. Problematic Hydric Soils <sup>3</sup> :
Black H × Hydrog Stratifid Organi 5 cm M Muck F 1 cm M Deplete Thick I Coast Sandy Sandy Sandy Strippe Dark S	Epipedon (A2) Histic (A3) gen Sulfide (A4) ed Layers (A5) c Bodies (A6) (LRR   Mucky Mineral (A7) (L Presence (A8) (LRR P, T) ed Below Dark Surfa Dark Surface (A12) Prairie Redox (A16) ( Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Auger (if observed)	RR P, T, U U) ce (A11) (MLRA 150 (LRR O, S) S, T, U)	Redox Depr     Marl (F10) (     Depleted O     Iron-Mangar      Umbric Surf     Delta Ochric     Reduced Ve     Piedmont Fl	urface (S9) cy Mineral d ed Matrix ( atrix (F3) Surface (F urk Surface essions (F LRR U) chric (F11) hese Masse ace (F13) ( c (F17) (ML rtic (F18) ( oodplain S	(LRR S, (F1) (LRR S, (F1) (LRR F2) (6) (F7) 8) (MLRA 1: (LRR P, T .RA 1:51) MLRA 1:5 oils (F19)	T, U) 51) LRR O, P, , U) 0A, 150B) (MLRA 14	2 cm Muck Reduced V Piedmont F Anomalous (MLRA 1 Red Parent Very Shallo × Other (Expl T) <sup>3</sup> Indicators wetland unless c	(A10) (LRR S) ertic (F18) (outside MLRA 150A, B floodplain Soils (F19) (LRR P, S, T Bright Loamy Soils (F20) 53B) : Material (TF2) ow Dark Surface (TF12) lain in Remarks) s of hydrophytic vegetation and hydrology must be present, listurbed or problematic.
Туре:	2	,-						
Depth (i	nches):						Hydric Soil Pres	sent? Yes <u>×</u> No
Bobai (i								



Photograph Number

Photograph Direction North

Comments: View of PEM wetland to the North.



Photograph Number Photograph Direction South

Comments: View of PEM wetland to the South.



Photograph Number

Photograph Direction West

Comments:

View of PEM wetland to the West.



Photograph Number

Photograph Direction East

Comments: View of PEM wetland to the East.

City/County: Virginia Beach/Chesapeake	Sampling Date: 4/28/2021
State: VA	_ Sampling Point: <u>EF_W_002_UP</u>
Section, Township, Range:	
Local relief (concave, convex, none): Convex	Slope (%): 0-5
36.718196 Long:	-76.167443 Datum: WGS84
NWI classif	fication: Upland
ear? Yes <u>x</u> No (If no, explain in	Remarks.)
y disturbed? Are "Normal Circumstances"	present? Yes <u>x</u> No
roblematic? (If needed, explain any answ	vers in Remarks.)
	State: VA Section, Township, Range: Local relief (concave, convex, none): Convex 36.718196 Long: NWI classif rear? Yes No (If no, explain in y disturbed? Are "Normal Circumstances"

# 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 Yes No Yes No	Is the Sampled Area within a Wetland?	Yes No
Remarks:			Observed Classifications:
Fallow agriculture field			Cowardin: Upland

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	oots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C	6) Saturation Visible on Aerial Imagery (C9)
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         Depth (inches):	
	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspection	ons) if available:
Describe Necolded Data (stream gauge, morntoning weil, aenar photos, previous inspectiv	ons), il avallable.
Remarks:	
Remarks.	
	-

Sampling Point: EF W 002 UP

4.       Percent of Dominant Species         5.       That Are OBL, FACW, or FAC:       50.0%         6.       0       = Total Cover         5.       0       20% of total cover:       0         7.       10       20% of total cover:       0	(B)
3.	
5.	
6 = Total Cover Prevalence Index worksheet: 50% of total cover: 0 20% of total cover: 0 Total % Cover of: Multiply by	(A/B)
<u> </u>	(\\D)
Sapling Stratum (Plot size: 30 ft)       OBL species       0 $x = 0$	
$\begin{array}{c} \hline \\ \hline \\ 1. \\ \hline \\ 1. \\ \hline \\ 1. \\ \hline \\ \hline \\ 1. \\ 1.$	
2. FAC species X3 =5	
3. FACU species X 4 =0	
4. UPL species X 5 =	
5 Column Totals: (A)05	<u>&gt; (B)</u>
6 Prevalence Index = B/A = 3.50	
0 = Total Cover Hydrophytic Vegetation Indicators:	
50% of total cover: 0 20% of total cover: 0 1 - Rapid Test for Hydrophytic Vegetatio	n
Shrub Stratum (Plot size: <u>30 ft</u> ) 2 - Dominance Test is >50%	
1 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
2 Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	xplain)
3	
4 <sup>1</sup> Indicators of hydric soil and wetland hydrolo	
5 be present, unless disturbed or problematic.	
6 Definitions of Five Vegetation Strata:	
0 = Total Cover Tree – Woody plants, excluding woody vines	
50% of total cover:       0       20% of total cover:       0       approximately 20 ft (6 m) or more in height a         Herb Stratum (Plot size:       30 ft       )       (7.6 cm) or larger in diameter at breast height	
1. Trifolium pratense, Red Clover 15 Yes FACU Sapling – Woody plants, excluding woody vi	ines
2. Ranunculus sardous, Hairy Buttercup       15       Yes       FAC       approximately 20 ft (6 m) or more in height a than 3 in. (7.6 cm) DBH.         3.	
4 Shrub – Woody plants, excluding woody ving	es,
5.	
7.	
9 Woody vine – All woody vines, regardless o	of height.
30 = Total Cover	
50% of total cover: <u>15</u> 20% of total cover: <u>6</u>	
Woody Vine Stratum (Plot size: <u>30 ft</u> )	
2	
3	
4	
5 Hydrophytic 0 = Total Cover Vegetation	
50% of total cover: 0 20% of total cover: 0 Present? Yes <u>No ×</u>	
Remarks: (If observed, list morphological adaptations below).	
Agriculture field, currently fallow	

Depth	Matrix	-	Redo	x Features				-
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-12	2.5y 4/4	100%					Silty loam	
12-18	2.5y 5/4	100%					Clay loam	
				·				
	Concentration, D=Dep I Indicators: (Applic	,	,			ains.		L=Pore Lining, M=Matrix. r Problematic Hydric Soils <sup>3</sup> :
Black H Hydrog Stratifie Organie 5 cm M Muck P 1 cm M Deplete Thick D Coast F Sandy Sandy Sandy	ol (A1) Epipedon (A2) Histic (A3) Ien Sulfide (A4) ed Layers (A5) c Bodies (A6) (LRR F Hucky Mineral (A7) (L Presence (A8) (LRR L Huck (A9) (LRR P, T) ed Below Dark Surface Dark Surface (A12) Prairie Redox (A16) (I Mucky Mineral (S1) ( Gleyed Matrix (S4) Redox (S5) d Matrix (S6)	RR P, T, U) J) ce (A11) MLRA 150A)	Delta Ochric Reduced Ver Piedmont Flo	rface (S9) y Mineral ( td Matrix (I trix (F3) Surface (F k Surface (F k Surface cssions (F8 <b>RR U)</b> nric (F11) ( ese Masse ce (F13) ( (F17) ( <b>ML</b> tic (F18) (I podplain So	(LRR S, F1) (LRR F2) 6) (F7) 3) (MLRA 1 25 (F12) (1 LRR P, T RA 151) MLRA 15 pills (F19)	T, U) O) LRR O, P, <sup>-</sup> , U) 0A, 150B) (MLRA 145	2 cm Muc Reduced Piedmoni Anomalou (MLRA Red Pare Very Sha Other (E) T) <sup>3</sup> Indicato wetlar unless	ent Material (TF2) Illow Dark Surface (TF12) (plain in Remarks) ors of hydrophytic vegetation and nd hydrology must be present, s disturbed or problematic.
	urface (S7) (LRR P, s Layer (if observed)						Hydric Soil Pr	resent? Yes <u>No</u>
Remarks:							l -	
Agriculture	e field,currently falle	w						



Photograph Number

Photograph Direction South

Comments:

Feature Name: EF\_W\_002\_UP



Photograph Number \_\_\_\_\_ Photograph Direction <u>North</u>\_\_\_\_

Comments:



Photograph Number

Photograph Direction West

Comments:



Photograph Number

Photograph Direction East

Comments:

Project/Site: Dominion CVOW	City/County: Virginia Beach/Che	sapeake Samp	pling Date:5/29/202	21
Applicant/Owner: Dominion	Sta	te: <u>VA</u> Samp	pling Point: <u>EF_W_003</u>	
Investigator(s): Emily Foster, Debbie Painter	Section, Township, Range:			
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, nor	e): <u>Concave</u>	Slope (%): 0-5	
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.713501 Long:	-76.16	68335 Datum: WGS84	
Soil Map Unit Name: Acredale silt loam, 0 to 1 percent slopes		NWI classification:	upland	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u>×</u> No (If r	o, explain in Remark	(S.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Cir	cumstances" presen	t? Yes <u>×</u> No	
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, expl	ain any answers in R	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 <u>×</u> No Yes <u>×</u> No Yes <u>×</u> No	Is the Sampled Area within a Wetland?	Yes <u>×</u> No
Remarks:			<b>Observed Classifications:</b>
Disturbed fallow agricultural field. I	Drained by ditches, some small en	nergent areas.	Cowardin: PEM

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	X 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 R	oots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	<u>x</u> Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (	C6) Saturation Visible on Aerial Imagery (C9)
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)	X FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present?         Yes Nox         Depth (inches):	
Water Table Present? Yes <u>No x</u> Depth (inches):	
Saturation Present? Yes No _x Depth (inches):	Wetland Hydrology Present? Yes <u>×</u> No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	tions) if available:
	ions), il avallable.
	ions), ii availabis.
Remarks:	
	auns, ii availabis.

Sampling Point: EF W 003

	Absolute Domina	nt Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> ) 1)	<u>% Cover</u> Specie	<u>s?</u> _ <u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:3(A)
23			Total Number of Dominant Species Across All Strata:3(B)
4	· ·		Percent of Dominant Species
5			That Are OBL, FACW, or FAC: (A/B)
	= Total C		Prevalence Index worksheet:
50% of total cover: <u>0</u>			Total % Cover of:Multiply by:
Sapling Stratum (Plot size: <u>30 ft</u> )	20 % 01 10181 000		OBL species <u>30</u> x 1 = <u>30</u>
			FACW species x 2 =0
1			FAC species <u>10</u> x 3 = <u>30</u>
2			FACU species x 4 =
3			UPL species x 5 =
4			Column Totals: (A) (B)
5			
6	= Total C		Prevalence Index = B/A =1.50
			Hydrophytic Vegetation Indicators:
50% of total cover: <u>0</u>	20% of total col	/er:	1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: <u>30 ft</u> )			2 - Dominance Test is >50%
1			X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3			
4			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5			be present, unless disturbed or problematic.
6			Definitions of Five Vegetation Strata:
	0 = Total C		Tree – Woody plants, excluding woody vines,
50% of total cover:0	20% of total cov	/er: 0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )			(7.6 cm) or larger in diameter at breast height (DBH).
1. Juncus articulatus, Joint-Leaf Rush	<u>15</u> Yes	OBL	Sapling – Woody plants, excluding woody vines,
2. Juncus effusus, Lamp Rush			approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3. <u>Ranunculus sardous, Hairy Buttercup</u>	<u>10 Yes</u>	FAC	
4 5			Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
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			Woody vine - All woody vines, regardless of height.
10			
11	40 = Total C		
50% of total cover: 20			
Woody Vine Stratum (Plot size: 30 ft)	20% of total cov	ei. <u>o</u>	
1			
2			
3			
4			
5			Hydrophytic
	<u> </u>		Vegetation Present? Yes <u>×</u> No
50% of total cover: 0		/er: <u>0</u>	
Remarks: (If observed, list morphological adaptations belo	SW).		

#### SOIL

epth	Matrix			lox Features				
nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	7.5YR 4/1	85%	10yr 5/8	15%	C	PL	Clay loam	no odor
6-12	7.5yr 4/1	85%	2.5yr 4/6	15%	C	PL	Clay loam	
12-18	10yr 3/2	80%	2.5yr 4/6	20%	<u> </u>	M	Clay	
ydric Soil Histosoi Histic E Black H Hydroge Stratifie Organic 5 cm Mi Muck P 1 cm Mi Deplete Thick D Coast F	concentration, D=Dep Indicators: (Applic Indicators: (Applic I (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) : Bodies (A6) (LRR F ucky Mineral (A7) (L resence (A8) (LRR I uck (A9) (LRR P, T) d Below Dark Surfac ark Surface (A12) trairie Redox (A16) ( Mucky Mineral (S1) (	cable to all P, T, U) RR P, T, U) J) Se (A11) MLRA 150 <i>A</i>	LRRs, unless oth Polyvalue E Thin Dark S Loamy Muc Loamy Gley Depleted M Redox Dark _×_ Depleted D Redox Dep Marl (F10) Depleted O Iron-Manga N Umbric Sur	erwise note Below Surface Surface (S9) Sky Mineral ( yed Matrix (F3) (Surface (F4) ark Surface ressions (F8 (LRR U) chric (F11) ( nese Masse	d.) e (S8) (L (LRR S, F1) (LRR F2) 6) (F7) ) MLRA 1: s (F12) ( LRR P, T	RR S, T, U T, U) O) 51) LRR O, P,	Indicators I) 1 cm M 2 cm M Reduc Piedm Anoma (MLI Red P Very S Other T) <sup>3</sup> Indic wet	PL=Pore Lining, M=Matrix. for Problematic Hydric Soils <sup>3</sup> : Muck (A9) (LRR O) Muck (A10) (LRR S) ed Vertic (F18) (outside MLRA 150A, E ont Floodplain Soils (F19) (LRR P, S, T alous Bright Loamy Soils (F20) RA 153B) arent Material (TF2) Shallow Dark Surface (TF12) (Explain in Remarks) extors of hydrophytic vegetation and tland hydrology must be present, ess disturbed or problematic.
Sandy ( Sandy F Stripped Dark Su	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Irface (S7) (LRR P, 3 Layer (if observed)	S, T, U)	Piedmont F	ertic (F18) <b>(I</b> loodplain So Bright Loan	oils (F19)	(MLRA 14		, 153D)
Туре:		-						v
Depth (in emarks:	ches):						Hydric Soil	Present? Yes X No



Photograph Number

Photograph Direction East

Comments: View of PEM wetland to the East.

Feature Name: EF\_W\_003



Photograph Number \_\_\_\_\_ Photograph Direction North

Comments: View of PEM wetland to the North.



Photograph Number

Photograph Direction South

Comments:

View of PEM wetland to the South.



Photograph Number \_\_\_\_\_

Photograph Direction West

Comments: View of PEM wetland to the West.

Project/Site: Dominion CVOW	City/County: Chesapeake		Sampling Date: 4/29/2021
Applicant/Owner: Dominion		State: VA	Sampling Point: EF_W_003_UP
Investigator(s): Emily Foster, Debbie Painter	Section, Township, Range: _		
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex	, none): <u>None</u>	Slope (%): 0-3
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.711832 Long: _		-76.168321 Datum: WGS84
Soil Map Unit Name: Tomotley-Bertie complex, 0 to 2 percent slopes		NWI classific	cation: upland
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u>×</u> No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significantly	/ disturbed? Are "Norma	al Circumstances" p	present? Yes <u>×</u> No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	ers 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 Yes No Yes No	Is the Sampled Area within a Wetland?	Yes No	
Remarks:			Observed Classificat	tions:
No hydrologic indicators. Fallow field	d, effectively drained by ditches		Cowardin: Upland	

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 R	Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils	(C6) Saturation Visible on Aerial Imagery (C9)
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 Depth (inches):	
Saturation Present? Yes No _x Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	itions), if available:
Remarks:	

Sampling Point: EF W 003 UP

	Absolute D			Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	% Cover S		Status	Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)
1				That Are OBL, FACW, or FAC: (A)
23				Total Number of Dominant Species Across All Strata:2(B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:
6	0 = 1			Prevalence Index worksheet:
50% of total cover: <u>0</u>				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: <u>30 ft</u> )	20% 0110	tai cover	0	OBL species x 1 =0
				FACW species0 x 2 =0
1				FAC species x 3 =20
2				FACU species 60 x 4 =240
3				UPL species x 5 =0
4				Column Totals: <u>100</u> (A) <u>360</u> (B)
5				
6				Prevalence Index = B/A =3.60
		Fotal Cover		Hydrophytic Vegetation Indicators:
50% of total cover: <u>0</u>	20% of to	tal cover: _	0	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: <u>30 ft</u> )				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	0 = 1	Total Cover		Tree – Woody plants, excluding woody vines,
50% of total cover: 0	20% of to	tal cover: _	0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )				(7.6 cm) or larger in diameter at breast height (DBH).
1. Ranunculus sardous, Hairy Buttercup	40	Yes	FAC	Sapling – Woody plants, excluding woody vines,
2. Lolium perenne, Perennial Rye Grass	35	Yes	FACU	approximately 20 ft (6 m) or more in height and less
3. Trifolium repens, White Clover	15	No	FACU	than 3 in. (7.6 cm) DBH.
4. Trifolium dubium, Suckling Clover	10	No	FACU	Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6				Herb – All herbaceous (non-woody) plants, including
7				herbaceous vines, regardless of size, <u>and</u> woody
8				plants, except woody vines, less than approximately 3 ft (1 m) in height.
9				
10				Woody vine - All woody vines, regardless of height.
11				
	100 = 1	Total Cover		
50% of total cover: <u>50</u>				
Woody Vine Stratum (Plot size: 30 ft )				
1				
2				
3				
4				
5		Fotal Cover		Hydrophytic Vegetation
50% of total cover: 0				Present? Yes No ×
			0	
Remarks: (If observed, list morphological adaptations belo	/w/).			

#### SOIL

Depth	Matrix		Red	ox Feature	s		_	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 3/2	97%	7.5YR 4/6	3%	C	PL	Sandy clay loam	
6-12	10yr 5/1	70%	7.5yr 5/8	30%	С	М	Loamy clay	
12-18	10yr 4/1	60%	7.5yr 5/8	40%	<u> </u>	M	Clay	
							· ·	
Type: C=0	Concentration, D=Dep	letion, RN	I=Reduced Matrix, N	IS=Maske	d Sand Gr	ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils <sup>3</sup> :
Black H Hydrog Stratifie Organie 5 cm M Muck F 1 cm M Deplete Thick D Coast F Sandy Sandy Sandy	Epipedon (A2) Histic (A3) Hen Sulfide (A4) Hen Sulfide (A4) Hen Sulfide (A5) C Bodies (A6) (LRR P Hucky Mineral (A7) (LH Presence (A8) (LRR U Huck (A9) (LRR P, T) Huck (A9) (LRR P, T) Hucky Mineral (A12) Hucky Mineral (S1) (H Mucky Mineral (S1) (H Gleyed Matrix (S4) Redox (S5) Hendarix (S6) Hendarix (S6) Hendaria (S7) (LRR P, S	RR P, T, U I) e (A11) VILRA 150 LRR O, S)	Redox Depr     Marl (F10) (     Depleted Or     Iron-Mangai     Umbric Surf     Delta Ochric     Reduced Ve     Piedmont Fl	ky Mineral red Matrix ( atrix (F3) Surface (f ark Surface ressions (F <b>LRR U)</b> chric (F11) nese Mass face (F13) c (F17) <b>(MI</b> ertic (F18) oodplain S	(F1) (LRR (F2) F6) (F7) (MLRA 1: (Ses (F12) ( (LRR P, T LRA 151) (MLRA 15 Soils (F19)	51) LRR O, F , U) 0A, 150E (MLRA 1	— Reduce — Piedmo — Anomal <b>(MLR</b> — Red Pai — Very Sh — Other (B • <b>T</b> ) <sup>3</sup> Indica wetta unles	uck (A10) <b>(LRR S)</b> ed Vertic (F18) <b>(outside MLRA 150A,</b> int Floodplain Soils (F19) <b>(LRR P, S, T</b> ous Bright Loamy Soils (F20) <b>A 153B)</b> rent Material (TF2) hallow Dark Surface (TF12) Explain in Remarks) ators of hydrophytic vegetation and and hydrology must be present, ss disturbed or problematic. <b>153D)</b>
Dark S	Layer (if observed):							

Remarks:

Relic hydric soil coloring likely from prior to drained conditions. If ditches were abandoned this area would potentially develop wetland conditions.



Photograph Number

Photograph Direction West

Comments:

Feature Name: EF\_W\_003\_UP



Photograph Number \_\_\_\_\_ Photograph Direction East

Comments:



Photograph Number

Photograph Direction South

Comments:



Photograph Number \_\_\_\_\_ Photograph Direction North\_\_\_

Comments:

/2021
4
3
84

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>×</u> No Yes <u>×</u> No Yes <u>×</u> No	Is the Sampled Area within a Wetland? Yes	× No
Remarks: Fallow agricultural field drained by a to or in vicinity of ditches with surfa	0	nt wetland areas apparent, adjacent	Observed Classifications: Cowardin: <u>PEM</u>

Primary Indicators (minimum of one is required; check all that apply) X Surface Soil Cracks (B6)	
Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (	38)
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 Roots (C3) Dry-Season Water Table (C2)	
Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8)	
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C	9)
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         Nox         Depth (inches):	
Saturation Present?         Yes No         Depth (inches):         Wetland Hydrology Present?         Yes No	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Describe Recorded Data (shearn gauge, monitoring weil, aerial protos, previous inspections), il available.	
Personal sec	
Remarks:	
	-

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

Sampling Point: EF W 004

	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	% Cover Species? Status	Number of Dominant Species
1		That Are OBL, FACW, or FAC: (A)
2		
3		Total Number of Dominant Species Across All Strata: 1(B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC:100.0% (A/B)
6		Prevalence Index worksheet:
	0 = Total Cover	
50% of total cover: <u>0</u>	20% of total cover:0	Total % Cover of:Multiply by:
Sapling Stratum (Plot size: <u>30 ft</u> )		OBL species90 x 1 =90
		FACW species x 2 =
1		FAC species10 x 3 =30
2		FACU species x 4 =
3		UPL species $0 \times 5 = 0$
4		
5		Column Totals: <u>100</u> (A) <u>120</u> (B)
6		Prevalence Index = B/A =1.20
	0 = Total Cover	
50% of total cover: 0	20% of total cover:0	Hydrophytic Vegetation Indicators:
		x 1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: <u>30 ft</u> )		<u>×</u> 2 - Dominance Test is >50%
1		X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3		
4		<sup>1</sup> Indiastors of hydria soil and watland hydrolony must
5		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		Definitions of Five Vegetation Strata:
6		Deminions of Five vegetation Strata.
	0 = Total Cover	Tree – Woody plants, excluding woody vines,
	20% of total cover:0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )		(7.6 cm) or larger in diameter at breast height (DBH).
1. Juncus effusus, Lamp Rush	75 Yes OBL	Sapling – Woody plants, excluding woody vines,
2. <u>Ranunculus sardous, Hairy Buttercup</u>	10 No FAC	approximately 20 ft (6 m) or more in height and less
3. Juncus articulatus, Joint-Leaf Rush		than 3 in. (7.6 cm) DBH.
	5 N 001	Shrub – Woody plants, excluding woody vines,
		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, and woody
8		3 ft (1 m) in height.
9		
10		Woody vine - All woody vines, regardless of height.
11		
	100 = Total Cover	
50% of total cover: <u>50</u>	20% of total cover:20	
Woody Vine Stratum (Plot size: <u>30 ft</u> )		
1		
2		
3		
4		
5		Hydrophytic
	0 = Total Cover	Vegetation Present2 Veg X No
50% of total cover: 0	20% of total cover: 0	Present? Yes <u>×</u> No
Remarks: (If observed, list morphological adaptations belo	W).	1
,,	-	

Depth	Matrix		Redo	ox Feature	s				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-6	10yr 4/2	100%					Loamy sand		
6-18	10yr 4/1	95%	10yr 5/6	5%	C	PL	Loamy sand		
21	Concentration, D=Dep	,	,			ains.		=Pore Lining, M=Matr	_
-	il Indicators: (Applic	able to all			,			Problematic Hydric	Soils":
Black I Hydrog Stratifi Organi 5 cm N Muck F 1 cm N Deplet Thick I Coast Sandy Sandy Sandy Sandy	Epipedon (A2) Epipedon (A2) Histic (A3) gen Sulfide (A4) ed Layers (A5) ic Bodies (A6) (LRR P Aucky Mineral (A7) (LI Presence (A8) (LRR L Auck (A9) (LRR P, T) ed Below Dark Surface Dark Surface (A12) Prairie Redox (A16) (I Mucky Mineral (S1) (I Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, S	RR P, T, U I) e (A11) MLRA 150 LRR O, S)	Redox Depr     Marl (F10) (I     Depleted Oc     Iron-Mangar      Umbric Surfi     Delta Ochric     Reduced Ve     Piedmont FI	urface (S9 cy Mineral ed Matrix ( atrix (F3) Surface (F urk Surface essions (F L <b>RR U)</b> chric (F11) hese Mass ace (F13) ( (F17) ( <b>ML</b> rtic (F18) ( oodplain S	) (LRR S, (F1) (LRR S, (F2) =6) = (F7) 8) (MLRA 1 = s (F12) ( (LRR P, T = RA 151) (MLRA 15 soils (F19)	T, U) 2 O) 51) LRR O, P , U) 0A, 150B (MLRA 1	2 cm Muc Reduced Piedmont Anomalou (MLRA Red Pare Very Shal Other (Ex P, T) <sup>3</sup> Indicato wetlan unless	nt Material (TF2) low Dark Surface (TF plain in Remarks) rs of hydrophytic vege d hydrology must be p disturbed or problema	) <b>(LRR P, S,</b> T (F20) 12) etation and present,
lestrictive	e Layer (if observed)	:							

Soil is disturbed and compacted, fallow agricultural field. Some shallow surface connection to adjacent ditch.



Photograph Number

Photograph Direction East

Comments: View of a PEM wetland to the East.

Feature Name: EF\_W\_004



Photograph Number Photograph Direction South

Comments: View of a PEM wetland to the South.



Photograph Number

Photograph Direction West

Comments:

View of a PEM wetland to the West.



Photograph Number

Photograph Direction North

Comments: View of a PEM wetland to the North.

Project/Site: Dominion CVOW	City/County: Chesapeake		Sampling Date:	5/4/2021	L
Applicant/Owner: Dominion		State: VA	Sampling Point:	EF_W_004-005-	-006 UP
Investigator(s): Emily Foster, Kristen Walls, Chelsea Bajek	Section, Township, Range: _				
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex	, none): <u>None</u>	Slo	pe (%): <u>0-3</u>	
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.700915 Long: _		-76.169961 Da	atum: <u>WGS84</u>	
Soil Map Unit Name: Tomotley-Nimmo complex, 0 to 1 percent slopes		NWI classific	ation: <u>R4SBCx</u>		
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u>x</u> No	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Norma	al Circumstances" p	resent? Yes	x No	
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed,	explain any answe	rs 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         x           Yes         No         x           Yes         No         x	Is the Sampled Area within a Wetland?	Yes No×
Remarks:			Observed Classifications:
Fallow agricultural field drained by	a series of ditches.		Cowardin: Upland

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	Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils	(C6) Saturation Visible on Aerial Imagery (C9)
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 _x Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe-	ctions), if available:
	r.
Remarks:	r
Remarks:	
Remarks:	r.
Remarks:	, , , , , , , , , , , , , , , , , , ,
Remarks:	, , , , , , , , , , , , , , , , , , ,
Remarks:	

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

#### Sampling Point: EF\_W\_004-005-006UP

	Absolute Domina	nt Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> ) 1	<u>% Cover</u> Species		Number of Dominant Species That Are OBL, FACW, or FAC:0 (A)
23			Total Number of Dominant Species Across All Strata:2 (B)
4 5			Percent of Dominant Species That Are OBL, FACW, or FAC:0.0% (A/B)
6			Prevalence Index worksheet:
	<u> </u>	over	
50% of total cover: <u>0</u>	20% of total cov	er:0	Total % Cover of: Multiply by:
<u>Sapling Stratum</u> (Plot size: <u>30 ft</u> )			OBL species <u>15</u> x 1 = <u>15</u>
1			FACW species $0 \times 2 = 0$
2			FAC species $10 \times 3 = 30$
3			FACU species 45 x 4 =180
4			UPL species x 5 =0
5			Column Totals: (A) (B)
6			Prevalence Index = B/A =3.21
	0 = Total C		Hydrophytic Vegetation Indicators:
50% of total cover: <u>0</u>			1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: <u>30 ft</u> )			
1			2 - Dominance Test is >50%
2			3 - Prevalence Index is ≤3.0 <sup>1</sup>
			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3			1
4			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			
6			Definitions of Five Vegetation Strata:
	= Total C		Tree – Woody plants, excluding woody vines,
50% of total cover: 0	20% of total cov	er: 0	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: <u>30 ft</u> )			
1. Poa pratensis, Kentucky Blue Grass			Sapling – Woody plants, excluding woody vines,
2. Lolium perenne, Perennial Rye Grass			approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3. Juncus articulatus, Joint-Leaf Rush			
4. Ranunculus sardous, Hairy Buttercup	<u>10 No</u>	FAC	Shrub – Woody plants, excluding woody vines,
5. Juncus effusus, Lamp Rush	<u> </u>	OBL	approximately 3 to 20 ft (1 to 6 m) in height.
6			Herb – All herbaceous (non-woody) plants, including
7			herbaceous vines, regardless of size, and woody
8			plants, except woody vines, less than approximately 3 ft (1 m) in height.
9			
10			Woody vine – All woody vines, regardless of height.
11			
	<u>70</u> = Total C	over	
50% of total cover: <u>35</u>			
Woody Vine Stratum (Plot size: 30 ft )			
1,			
2			
3			
4			
5			Hydrophytic Vegetation
	= Total C		Vegetation Present? Yes No×
50% of total cover: 0		er: <u> </u>	
Remarks: (If observed, list morphological adaptations belo	₩).		

### SOIL

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the in	dicator	or confirm	the absence	of indicators.)	
Depth	Matrix		Redo	x Features					
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-18	10yr 3/3	100%					Loamy sand		
	•								
				· ·					
	oncentration, D=Dep					ains.		PL=Pore Lining, M=Mat	
Hydric Soil	Indicators: (Applic	able to all LF	Rs, unless othe	rwise note	d.)		Indicators	for Problematic Hydric	: Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Be	low Surfac	e (S8) <b>(L</b>	RR S, T, U	) 1 cm M	uck (A9) <b>(LRR O)</b>	
Histic Ep	oipedon (A2)		Thin Dark Su	irface (S9)	(LRR S,	T, U)	2 cm M	uck (A10) <b>(LRR S)</b>	
Black Hi	stic (A3)		Loamy Muck	y Mineral (I	=1) (LRR	0)	Reduce	d Vertic (F18) (outside	MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (F	2)		Piedmo	nt Floodplain Soils (F19	) (LRR P, S, T)
Stratified	d Layers (A5)		Depleted Ma	trix (F3)			Anoma	ous Bright Loamy Soils	(F20)
Organic	Bodies (A6) (LRR F	P, T, U)	Redox Dark	Surface (F6	5)		(MLR	A 153B)	
5 cm Mւ	ıcky Mineral (A7) <b>(L</b> I	RR P, T, U)	Depleted Da	rk Surface (	(F7)		Red Pa	rent Material (TF2)	
Muck Pr	esence (A8) <b>(LRR L</b>	J)	Redox Depression	essions (F8	)			allow Dark Surface (TF	12)
1 cm Mւ	ick (A9) (LRR P, T)		Marl (F10) (L	.RR U)			Other (	Explain in Remarks)	
	d Below Dark Surfac	e (A11)	Depleted Oc	· / ·					
	ark Surface (A12)		Iron-Mangan		· / ·	, ,	,	ators of hydrophytic veg	
	rairie Redox (A16) (I		Umbric Surfa			, U)		and hydrology must be p	
	/lucky Mineral (S1) (	LRR O, S)	Delta Ochric	. , .				ss disturbed or problem	atic.
	Bleyed Matrix (S4)		Reduced Ve						
	Redox (S5)		Piedmont Flo						
	Matrix (S6)		Anomalous E	Bright Loam	y Solls (I	F20) (MLR/	A 149A, 153C,	153D)	
	rface (S7) (LRR P, S								
Restrictive	Layer (if observed)	:							
Туре:			_						
Depth (in	ches):						Hydric Soil	Present? Yes	No
Remarks:							•		

# Feature Name: EF\_W\_004-005-006 UP



Photograph Number

Photograph Direction West

Comments:



Photograph Number \_\_\_\_\_ Photograph Direction East

Comments:



Photograph Number

Photograph Direction South

Comments:



Photograph Number \_\_\_\_\_ Photograph Direction North

Comments:

Project/Site: Dominion CVOW	City/County: Chesapeake		Sampling Date:5/	/4/2021
Applicant/Owner: Dominion		State: VA	Sampling Point: <u>EF_W_(</u>	)05
Investigator(s): Emily Foster, Kristen Walls, Chelsea Bajek	Section, Township, Range: _			
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex	, none): <u>None</u>	Slope (%): 0	1-3
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.701229 Long:		-76.169645 Datum: WG	<u>3584</u>
Soil Map Unit Name: Tomotley-Nimmo complex, 0 to 1 percent slopes		NWI classific	ation: Upland	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u>x</u> No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Norm:	al Circumstances" p	oresent? Yes <u>×</u> No	)
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs 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 <u>×</u> No Yes <u>×</u> No Yes <u>×</u> No	Is the Sampled Area within a Wetland?	Yes No
Remarks:			Observed Classifications:
Fallow agriculturak field with some	emergent wetland areas adjacent	to ditches.	Cowardin: PEM

Wetland Hydrology Indicato	rs:			Secondary Indicators (minimum of two required)
Primary Indicators (minimum of	of one is required;	check all that apply)		x Surface Soil Cracks (B6)
Surface Water (A1)	_	_ Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	_	_ Marl Deposits (B15) (LRR U)		x Drainage Patterns (B10)
Saturation (A3)		Hydrogen Sulfide Odor (C1)		Moss Trim Lines (B16)
Water Marks (B1)		Oxidized Rhizospheres along Living	Roots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2)		Presence of Reduced Iron (C4)		Crayfish Burrows (C8)
Drift Deposits (B3)		Recent Iron Reduction in Tilled Soils	(C6)	Saturation Visible on Aerial Imagery (C9)
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 Aeri	al Imagery (B7)			X FAC-Neutral Test (D5)
Water-Stained Leaves (B	9)		-	Sphagnum moss (D8) (LRR T, U)
Field Observations:				
Surface Water Present?	Yes No _	x Depth (inches):		
Water Table Present?	Yes No _	x Depth (inches):		
Saturation Present? (includes capillary fringe)	Yes No _	x Depth (inches):	Wetland	Hydrology Present? Yes <u>×</u> No
	am gauge, monito	ring well, aerial photos, previous inspec	tions), if ava	ailable:
Remarks:				

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

Sampling Point: EF W 005

	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	% Cover Species? Status	Number of Dominant Species
1		That Are OBL, FACW, or FAC: (A)
2		
3		Total Number of Dominant Species Across All Strata: 1(B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC:100.0% (A/B)
6		Prevalence Index worksheet:
	0 = Total Cover	
50% of total cover: <u>0</u>	20% of total cover:0	Total % Cover of:Multiply by:
Sapling Stratum (Plot size: <u>30 ft</u> )		OBL species x 1 =90
		FACW species x 2 =
1		FAC species10 x 3 =30
2		FACU species x 4 =
3		UPL species $0 \times 5 = 0$
4		
5		Column Totals: <u>100</u> (A) <u>120</u> (B)
6		Prevalence Index = B/A =1.20
	0 = Total Cover	
50% of total cover: 0	20% of total cover:0	Hydrophytic Vegetation Indicators:
		x 1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: <u>30 ft</u> )		<u>×</u> 2 - Dominance Test is >50%
1		X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3		
4		<sup>1</sup> Indiastors of hydria soil and watland hydrolony must
5		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		Definitions of Five Vegetation Strata:
6		Deminions of Five vegetation Strata.
	0 = Total Cover	Tree – Woody plants, excluding woody vines,
	20% of total cover:0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )		(7.6 cm) or larger in diameter at breast height (DBH).
1. Juncus effusus, Lamp Rush	75 Yes OBL	Sapling – Woody plants, excluding woody vines,
2. <u>Ranunculus sardous, Hairy Buttercup</u>	10 No FAC	approximately 20 ft (6 m) or more in height and less
3. Juncus articulatus, Joint-Leaf Rush		than 3 in. (7.6 cm) DBH.
	5 N 001	Shrub – Woody plants, excluding woody vines,
		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, and woody
8		3 ft (1 m) in height.
9		
10		Woody vine - All woody vines, regardless of height.
11		
	100 = Total Cover	
50% of total cover: <u>50</u>	20% of total cover:20	
Woody Vine Stratum (Plot size: <u>30 ft</u> )		
1		
2		
3		
4		
5		Hydrophytic
	0 = Total Cover	Vegetation Present2 Veg X No
50% of total cover: 0	20% of total cover: 0	Present? Yes <u>×</u> No
Remarks: (If observed, list morphological adaptations belo	W).	1
,,	-	

Depth	Matrix		Redo	x Feature	s			
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10yr 4/2	100%					Loamy sand	
6-18	10yr 4/1	95%	10yr 5/6	5%	C	PL	Loamy sand	
Type: C=0	 Concentration, D=Dep	letion, RM	=Reduced Matrix, M	 S=Maskec	I Sand Gra	ains.	<sup>2</sup> Location: PL=	=Pore Lining, M=Matrix.
lydric Soi	Indicators: (Applic	able to al	LRRs, unless othe	rwise not	ed.)		Indicators for	Problematic Hydric Soils <sup>3</sup> :
Black H Hydrog Stratifie Crgani 5 cm M Muck F 1 cm M Deplete Thick E Coast I Sandy Sandy Sandy	Epipedon (A2) Epipedon (A2) Histic (A3) gen Sulfide (A4) ed Layers (A5) c Bodies (A6) (LRR P fucky Mineral (A7) (LI Presence (A8) (LRR P, T) ed Below Dark Surface Dark Surface (A12) Prairie Redox (A16) (I Mucky Mineral (S1) (I Gleyed Matrix (S4) Redox (S5) ed Matrix (S6)	RR P, T, U I) e (A11) VILRA 150	Redox Deprovement     Redox Deprovement     Marl (F10) (I     Depleted Oc     Iron-Mangan     Umbric Surfa     Delta Ochric     Reduced Ve     Piedmont Flo	urface (S9) cy Mineral I ed Matrix ( atrix (F3) Surface (F rk Surface essions (F <b>LRR U</b> ) thric (F11) nese Massi ace (F13) ( (F17) ( <b>ML</b> rtic (F18) ( oodplain S	) (LRR S, (F1) (LRR F2) 6) (F7) 8) (MLRA 1 (LRR P, T .RA 151) MLRA 15 oils (F19)	T, U) 51) LRR O, P , U) 0A, 150B (MLRA 1	2 cm Muck Reduced V Piedmont I Anomalous (MLRA 1 Red Paren Very Shall Other (Exp , T) <sup>3</sup> Indicator wetland unless (	(A10) (LRR S) /ertic (F18) (outside MLRA 150A,I Floodplain Soils (F19) (LRR P, S, T s Bright Loamy Soils (F20) (53B) it Material (TF2) ow Dark Surface (TF12) olain in Remarks) es of hydrophytic vegetation and I hydrology must be present, disturbed or problematic.
	urface (S7) (LRR P, S							
	Layer (if observed)							
Туре:							Hydric Soil Pre	

Soil is disturbed and compacted, fallow agricultural field. Shallow surface connection to adjacent ditch.

Date: <u>5/4/2</u>1



Photograph Number \_\_\_\_

Photograph Direction East

Comments: View of a PEM wetland to the East.

Feature Name: EF\_W\_005



Photograph Number Photograph Direction South

Comments: View of a PEM wetland to the South.



Photograph Number

Photograph Direction North

Comments:

View of a PEM wetland to the North.



Photograph Number

Photograph Direction West

Comments: View of a PEM wetland to the West.

Project/Site: Dominion CVOW	City/County: Chesapeake		Sampling Date: 5/4/2021
Applicant/Owner: Dominion		State: VA	Sampling Point: <u>EF_W_006</u>
Investigator(s): Emily Foster, Kristen Walls, Chelsea Bajek	Section, Township, Range: _		
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex	, none): <u>None</u>	Slope (%): 0-3
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.701513 Long:		-76.170192 Datum: WGS84
Soil Map Unit Name: Tomotley-Nimmo complex, 0 to 1 percent slopes		NWI classific	ation: Upland
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u>x</u> No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significantly	v disturbed? Are "Norma	al Circumstances" p	present? Yes <u>×</u> No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	ers 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 <u>x</u> No Yes <u>x</u> No Yes <u>x</u> No	Is the Sampled Area within a Wetland? Yes	× No
Remarks: Agricultural field being drained by a shallow surface connection.	series of ditches. Emergent wetl	ands adjacent to ditches with	Observed Classifications: Cowardin: <u>PEM</u>

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all t	that apply)	X 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) Hydroge	en Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized	d Rhizospheres along Living Roots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence	ce of Reduced Iron (C4)	X Crayfish Burrows (C8)
Drift Deposits (B3) Recent	Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Mu	ick Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (E	Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		X FAC-Neutral Test (D5)
Water-Stained Leaves (B9)		Sphagnum moss (D8) (LRR T, U)
Field Observations:		
Surface Water Present? Yes No Dep	pth (inches):	
Water Table Present? Yes No Dep	pth (inches):	
Saturation Present? Yes No Dep (includes capillary fringe)	pth (inches): Wetland	Hydrology Present? Yes <u>×</u> No
Describe Recorded Data (stream gauge, monitoring well, a	aerial photos, previous inspections), if ava	ailable:
Remarks:		
[		

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

Sampling Point: EF W 006

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: $1$ (A)
2				
3				Total Number of Dominant       Species Across All Strata:       1
4				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:100.0% (A/B)
6				Prevalence Index worksheet:
		= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover:	0	
<u>Sapling Stratum</u> (Plot size: <u>30 ft</u> )				OBL species <u>75</u> x 1 = <u>75</u>
1				FACW species x 2 =0
2				FAC species <u>10</u> x 3 = <u>30</u>
				FACU species x 4 =
3				UPL species x 5 =0
4				Column Totals: <u>85</u> (A) <u>105</u> (B)
5				
6				Prevalence Index = B/A =1.24
				Hydrophytic Vegetation Indicators:
50% of total cover: <u>0</u>	20% of	total cover:	0	<u>×</u> 1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: <u>30 ft</u> )				X 2 - Dominance Test is >50%
1				X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
···		= Total Cove	-	
50% official assess				Tree – Woody plants, excluding woody vines,
50% of total cover: <u>0</u>	20% of	total cover:	0	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: <u>30 ft</u> )				
1. Juncus effusus, Lamp Rush				Sapling – Woody plants, excluding woody vines,
2. <u>Typha latifolia, Broad-Leaf Cat-Tail</u>	10	<u>No</u>	OBL	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3. Ranunculus sardous, Hairy Buttercup	10	No	FAC	
4. Juncus articulatus, Joint-Leaf Rush	10	No	OBL	Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6				Herb – All herbaceous (non-woody) plants, including
7				herbaceous vines, regardless of size, and woody
8				plants, except woody vines, less than approximately
				3 ft (1 m) in height.
9				Woody vine - All woody vines, regardless of height.
10				
11				
		= Total Cove		
50% of total cover: <u>42.5</u>	20% of	total cover:	17	
Woody Vine Stratum (Plot size: <u>30 ft</u> )				
1				
2				
3				
4				
5				Hydrophytic Vegetation
		= Total Cove		Present? Yes <u>×</u> No
50% of total cover: <u>0</u>		total cover:	0	
Remarks: (If observed, list morphological adaptations belo	w).			

Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10yr 4/2	100%					Loamy sand	
6-18	10yr 4/1	95%	10yr 5/6	5%	C		Loamy sand	
21	Concentration, D=Dep	,	,			ains.		=Pore Lining, M=Matrix. Problematic Hydric Soils <sup>3</sup> :
Black H Hydrog Stratifie 5 cm M Muck F 1 cm M Deplete Thick D Coast I Sandy Sandy Sandy Strippe Dark S	Epipedon (A2) Histic (A3) Hen Sulfide (A4) ad Layers (A5) c Bodies (A6) (LRR P, lucky Mineral (A7) (LF Presence (A8) (LRR U luck (A9) (LRR P, T) ed Below Dark Surface Dark Surface (A12) Prairie Redox (A16) (N Mucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR P, S	R P, T, U ) ● (A11) ILRA 150 .RR O, S) 5, T, U)	Redox Depro     Marl (F10) (L     Depleted Oc     Iron-Mangan     Umbric Surfa     Delta Ochric     Reduced Ve     Piedmont Flo	urface (S9 y Mineral ed Matrix ( trix (F3) Surface (F rk Surface essions (F .RR U) hric (F11) ese Mass ace (F13) (F17) (MI rtic (F18) coodplain S	) (LRR S, (F1) (LRR S, (F2) =6) = (F7) 8) (MLRA 1 = s (F12) ( (LRR P, T = RA 151) (MLRA 15 soils (F19)	T, U) 2 O) 51) LRR O, P, , U) 0A, 150B (MLRA 14	2 cm Muc Reduced V Piedmont MLRA Red Paren Very Shall Other (Exp T) <sup>3</sup> Indicato wetland unless	nt Material (TF2) low Dark Surface (TF12) plain in Remarks) rs of hydrophytic vegetation and d hydrology must be present, disturbed or problematic.
Type:	Layer (if observed):							
	nches):						Hydric Soil Pre	esent? Yes <u>×</u> No
Remarks:								

Date: <u>5/4/21</u>

# Feature Name: EF\_W\_006



Photograph Number

Photograph Direction North

Comments: View of a PEM wetland to the North.



Photograph Number Photograph Direction South

Comments: View of a PEM wetland to the South.



Photograph Number

Photograph Direction East

Comments:

View of a PEM wetland to the East.



Photograph Number

Photograph Direction West

Comments: View of a PEM wetland to the West.

Project/Site: Dominion CVOW	City/County: Chesapeake		Sampling Date: 5/5/2021
Applicant/Owner: Dominion		State: VA	_ Sampling Point: <u>EF_W_008_PEM</u>
Investigator(s): Emily Foster, Kristen Walls	Section, Township, Range: _		
Landform (hillslope, terrace, etc.): Hillslope	Local relief (concave, convex	, none): <u>None</u>	Slope (%): 0-5
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.74263741 Long:		76.14043379 Datum: WGS84
Soil Map Unit Name: 2: Acredale-Chapanoke complex, 0 to 1 percent slopes		NWI classif	ication: upland
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u>×</u> No	(If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances"	present? Yes <u>×</u> No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answ	ers 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 <u>×</u> No Yes <u>×</u> No Yes <u>×</u> No	Is the Sampled Area within a Wetland?	Yes <u>×</u> No
Remarks:		-	<b>Observed Classifications:</b>
Disturbed emergent wetland in exis	sting powerline easement.		Cowardin: PEM

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required	; check all that apply)	X_ Surface Soil Cracks (B6)
Surface Water (A1) High Water Table (A2)	_ Aquatic Fauna (B13) _ Marl Deposits (B15) <b>(LRR U)</b>	Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
	Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1)	Oxidized Rhizospheres along Living Root	
Sediment Deposits (B2)	Presence of Reduced Iron (C4)	<u>×</u> Crayfish Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils (C6)	
Algal Mat or Crust (B4)	Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5)	Other (Explain in Remarks)	Shallow Aguitard (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	x Depth (inches):	
Water Table Present? Yes No	Depth (inches):	
		etland Hydrology Present? Yes <u>×</u> No
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspection	s), if available:
Remarks:		
-		-

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

Sampling Point: EF\_W\_008\_PEM

	Absolute Dominant Indica	tor Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	<u>% Cover Species?</u> Stat	
1		That Are OBL, FACW, or FAC: (A)
2		
3		Species Across All Strata: (B)
4		Percent of Dominant Species
5		— That Are OBL, FACW, or FAC:100.0% (A/B)
6		
	0 = Total Cover	Prevalence Index worksheet:
50% of total cover: <u>0</u>	20% of total cover:0	Total % Cover of: Multiply by:
<u>Sapling Stratum</u> (Plot size: <u>30 ft</u> )		OBL species x 1 =70
1		FACW species <u>15</u> x 2 = <u>30</u>
2		FAC species <u>5</u> x 3 = <u>15</u>
3		FACU species x 4 =
4		UPL species x 5 =0
5		Column Totals: <u>90</u> (A) <u>115</u> (B)
6		- 1.28
	0 = Total Cover	Prevalence Index = B/A = <u>1.28</u>
50% of total cover: 0	20% of total cover:0	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: <u>30 ft</u> )		
		$\frac{x}{2}$ - Dominance Test is >50%
1		$\frac{X}{2}$ 3 - Prevalence Index is $\leq 3.0^{1}$
2		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3		—
4		
5		be present, unless disturbed or problematic.
6		Definitions of Five Vegetation Strata:
	0 = Total Cover	Tree – Woody plants, excluding woody vines,
	20% of total cover:0	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: <u>30 ft</u> )		
1. <u>Typha latifolia, Broad-Leaf Cat-Tail</u>		
2. <u>Carex lurida, Shallow Sedge</u>		than 3 in (7.6 cm) DBH
3. Juncus effusus, Lamp Rush		
4. Arundinaria tecta, Switch Cane		
5. <u>Carex lonchocarpa, Southern Long Sedge</u>		—
6. <u>Solidago sp.</u>	<u>    5     No     N</u> D	The based of the theory plants, molading
7. <u>Acer rubrum, Red Maple</u>	<u>5 No</u> FA	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		
	90 = Total Cover	
50% of total cover: <u>47.5</u>	20% of total cover:19	
Woody Vine Stratum (Plot size: 30 ft )		
1		
2.		—
3		—
4		—
		—
5	0 = Total Cover	— Hydrophytic Vegetation
E00/ of table any any		Present? Ves X No
	20% of total cover:0	—
Remarks: (If observed, list morphological adaptations belo	W).	

#### SOIL

6-18 ype: C=Cor ydric Soil In Histosol (, Histic Epi Black Hist Hydrogen Stratified Organic E 5 cm Muc Organic Pre 1 cm Muc Depleted Thick Dar	bedon (A2) ic (A3) Sulfide (A4) Layers (A5) odies (A6) (LRR P ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)	90% 1	Color (moist) .0yr 4/6 .0yr 4/6	erwise note elow Surfac furface (S9) ky Mineral ( red Matrix (F	<u>Type</u> <sup>1</sup> <u>C</u> <u>C</u> <u>Sand Gr:</u> d.) e (S8) (L (LRR S, F1) (LRR S,	.RR S, T, I T, U)	Indicators fo U) 1 cm Mu 2 cm Mu	Remarks PL=Pore Lining, M=Matrix. or Problematic Hydric Soils <sup>3</sup> : ck (A9) (LRR O) ck (A10) (LRR S)
0-6 6-18 ype: C=Cor ydric Soil In Histosol (, Histic Epi Black Hisi Black Hisi Grganic E 5 cm Muc Organic E 5 cm Muc 1 cm Muc Depleted Thick Dar	L0yr 4/2 L0yr 5/2 L0yr 5/2 meentration, D=Dep dicators: (Applic A1) bedon (A2) ic (A3) Sulfide (A4) Layers (A5) odies (A6) (LRR P ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)	90% 1	Reduced Matrix, M Res, unless othe Polyvalue B Thin Dark S Loamy Muc Loamy Gley X Depleted M	10%	 	PL PL 	Silty clay loam	or Problematic Hydric Soils <sup>3</sup> : ck (A9) (LRR O) ck (A10) (LRR S)
6-18 ype: C=Cor ydric Soil In Histosol (J Histic Epi Black Hist Hydrogen Stratified Organic E 5 cm Muc Organic Pre 1 cm Muc Depleted Thick Dar	10yr 5/2 icentration, D=Dep dicators: (Applic A1) bedon (A2) ic (A3) Sulfide (A4) Layers (A5) odies (A6) (LRR P ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)	90% 1	Reduced Matrix, M Res, unless othe Polyvalue B Thin Dark S Loamy Muc Loamy Gley X Depleted M	10%	<u>C</u> <u>Sand Gr:</u> d.) e (S8) (L (LRR S, F1) (LRR S,	PL 	Silty clay loam	or Problematic Hydric Soils <sup>3</sup> : ck (A9) (LRR O) ck (A10) (LRR S)
ype: C=Cor ydric Soil In Histosol (, Histosol (, Histic Epi Black Hisi Hydrogen Stratified Organic E 5 cm Muc 5 cm Muc Muck Pre 1 cm Muc Depleted Thick Dar	icentration, D=Dep dicators: (Applic A1) bedon (A2) ic (A3) Sulfide (A4) _ayers (A5) odies (A6) (LRR P ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)		Reduced Matrix, M RRs, unless othe Polyvalue B Thin Dark S Loamy Muc Loamy Gley Depleted Mi	IS=Masked Prwise note elow Surfac urface (S9) ky Mineral ( red Matrix (F	Sand Gr: d.) e (S8) (L (LRR S, F1) (LRR	ains. RR S, T, I T, U)	<sup>2</sup> Location: P Indicators fo U) 1 cm Mu 2 cm Mu	or Problematic Hydric Soils <sup>3</sup> : ck (A9) (LRR O) ck (A10) (LRR S)
ydric Soil In Histosol (, Histic Epi Black Hist Hydrogen Stratified Organic E 5 cm Muc Muck Pre 1 cm Muc Depleted Thick Dar	dicators: (Applic A1) bedon (A2) ic (A3) Sulfide (A4) Layers (A5) odies (A6) (LRR P ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)	able to all L , T, U) RR P, T, U)	RRs, unless othe Polyvalue B Thin Dark S Loamy Muc Loamy Gley X Depleted M	erwise note elow Surfac furface (S9) ky Mineral ( red Matrix (F	d.) e (S8) (L (LRR S, F1) (LRR	.RR S, T, I T, U)	Indicators fo U) 1 cm Mu 2 cm Mu	or Problematic Hydric Soils <sup>3</sup> : ck (A9) (LRR O) ck (A10) (LRR S)
ydric Soil In Histosol (, Histic Epi Black Hist Hydrogen Stratified Organic E 5 cm Muc Muck Pre 1 cm Muc Depleted Thick Dar	dicators: (Applic A1) bedon (A2) ic (A3) Sulfide (A4) Layers (A5) odies (A6) (LRR P ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)	able to all L , T, U) RR P, T, U)	RRs, unless othe Polyvalue B Thin Dark S Loamy Muc Loamy Gley X Depleted M	erwise note elow Surfac furface (S9) ky Mineral ( red Matrix (F	d.) e (S8) (L (LRR S, F1) (LRR	.RR S, T, I T, U)	Indicators fo U) 1 cm Mu 2 cm Mu	or Problematic Hydric Soils <sup>3</sup> : ck (A9) (LRR O) ck (A10) (LRR S)
ydric Soil In Histosol (, Histic Epi Black Hist Hydrogen Stratified Organic E 5 cm Muc Muck Pre 1 cm Muc Depleted Thick Dar	dicators: (Applic A1) bedon (A2) ic (A3) Sulfide (A4) Layers (A5) odies (A6) (LRR P ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)	able to all L , T, U) RR P, T, U)	RRs, unless othe Polyvalue B Thin Dark S Loamy Muc Loamy Gley X Depleted M	erwise note elow Surfac furface (S9) ky Mineral ( red Matrix (F	d.) e (S8) (L (LRR S, F1) (LRR	.RR S, T, I T, U)	Indicators fo U) 1 cm Mu 2 cm Mu	or Problematic Hydric Soils <sup>3</sup> : ck (A9) (LRR O) ck (A10) (LRR S)
Histosol (, Histic Epij Black Hist Hydrogen Stratified Organic E 5 cm Muc Muck Pre 1 cm Muc Depleted Thick Dar	A1) bedon (A2) ic (A3) Sulfide (A4) Layers (A5) odies (A6) (LRR P ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)	, T, U) RR P, T, U)	Polyvalue B Thin Dark S Loamy Muc Loamy Gley X Depleted M	elow Surfac aurface (S9) ky Mineral ( ved Matrix (F	e (S8) <b>(L (LRR S,</b> F1) <b>(LRR</b>	T, U)	U) 1 cm Mu 2 cm Mu	ck (A9) <b>(LRR O)</b> ck (A10) <b>(LRR S)</b>
Histic Epi Black Hist Hydrogen Stratified Organic E 5 cm Muc Muck Pre 1 cm Muc Depleted Thick Dar	bedon (A2) ic (A3) Sulfide (A4) Layers (A5) odies (A6) (LRR P ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)	RR P, T, U)	Thin Dark S Loamy Muc Loamy Gley Depleted Mi	iurface (S9) ky Mineral ( ved Matrix (F	(LRR S, F1) (LRR	T, U)	2 cm Mu	ck (A10) (LRR S)
Black Hisi Hydrogen Stratified Organic E 5 cm Muc Muck Pre 1 cm Muc Depleted Thick Dar	ic (A3) Sulfide (A4) Layers (A5) odies (A6) (LRR P ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)	RR P, T, U)	Loamy Muc Loamy Gley X Depleted M	ky Mineral ( ved Matrix (F	F1) (LRR			
Hydrogen Stratified Organic E 5 cm Muc Muck Pre 1 cm Muc Depleted Thick Dar	Sulfide (A4) Layers (A5) odies (A6) (LRR P ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)	RR P, T, U)	Loamy Gley	ed Matrix (F				
Stratified Organic E 5 cm Muc Muck Pre 1 cm Muc Depleted Thick Dar	Layers (A5) odies (A6) (LRR P ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)	RR P, T, U)	× Depleted M	•		. 0)		d Vertic (F18) (outside MLRA 150A, E
Organic E 5 cm Muc Muck Pre 1 cm Muc Depleted Thick Dar	odies (A6) (LRR P ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)	RR P, T, U)			2)			t Floodplain Soils (F19) <b>(LRR P, S, T</b>
5 cm Muc Muck Pre 1 cm Muc Depleted Thick Dar	ky Mineral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T)	RR P, T, U)		Surface (F6	3)			ous Bright Loamy Soils (F20) A <b>153B)</b>
_ Muck Pre _ 1 cm Muc _ Depleted _ Thick Dar	sence (A8) <b>(LRR U</b> k (A9) <b>(LRR P, T)</b>		Redox Dark	· ·	,			ent Material (TF2)
_ 1 cm Muc _ Depleted _ Thick Dar	k (A9) (LRR P, T)		Redox Depr					allow Dark Surface (TF12)
_ Depleted _ Thick Dar		,	Marl (F10) (		,			xplain in Remarks)
_ Thick Dar	Below Dark Surfac	e (A11)	Depleted O		MLRA 1	51)		
	k Surface (A12)	• (//)	Iron-Manga	· / ·			T) <sup>3</sup> Indicat	ors of hydrophytic vegetation and
Coast Pra	irie Redox (A16) (N	(LRA 150A)			· · ·			nd hydrology must be present,
	cky Mineral (S1) (L		Delta Ochrid			, _,		s disturbed or problematic.
	eyed Matrix (S4)	, ,	Reduced Ve			0A, 150B)		·
Sandy Re			Piedmont F					
	Aatrix (S6)			•	· ,	•	RA 149A, 153C, 1	(53D)
	ace (S7) (LRR P, S	S, T, U)	—	•				
	yer (if observed):							
Туре:								
Depth (inch	es):						Hydric Soil P	resent? Yes <u>×</u> No
emarks:								



Photograph Number

Photograph Direction West

Comments: None.

Feature Name: EF\_W\_008 PEM



Photograph Number \_\_\_\_\_ Photograph Direction East

Comments: None.



Photograph Number

Photograph Direction South

Comments:



Photograph Number \_\_\_\_\_ Photograph Direction North\_\_\_

Comments:

Project/Site: Dominion CVOW	City/County: Chesapeake		Sampling Date: 5/5/2021
Applicant/Owner: Dominion		State: VA	_ Sampling Point: <u>EF_W_008_PF0</u>
Investigator(s): Emily Foster, Kristen Walls	Section, Township, Range:		
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, conve	x, none): <u>None</u>	Slope (%): 0-5
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.74136876 Long:		-76.14361945 Datum: WGS84
Soil Map Unit Name: 2: Acredale-Chapanoke complex, 0 to 1 percent slopes		NWI classif	fication: PFO1E
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u>×</u> No	_ (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology significantly	v disturbed? Are "Norn	al Circumstances	' present? Yes <u>×</u> No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed	, explain any answ	vers 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 <u>×</u> No Yes <u>×</u> No Yes <u>×</u> No	Is the Sampled Area within a Wetland? Yes	× No
<b>Remarks</b> : Large PFO complex associated with 0 point is JD_W_004 UP.	Gum Swamp. To NE and SW of ex	isting powerline easement. Upland	Observed Classifications: Cowardin: <u>PFO</u>

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
<u>×</u> Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
X Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living R	oots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (	C6) Saturation Visible on Aerial Imagery (C9)
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)	X FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present?         Yesx No Depth (inches): 0-1	
Water Table Present?     Yes x     No Depth (inches): 0	
Saturation Present? Yes <u>x</u> No <u>Depth</u> (inches): 0	Wetland Hydrology Present? Yes <u>×</u> No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	ions), if available:
Remarks:	
-	
_	

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

Sampling Point: EF W 008 PFO

	Absolute Dominant Indicator	
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	<u>% Cover Species? Status</u>	- Number of Dominant Species
1. <u>Acer rubrum, Red Maple</u>	<u> </u>	That Are OBL, FACW, or FAC:6 (A)
2. <u>Salix nigra, Black Willow</u>	<u> </u>	- Total Number of Dominant
3		Species Across All Strata:6(B)
4		
5		Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
6		
	70 = Total Cover	Prevalence Index worksheet:
50% of total cover: 25	20% of total cover: 14	Total % Cover of: Multiply by:
		OBL species45 x 1 =45
Sapling Stratum (Plot size: <u>30 ft</u> )		FACW species x 2 = 30
1		FAC species x 3 =
2		FACU species x 4 =
3		UPL species $0$ $x = 0$
4		
5		Column Totals: <u>130</u> (A) <u>285</u> (B)
6		Prevalence Index = B/A =
	0 = Total Cover	Hydrophytic Vegetation Indicators:
50% of total cover: <u>0</u>	20% of total cover:0	
Shrub Stratum (Plot size: <u>30 ft</u> )		
1. Acer rubrum, Red Maple	25 Yes FAC	$\frac{x}{2}$ 2 - Dominance Test is >50%
		— • • • • • • • • • • • • • • • • • • •
2		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3		-
4		, , , ,
5		be present, unless disturbed or problematic.
6		Definitions of Five Vegetation Strata:
	25 = Total Cover	Tree – Woody plants, excluding woody vines,
50% of total cover: <u>12.5</u>	5 20% of total cover: 5	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )		(7.6 cm) or larger in diameter at breast height (DBH).
1. Arundinaria gigantea, Giant Cane	15 Yes FACW	Sapling – Woody plants, excluding woody vines,
2. <u>Saururus cernuus, Lizard's-Tail</u>		approximately 20 ft (6 m) or more in height and less
3		than 3 in. (7.6 cm) DBH.
4		- Shrub – Woody plants, excluding woody vines,
		approximately 3 to 20 ft (1 to 6 m) in height.
5		
6		Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
7		plants, except woody vines, less than approximately
8		3 ft (1 m) in height.
9		Woody vine – All woody vines, regardless of height.
10		woody whice - All woody whice, regulatess of height.
	·	-
11		
11		-
		-
50% of total cover: <u>12.5</u>	= Total Cover	-
50% of total cover: <u>12.5</u> <u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> )	<u>25</u> = Total Cover 20% of total cover: <u>5</u>	-
50% of total cover: <u>12.5</u> <u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> ) 1. <u>Smilax rotundifolia, Horsebrier</u>	<u>25</u> = Total Cover 20% of total cover: <u>5</u> 10 Yes FAC	-
50% of total cover: <u>12.5</u> <u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> ) 1. <u>Smilax rotundifolia, Horsebrier</u> 2.	<u>25</u> = Total Cover <u>5</u> 20% of total cover: <u>5</u> <u>10 Yes</u> FAC	-
50% of total cover: <u>12.5</u> <u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> ) 1. <u>Smilax rotundifolia, Horsebrier</u> 2. 3.	= Total Cover 520% of total cover:5 10YesFAC	- - - -
50% of total cover: <u>12.5</u> <u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> ) 1. <u>Smilax rotundifolia, Horsebrier</u> 2. 3. 4.	= Total Cover 520% of total cover:5 10YesFAC	
50% of total cover: <u>12.5</u> <u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> ) 1. <u>Smilax rotundifolia, Horsebrier</u> 2. 3.	= Total Cover 520% of total cover:5 10YesFAC	- - - - - Hydrophytic
50% of total cover: <u>12.5</u> <u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> ) 1. <u>Smilax rotundifolia, Horsebrier</u> 2. 3. 4. 5.	<u>25</u> = Total Cover 20% of total cover: <u>5</u> <u>10</u> Yes FAC <u>10</u> = Total Cover	- - - - - - - Vegetation
50% of total cover: <u>12.5</u> <u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> ) 1. <u>Smilax rotundifolia, Horsebrier</u> 2. 3. 4. 5.	= Total Cover 520% of total cover:5 10YesFAC	- - - - - Hydrophytic
50% of total cover: <u>12.5</u> <u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> ) 1. <u>Smilax rotundifolia, Horsebrier</u> 2. 3. 4. 5.	25         = Total Cover           20% of total cover:         5           10         Yes         FAC           10         Total Cover         20% of total cover:         2	- - - - - - - Vegetation
50% of total cover: <u>12.5</u> <u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> ) 1. <u>Smilax rotundifolia, Horsebrier 2. 3. 4. 5. 5. 50% of total cover: <u>5</u></u>	25         = Total Cover           20% of total cover:         5           10         Yes         FAC           10         Total Cover         20% of total cover:         2	- - - - - - - Vegetation
50% of total cover: <u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> ) 1. <u>Smilax rotundifolia, Horsebrier</u> 2 3 4 5 50% of total cover:5	25         = Total Cover           20% of total cover:         5           10         Yes         FAC           10         Total Cover         20% of total cover:         2	- - - - - - - Vegetation

Depth       Matrix       Redox Features       Type       Loc       Testure       Remarks         0-6       10/r 2/1       100%	
6-18       10yr 4/1       100%       clay         6-18       10yr 4/1       100%       clay         7       Clay       clay	5
Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Ma         tydric Soil Indicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       2 cm Muck (A10) (LRR S)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outsid         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F3)       Anomalous Bright Loamy Soils (F1         Stratified Layers (A6)       X       Depleted Matrix (F3)       Anomalous Bright Loamy Soils (F12)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)       So mously Mineral (A7) (LRR P, T, U)         Muck Presence (A8) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (T12)       Werk Shallow Dark Surface (T12)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       other (Explain in Remarks)       unless disturbed or problem         Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       vertian dhydrology must be unless disturbed or problem         Sandy Mucky Mineral (S1) (LRR O, S)       Delte Ochric (F17) (MLRA 151)       other (Explain in Remarks)       endes	
tydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydrid         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outsid         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F1         Stratified Layers (A5)       ×       Depleted Matrix (F3)       Anomalous Bright Loamy Soils         Organic Bodies (A6) (LRR P, T, U)       Depleted Dark Surface (F6)       (MLRA 153B)       Red Parent Material (TF2)         Muck Presence (A8) (LRR P, T)       Redox Depressions (F8)       Very Shallow Dark Surface (T         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)       Other (Explain In Remarks)         1 coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       Belate Ochric (F13) (MLRA 151)         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)       Indicators of hydrophytic very wetland hydrology must be unless disturbed or probler         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Soils (Sirtope Matrix (S6)	
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydri	
Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         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) (outsid         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F1         Stratified Layers (A5)       ×       Depleted Matrix (F3)       Anomalous Bright Loamy Soils         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (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 (T         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)       Other (Explain in Remarks)         Depleted Sol Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (LRR P, T, U)       "Indicators of hydrophytic ventility of the state o	
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) (outsid         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F1         Stratified Layers (A5)       ×       Depleted Matrix (F3)       Anomalous Bright Loamy Soils         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         5 cm Mucky Mineral (A7) (LRR P, T, U)       Depleted Dark Surface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR P, T)       Redox Depressions (F8)       Very Shallow Dark Surface (T         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)       Iron-Manganese Masses (F12) (LRR O, P, T) <sup>3</sup> Indicators of hydrophytic vere wetland hydrology must be unless disturbed or probler         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (MLRA 150A, 150B)       unless disturbed or probler         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Hydric Soil Present? Yes <u>×</u>	c Soils <sup>3</sup> :
Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outsid         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F1         Stratified Layers (A5)       ×       Depleted Matrix (F3)       Anomalous Bright Loamy Soils         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (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 (T         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)       other (Explain in Remarks)         Depleted Below Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T) <sup>3</sup> Indicators of hydrophytic version of hydrophytic version of hydrophytic version of hydrophytic version of the set	
Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F1         Stratified Layers (A5)       ×       Depleted Matrix (F3)       Anomalous Bright Loamy Soils         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (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 (T         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)       Other (Explain in Remarks)         Depleted Below Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T) <sup>3</sup> Indicators of hydrophytic very wetland hydrology must be unless disturbed or probler         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A, 150B)       unless disturbed or probler         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Restrictive Layer (if observed):       Type:	e MLRA 150A,I
Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (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 (T         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)       Other (Explain in Remarks)         Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T) <sup>3</sup> Indicators of hydrophytic versions (F8)         Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       wetland hydrology must be unless disturbed or probler         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)       unless disturbed or probler         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       unless disturbed or probler         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)       Dark Surface (S7) (LRR P, S, T, U)         Restrictive Layer (if observed):       Type:	,
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 (T         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)       Other (Explain in Remarks)         Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T)       Indicators of hydrophytic version of h	s (F20)
Muck Presence (A8) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (T         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)       Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T)       Indicators of hydrophytic version of hydrophyte	
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)       Iron-Manganese Masses (F12) (LRR O, P, T)       Indicators of hydrophytic very wetland hydrology must be wetland hydrology must be wetland hydrology must be unless disturbed or problem         Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       wetland hydrology must be wetland hydrology must be unless disturbed or problem         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)       unless disturbed or problem         Sandy Redox (S5)       Reduced Vertic (F18) (MLRA 150A, 150B)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Restrictive Layer (if observed):         Type:	
	F12)
Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T)       Indicators of hydrophytic vegorities (S12) (LRR O, P, T)         Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       wetland hydrology must be wetland hydrology must be unless disturbed or problem         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)       unless disturbed or problem         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)       unless disturbed or problem         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       stripped Matrix (S6)         Dark Surface (S7) (LRR P, S, T, U)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Restrictive Layer (if observed):       Type:         Type:	
Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       wetland hydrology must be         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)       unless disturbed or probler         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)       piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)       Dark Surface (S7) (LRR P, S, T, U)         Restrictive Layer (if observed):       Type:	
Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)       unless disturbed or problem         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Restrictive Layer (if observed):         Type:       Hydric Soil Present? Yes x	-
Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Restrictive Layer (if observed):         Type:       Hydric Soil Present? Yes x	
Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Restrictive Layer (if observed):         Type:       Pepth (inches):         Depth (inches):       Yes x	natic.
Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)         Restrictive Layer (if observed):         Type:         Depth (inches):         Hydric Soil Present?         Yes	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes	
Restrictive Layer (if observed):         Type:         Depth (inches):         Hydric Soil Present?         Yes	
Type:	
Depth (inches): Hydric Soil Present? Yes	
Remarks:	No



# Feature Name: EF\_W\_008\_PFO



# Photograph Direction West

Comments:

# Photograph Direction East

Comments:



Photograph Direction South

Comments:



# Photograph Direction North

Comments:

Project/Site: CVOW Dominion	City/County: Chesapea	ake	Sampling Date	: <u>5/5/2021</u>
Applicant/Owner: Dominion		State: VA	Sampling Poin	t: <u>EF_W_009</u>
Investigator(s): Emily Foster, Kristen Walls	Section, Township, Ra	nge:		
Landform (hillslope, terrace, etc.): Hillslope	Local relief (concave, c	convex, none): <u>Concav</u>	e Slo	ope (%): <u>0-5</u>
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.74609532 L	Long:	-76.1332205	Datum: WGS84
Soil Map Unit Name: 2: Acredale-Chapanoke complex, 0 to 1 percent slopes		NWI class	ification: upland	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u>×</u> No _	(If no, explain ir	n Remarks.)	
Are Vegetation, Soil, or Hydrology significantly	v disturbed? Are "	"Normal Circumstances	s" present? Yes _	No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If ne	eeded, explain any ans	wers 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 <u>×</u> No Yes <u>×</u> No Yes <u>×</u> No	Is the Sampled Area within a Wetland?	Yes <u>×</u> No
Remarks:			<b>Observed Classifications:</b>
Disturbed wetland in existing powe	rline easement. Associated uplar	d point is JD_W_006_UP	Cowardin: PEM

Primary Indicators (minimum of one is required; check all that apply)      X       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)
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 Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
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         Depth (inches):
Saturation Present? Yes No X Depth (inches): 13 Wetland Hydrology Present? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Describe Recorded Data (silearn gauge, monitoring weil, aerial protos, previous inspections), il available.
Remarks:

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

Sampling Point: EF W 009

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> ) 1)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:3(A)
23				Total Number of Dominant Species Across All Strata: 3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100.0% (A/B)
6				Prevalence Index worksheet:
		= Total Cov		Total % Cover of:Multiply by:
50% of total cover: <u>0</u>	20% 0	r totar cover.		OBL species55 x 1 =55
Sapling Stratum (Plot size: <u>30 ft</u> )				FACW species X 2 = 60
1				FAC species 0 x 3 = 0
2				FACU species 0 x 4 = 0
3				UPL species x 5 =
4				Column Totals: <u>85</u> (A) <u>115</u> (B)
5				
6				Prevalence Index = B/A =1.35
		= Total Cov		Hydrophytic Vegetation Indicators:
50% of total cover: <u>0</u>	20% o	t total cover:	0	× 1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: <u>30 ft</u> )				X 2 - Dominance Test is >50%
1				$\frac{x}{1}$ 3 - Prevalence Index is $\leq 3.0^{1}$
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	0	= Total Cov	er	Tree – Woody plants, excluding woody vines,
50% of total cover: 0	20% o	f total cover:	0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )				(7.6 cm) or larger in diameter at breast height (DBH).
1. Arundinaria tecta, Switch Cane				Sapling – Woody plants, excluding woody vines,
2. <u>Eleocharis palustris, Common Spike-Rush</u>		Yes		approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3. Juncus effusus, Lamp Rush	20	Yes		
4. <u>Solidago sp.</u>				Shrub – Woody plants, excluding woody vines,
5. Osmunda spectabilis, Royal Fern			OBL	approximately 3 to 20 ft (1 to 6 m) in height.
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				Woody vine – All woody vines, regardless of height.
10				
11				
	90	= Total Cov	er	
50% of total cover: <u>45</u>	20% o	f total cover:	18	
Woody Vine Stratum (Plot size: <u>30 ft</u> )				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover: <u>0</u>	20% o	f total cover:	0	Present? Yes <u>×</u> No
Remarks: (If observed, list morphological adaptations belo	w).			

#### SOIL

Optimizers         Coder         Coder         Tope         Loc <sup>2</sup> Texture         Remarks           0-3         J0yr 4/2         9554         J0yr 3/6         5%         C         PL         Coty	Depth	Motrix		Ba	dox Features			n the absence	ormalout		
0-3         10yr 4/2         95%         10yr 3/6         5%         C         PL         Clay           3-6         10yr 5/2         95%         7.5yr 5/6         5%         C         PL         Loamy Clay           6-18         10yr 5/2         70%         7.5yr 5/6         30%         C         PL         Loamy Clay           6-18         10yr 5/2         70%         7.5yr 5/6         30%         C         PL         Loamy Clay           6-18         10yr 5/2         70%         7.5yr 5/6         30%         C         PL         Loamy Clay           6-18         10yr 5/2         70%         7.5yr 5/6         30%         C         PL         Loamy Clay           6-18         10yr 5/2         70%         7.5yr 5/6         30%         C         PL         Loamy Clay           6-18         10yr 5/2         70%         7.5yr 5/6         30%         C         PL         Loamy Clay           6-18         10yr 5/2         7.5yr 5/6         30%         C         PL         Loamy Clay           7         10yr 5/2         7.5yr 5/6         30%         C         PL         Loamy Clay           7         10         10	inches)	<u>Matrix</u> Color (moist)	%				Loc <sup>2</sup>	Texture		Remarks	
3-6       10yr 5/2       95%       7.5yr 5/6       5%       C       PL       Loamy Clay         6-18       10yr 5/2       70%       7.5yr 5/6       30%       C       PL       Loamy Clay         5-18       10yr 5/2       70%       7.5yr 5/6       30%       C       PL       Loamy Clay         5-18       10yr 5/2       70%       7.5yr 5/6       30%       C       PL       Loamy Clay         5-18       10yr 5/2       70%       7.5yr 5/6       30%       C       PL       Loamy Clay         5-18       10yr 5/2       70%       7.5yr 5/6       30%       C       PL       Loamy Clay         5-10       10       10       Polyalue Below Sufface (S8) (LRR S, T, U)       Indicators for Problematic Hydric Solls <sup>3</sup> :         Histosol (A1)       Polyvalue Below Sufface (S9) (LRR S, T, U)       1 cm Muck (A9) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A)         Hydrogen Sufface (A2)       Thin Dark Surface (S9)       Loamy Glay       Pledmont Floodplain Soils (F19) (LRR P, S, T         Stratified Layers (A5)       X       Depleted Matrix (F2)       Pledmont Floodplain Soils (F20)       McRArace (TF12)         Muck Presence (A8) (LRR P, T, U)       Redox Dark Surface (F7)       Red Parent Material (TF2)       Matrace											
6-18       10yr 5/2       7.5yr 5/6       30%       C       PL       Loamy Clay         Commod Composition       Commod Composition       Commod Composition       Commod Composition       Commod Composition         Cype:       C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>1</sup> Location:       PL=Pore Lining, M=Matrix.         ydric Soil Indicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histoso (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       2 cm Muck (A9) (LRR O)         Histoso (A1)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T, S, S cm Mucky Mineral (A7) (LRR P, T, U)       Redox Dark Surface (F6)         S cm Mucky Mineral (A7) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         Muck (A9) (LRR P, T)       Mart (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F17) (MLRA 151)       Other (Explain in Remarks)         Depleted Below Dark Surface (A12)       Icon-Manganese Masses (F12) (LRR O, P, T) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (											
Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>3</sup> Location:       PL=Pore Lining, M=Matrix.         ydric Soil Indicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A9) (LRR O)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A,         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F7)       Red Piedmont Floodplain Soils (F20)         Organic Bodies (A6) (LRR P, T, U)       Depleted Dark Surface (F7)       Red Piedmont Surface (TF12)         1 cm Muck (A9) (LRR P, T, U)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 150A)       outrate (F13) (ULRR O, P, T)       outre (Explain in Remarks)         Depleted Below Dark Surface (S5)       Delted Ochric (F11) (MLRA 150A)       unless disturbed or problematic.       outre (Explain in Remarks)         Depleted Below Dark Surface (S5)       Depleted Ochric (F11) (MLRA 150A)       unless disturbed or problematic.       outre (S7) (URR P, S											
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         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,         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Stratified Layers (A5)       ×       Depleted Matrix (F3)       Anomalous Bright Loamy Soils (F20)         Organic Bodies (A6) (LRR P, T, U)       Redox Depressions (F6)       (MLRA 153B)       Very Shallow Dark Surface (TF12)         Muck (A9) (LRR P, T)       Marl (F10) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12)         Indicators of hydrophytic vegetation and       Iron-Manganese Masses (F12) (LRR O, P, T) <sup>3</sup> Indicators of hydrophytic vegetation and         Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       wetland hydrology must be present,         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (MLRA 150A, 150B)       sandy Redox (S5)         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       unless disturbed or problematic.         Sandy Redox (S5)       Piedmont Floodplain Soi	6-18	10yr 5/2		7.5yr 5/6	30%			Loamy Clay			
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         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, 100mg Gleyed Matrix (F2)         Yorganic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         S cm Mucky Mineral (A7) (LRR P, T, U)       Depleted Dark Surface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR V, T)       Mari (F10) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12)         1 cm Muck (A9) (LRR P, T)       Mari (F10) (LRR U)       Other (Explain in Remarks)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       other (Explain in Remarks)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (MLRA 150A, 150B)       sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A)         Stripped Matrix (S6)       Piedmont Floodplain											
Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         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,         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         5 cm Mucky Mineral (A7) (LRR P, T, U)       Depleted Dark Surface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR P, T)       Mari (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Thin Dark Surface (F13) (LRR P, T, U)         Muck Yafface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T)       "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (MLRA 150A, 150B)       unless disturbed or problematic.         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Hydric Soil Present? Yes X No         testrictive Layer (if observed):       Type:							ains.				
	ydric Soil	Indicators: (Appli	cable to al	I LRRs, unless otl	nerwise note	d.)		Indicators	for Proble	matic Hydric \$	Soils <sup>3</sup> :
Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A,         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T         Stratified Layers (A5)       ×       Depleted Matrix (F3)       Anomalous Bright Loamy Soils (F20)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (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)       Iron-Manganese Masses (F12) (LRR O, P, T)         1 cm Kuck Ymineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)       Sindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F18) (MLRA 150A, 150B)       Stripped Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)         Stripped Matrix (S6)       Piedmont Floodplain Soils (F20) (MLRA 149A), 153C, 153D)       Dark Surface (S7) (LRR P, S, T, U)         testrictive Layer (if observed):       Type:		· ,									
Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T         Stratified Layers (A5)       X       Depleted Matrix (F3)       Anomalous Bright Loamy Soils (F20)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (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)       Iron-Manganese Masses (F12) (LRR O, P, T) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)       unless disturbed or problematic.         Sandy Redox (S5)       Piedmont Floodplain Soils (F20) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Tipe:       Momalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Hydric Soil Present? Yes X No       No					, ,	• •			, ,		
Stratified Layers (A5)       ×       Depleted Matrix (F3)       Anomalous Bright Loamy Soils (F20)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (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)       Other (Explain in Remarks)         Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A, 150B)       unless disturbed or problematic.         Stripped Matrix (S6)       Piedmont Floodplain Soils (F19) (MLRA 149A)       unless disturbed or problematic.         Dark Surface (S7) (LRR P, S, T, U)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)       Toark Surface (S7) (LRR P, S, T, U)         Type:		· · /			-		0)		-		
Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (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)       Other (Explain in Remarks)         Depleted Below Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A, 150B)       wetland hydrology must be present, unless disturbed or problematic.         Sandy Gleyed Matrix (S6)       Piedmont Floodplain Soils (F19) (MLRA 149A)       sandy Law (S6)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Type:         Type:	_ , .	· · ·			•	-2)				• • •	
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)       Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T)       3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         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)       unless disturbed or problematic.         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       If observed):       Type:		• • •	ртії	<u> </u>	· ,	3)			-	Loanty Solis (i	-20)
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)       Indicators of hydrophytic vegetation and         Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       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)       unless disturbed or problematic.         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       testrictive Layer (if observed):       Yes No         Type:	-	· · ·				,				ial (TF2)	
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)       Iron-Manganese Masses (F12) (LRR O, P, T)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F17) (MLRA 151)       unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A, 150B)       unless disturbed or problematic.         Sandy Redox (S5)       Reduced Vertic (F18) (MLRA 149A)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Hydric Soil Present? Yes No										· · ·	2)
Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)         Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T)         Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Hydric Soil Present? Yes X No			,			,					-)
Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       wetland hydrology must be present, unless disturbed or problematic.         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)       piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)       Dark Surface (S7) (LRR P, S, T, U)         testrictive Layer (if observed):       Type:				,	. ,	MLRA 1	51)			,	
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)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)       Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Image: Compare the second seco			. ,					T) <sup>3</sup> Indica	ators of hyd	drophytic veget	ation and
Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Image: Comparison of the strictive Layer (if observed):         Type:       Type:         Depth (inches):       Hydric Soil Present? Yes No			MLRA 150	A) Umbric Su	rface (F13) <b>(l</b>	RR P, T	, U)	wetl	and hydrol	ogy must be pr	esent,
Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)         testrictive Layer (if observed):         Type:         Depth (inches):         Hydric Soil Present?         Yes	Sandy N	Mucky Mineral (S1)	(LRR O, S)	Delta Ochi	ric (F17) <b>(MLI</b>	RA 151)		unle	ss disturbe	ed or problemat	ic.
_ Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Type: Depth (inches): Hydric Soil Present? Yes No	Sandy G	Gleyed Matrix (S4)		Reduced \	/ertic (F18) <b>(</b> M	VILRA 15	0A, 150B)	)			
Dark Surface (S7) (LRR P, S, T, U)           testrictive Layer (if observed):           Type:           Depth (inches):   Hydric Soil Present? Yes <u>×</u> No	_ Sandy F	Redox (S5)		Piedmont	Floodplain Sc	oils (F19)	(MLRA 14	49A)			
Instrictive Layer (if observed):         Hydric Soil Present?         Yes           Type:          Hydric Soil Present?         Yes         No	Stripped	d Matrix (S6)		Anomalou	s Bright Loam	ny Soils (	F20) (MLF	RA 149A, 153C,	153D)		
Type:	_ Dark Su	rface (S7) (LRR P,	S, T, U)								
Depth (inches):	estrictive	Layer (if observed	):								
	Туре:										
	Depth (in	ches):						Hydric Soil	Present?	Yes ×	No
								,			
	Cillarks.										
	ciliarks.										
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	KOTTALKS.										
	Kennan KS.										
	Kennan KS.										

Date: <u>5/5/21</u>



# Feature Name: EF\_W\_009



Photograph Direction SE

Comments:

Photograph Direction SW

Comments:





Photograph Direction NE

Comments:

Photograph Direction NW

Comments:

Project/Site: Dominion CVOW	City/County: Virginia Beach/	'Virginia Beach	Sampling Da	ate: 5/14/2021
Applicant/Owner: Dominion		State: VA	Sampling Po	oint: EF_W_013
Investigator(s): Emily Foster, Debbie Painter	Section, Township, Range: _			
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex	, none): <u>Concave</u>		Slope (%): <u>3-5</u>
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.770597 Long: _	-7	6.064658	Datum: WGS84
Soil Map Unit Name: Tomotely Loam		NWI classifica	ation: <u>PEM</u>	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes X No	(If no, explain in Re	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	resent? Yes	s No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answer	rs in Remark	s.)

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>x</u> Yes <u>x</u> Yes <u>x</u>	No No No	Is the Sampled Area within a Wetland?	Yes <u>×</u>	No
Remarks:					Observed Classifications:
Wet meadow in powerline easemen	t				Cowardin: <u>PEM</u>

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	X 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 F	Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	_x Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils	(C6) Saturation Visible on Aerial Imagery (C9)
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)	X Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present?       Yes No _x Depth (inches):	
Water Table Present?       Yes No _x Depth (inches):	
Saturation Present? Yes <u>x</u> No Depth (inches): <u>8</u>	Wetland Hydrology Present? Yes <u>x</u> No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	

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

Sampling Point:	EF ۱	W	013
-----------------	------	---	-----

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft</u> )		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC:(A)
2				
3				Total Number of Dominant       Species Across All Strata:       2       (B)
4				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50.0% (A/B)
6				Prevalence Index worksheet:
		= Total Cov		Total % Cover of: Multiply by:
50% of total cover: 0	20% of	total cover	0	$\begin{array}{c} \hline \hline \\ OBL species \\ \hline \\ \hline \\ 35 \\ \hline \\ x1 = \\ \hline \\ 35 \\ \hline \\ x1 = \\ \hline \\ 35 \\ \hline \\ \end{array}$
<u>Sapling Stratum</u> (Plot size: <u>30 ft</u> )				FACW species $40$ $x = 80$
1				FAC species $\underline{0}$ $x 3 = \underline{0}$
2				
3				FACU species <u>30</u> x 4 = <u>120</u>
4				UPL species $0 \times 5 = 0$
5				Column Totals: <u>105</u> (A) <u>235</u> (B)
6				Prevalence Index = B/A =2.24
		= Total Cov	er	
50% of total cover: <u>0</u>				Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 30 ft )	2070 01			1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
1				$\frac{x}{1}$ 3 - Prevalence Index is $\leq 3.0^{1}$
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	0	= Total Cov	er	<b>Tree</b> – Woody plants, excluding woody vines,
50% of total cover: 0	20% of	total cover	0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )				(7.6 cm) or larger in diameter at breast height (DBH).
1. Solidago gigantea, Late Goldenrod	40	Yes	FACW	Sapling – Woody plants, excluding woody vines,
2. <u>Cirsium vulgare, Bull Thistle</u>	30	Yes	FACU	approximately 20 ft (6 m) or more in height and less
3. Juncus effusus, Lamp Rush	20			than 3 in. (7.6 cm) DBH.
4. Eleocharis obtusa, Blunt Spike-Rush	5	No	OBL	Shrub – Woody plants, excluding woody vines,
5. Scirpus atrovirens, Dark-Green Bulrush	5	No		approximately 3 to 20 ft (1 to 6 m) in height.
6. Carex lurida, Shallow Sedge		No	OBL	Herb – All herbaceous (non-woody) plants, including
			ODL	herbaceous vines, regardless of size, and woody
7				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				
11				
		= Total Cov		
50% of total cover:52.5	20% of	total cover	21	
Woody Vine Stratum (Plot size: <u>30 ft</u> )				
1				
2				
3				
4				
5		 = Total Cov		Hydrophytic Vegetation
E00/ -#4-4-1 0				Present? Yes <u>×</u> No
50% of total cover: 0		total cover	U	<u></u>
Remarks: (If observed, list morphological adaptations belo	₩).			
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### SOIL

Color (moist)         %         Color (moist)         %         Type <sup>1</sup> Loc <sup>7</sup> Texture         Remarks           0-6         10yr 3/2         100%
6-10       10yr 4/2       70%       7.5yr 4/6       30%       C       PL       Sitty clay loam         10-16       10yr 4/2       60%       7.5yr 5/6       40%       C       PL       Sitty clay loam         10-16       10yr 4/2       60%       7.5yr 5/6       40%       C       PL       Sitty clay loam         Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         Mitiot Soli (A1)       Condetatrix (Sol (LRR 9, T, U)
10-16       10yr 4/2       60%       7.5yr 5/6       40%       C       PL       Silty clay loam         Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         Histo Soll Indicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Solls <sup>3</sup> :         Histosol (A1)
Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location:       PL=Pore Lining, M=Matrix.         tydric Soll Indicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Solls <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S9) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histosol (A1)       Polyvalue Below Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR S)         Black Histic (A3)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Hydrogen Sulfide Layers (A5)       X       Depleted Matrix (F3)       Anomalous Bright Loamy Soils (F20)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)       S cm Mucky Mineral (A7) (LRR P, T, U)         Muck Presence (A8) (LRR P, T)       Depleted Dark Surface (F7)       Red Parent Material (TF2)         Muck A9 (LRR P, T)       Marl (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, sandy Mucky Mineral (S1) (LRR O, S)         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A, 150B)       S andy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous B
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histosol (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,         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         5 cm Muck (A9) (LRR P, T, U)       Depleted Dark Surface (F7)       Red Parent Material (TF2)         Muck (A9) (LRR P, T, 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) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (MLRA 150A, 150B)       unless disturbed or problematic.         Sandy Gleyed Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A)       sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F2
Depth (inches):          Hydric Soil Present?         Yes         No           Remarks:



# Feature Name: EF\_W\_013



# Photograph Direction North

Comments:

Photograph Direction South

Comments:





Photograph Direction West

Comments:

Photograph Direction East

Comments:

Project/Site: Dominion CVOW	City/County: Virginia Beach/	/Virginia Beach s	ampling Date	5/14/2021
Applicant/Owner: Dominion		State: VA S	ampling Poin	t: <u>EF_W_013_UP</u>
Investigator(s): Emily Foster, Debbie Painter	Section, Township, Range: _			
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex	, none): <u>Convex</u>	Slo	ope (%): <u>3-5</u>
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.770597 Long: _	-76.	.064658 🛛	atum: WGS84
Soil Map Unit Name: Tomotely Loam		NWI classificati	on: Upland	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u>×</u> No	(If no, explain in Rem	narks.)	
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" pre	sent? Yes _	_x No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (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 <u>x</u> No Yes <u>x</u> No Yes No <u>x</u>	Is the Sampled Area within a Wetland?	Yes No×
Remarks:			Observed Classifications:
Upland forest adjacent to powerlin	ne easement.		Cowardin: upland

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 Roots (C3) Dry-Season Water Table (C2)			
Sediment Deposits (B2) Presence of Reduced Iron (C4)	ence of Reduced Iron (C4) Crayfish Burrows (C8)		
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils	ils (C6) Saturation Visible on Aerial Imagery (C9)		
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 _x _ Depth (inches):			
Water Table Present? Yes No _x Depth (inches):			
Saturation Present? Yes No X Depth (inches):	Wetland Hydrology Present? Yes No ×		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe	ctions), if available:		
Remarks:			
	-		

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

Sampling Point: EF W 013 UP

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Species?		Number of Dominant Species
1. Acer rubrum, Red Maple	35	Yes	FAC	That Are OBL, FACW, or FAC: 7 (A)
2. Liquidambar styraciflua, Sweet-Gum				(**
				Total Number of Dominant
3. Quercus rubra, Northern Red Oak				Species Across All Strata:8 (B)
4. <u>Pinus taeda, Loblolly Pine</u>	15	No	FAC	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: <u>87.5%</u> (A/B)
6				(***)
		= Total Cov	er	Prevalence Index worksheet:
50% of total approx. 47 E				Total % Cover of:Multiply by:
50% of total cover: <u>47.5</u>	20% 0	totar cover.		OBL species x 1 =
<u>Sapling Stratum</u> (Plot size: <u>30 ft</u> )				FACW species5 x 2 =10
1. <u>Acer rubrum, Red Maple</u>				
2. Morella cerifera, Southern Bayberry	6	Yes	FAC	FAC species $106$ x 3 = $318$
3				FACU species20 x 4 =80
4				UPL species x 5 =0
				Column Totals: <u>131</u> (A) <u>408</u> (B)
5				
6				Prevalence Index = B/A =3.11
	21	= Total Cov	er	Hydrophytic Vegetation Indicators:
50% of total cover: <u>10.5</u>	20% of	total cover	4.2	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: <u>30 ft</u> )				
				$\frac{x}{2}$ - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
···		- Tatal Car		
		= Total Cov		Tree – Woody plants, excluding woody vines,
50% of total cover: <u>0</u>	20% of	total cover	0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )				(7.6 cm) or larger in diameter at breast height (DBH).
1. Echinochloa crus-galli, Large Barnyard Grass	5	Yes	FACW	Sapling – Woody plants, excluding woody vines,
2. Carex sp				approximately 20 ft (6 m) or more in height and less
3. Pinus taeda, Loblolly Pine				than 3 in. (7.6 cm) DBH.
				Shrub Mady planta avaluding wady vince
4				Shrub – Woody plants, excluding woody vines, 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
8				plants, except woody vines, less than approximately 3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				
11				
	15	= Total Cov	er	
50% of total cover: 7.5	20% of	total cover	3	
Woody Vine Stratum (Plot size: 30 ft)				
1. Smilax rotundifolia, Horsebrier	E	Voc	EAC	
2				
3				
4				
5				Hydrophytic
		= Total Cov		Vegetation
50% of total cover: 2.5				Present? Yes <u>×</u> No
		total cover.		
Remarks: (If observed, list morphological adaptations belo	w).			
US Army Corps of Engineers				Atlantic and Gulf Coastal Plain Region – Version 2.0

### SOIL

						or confirn			,	
Depth inches)	<u>Matrix</u> Color (moist)	%	Color (moist)	<u>x Features</u> %	S Type <sup>1</sup>	_Loc <sup>2</sup>	Texture		Bamarka	
					Type	LOC	Texture		Remarks	
0-6	2.5y 5/8	100%	10·m E /C	200/			Sandy loam	1		
6-12	10yr 4/1	80%	10yr 5/6	<u>20%</u> 25%	C	<u> </u>	Sandy loam			
12-16	10yr 4/1		10yr 5/3				Silty clay loam			
	Concentration, D=Dep Indicators: (Applic		· · · · · · · · · · · · · · · · · · ·			ains.			ining, M=Matrix matic Hydric ६	-
Black H Hydrog Stratifie Organia 5 cm M Muck P 1 cm M Deplete Thick D Coast F Sandy Sandy Sandy Sandy Dark St	Epipedon (A2) distic (A3) en Sulfide (A4) ed Layers (A5) c Bodies (A6) (LRR P lucky Mineral (A7) (LR Presence (A8) (LRR U luck (A9) (LRR P, T) ed Below Dark Surfac Dark Surface (A12) Prairie Redox (A16) (I Mucky Mineral (S1) (I Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR P, S	RR P, T, U ) e (A11) /ILRA 150 .RR O, S) 5, T, U)	<ul> <li>Redox Depresent Marl (F10) (L</li> <li>Depleted Oc</li> <li>Iron-Mangan</li> <li>Umbric Surfa</li> <li>Delta Ochric</li> <li>Reduced Ven</li> <li>Piedmont Flo</li> </ul>	y Mineral ( ed Matrix ( trix (F3) Surface (F k Surface essions (F8 .RR U) hric (F11) ese Masse ce (F13) ( (F17) (ML tic (F18) ( xodplain S	(F1) (LRR F2) 6) (F7) 3) (MLRA 1 es (F12) ( LRR P, T RA 151) MLRA 15 oils (F19)	51) LRR O, P, , U) 0A, 150B (MLRA 14	Reducc Piedma Anoma (MLF Red Pa Very S Other ( T) <sup>3</sup> Indic wett unle	ont Floodpl lous Bright <b>A 153B)</b> arent Mater hallow Dari Explain in ators of hyu and hydrol ess disturbe	18) <b>(outside IV</b> ain Soils (F19) Loamy Soils (F ial (TF2) k Surface (TF1:	(LRR P, S, T <sup>-</sup> 20) 2) ation and esent,
Туре:	Layer (if observed):						Hydric Soil	Present?	Yes _ <sup>x</sup>	No
emarks:							-			
i y ury tr	rumbly soils.									

# Date: <u>5/14/21</u>



# Feature Name: EF\_W\_013\_UP



Photograph Direction West

Comments:

Photograph Direction East

Comments:



Photograph Direction South

Comments:



# Photograph Direction North

Comments:

U.S. A WETLAND DETERMINATION DAT See ERDC/EL TR-07-2	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)		
Project/Site: CVOW	City/County	r: Chesapeake	Sampling Date: 4/6/2022
Applicant/Owner: Dominion		State: VA	Sampling Point: EF_W_201_PFO
Investigator(s): E. Foster, T. Conard	Section, Townsł	nip, Range:	
Landform (hillside, terrace, etc.): Hillslope	Local relief (concar	ve, convex, none): Concave	Slope (%): 0-5
Subregion (LRR or MLRA): LRR T, MLRA 153E	Lat: 36.724582	Long: -76.168415	Datum: WGS84
Soil Map Unit Name: Psamments, 0-10 percent	slopes	NWI classific	ation: PFO
Are climatic / hydrologic conditions on the site ty	bical for this time of year?	Yes X No (If no,	, explain in Remarks.)
Are Vegetation , Soil , or Hydrology		e "Normal Circumstances" preser	
Are Vegetation, Soil, or Hydrology		needed, explain any answers in F	
SUMMARY OF FINDINGS – Attach si		int locations, transects, i	mportant features, etc.
Hydric Soil Present? Ye	S         X         No         Is the Sam           s         X         No         within a West           s         X         No         within a West		No
Remarks: Pinch point of wetlands abutting access road. C and soils cross existing road at this point	bserved muskrat at this location. Eagle	∋ nest to the North ~1 mile. Bald o	cypress swamp. Hydrology
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators	s (minimum of two required)
Primary Indicators (minimum of one is required;		Surface Soil Cra	( )
Surface Water (A1)	_Aquatic Fauna (B13)		ated Concave Surface (B8)
x High Water Table (A2)	Marl Deposits (B15) (LRR U)	Drainage Pattern	. ,
x Saturation (A3)	Hydrogen Sulfide Odor (C1)	Moss Trim Lines	

x Saturation (A3)		Hydrog	Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)					
Water Marks (B1)		Oxidiz	ed Rhizospheres on Livin	g Roots (C3)	Dry-Season Water 1	Dry-Season Water Table (C2)		
Sediment Deposits (B2	.)	Preser	nce of Reduced Iron (C4)	Crayfish Burrows (C	:8)			
Drift Deposits (B3)		Recen	Recent Iron Reduction in Tilled Soils (C6) x Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)	1	Thin M	Thin Muck Surface (C7) Geomorphic Position (D2)			n (D2)		
Iron Deposits (B5)		Other	(Explain in Remarks)	arks) Shallow Aquitard (D3)				
x Inundation Visible on A	erial Imagery (	B7)			x FAC-Neutral Test (E	05)		
x Water-Stained Leaves	(B9)				x Sphagnum Moss (D	8) (LRR T,U)		
Field Observations:								
Surface Water Present?	Yes	No x	Depth (inches):					
Water Table Present?	Yes x	No	Depth (inches): 8					
Saturation Present?	Yes x	No	Depth (inches): 6	Wetland	Hydrology Present?	Yes X No		
(includes capillary fringe)				—				
Describe Recorded Data (s	tream daude, r	nonitorina wel	ll, aerial photos, previous	inspections), if a	vailable:			
Booonibo nooonaba Bata (o								
		5		1 ,7				
				1 //				
Remarks:								
			. Denser A. Tecta south c			of access road.		
Remarks:			I. Denser A. Tecta south c			of access road.		
Remarks:			I. Denser A. Tecta south c			of access road.		
Remarks:			l. Denser A. Tecta south c			of access road.		

Sampling Point: EF\_W\_201\_PFO

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 )	% Cover	Species?	Status	Dominance Test worksheet:
1. Taxodium distichum	45	Yes	OBL	Number of Dominant Species
2. Acer rubrum	20	Yes	FAC	That Are OBL, FACW, or FAC:6 (A)
3. Liquidambar styraciflua	15	No	FAC	Total Number of Dominant
4.				Species Across All Strata: 6 (B)
5.				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
		=Total Cover	10	Prevalence Index worksheet:
50% of total cover: 4	0 20%	of total cover:	16	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30)				OBL species 55 x 1 = 55
1				FACW species $30 \times 2 = 60$
2.				FAC species $60 \times 3 = 180$
3.				FACU species     0 $x 4 = 0$ UPL species     0 $x 5 = 0$
4.				UPL species $0 \times 5 = 0$
5.				Column Totals: 145 (A) 295 (B)
6				Prevalence Index = $B/A = 2.03$
		=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	20%	of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30)			=	X 2 - Dominance Test is >50%
1. Clethra alnifolia	30	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6				present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:1	5 20%	of total cover:	6	<b>Tree</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30)				approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1. <i>Glyceria septentrionalis</i>	5	Yes	OBL	
2. Juncus effusus	5	Yes	OBL	Sapling – Woody plants, excluding woody vines,
3				approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
4				
5				<b>Shrub -</b> Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
6				approximately 3 to 20 ft (1 to 6 ff) in height.
7				Herb - All herbaceous (non-woody) plants, including
8				herbaceous vines, regardless of size, <u>and</u> woody
9				plants, except woody vines, less than approximately 3 ft (1 m) in height.
10				
11				Woody Vine – All woody vines, regardless of height.
		=Total Cover		
50% of total cover: 5	20%	of total cover:	2	
Woody Vine Stratum (Plot size: 30 )				
1. Smilax rotundifolia	25	Yes	FAC	
2				
3				
4				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:1	3 20%	of total cover:	5	Present?         Yes X         No
Remarks: (If observed, list morphological adaptation	ns below.)			

SOIL

Depth	Matrix			ox Feature	4	. 2	_		
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc <sup>2</sup>	Te	kture	Remarks
0-4	10YR 2/1	100					Sa	indy	Fill
4-10	10YR 4/2	100					Sa	indy	Fill
10-18	10YR 2/1	100					Sa	indy	Sandy Loam/ High Organic Conte
18-22	10YR 4/2	100					Sa	indy	sandy loam
		·							
71	oncentration, D=Dep	,	,			Grains.			PL=Pore Lining, M=Matrix.
•	Indicators: (Applica	able to all L			,				for Problematic Hydric Soils <sup>3</sup> :
Histosol	· · ·		Thin Dark S	`	<i>,</i> .				Muck (A9) <b>(LRR O)</b>
	oipedon (A2)		Barrier Islar	nds 1 cm l	Muck (S1	2)		2 cm I	Muck (A10) <b>(LRR S)</b>
Black His	stic (A3)		(MLRA 1	53B, 153I	D)			Coast	Prairie Redox (A16)
Hydroge	n Sulfide (A4)		Loamy Muc	ky Minera	al (F1) <b>(L</b>	RR O)		(out	side MLRA 150A)
Stratified	l Layers (A5)		Loamy Gley	ed Matrix	(F2)			Reduc	ed Vertic (F18)
Organic	Bodies (A6) (LRR, F	P, T, U)	Depleted M	atrix (F3)				(out	side MLRA 150A, 150B)
5 cm Mu	icky Mineral (A7) (LF	RR P, T, U)	Redox Dark	Surface	(F6)			Piedm	ont Floodplain Soils (F19) (LRR P, T)
Muck Pre	esence (A8) <b>(LRR U</b>	)	Depleted Da	ark Surfac	ce (F7)			Anoma	alous Bright Floodplain Soils (F20)
1 cm Mu	ick (A9) (LRR P, T)		Redox Depr	essions (	(F8)		-	(ML	RA 153B)
X Depleted	d Below Dark Surface	e (A11)	Marl (F10) (	LRR U)				Red P	arent Material (F21)
Thick Da	ark Surface (A12)		Depleted O	chric (F11	I) <b>(MLRA</b>	151)	•	Very S	Shallow Dark Surface (F22)
Coast Pr	rairie Redox (A16) (N	/LRA 150A)	Iron-Manga	nese Mas	sses (F12	) (LRR O	, P, T)	(out	side MLRA 138, 152A in FL, 154)
Sandy M	lucky Mineral (S1) (L	.RR O, S)	Umbric Surf	ace (F13	) (LRR P	, T, U)			r Islands Low Chroma Matrix (TS7)
Sandy G	leved Matrix (S4)		Delta Ochrid	c (F17) <b>(N</b>	ILRA 15	1)	•	(ML	RA 153B, 153D)
Sandy R	edox (S5)		Reduced Ve	ertic (F18)	) (MLRA	, 150A, 15	0B)	Other	(Explain in Remarks)
	Matrix (S6)		Piedmont F				•		
	rface (S7) (LRR P, S	6. T. U)	Anomalous	•	``	, <b>.</b>	,		
	e Below Surface (S8		(MLRA 14	0	•	- (	,	<sup>3</sup> Indica	ators of hydrophytic vegetation and
	S, T, U)	/	Very Shallo			22)			land hydrology must be present,
,	-, , -,		(MLRA 1		`	,			ess disturbed or problematic.
	Layer (if observed):								
Type:									
Depth (ir	nches):						Hydric	Soil Pres	ent? Yes X No

Date: \_\_\_\_\_

Feature ID: EF\_W\_201



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_ Photograph Direction West\_\_\_

U.S. Army Co WETLAND DETERMINATION DATA SHE See ERDC/EL TR-07-24; the p	ain Region	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)					
Project/Site: CVOW	City/County: Chesapeake	City/County: Chesapeake					
Applicant/Owner: Dominion		State: VA	Sampling Point: EF_W_201_UP				
Investigator(s): E. Foster T. Conard	Section, Township, Range: N	/a					
Landform (hillside, terrace, etc.): Flat	Local relief (concave, convex, no	ne): None	Slope (%): 0-2				
Subregion (LRR or MLRA): LRR T, MLRA 153B Lat: 3	36.724580 Long: -76.	168150	Datum: WGS84				
Soil Map Unit Name: Psamments, 0-10 percent slopes		NWI classifica	ation: Uplands				
Are climatic / hydrologic conditions on the site typical for the	his time of year? Yes X	No (If no,	explain in Remarks.)				
Are Vegetation, Soil, or Hydrologys	significantly disturbed? Are "Normal Circ	umstances" presen	t? Yes X No				
Are Vegetation, Soil, or Hydrologyr	naturally problematic? (If needed, expla	iin any answers in F	Remarks.)				
SUMMARY OF FINDINGS – Attach site map	showing sampling point location	ns, transects, ir	nportant features, etc.				
Hydric Soil Present? Yes	No     Is the Sampled Area       No     X       No     X	Yes	No <u>X</u>				
Remarks:							
HYDROLOGY							
Watland Hydrology Indiastore:	c	ocondary Indicators	(minimum of two required)				

Vetland Hydrology Indicators:				Secondary Indicators (minimum of two required)				
Primary Indicators (minimu	<u>m of one is req</u>	uired; check a	ll that apply)	<u>.</u>	Surface Soil Cracks	(B6)		
Surface Water (A1)		Aquatio	c Fauna (B13)		Sparsely Vegetated	Concave Surface (B8)		
High Water Table (A2)		Marl D	eposits (B15) <b>(LRR U)</b>		Drainage Patterns (B	310)		
Saturation (A3)		Hydroc	gen Sulfide Odor (C1)		Moss Trim Lines (B1	16)		
Water Marks (B1)		Oxidize	ed Rhizospheres on Living	g Roots (C3)	Dry-Season Water Table (C2)			
Sediment Deposits (B2	:)	Presen	nce of Reduced Iron (C4)		Crayfish Burrows (C8)			
Drift Deposits (B3)		Recent	t Iron Reduction in Tilled	Soils (C6)	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Thin M	uck Surface (C7)		Geomorphic Position (D2)			
Iron Deposits (B5)		Other (	(Explain in Remarks)		Shallow Aquitard (D	3)		
Inundation Visible on A	erial Imagery (	(B7)			FAC-Neutral Test (D	05)		
Water-Stained Leaves	(B9)				Sphagnum Moss (D	8) (LRR T,U)		
Field Observations: Surface Water Present?	Yes	No X	Depth (inches):					
Water Table Present?	Yes	No X	Depth (inches):	-				
Saturation Present?	Yes	No X	Depth (inches):	Wetland	I Hydrology Present?	Yes No X		
(includes capillary fringe)				-				
Describe Recorded Data (s Remarks:	tream gauge, r	monitoring well	l, aerial photos, previous i	inspections), if a	available:			

Sampling Point: EF\_W\_201\_UP

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 )	% Cover	Species?	Status	Dominance Test worksheet:
1. Pinus taeda	40	Yes	FAC	Number of Dominant Species
2. Liquidambar styraciflua	30	Yes	FAC	That Are OBL, FACW, or FAC: 4 (A)
3. Acer rubrum	10	No	FAC	
4. Quercus alba	10	No	FACU	Total Number of DominantSpecies Across All Strata:4(B)
	10	110	TAGO	
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
		=Total Cover		Prevalence Index worksheet:
50% of total cover: 4	5 20%	of total cover:	18	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 )				OBL species 0 x 1 = 0
1. Acer rubrum	15	Yes	FAC	FACW species 0 x 2 = 0
2.				FAC species 120 x 3 = 360
3.				FACU species 10 $x 4 = 40$
4.				UPL species $0 \times 5 = 0$
5.				Column Totals: 130 (A) 400 (B)
6.				$\frac{1}{2} = \frac{1}{2} = \frac{1}$
0.	45	Tatal Causer		
		=Total Cover	_	Hydrophytic Vegetation Indicators:
50% of total cover: 8	20%	of total cover:	3	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 30 )				X 2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
Λ				
5 6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
0.				
		-Total Covor		· · · ·
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:		=Total Cover of total cover:		Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines,
50% of total cover: <u>Herb Stratum</u> (Plot size:30)				Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
				Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30 )				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,
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Herb Stratum       (Plot size:	20%	e of total cover:	FAC	<ul> <li>Definitions of Five Vegetation Strata:</li> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
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Depth	 Matrix			x Featu				e absence	••••••	,		
(inches)	Color (moist)	%	Color (moist)	x realu	Type <sup>1</sup>	Loc <sup>2</sup>	Тех	ture		Re	emarks	
0-12	7.5YR 3/3	100					Sa	ndy		fin	e sand	
12-18	10YR 5/6	100					Sa	ndy		fin	e sand	
						·						
Туре: С=Со	oncentration, D=Depl	etion, RM=F	Reduced Matrix, I	//S=Mas		Grains.		<sup>2</sup> Location:	PL=Por	e Lining, M	I=Matrix.	
lydric Soil	Indicators: (Applica	ble to all LF	RRs, unless othe	erwise r	noted.)			Indicators	for Pro	blematic H	lydric Soil	s <sup>3</sup> :
Histosol	(A1)		Thin Dark S	urface (S	59) <b>(LRR</b>	S, T, U)		1 cm M	luck (A9	) (LRR O)		
Histic Ep	pipedon (A2)		Barrier Islan	ds 1 cm	Muck (S	12)	-	2 cm N	luck (A1	0) (LRR S	)	
Black Hi	stic (A3)		(MLRA 15	3B, 153	D)		-	Coast	Prairie R	Redox (A16	5)	
Hydroge	en Sulfide (A4)		Loamy Mucl	y Miner	al (F1) <b>(L</b>	RR O)	-	(outs	side ML	RA 150A)		
	d Layers (A5)		Loamy Gley	•	· / ·	,		Reduc	ed Vertio	, (F18)		
	Bodies (A6) (LRR, P	. T. U)	Depleted Ma		` '		-			RA 150A,	150B)	
	icky Mineral (A7) (LR		Redox Dark					•			s (F19) <b>(LR</b>	R P. T
	esence (A8) (LRR U)		Depleted Da		· · /		-			•	lain Soils (	
	ick (A9) (LRR P, T)		Redox Depr		. ,		-		RA 153B	• •		- /
	d Below Dark Surface	e (A11)	Marl (F10) (I		( - /			•		, aterial (F21	)	
-	ark Surface (A12)	()	Depleted Oc		1) (MLRA	151)	-			Dark Surfac	,	
	rairie Redox (A16) (M	LRA 150A)					). P. T)				52A in FL,	154)
	lucky Mineral (S1) (L	· · ·	Umbric Surf		`	, <b>、</b>		•			ma Matrix (	,
	Bleyed Matrix (S4)		Delta Ochric		<i>,</i> .		-			s, 153D)	,	
	Redox (S5)		Reduced Ve				50B)			in Remark	s)	
Stripped	Matrix (S6)		Piedmont Fl	odplair	Soils (F	9) (MLR	A 149A)				,	
Dark Su	rface (S7) (LRR P, S,	, T, U)	Anomalous	Bright Fl	oodplain	Soils (F2	0)					
	e Below Surface (S8)		(MLRA 14	9A, 153	C, 153D)	,	,	<sup>3</sup> Indica	tors of h	ydrophytic	vegetation	and
	S, T, U)		Very Shallov								st be presei	
-	-		(MLRA 13	8, 152A	in FL, 1	54)		unle	ss distu	rbed or pro	blematic.	
Restrictive I	Layer (if observed):											
Type:												
Depth (ir	nches):						Hydric	Soil Pres	ent?	Yes	No	Х
Remarks:	·											

Date: \_\_\_\_\_

Feature ID: <u>EF\_W\_201\_UP</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_ Photograph Direction West\_\_\_

U.S WETLAND DETERMINATION See ERDC/EL TR-	-	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)		
Project/Site: CVOW	City/County:	Virginia Beach	Sampling Date: 6/7/2022	
Applicant/Owner: Dominion		State: VA	Sampling Point: EF_W_1001	
Investigator(s): E. Foster, K. Shephard	Section, Township	, Range:		
Landform (hillside, terrace, etc.): Floodpla		, convex, none): Concave	Slope (%): 0-5	
Subregion (LRR or MLRA): LRR T, MLRA	153B Lat: 36.752653	Long: -76.119087	Datum: WGS84	
Soil Map Unit Name: Nawney Silt Loam		NWI classific		
Are climatic / hydrologic conditions on the si	te typical for this time of year? Ye	s X No	(If no, explain in Remarks	
Are Vegetation, Soil, or Hydr	ology significantly disturbed? Are "	Normal Circumstances" preser	nt? Yes X No	
Are Vegetation, Soil, or Hydr		eded, explain any answers in I		
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes     X     No     Is the Sample within a Weth       Yes     X     No     within a Weth       Yes     X     No     within a Weth	ed Area		
HYDROLOGY				
Wetland Hydrology Indicators:			s (minimum of two required)	
Primary Indicators (minimum of one is requ		Surface Soil Cra	( )	
X Surface Water (A1) X High Water Table (A2)	Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b>	Sparsely Vegeta Drainage Patter	ated Concave Surface (B8)	
X Saturation (A3)	Hydrogen Sulfide Odor (C1)	Moss Trim Lines	, ,	
X Water Marks (B1)	Oxidized Rhizospheres on Living Roots			

X Water Marks (B1)			Oxic	lized Rhizospheres or	Living R	oots (C3)	Dry-Season Water	Гable (C2)			
Sediment Deposits (B2	<u>?</u> )		Pres	ence of Reduced Iror	n (C4)		Crayfish Burrows (C	;8)			
Drift Deposits (B3)			Rec	ent Iron Reduction in <sup>-</sup>	Tilled Soil	Is (C6) Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)	)		Thin	Muck Surface (C7)		X Geomorphic Position (D2)					
Iron Deposits (B5)			Othe	er (Explain in Remarks	s)	Shallow Aquitard (D3)					
Inundation Visible on A	erial In	nagery	(B7)				X FAC-Neutral Test (D5)				
X Water-Stained Leaves	(B9)						Sphagnum Moss (D	8) <b>(LRR T,U)</b>			
Field Observations:											
Surface Water Present?	Yes	Х	No	Depth (inches):	1						
Water Table Present?	Yes	Х	No	Depth (inches):	0						
Saturation Present?	Yes	Х	No	Depth (inches):	0	Wetland	Hydrology Present?	Yes X No			
(includes capillary fringe)	-										
Describe Recorded Data (s	stream of	jauge,	monitoring w	ell, aerial photos, pre	vious insp	ections), if a	available:				
Remarks:											

Sampling Point: EF\_W\_1001

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30ft )	% Cover	Species?	Status	Dominance Test worksheet:
1. Fraxinus pennsylvanica	60	Yes	FACW	Number of Dominant Species
2. Acer rubrum	15	Yes	FAC	That Are OBL, FACW, or FAC:6 (A)
3.				Total Number of Dominant
4.				Species Across All Strata: 6 (B)
5				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 100.0% (A/B)
	75	=Total Cover		Prevalence Index worksheet:
50% of total cover: 3	38 20%	of total cover:	15	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30ft )				OBL species 30 x 1 = 30
1. Fraxinus pennsylvanica	10	Yes	FACW	FACW species 75 x 2 = 150
2. Acer rubrum	5	Yes	FAC	FAC species 25 x 3 = 75
3. Carpinus caroliniana	5	Yes	FAC	FACU species $0   x 4 = 0$
4.				UPL species $0   x 5 = 0$
5.				Column Totals: 130 (A) 255 (B)
6.				$\frac{1}{200} \frac{1}{100} \frac{1}$
	20	=Total Cover		Hydrophytic Vegetation Indicators:
E00/ of total anyon 1			4	
	10 20%	of total cover:	4	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				X 2 - Dominance Test is >50%
1				X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3	-			
4.				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6				present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30ft )				approximately 20 ft (6 m) or more in height and 3 in.
1. Saururus cernuus	25	Yes	OBL	(7.6 cm) or larger in diameter at breast height (DBH).
2. Carex crinita	5	No	FACW	Sapling – Woody plants, excluding woody vines,
3. Osmunda spectabilis	5	No	OBL	approximately 20 ft (6 m) or more in height and less
4.	li.			than 3 in. (7.6 cm) DBH.
5.				Shrub - Woody Plants, excluding woody vines,
6.				approximately 3 to 20 ft (1 to 6 m) in height.
7				
				<b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody
				plants, except woody vines, less than approximately 3
9 10.				ft (1 m) in height.
				<b>Woody Vine</b> – All woody vines, regardless of height.
11				The star woody whee, regulateds of height.
		=Total Cover		
	18 20%	of total cover:	7	
Woody Vine Stratum (Plot size:)				
1				
2.				
3.				
4.				
5.				
		=Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation           Present?         Yes X         No
Remarks: (If observed, list morphological adaptatio	ns below.)			

	cription: (Describe	to the dep						e of maleators.)			
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Featur %	es Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0-6	10YR 3/2	100					Loamy/Clayey SILTY CLAY				
6-20	10yr 4/1	98	10YR 5/4	2		М	Sandy	SILTY CLAY			
			Doduced Metrix				<sup>21</sup> continu				
71	oncentration, D=Dep	,	,			Grains.		: PL=Pore Lining, M=Matrix.	_ <sup>3</sup> .		
Histosol	Indicators: (Applica	Die to all L	Thin Dark S		,	ст II)		rs for Problematic Hydric Soil Muck (A9) (LRR O)	5.		
	( )			•	<i>,</i> <b>,</b>						
Histic Epipedon (A2)       Barrier Islands 1 cm Muck (S12)         Black Histic (A3)       (MLRA 153B, 153D)								Muck (A10) <b>(LRR S)</b>			
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (								st Prairie Redox (A16)			
	( )				· / ·	RR O)	•	utside MLRA 150A)			
	d Layers (A5)		Loamy Gley		· · /			uced Vertic (F18)			
	Bodies (A6) (LRR, P		Depleted Ma	. ,				utside MLRA 150A, 150B)			
	ucky Mineral (A7) <b>(LR</b>		Redox Dark		· · /			mont Floodplain Soils (F19) (LR			
	resence (A8) (LRR U)	)	Depleted Da					nalous Bright Floodplain Soils (	F20)		
	uck (A9) (LRR P, T)		Redox Depr		(F8)		•	LRA 153B)			
Deplete	d Below Dark Surface	e (A11)	Marl (F10) (	LRR U)			Red	Parent Material (F21)			
Thick D	ark Surface (A12)		Depleted Oc	hric (F1	1) <b>(MLRA</b>	. 151)	Very	Shallow Dark Surface (F22)			
Coast P	rairie Redox (A16) (N	ILRA 150A	) Iron-Mangai	nese Mas	sses (F12	2) (LRR O	, Ρ, Τ) (οι	utside MLRA 138, 152A in FL,	154)		
Sandy N	/lucky Mineral (S1) <b>(L</b>	RR O, S)	Umbric Surf	ace (F13	B) (LRR P	, T, U)	Barri	er Islands Low Chroma Matrix (	TS7)		
Sandy C	Gleyed Matrix (S4)		Delta Ochric	; (F17) <b>(N</b>	MLRA 15	1)	(M)	LRA 153B, 153D)			
Sandy F	Redox (S5)		Reduced Ve	ertic (F18	) <b>(MLRA</b>	150A, 15	<b>0B)</b> Othe	er (Explain in Remarks)			
Stripped	d Matrix (S6)		Piedmont Fl	oodplain	Soils (F1	9) (MLRA	A 149A)				
Dark Su	rface (S7) (LRR P, S	, T, U)	Anomalous	Bright Flo	oodplain	Soils (F20	))				
Polyvalu	ue Below Surface (S8	)	(MLRA 14	9A, 153	C, 153D)		<sup>3</sup> India	cators of hydrophytic vegetation	and		
(LRR	S, T, U)		Very Shallov	v Dark S	urface (F	22)	We	etland hydrology must be preser	nt,		
			(MLRA 13	88, 152A	in FL, 1	54)	un	less disturbed or problematic.			
Restrictive	Layer (if observed):										
Type:											
Type.											

Date: \_\_\_\_\_

Feature ID: EF\_W\_1001



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_ Photograph Direction West\_\_\_

U.S. A WETLAND DETERMINATION DA See ERDC/EL TR-07-2		c and Gulf Coa		egion	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW		City/County: Virg	ginia Beach		Sampling Date: 6/7/2022
Applicant/Owner: Dominion				te: VA	Sampling Point: EF_W_1001-1002-UP
Investigator(s): E. Foster, K. Shephard	S	ection, Township, R			
			·		
Landform (hillside, terrace, etc.): Hillslope		l relief (concave, co			Slope (%): 0-3
Subregion (LRR or MLRA): LRR T, MLRA 153E	3 Lat: 36.7527108	L	.ong: <u>-76.119025</u>	7	Datum: WGS84
Soil Map Unit Name: Nawney silt loam			N	WI classifica	ation: Uplands
Are climatic / hydrologic conditions on the site ty	pical for this time of year	? Yes	x No	(lf no,	explain in Remarks.)
Are Vegetation, Soil, or Hydrolog	v significantly dist		ormal Circumstan	ces" presen	t? Yes X No
Are Vegetation, Soil, or Hydrolog			ed, explain any a		
					,
SUMMARY OF FINDINGS – Attach si	ite map showing sa	impling point le	ocations, tra	nsects, ir	nportant features, etc.
Hydric Soil Present? Ye	es <u>No X</u> es <u>X</u> No <u>X</u> es <u>No X</u>	Is the Sampled within a Wetland		Yes	No <u>X</u>
Wetland Hydrology Indicators:			Seconda	ry Indicators	(minimum of two required)
Primary Indicators (minimum of one is required	; check all that apply)		Surfa	ice Soil Cra	cks (B6)
Surface Water (A1)	Aquatic Fauna (B13)		Spar	sely Vegeta	ted Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (L	.RR U)	Drair	age Patterr	ns (B10)
Saturation (A3)	Hydrogen Sulfide Odo	r (C1)	Moss	Trim Lines	(B16)
Water Marks (B1)	Oxidized Rhizospheres	s on Living Roots (C	C3) Dry-9	Season Wat	er Table (C2)
Sediment Deposits (B2)	Presence of Reduced	Iron (C4)	Cray	fish Burrows	s (C8)
Drift Deposits (B3)	Recent Iron Reduction	in Tilled Soils (C6)	Satu	ration Visible	e on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C7	7)	Geor	norphic Pos	ition (D2)
Iron Deposits (B5)	Other (Explain in Rema	arks)	Shall	ow Aquitard	I (D3)
Inundation Visible on Aerial Imagery (B7)			FAC	Neutral Tes	st (D5)
Water-Stained Leaves (B9)			Spha	ignum Moss	s (D8) <b>(LRR T,U)</b>

Field Observations:						
Surface Water Present?	Yes	No X	Depth (inches):			
Water Table Present?	Yes	No X	Depth (inches):	-		
Saturation Present?	Yes	No X	Depth (inches):	Wetland Hydrology Present?	Yes	No X
(includes capillary fringe)				-		
Pamarka.						
Remarks:						
None						

Sampling Point: EF\_W\_1001-1002-UP

Tree Stratum (Distaire)	Absolute	Dominant	Indicator	Deminance Test werkehest
Tree Stratum (Plot size:) 1.	% Cover	Species?	Status	Dominance Test worksheet:
2.				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata: 2 (B)
4 5				· · · · · · · · · · · · · · · · · · ·
6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)
		=Total Cover		Prevalence Index worksheet:
50% of total cover:	20%	of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species 0 x 1 = 0
1		·		FACW species $0   x^2 = 0$
		·		FAC species <u>16</u> x 3 = <u>48</u>
3.		·		FACU species 55 x 4 = 220
4		·		UPL species $0 \times 5 = 0$
5.		·		Column Totals: 71 (A) 268 (B)
6		=Total Cover		Prevalence Index = B/A = 3.77 Hydrophytic Vegetation Indicators:
50% of total cover:		of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				2 - Dominance Test is >50%
1				$3 - Prevalence Index is \leq 3.0^{1}$
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
4				
5.				11- dis-store of hydric coil and watland hydrology must be
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
· · · · · · · · · · · · · · · · · · ·		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30 )				approximately 20 ft (6 m) or more in height and 3 in.
1. Anthoxanthum odoratum	40	Yes	FACU	(7.6 cm) or larger in diameter at breast height (DBH).
2. Lespedeza cuneata	5	No	FACU	Sapling – Woody plants, excluding woody vines,
3. Parthenocissus quinquefolia	5 10	No No	FACU	approximately 20 ft (6 m) or more in height and less
<ol> <li>Parthenocissus quinquefolia</li> <li>Toxicodendron radicans</li> </ol>	5 10 5	No No No	FACU FAC	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
<ul> <li>3. Parthenocissus quinquefolia</li> <li>4. Toxicodendron radicans</li> <li>5. Juncus tenuis</li> <li>6</li> </ul>	5 10	No No	FACU	approximately 20 ft (6 m) or more in height and less
<ol> <li>Parthenocissus quinquefolia</li> <li>Toxicodendron radicans</li> <li>Juncus tenuis</li> </ol>	5 10 5	No No No	FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> </ul>
<ul> <li>3. Parthenocissus quinquefolia</li> <li>4. Toxicodendron radicans</li> <li>5. Juncus tenuis</li> <li>6.</li> </ul>	5 10 5	No No No	FACU FAC	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. <b>Shrub -</b> Woody Plants, excluding woody vines,
3.       Parthenocissus quinquefolia         4.       Toxicodendron radicans         5.       Juncus tenuis         6.	5 10 5	No No No	FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3</li> </ul>
3.       Parthenocissus quinquefolia         4.       Toxicodendron radicans         5.       Juncus tenuis         6.	5 10 5	No No No	FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody</li> </ul>
3.       Parthenocissus quinquefolia         4.       Toxicodendron radicans         5.       Juncus tenuis         6.	5 10 5	No No No	FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3</li> </ul>
3.       Parthenocissus quinquefolia         4.       Toxicodendron radicans         5.       Juncus tenuis         6.	5 10 5 5 	No No No	FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
3.       Parthenocissus quinquefolia         4.       Toxicodendron radicans         5.       Juncus tenuis         6.	5 10 5 5 	No No No	FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
3.       Parthenocissus quinquefolia         4.       Toxicodendron radicans         5.       Juncus tenuis         6.	5 10 5 5 	No           No           No           No           No	FACU FAC FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
3.       Parthenocissus quinquefolia         4.       Toxicodendron radicans         5.       Juncus tenuis         6.	5 10 5 5 	No           No           No           No           No	FACU FAC FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
3.       Parthenocissus quinquefolia         4.       Toxicodendron radicans         5.       Juncus tenuis         6.	5 10 5 5 	No No No No Total Cover of total cover:	FACU FAC FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
3.       Parthenocissus quinquefolia         4.       Toxicodendron radicans         5.       Juncus tenuis         6.	5 10 5 5 	No No No No Total Cover of total cover:	FACU FAC FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
3.       Parthenocissus quinquefolia         4.       Toxicodendron radicans         5.       Juncus tenuis         6.	5 10 5 5 	No No No No Total Cover of total cover:	FACU FAC FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
3.       Parthenocissus quinquefolia         4.       Toxicodendron radicans         5.       Juncus tenuis         6.	5 10 5 5 	No No No No Total Cover of total cover:	FACU FAC FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> </ul>
3.       Parthenocissus quinquefolia         4.       Toxicodendron radicans         5.       Juncus tenuis         6.	5 10 5 5 6 6 6 6	No No No No Total Cover of total cover:	FACU FAC FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine - All woody vines, regardless of height.</li> <li>Hydrophytic</li> </ul>
3.       Parthenocissus quinquefolia         4.       Toxicodendron radicans         5.       Juncus tenuis         6.	5 10 5 5 	No No No No No = Total Cover of total cover: Yes	FACU FAC FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> </ul>

SOIL

	cription: (Describe f	o the dept				tor or con	nfirm the a	absence	of indicators.)
Depth	Matrix			x Featur	_ 1	1 2	<b>–</b> .		
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc <sup>2</sup>	Textu	ire	Remarks
0-20	10YR 5/4	100					Sand	ły	Silty Sand
Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, N	/IS=Masl	ked Sand	Grains.	<sup>2</sup> L	ocation:	PL=Pore Lining, M=Matrix.
	Indicators: (Applica								for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Thin Dark Su	urface (S	9) <b>(LRR</b>	S, T, U)		1 cm N	/luck (A9) <b>(LRR O)</b>
Histic Ep	oipedon (A2)		Barrier Islan	ds 1 cm	Muck (S1	2)		2 cm N	/luck (A10) <b>(LRR S)</b>
Black Hi	stic (A3)		(MLRA 15	3B, 153	D)			Coast	Prairie Redox (A16)
Hydroge	n Sulfide (A4)		Loamy Muck	y Minera	al (F1) <b>(L</b>	RR O)		(out	side MLRA 150A)
Stratified	l Layers (A5)		Loamy Gley	ed Matrix	(F2)			Reduc	ed Vertic (F18)
X Organic	Bodies (A6) (LRR, P	, T, U)	Depleted Ma	trix (F3)				(out	side MLRA 150A, 150B)
5 cm Mu	icky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	Surface	(F6)			Piedm	ont Floodplain Soils (F19) <b>(LRR P, T</b>
Muck Pr	esence (A8) (LRR U)	)	Depleted Da	rk Surfa	ce (F7)			Anoma	alous Bright Floodplain Soils (F20)
1 cm Mu	ick (A9) <b>(LRR P, T)</b>		Redox Depr	essions (	F8)			 (MLF	RA 153B)
Depleted	d Below Dark Surface	e (A11)	Marl (F10) <b>(I</b>	.RR U)				Red P	arent Material (F21)
Thick Da	ark Surface (A12)		Depleted Oc	hric (F11	) <b>(MLRA</b>	151)		Very S	Shallow Dark Surface (F22)
Coast P	rairie Redox (A16) ( <b>M</b>	LRA 150A)	J Iron-Mangar	ese Mas	ses (F12	) (LRR O,	, P, T)	(out	side MLRA 138, 152A in FL, 154)
Sandy M	lucky Mineral (S1) <b>(L</b>	RR O, S)	Umbric Surfa	ace (F13	) (LRR P	T, U)		Barrier	Islands Low Chroma Matrix (TS7)
Sandy G	ileyed Matrix (S4)		Delta Ochric	(F17) <b>(N</b>	ILRA 15	)		 (MLF	RA 153B, 153D)
Sandy R	edox (S5)		Reduced Ve	rtic (F18	) (MLRA	150A, 150	0B)	Other	(Explain in Remarks)
Stripped	Matrix (S6)		Piedmont Fle	oodplain	Soils (F1	9) <b>(MLRA</b>	A 149A)		
Dark Su	rface (S7) <b>(LRR P, S</b>	, T, U)	Anomalous I	Bright Flo	odplain	Soils (F20)	))		
Polyvalu	e Below Surface (S8	)	(MLRA 14	9A, 153	C, 153D)			<sup>3</sup> Indica	tors of hydrophytic vegetation and
(LRR	S, T, U)		Very Shallov	v Dark S	urface (F	22)		wetl	and hydrology must be present,
			(MLRA 13	8, 152A	in FL, 1	4)		unle	ess disturbed or problematic.
Restrictive I	Layer (if observed):								
Type:									
	nches):					1	Hydric S	oil Pros	ent? Yes X No

Date: \_\_\_\_

Feature ID: <u>EF\_W\_1001-1002\_UP</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number 4

Photograph Direction West

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R  Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
roject/Site: CVOW City/County: Virginia Beach Sampling Date: <u>6</u> /7/2022
pplicant/Owner: Dominion State: VA Sampling Point: EF_W_1002_PE
vestigator(s): E. Foster, K. Shepherd Section, Township, Range: N/a
andform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 0-5
ubregion (LRR or MLRA): LRR T, MLRA 153B Lat: 36.752729 Long: -76.119519 Datum: WGS84
oil Map Unit Name: Nawny Silt Loam NWI classification: PEM
re climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
re Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Circumstances" present? Yes X No
re Vegetation X, Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
UMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       X       No       Is the Sampled Area         Hydric Soil Present?       Yes       X       No       within a Wetland?       Yes       X       No         Wetland Hydrology Present?       Yes       X       No
Remarks: None
IYDROLOGY

	Secondary Indicators (minimum of two required)		
uired; check all that apply)	Surface Soil Cracks (B6)		
Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)		
Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)		
Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)			
Oxidized Rhizospheres on Living Roots (	C3) Dry-Season Water Table (C2)		
Presence of Reduced Iron (C4)	Crayfish Burrows (C8)		
Recent Iron Reduction in Tilled Soils (C6)	) Saturation Visible on Aerial Imagery (C9)		
Thin Muck Surface (C7)	X Geomorphic Position (D2)		
Other (Explain in Remarks)	Shallow Aquitard (D3)		
37)	X FAC-Neutral Test (D5)		
	Sphagnum Moss (D8) (LRR T,U)		
No Depth (inches): 0			
No Depth (inches): 0			
No Depth (inches): 0 We	etland Hydrology Present? Yes X No		
nonitoring well, aerial photos, previous inspection	ns), if available:		
	Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots ( Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6 Thin Muck Surface (C7) Other (Explain in Remarks) 37) No Depth (inches): 0 No Depth (inches) (i		

Sampling Point: \_EF\_W\_1002\_PEM

Trop Stratum (Dist size: 20)	Absolute Dominant Indicator	Deminence Test werkehest
<u>Tree Stratum</u> (Plot size: <u>30</u> ) 1.	% Cover Species? Status	Dominance Test worksheet:
2.		Number of Dominant Species           That Are OBL, FACW, or FAC:         1         (A)
3		. Total Number of Dominant Species Across All Strata: 1 (B)
4 5		· · · · · · · · · · · · · · · · · · ·
6.		Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
	=Total Cover	Prevalence Index worksheet:
50% of total cover:	20% of total cover:	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 )		OBL species 0 x 1 = 0
1		FACW species 100 x 2 = 200
2		FAC species x 3 =
3		FACU species 0 x 4 = 0
4		UPL species 0 x 5 = 0
5.		Column Totals: 100 (A) 200 (B)
6.		Prevalence Index = $B/A = 2.00$
	=Total Cover	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of total cover:	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: )		X 2 - Dominance Test is >50%
1,		X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.		
4		•
5		<ul> <li><sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</li> </ul>
0.	=Total Cover	Definitions of Five Vegetation Strata:
		Deminions of the vegetation of ata.
50% of total cover	20% of total cover	Tree March reports even where the sizes
50% of total cover:	20% of total cover:	<b>Tree</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30Ft )		<b>Tree</b> – 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).
Herb Stratum       (Plot size:	20% of total cover:	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
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Herb Stratum       (Plot size:		<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less</li> </ul>
Herb Stratum       (Plot size:	Yes FACW	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> </ul>
Herb Stratum         (Plot size: 30Ft )           1.         Phragmites australis           2.	100 Yes FACW	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody</li> </ul>
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Herb Stratum       (Plot size:	100 Yes FACW	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
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Herb Stratum       (Plot size:30Ft)         1.       Phragmites australis         2.	100 Yes FACW	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size:30Ft)         1.       Phragmites australis         2.	Yes FACW	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> <li>Hydrophytic Vegetation</li> </ul>
Herb Stratum       (Plot size:	100 Yes FACW	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> </ul>

Depth	Matrix		Redo	x Featu	ires					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Text	ure		Remarks
0-6	10YR 3/2	100					Loamy/	Clayey		Silty Clay
6-20	10yr 4/1	98	10YR 5/4	2	С	PL	Loamy/	Clayey		Silty Clay
						·				
						i				
71	ncentration, D=Dep					d Grains.			L=Pore Linin	
	ndicators: (Applica	ble to all	•		,	o =	li			tic Hydric Soils <sup>3</sup> :
Histosol			Thin Dark S				_		ick (A9) <b>(LRR</b>	
	ipedon (A2)		Barrier Islan		`	12)	_	_	ick (A10) <b>(LR</b>	
Black His	( )		(MLRA 15				_		rairie Redox (	,
	n Sulfide (A4)		Loamy Mucl		• • •	RR O)		•	de MLRA 150	,
	Layers (A5)		Loamy Gley				_		d Vertic (F18)	
	Bodies (A6) (LRR, P	,	Depleted Ma	`	,			•	de MLRA 150	
	cky Mineral (A7) <b>(LR</b>	,	Redox Dark		· · /		_		•	Soils (F19) (LRR P,
	esence (A8) (LRR U)	)	Depleted Da		· · /		_		-	odplain Soils (F20)
	ck (A9) <b>(LRR P, T)</b>		Redox Depr						A 153B)	
	Below Dark Surface	e (A11)	Marl (F10) (	,			_		ent Material (	,
	rk Surface (A12)		Depleted Oc		<i>,</i> , ,	,	_		allow Dark Su	. ,
	airie Redox (A16) ( <b>N</b>		· <u> </u>			<i>,</i> .	), P, T)	•		8, 152A in FL, 154)
	ucky Mineral (S1) <b>(L</b>	.RR O, S)	Umbric Surf		<i>,</i> .		_			hroma Matrix (TS7)
	eyed Matrix (S4)		Delta Ochric					•	A 153B, 153D	
	edox (S5)		Reduced Ve		, <b>.</b>			Other (E	xplain in Ren	narks)
Stripped	Matrix (S6)		Piedmont Fl	oodplai	n Soils (F	9) <b>(MLR</b>	A 149A)			
	face (S7) <b>(LRR P, S</b>		Anomalous	-		,	0)	0		
	e Below Surface (S8	)	(MLRA 14	•						nytic vegetation and
(LRR S	S, T, U)		Very Shallov		`	,		wetlar	nd hydrology	must be present,
			(MLRA 13	8, 152/	A in FL, 1	54)		unles	s disturbed or	problematic.
Restrictive L	ayer (if observed):									
Type:										
Donth (in	ches):						Hydric	Soil Preser	nt? Ye	s X No

Date: \_\_\_\_\_

Feature ID: EF\_W\_1002



Photograph Number \_\_\_\_1

Photograph Direction North

Comments: Area dominated by phragmites



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_ Photograph Direction West

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Ro See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	egion	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW City/County: Chesapeake		Sampling Date: 6/7/2022
Applicant/Owner: Dominion Sta	tate: VA	Sampling Point: EF_W_1003_PEM
Investigator(s): E. Foster, K. Shepherd Section, Township, Range: N/a		
Landform (hillside, terrace, etc.): Swell Local relief (concave, convex, none): Co	oncave	Slope (%): 2
Subregion (LRR or MLRA):         LRR T, MLRA 153B         Lat:         36.694406         Long: -76.170970	0	Datum: WGS84
Soil Map Unit Name: Tomotley-Bertie complex, 0 to 2 percent slopes	WI classificat	tion: PEM1
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No	(If no, e	explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Circumstar	nces" present?	? Yes <u>x</u> No
Are Vegetation, Soil, or Hydrologynaturally problematic? (If needed, explain any a	answers in Re	emarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, tra	ansects, im	portant features, etc.
Hydrophytic Vegetation Present?       Yes       X       No       Is the Sampled Area         Hydric Soil Present?       Yes       X       No       within a Wetland?         Wetland Hydrology Present?       Yes       X       No       Is the Sampled Area	Yes <u>X</u>	No
Remarks: Depression/former ag. Ditch dominated by lizard's tail.		

#### HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is requi	ired; 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)
X Saturation (A3)	Hydrogen Sulfide Odor (C1)		Moss Trim Lines (B16)
Water Marks (B1)	X Oxidized Rhizospheres on Living Ro	ots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iron (C4)		X Crayfish Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils	(C6)	Saturation Visible on Aerial Imagery (C9)
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 (B	7)		X FAC-Neutral Test (D5)
Water-Stained Leaves (B9)			Sphagnum Moss (D8) (LRR T,U)
Field Observations:			
Surface Water Present? Yes	No x Depth (inches):		
Water Table Present? Yes	No x Depth (inches):		
Saturation Present? Yes X	No Depth (inches): 10	Wetland	Hydrology Present? Yes X No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, me	onitoring well, aerial photos, previous insp	ections), if a	available:
Remarks:			
Saturation found, but no water table within 2	20".		

Sampling Point: EF\_W\_1003\_PEM

	Absolute Dominant Indicator	Deminance Test worksheets
<u>Tree Stratum</u> (Plot size:) 1.	% Cover Species? Status	Dominance Test worksheet:
2.		Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
3		Total Number of Dominant Species Across All Strata: 1 (B)
4 5.		
6.		Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
	=Total Cover	Prevalence Index worksheet:
50% of total cover:	20% of total cover:	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)		OBL species 100 x 1 = 100
1		FACW species 0 x 2 = 0
2		FAC species 0 x 3 = 0
3		FACU species 0 x 4 = 0
4		UPL species 0 x 5 = 0
5		Column Totals: 100 (A) 100 (B)
6		Prevalence Index = B/A = 1.00
	=Total Cover	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of total cover:	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: )		X 2 - Dominance Test is >50%
1		X 3 - Prevalence Index is $\leq 3.0^1$
2.		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.		
4.		
5.		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6.		present, unless disturbed or problematic.
	=Total Cover	Definitions of Five Vegetation Strata:
		_
50% of total cover:	20% of total cover:	<b>Tree</b> – Woody plants, excluding woody vines.
Herb Stratum (Plot size: 30 Ft )	20% of total cover:	<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
	20% of total cover: 100 Yes OBL	
Herb Stratum (Plot size: 30 Ft )		approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
Herb Stratum (Plot size: <u>30 Ft</u> ) 1. Saururus cernuus		approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 Ft</u> ) 1. <u>Saururus cernuus</u> 2.		approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). <b>Sapling</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: <u>30 Ft</u> ) 1. <u>Saururus cernuus</u> 2.		approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
Herb Stratum (Plot size: <u>30 Ft</u> ) 1. <u>Saururus cernuus</u> 2.	YesBL	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
Herb Stratum       (Plot size: 30 Ft )         1.       Saururus cernuus         2.	YesOBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in.</li> <li>(7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines,</li> </ul>
Herb Stratum       (Plot size: 30 Ft)         1.       Saururus cernuus         2.	100 Yes OBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody</li> </ul>
Herb Stratum       (Plot size: 30 Ft )         1.       Saururus cernuus         2.	YesOBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3</li> </ul>
Herb Stratum       (Plot size: 30 Ft)         1.       Saururus cernuus         2.	YesOBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size: 30 Ft)         1.       Saururus cernuus         2.	YesOBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3</li> </ul>
Herb Stratum       (Plot size: 30 Ft)         1.       Saururus cernuus         2.	100 Yes OBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size: 30 Ft)         1.       Saururus cernuus         2.	Yes OBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size:	100 Yes OBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size:	100 Yes OBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size:30 Ft)         1.       Saururus cernuus         2.	100 Yes OBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size:	100 Yes OBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size:	100 Yes OBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size:30 Ft)         1.       Saururus cernuus         2.	100 Yes OBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> </ul>
Herb Stratum       (Plot size:30 Ft)         1.       Saururus cernuus         2.	100 Yes OBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> </ul>
Herb Stratum       (Plot size:30 Ft)         1.       Saururus cernuus         2.	OBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> </ul>
Herb Stratum       (Plot size:30 Ft)         1.       Saururus cernuus         2.	100       Yes       OBL	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> <li>Woody Vine – All woody vines, regardless of height.</li> <li>Hydrophytic Vegetation</li> </ul>

Depth	Matrix		Redo	x Featu	res				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Те	xture	Remarks
0-8	10yr 3/2	98	7.5yr 5/6	2	С	pl	Loam	//Clayey	Prominent redox concentrations
8-16	10yr 4/2	95	7.5yr 5/6	5	с	pl	Loam	y/Clayey	Prominent redox concentrations
16-20	10yr 4/1	95	7.5yr 5/6	5	C	pl	Loamy	y/Clayey	Prominent redox concentrations
71	oncentration, D=Dep	,	,			d Grains.			PL=Pore Lining, M=Matrix.
-	Indicators: (Applica	ble to all							for Problematic Hydric Soils <sup>3</sup> :
Histosol			Thin Dark S	`	<i>,</i> .				uck (A9) <b>(LRR O)</b>
	pipedon (A2)		Barrier Islar		`	12)			uck (A10) <b>(LRR S)</b>
Black His	( )		(MLRA 1		,				Prairie Redox (A16)
	n Sulfide (A4)		Loamy Muc	-		RR O)		•	ide MLRA 150A)
	I Layers (A5)		Loamy Gley		. ,				d Vertic (F18)
Organic	Bodies (A6) (LRR, P	, T, U)	X Depleted Ma	atrix (F3)	)			(outs	ide MLRA 150A, 150B)
5 cm Mu	cky Mineral (A7) (LR	R P, T, U	)Redox Dark	Surface	(F6)			Piedmo	nt Floodplain Soils (F19) <b>(LRR P, T</b>
	esence (A8) (LRR U	)	Depleted Da	ark Surfa	ice (F7)			Anomal	ous Bright Floodplain Soils (F20)
1 cm Mu	ck (A9) <b>(LRR P, T)</b>		Redox Depr	essions	(F8)			(MLR	A 153B)
X Depleted	Below Dark Surface	e (A11)	Marl (F10) (	LRR U)				Red Pa	rent Material (F21)
Thick Da	ark Surface (A12)		Depleted O	chric (F1	1) (MLRA	A 151)		Very Sh	nallow Dark Surface (F22)
Coast Pr	airie Redox (A16) (N	ILRA 150	A) Iron-Manga	nese Ma	sses (F12	2) (LRR (	D, P, T)	(outs	ide MLRA 138, 152A in FL, 154)
Sandy M	lucky Mineral (S1) <b>(L</b>	RR O, S)	Umbric Surf	ace (F13	B) (LRR F	P, T, U)		Barrier	Islands Low Chroma Matrix (TS7)
Sandy G	ileyed Matrix (S4)		Delta Ochrid	; (F17) <b>(</b>	MLRA 15	1)		(MLR	A 153B, 153D)
Sandy R	edox (S5)		Reduced Ve	ertic (F18	B) (MLRA	150A, 1	50B)	Other (I	Explain in Remarks)
Stripped	Matrix (S6)		Piedmont Fl	oodplair	n Soils (F	19) <b>(MLR</b>	A 149A)		
Dark Sur	rface (S7) (LRR P, S	, T, U)	Anomalous	Bright Fl	oodplain	Soils (F2	0)		
Polyvalu	e Below Surface (S8	)	(MLRA 14	<b>19A</b> , 153	C, 153D)	1		<sup>3</sup> Indicat	ors of hydrophytic vegetation and
(LRR \$	S, T, U)		Very Shallo	w Dark S	Surface (F	22)		wetla	nd hydrology must be present,
			(MLRA 1	88, 152A	in FL, 1	54)		unles	s disturbed or problematic.
Restrictive I	_ayer (if observed):								
Type:									
Danth (in	nches):						Hydrid	c Soil Prese	nt? Yes X No

Date: \_\_\_\_\_

Feature ID: EF\_W\_1003



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_ Photograph Direction West\_\_\_

U. WETLAND DETERMINATION See ERDC/EL TR	I DATA SI		tic and Gu		•	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: DOMINION			City/Cour	nty: Chesape	ake	Sampling Date: 6/7/2022
Applicant/Owner: DOMINION					State: VA	Sampling Point: EF_W_1003_UP
Investigator(s): E. Foster, K. Shepherd		ç	Section, Town	ship. Range:	N/a	
Landform (hillside, terrace, etc.): Swell			al relief (conc			Slope (%): 0-5%
Subregion (LRR or MLRA): LRR T, MLR/	153B Lat				76.170978	Oope (78) 0 378
				Long		
Soil Map Unit Name: Tomotley-Nimmo co						ation: Uplands
Are climatic / hydrologic conditions on the		-		Yes <u>x</u>		explain in Remarks.)
Are Vegetation X, Soil , or Hy	drology	significantly dis	sturbed?	Are "Normal C	ircumstances" presen	t? Yes x No
Are Vegetation, Soil, or Hy	drology	naturally proble	ematic? (	If needed, ex	plain any answers in R	lemarks.)
SUMMARY OF FINDINGS – Atta	ch site m	ap showing s	ampling p	oint locati	ons, transects, ir	nportant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Problematic vegetation- upland cornfield.	Yes Yes Yes	No X No X No X erbicided/dead.	Is the Sar within a V	mpled Area Netland?	Yes	No_X
HYDROLOGY Wetland Hydrology Indicators:					Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is re-	quired; checl	call that apply)			Surface Soil Crac	cks (B6)
Surface Water (A1)	Aqu	atic Fauna (B13)			Sparsely Vegetat	ted Concave Surface (B8)
High Water Table (A2)	Mar	Deposits (B15)	LRR U)		Drainage Pattern	is (B10)
Saturation (A3)	-	rogen Sulfide Od			Moss Trim Lines	(B16)
Water Marks (B1)		lized Rhizospher	-	Roots (C3)	Dry-Season Wate	
Sediment Deposits (B2)		sence of Reduced			Crayfish Burrows	
Drift Deposits (B3)		ent Iron Reductio		ls (C6)		e on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Muck Surface (C			Geomorphic Pos	
Iron Deposits (B5)		er (Explain in Rer	narks)		Shallow Aquitard	
Inundation Visible on Aerial Imagery Water-Stained Leaves (B9)	(B7)				FAC-Neutral Tes	( )
				1	Sphagnum Moss	(D0) <b>(LKK 1,0)</b>
Field Observations:	Nie	Danth (in cha	-			
Surface Water Present? Yes	No	Depth (inche Depth (inche				
Water Table Present?YesSaturation Present?Yes	No No			Wetland	Hydrology Present?	Yes No X
(includes capillary fringe)				wenand	ingarology Fresent?	
Describe Recorded Data (stream gauge,	monitoring	ell aerial nhotos	nrevious ins	nections) if a	vailable <sup>.</sup>	
Decense Recorded Data (Stream gauge,			, provious iris	poolorioj, il a		
Remarks:						

Sampling Point: EF\_W\_1003\_UP

	Absolute Dominant Indic	cator
Tree Stratum (Plot size:)	% Cover Species? Sta	tus Dominance Test worksheet:
1		Number of Dominant Species
2		That Are OBL, FACW, or FAC:(A)
3		Total Number of Dominant
4		Species Across All Strata: (B)
5		Percent of Dominant Species
6		That Are OBL, FACW, or FAC:(A/B)
	=Total Cover	Prevalence Index worksheet:
50% of total cover:	20% of total cover:	
Sapling Stratum (Plot size:)		OBL species x 1 =
1		FACW species x 2 =
2		FAC species x 3 =
3		FACU species x 4 =
4		UPL species x 5 =
5		Column Totals: (A) (B)
6.		Prevalence Index = B/A =
	=Total Cover	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of total cover:	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)		2 - Dominance Test is >50%
1		3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.		X Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.		
4.		
5.		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6.		present, unless disturbed or problematic.
	=Total Cover	Definitions of Five Vegetation Strata:
50% of total cover:	20% of total cover:	<b>Tree</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size:)		approximately 20 ft (6 m) or more in height and 3 in.
		(7.6 cm) or larger in diameter at breast beight (DDLI)
1.		(7.6 cm) or larger in diameter at breast height (DBH).
2		[
2.		<ul> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less</li> </ul>
2.		Sapling – Woody plants, excluding woody vines,
2.		Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
2 3 4 5		<b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
2 3 4 5 6		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.
2 3 4 5 6 7		<ul> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including</li> </ul>
2.         3.         4.         5.         6.         7.         8.         2.		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.
2.         3.         4.         5.         6.         7.         8.         9.         10		<ul> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody</li> </ul>
2.         3.         4.         5.         6.         7.         8.         9.         10.		<ul> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
2.         3.         4.         5.         6.         7.         8.         9.         10		<ul> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3</li> </ul>
2.         3.         4.         5.         6.         7.         8.         9.         10.         11.		<ul> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
2		<ul> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
2		<ul> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
2		<ul> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
2		<ul> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
2		<ul> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
2		<ul> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
2		<ul> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
2.		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.         Hydrophytic         Vegetation
2	=Total Cover 	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.         Hydrophytic         Vegetation         Present?       Yes No _X_

SOIL

Depth (inches)	Matrix								
(Inches)				x Features	1 2	<b>T</b>			
	Color (moist)	%	Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks			
0-20	10yr 4/3	100				Loamy/Clayey			
17			- due - d Matrice N			<sup>2</sup> Leventione DL Dans Linion M. Mateix			
	centration, D=Depl				d Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	3.		
•	licators: (Applica	DIE to all LR	•	urface (S9) <b>(LRR</b>	C T IN	Indicators for Problematic Hydric Soils	51		
Histosol (A	,	-		diace (S9) (LKK ds 1 cm Muck (S		1 cm Muck (A9) (LRR O)			
Histic Epipe Black Histic		-		3B, 153D)	12)	2 cm Muck (A10) <b>(LRR S)</b>			
	( )			зв, 133D) xy Mineral (F1) <b>(L</b>		Coast Prairie Redox (A16) (outside MLRA 150A)			
Hydrogen Sulfide (A4) Stratified Layers (A5)				ed Matrix (F2)	-KK 0)	Reduced Vertic (F18)			
	dies (A6) <b>(LRR, P</b>	т II) -	Depleted Ma			(outside MLRA 150A, 150B)			
_	y Mineral (A7) <b>(LR</b>	-	Redox Dark	. ,		Piedmont Floodplain Soils (F19) (LR	RPT)		
	ence (A8) (LRR U)	-		rk Surface (F7)		Anomalous Bright Floodplain Soils (F 49) (EA			
	(A9) <b>(LRR P, T)</b>	-	Redox Depre	. ,			(MLRA 153B)		
	elow Dark Surface	- (A11)	Marl (F10) (I	( )		Red Parent Material (F21)			
	Surface (A12)	-		hric (F11) <b>(MLR</b>	A 151)	Very Shallow Dark Surface (F22)			
	ie Redox (A16) ( <b>M</b>	ILRA 150A)		ese Masses (F1			54)		
	ky Mineral (S1) <b>(L</b>	· -		ace (F13) <b>(LRR I</b>		Barrier Islands Low Chroma Matrix (7	,		
	ved Matrix (S4)	-,-,		(F17) <b>(MLRA 1</b>		(MLRA 153B, 153D)			
Sandy Red		-		rtic (F18) (MLRA					
Stripped Ma		-		odplain Soils (F					
	ce (S7) (LRR P, S	, T, U) -		Bright Floodplain					
	Below Surface (S8	-		9A, 153C, 153D		<sup>3</sup> Indicators of hydrophytic vegetation	and		
(LRR S, <sup>-</sup>			Very Shallov	v Dark Surface (I	- 	wetland hydrology must be presen	t,		
		-		8, 152A in FL, 1		unless disturbed or problematic.			
Restrictive Lay	/er (if observed):								
Туре:									
Depth (inch	nes):					Hydric Soil Present? Yes No	Х		
Remarks:									
Upland corn fiel	ld, dry compacted	soils.							

Date: \_\_\_\_\_

Feature ID: EF\_W\_1003\_UP



Photograph Number \_\_\_\_1

Photograph Direction South

Comments:

Photograph Number 2

Photograph Direction \_\_\_\_\_

Comments:

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph Numbe	er <u>4</u>
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Photograph Direction \_\_\_\_\_

WETLAND DETERMINATIO	I.S. Army Corps of Engineers N DATA SHEET – Atlantic and Gulf Coast R-07-24; the proponent agency is CECW-CC	•	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW	City/County: Virgi	inia Beach	Sampling Date: 06/15/22
Applicant/Owner: DOMINION		State: VA	Sampling Point: EF_W_200
nvestigator(s): Emily Foster	Section, Township, Range	e: N/A	
andform (hillside, terrace, etc.): Swell			Slope (%): 2
Subregion (LRR or MLRA): LRR T, MLR			Olope (78)2
Soil Map Unit Name: Tomotley loam		NWI classific	
Are climatic / hydrologic conditions on the	· · · · · · · · · · · · · · · · · · ·		, explain in Remarks.)
Are Vegetation $X$ , Soil $X$ , or Hy	ydrology X significantly disturbed? Are "Norma	al Circumstances" preser	nt? Yes X No
Are Vegetation, Soil, or Hy	vdrology naturally problematic? (If needed,	explain any answers in F	Remarks.)
SUMMARY OF FINDINGS – Atta	ach site map showing sampling point loca	ations, transects, i	mportant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes     X     No     Is the Sampled Are       Yes     X     No     within a Wetland?	a Yes <u>x</u>	No
Remarks: Mowed/maintained ROW, appears to ha	ive been sprayed by herbicide.		
Mowed/maintained ROW, appears to ha	ive been sprayed by herbicide.	Secondary Indicator	
Mowed/maintained ROW, appears to ha			s (minimum of two required)
Mowed/maintained ROW, appears to ha <b>HYDROLOGY</b> Wetland Hydrology Indicators: Primary Indicators (minimum of one is re-	equired; check all that apply)	Surface Soil Cra	acks (B6)
Mowed/maintained ROW, appears to ha IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1)	equired; check all that apply) Aquatic Fauna (B13)	Surface Soil Cra	acks (B6) ated Concave Surface (B8)
Mowed/maintained ROW, appears to ha IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2)	equired; check all that apply)	Surface Soil Cra Sparsely Vegeta Drainage Patter	acks (B6) ated Concave Surface (B8) ns (B10)
Mowed/maintained ROW, appears to ha IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re	equired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b>	Surface Soil Cra	acks (B6) ated Concave Surface (B8) ns (B10) s (B16)
Mowed/maintained ROW, appears to ha IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3)	equired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1)	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines	acks (B6) ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2)
Mowed/maintained ROW, appears to ha IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	equired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3)	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Dry-Season Wai	acks (B6) ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2)
Mowed/maintained ROW, appears to ha <b>IYDROLOGY</b> Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	equired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4)	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Dry-Season Wai	acks (B6) ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2) rs (C8) le on Aerial Imagery (C9)
Mowed/maintained ROW, appears to ha IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	Aquatic Fauna (B13) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6)	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Dry-Season Wat Crayfish Burrow Saturation Visibl	acks (B6) ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2) 's (C8) le on Aerial Imagery (C9) sition (D2)
Mowed/maintained ROW, appears to had         IYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is regeneration Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial Imagery	Aquatic Fauna (B13) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Dry-Season Wai Crayfish Burrow Saturation Visibl X Geomorphic Pos Shallow Aquitare X FAC-Neutral Tes	acks (B6) ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2) s (C8) le on Aerial Imagery (C9) sition (D2) d (D3) st (D5)
Mowed/maintained ROW, appears to ha IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Aquatic Fauna (B13) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Dry-Season Wai Crayfish Burrow Saturation Visibl X Geomorphic Pos Shallow Aquitare X FAC-Neutral Tes	acks (B6) ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2) s (C8) le on Aerial Imagery (C9) sition (D2) d (D3)
Mowed/maintained ROW, appears to ha IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9)	Aquatic Fauna (B13) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Dry-Season Wai Crayfish Burrow Saturation Visibl X Geomorphic Pos Shallow Aquitare X FAC-Neutral Tes	acks (B6) ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2) s (C8) le on Aerial Imagery (C9) sition (D2) d (D3) st (D5)
Mowed/maintained ROW, appears to ha	Aquatic Fauna (B13) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) (B7) No X Depth (inches):	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Dry-Season Wai Crayfish Burrow Saturation Visibl X Geomorphic Pos Shallow Aquitare X FAC-Neutral Tes	acks (B6) ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2) s (C8) le on Aerial Imagery (C9) sition (D2) d (D3) st (D5)
Mowed/maintained ROW, appears to hat         HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is regeneration (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial Imagery         Water-Stained Leaves (B9)         Field Observations:         Surface Water Present?         Yes         Water Table Present?	Aquatic Fauna (B13) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) (B7)	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Dry-Season Wat Crayfish Burrow Saturation Visibl X Geomorphic Pos Shallow Aquitard X FAC-Neutral Tes Sphagnum Moss	acks (B6) ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2) rs (C8) le on Aerial Imagery (C9) sition (D2) d (D3) st (D5) s (D8) <b>(LRR T,U)</b>
Mowed/maintained ROW, appears to hat         IYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is regeneration (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial Imagery         Water-Stained Leaves (B9)         Field Observations:         Surface Water Present?         Yes         Saturation Present?         Yes	equired; check all that apply)	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Dry-Season Wai Crayfish Burrow Saturation Visibl X Geomorphic Pos Shallow Aquitare X FAC-Neutral Tes	acks (B6) ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2) rs (C8) le on Aerial Imagery (C9) sition (D2) d (D3) st (D5) s (D8) <b>(LRR T,U)</b>
<b>HYDROLOGY Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is regenerative)         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial Imagery         Water-Stained Leaves (B9)         Field Observations:         Surface Water Present?       Yes         Saturation Present?       Yes         Gaturation Present?       Yes         Mater Table Present?       Yes         Saturation Present?       Yes	equired; check all that apply)	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Dry-Season Wat Crayfish Burrow Saturation Visibl X Geomorphic Pos Shallow Aquitard X FAC-Neutral Tes Sphagnum Moss	acks (B6) ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2) rs (C8) le on Aerial Imagery (C9) sition (D2) d (D3) st (D5) s (D8) <b>(LRR T,U)</b>
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is resented by the second secon	Aquatic Fauna (B13) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) (B7)	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Dry-Season Wat Crayfish Burrow Saturation Visibl X Geomorphic Pos Shallow Aquitard X FAC-Neutral Tes Sphagnum Moss	acks (B6) ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2) rs (C8) le on Aerial Imagery (C9) sition (D2) d (D3) st (D5) s (D8) <b>(LRR T,U)</b>

Sampling Point: EF\_W\_2008

	Absolute	Dominant	Indicator	During Takanalahat
Tree Stratum (Plot size: <u>30 FT</u> ) 1.	% Cover	Species?	Status	Dominance Test worksheet:
2.				Number of Dominant Species           That Are OBL, FACW, or FAC:         2         (A)
3 4				Total Number of Dominant         Species Across All Strata:       2         (B)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		=Total Cover		OBL species 40 x 1 =40
50% of total cover:	20%	of total cover:		FACW species 50 x 2 = 100
Sapling/Shrub Stratum (Plot size:)				FAC species 0 x 3 = 0
1				FACU species0 x 4 =0
2.				UPL species 0 x 5 = 0
3.				Column Totals: 90 (A) 140 (B)
4.				Prevalence Index = $B/A = 1.56$
5.				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
8.				X 3 - Prevalence Index is $\leq 3.0^{1}$
		=Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:		of total cover:		
	2078			
/	15	No		
1. Scirpus cyperinus	15	No	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
2. Arundinaria gigantea	50	Yes	FACW	present, unless disturbed or problematic.
3. Juncus effusus	25	Yes	OBL	Definitions of Four Vegetation Strata:
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of height.
6				noight.
7				Sapling/Shrub – Woody plants, excluding vines, less
8				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				
	90	=Total Cover		Woody Vine - All woody vines greater than 3.28 ft in
50% of total cover: 4	5 20%	of total cover:	18	height.
Woody Vine Stratum (Plot size: )				
1.				
2.				
3.				
1				
5.				
· · · · · · · · · · · · · · · · · · ·		=Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation Present? Yes X No
		or total cover.		
Remarks: (If observed, list morphological adaptation Area is highly disturbed. Located on the golf course.	,	mowed vegeta	ation.	

		to the dep	oth needed to doc			itor of Co	onnirm the a	ibsence o	i indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Featur %	res Type <sup>1</sup>	Loc <sup>2</sup>	Textu	ro	Remarks	
<u> </u>				70	турс	200			Remains	
0-3	10YR 3/2	100					Loamy/C	layey		
3-20	10YR 4/2	90	7.5YR 5/8	10	С	PL/M	Loamy/C	layey	loamy sand	
						<u> </u>				
						·				
						·				
Type: C=C	oncentration, D=Depl	letion, RM	=Reduced Matrix, I	NS=Mas	ked San	d Grains.	<sup>2</sup> L(	ocation: P	PL=Pore Lining, M=Matrix.	
lydric Soil	Indicators: (Applica	ble to all	LRRs, unless othe	erwise r	noted.)		In	dicators fo	or Problematic Hydric Soils <sup>3</sup> :	
Histosol	(A1)		Thin Dark S	urface (S	39) <b>(LRR</b>	S, T, U)		1 cm Mu	uck (A9) <b>(LRR O)</b>	
Histic Ep	pipedon (A2)		Barrier Islan	ds 1 cm	Muck (S	12)		2 cm Muck (A10) (LRR S)		
Black Histic (A3)			(MLRA 15	53B, 153	D)			Coast Prairie Redox (A16)		
Hydroge	n Sulfide (A4)		Loamy Mucl	ky Miner	al (F1) <b>(L</b>	RR O)		outsie	de MLRA 150A)	
Stratified	d Layers (A5)		Loamy Gley	ed Matri	x (F2)			Reduced	d Vertic (F18)	
Organic	Bodies (A6) (LRR, P	, T, U)	X Depleted Ma	atrix (F3)	)			(outsid	de MLRA 150A, 150B)	
5 cm Mu	icky Mineral (A7) <b>(LR</b>	R P, T, U	) Redox Dark	Surface	(F6)			Piedmor	nt Floodplain Soils (F19) <b>(LRR P, T</b>	
Muck Pr	esence (A8) (LRR U)	)	Depleted Da	irk Surfa	ice (F7)			Anomalo	ous Bright Floodplain Soils (F20)	
1 cm Mu	ick (A9) (LRR P, T)		X Redox Depr	essions	(F8)			(MLRA	A 153B)	
X Depleted	d Below Dark Surface	e (A11)	Marl (F10) (I	LRR U)				Red Par	ent Material (F21)	
Thick Da	ark Surface (A12)		Depleted Oc	hric (F1	1) (MLR/	A 151)		Very Sha	allow Dark Surface (F22)	
Coast P	rairie Redox (A16) (N	ILRA 150	A) Iron-Mangar	nese Ma	sses (F1	2) (LRR C	), P, T)	(outsid	de MLRA 138, 152A in FL, 154)	
Sandy M	lucky Mineral (S1) (L	.RR O, S)	Umbric Surf	ace (F13	B) (LRR F	P, T, U)		Barrier Is	slands Low Chroma Matrix (TS7)	
	Bleyed Matrix (S4)		Delta Ochric					-	A 153B, 153D)	
Sandy R	edox (S5)		Reduced Ve	rtic (F18	B) (MLRA	, 150A, 15	50B)	Other (E	Explain in Remarks)	
	Matrix (S6)		Piedmont FI		, <b>.</b>		· -		, ,	
	rface (S7) <b>(LRR P, S</b>	. T. U)	Anomalous	•		<i>,</i> .	-			
	e Below Surface (S8		(MLRA 14	0	•	`	,	<sup>3</sup> Indicato	ors of hydrophytic vegetation and	
	S, T, U)	,	Very Shallov	•	•				nd hydrology must be present,	
,			(MLRA 13			,			s disturbed or problematic.	
Restrictive	Layer (if observed):									
Type:										
	nches):						Hydric S	oil Prosor	nt? Yes X No	

Date: \_\_\_\_\_

Feature ID: EF\_W\_2008



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_

Photograph Direction \_\_\_\_\_

U.S. A WETLAND DETERMINATION DAT See ERDC/EL TR-07-2	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)			
Project/Site: CVOW	Sampling Date: 06/15/22			
Applicant/Owner: DOMINION		State: VA	Sampling Point: EF_W_2008_UP	
Investigator(s): E. Foster	Section, Township, Range	I		
Landform (hillside, terrace, etc.): Flat	Local relief (concave, convex		Slope (%): 1	
Subregion (LRR or MLRA): LRR T, MLRA 153E	3 Lat: 36.768181 Long:	-76.079119	Datum: WGS84	
Soil Map Unit Name: Acredale silt loam		NWI classifica	ation: Uplands	
Are climatic / hydrologic conditions on the site ty	pical for this time of year? Yes X	No (If no,	explain in Remarks.)	
Are Vegetation, Soil, or Hydrology	y X significantly disturbed? Are "Normal	Circumstances" presen	t? Yes <u>x</u> No	
Are Vegetation, Soil, or Hydrology	y naturally problematic? (If needed, e	explain any answers in F	Remarks.)	
SUMMARY OF FINDINGS – Attach si		-		
SOMMART OF FINDINGS – Attach si			inportant reatures, etc.	
Hydric Soil Present? Ye	s X No Is the Sampled Area s No X within a Wetland?		No <u>X</u>	
		Cooperate my la disetere		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required:	check all that apply)	Secondary Indicators	(minimum of two required)	
Surface Water (A1)	Aquatic Fauna (B13)		ted Concave Surface (B8)	
High Water Table (A2)	Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)		
Saturation (A3)	Hydrogen Sulfide Odor (C1)	Moss Trim Lines	( )	
Water Marks (B1)	Oxidized Rhizospheres on Living Roots (C3)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Presence of Reduced Iron (C4)	Crayfish Burrows	( )	
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils (C6)		e on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Thin Muck Surface (C7)	Geomorphic Pos		
Iron Deposits (B5)	Other (Explain in Remarks)	Shallow Aquitard	l (D3)	
Inundation Visible on Aerial Imagery (B7)		X FAC-Neutral Tes	t (D5)	
Water-Stained Leaves (B9)		Sphagnum Moss	(D8) <b>(LRR T,U)</b>	

Field Observations:	
Surface Water Present?	Yes
Water Table Present?	Voc

Field Observations:									
Surface Water Present?	Yes	No >	C Depth (inches	s):					
Water Table Present?	Yes	No >	C Depth (inches	s):					
Saturation Present?	Yes	No >	C Depth (inches	s):	Wetland Hydrology Present?	Yes	No	х	
(includes capillary fringe)									
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									

Remarks:

Sampling Point: EF\_W\_2008\_UP

	Abaaluta	Deminant	Indiantan	
Tree Stratum (Plot size: 30 FT )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Acer rubrum	50	Yes	FAC	
2. Quercus michauxii	15	Yes	FACW	Number of Dominant SpeciesThat Are OBL, FACW, or FAC:4(A)
3. Liquidambar styraciflua	5	No	FAC	
4.				Total Number of Dominant Species Across All Strata:4 (B)
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	70	=Total Cover		$OBL species \qquad 0 \qquad x \ 1 = 0$
50% of total cover: 3	5 20%	of total cover:	14	FACW species $30 \times 2 = 60$
Sapling/Shrub Stratum (Plot size: )	<u> </u>			FAC species 70 $\times$ 3 = 210
1				FACU species $0   x 4 = 0$
2				$\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $
3.				( )
4.				Prevalence Index = B/A = 2.70
5.				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		=Total Cover		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20%	of total cover:		
Herb Stratum (Plot size: 30 )				
1. Arundinaria gigantea	15	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
2. Smilax rotundifolia	10	Yes	FAC	present, unless disturbed or problematic.
3. Pinus taeda	5	No	FAC	Definitions of Four Vegetation Strata:
4.				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				more in diameter at breast height (DBH), regardless of
6.				height.
7.				
8.				Sapling/Shrub – Woody plants, excluding vines, less
Q				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
10				
11				Herb – All herbaceous (non-woody) plants, regardless
11				of size, and woody plants less than 3.28 ft tall.
12				
		=Total Cover		<b>Woody Vine</b> – All woody vines greater than 3.28 ft in height.
	5 20%	of total cover:	6	
Woody Vine Stratum (Plot size:)				
1				
2.				
3.				
4.				
5.				I haloo aha dia
		=Total Cover		Hydrophytic Vegetation
50% of total cover:		of total cover:		Present? Yes X No
		-		
Remarks: (If observed, list morphological adaptation Area is highly disturbed. Located on the golf course.		mowed vegeta	ation.	

	cription: (Describe	to the depth				tor or co	nfirm th	e absence of	indicators.)	
Depth (in choo)	Matrix	0/		x Featur	4	L = = <sup>2</sup>	Т	<b>T</b>		Demente
(inches)	Color (moist)	%	Color (moist)	%	Туре'	Loc <sup>2</sup>	Ie	exture Remarks		Remarks
0-20	10YR 3/2	90	10YR 3/6	10	<u> </u>	<u>M</u>	Loamy/Clayey		loam, extr	emely dry and loose
						·				
	·					·				
	oncentration, D=Depl					d Grains.			L=Pore Lining	0
Histosol Histic Eg Black Hi Hydroge Stratified Organic 5 cm Mu Muck Pr 1 cm Mu Depleted Thick Da Coast P Sandy M	Indicators: (Applica (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Bodies (A6) (LRR, P ucky Mineral (A7) (LR resence (A8) (LRR U) uck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rairie Redox (A16) (M Aucky Mineral (S1) (L Beleyed Matrix (S4)	, <b>T, U)</b> ∶ <b>R P, T, U)</b> ) ⊖ (A11) ILRA 150A)	Thin Dark So Barrier Islan (MLRA 15 Loamy Muck Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) (I Depleted Oc	urface (S ds 1 cm <b>3B, 153</b> dy Minera ed Matrix atrix (F3) Surface rk Surface rk Surface <b>.RR U)</b> chric (F1 mese Mas ace (F13	S9) <b>(LRR</b> Muck (S <b>D)</b> al (F1) <b>(L</b> x (F2) (F6) ce (F7) (F8) 1) <b>(MLR</b> sses (F1) 3) <b>(LRR F</b>	12) RR O) (151) 2) (LRR O , T, U)	9, P, T)	1 cm Mu 2 cm Mu Coast Pr (outsid Reduced Outsid Piedmon Anomalo (MLRA Red Pare Very Sha (outsid Barrier Is	ck (A9) (LRR ck (A10) (LRF airie Redox (A de MLRA 150) I Vertic (F18) de MLRA 150, It Floodplain S ius Bright Floo (A 153B) ent Material (F allow Dark Sur de MLRA 138	<b>A</b> (16) <b>A</b> ) <b>A</b> , <b>150B)</b> Soils (F19) <b>(LRR P, T</b> ) Sodplain Soils (F20) F21) fface (F22) <b>, 152A in FL, 154)</b> proma Matrix (TS7)
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Polyvalue Below Surface (S8) (LRR S, T, U)			Reduced Vertic (F18) (MLRA 150A, 150 Piedmont Floodplain Soils (F19) (MLRA Anomalous Bright Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Very Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)				RA 149A)			/tic vegetation and nust be present,
Restrictive Type: Depth (in Remarks:	Layer (if observed):						Hydri	c Soil Presen	it? Yes	s NoX

Date: \_\_\_\_\_

Feature ID: EF\_W\_2008\_UP



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_ Photograph Direction West\_\_\_

WETLAND DETERMINATION	S. Army Corps of Engineers DATA SHEET – Atlantic and -07-24; the proponent agency	Gulf Coastal Plain Region	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW	City/	County: City of Chesapeake	Sampling Date:4/20/2022
Applicant/Owner: Dominion Energy		State: VA	Sampling Point: JA_W_002B
Investigator(s): Justin Ahn	Section,	Township, Range: N/A	
Landform (hillside, terrace, etc.): Depres	sion Local relief	(concave, convex, none): Concave	Slope (%): 1
Subregion (LRR or MLRA): LRR T, MLRA		Long: -76.1323004888333	Datum: NAD83
Soil Map Unit Name: Acredale-Chapanok		NWI classific	ation <sup>.</sup> None
Are climatic / hydrologic conditions on the			explain in Remarks.)
Are Vegetation, Soil, or Hyd			
Are Vegetation, Soil, or Hyd		(If needed, explain any answers in F	
SUMMARY OF FINDINGS – Attac	ch site map showing samplir	ng point locations, transects, in	mportant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?		e Sampled Area in a Wetland? Yes X	No
HYDROLOGY			
		<u>Occessions indicator</u>	(minimum of the manufact)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is rec	uired: check all that apply)	Secondary Indicators Surface Soil Cra	s (minimum of two required)
X Surface Water (A1)	Aquatic Fauna (B13)		ted Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (LRR U)	X Drainage Patterr	
Saturation (A3)	Hydrogen Sulfide Odor (C1)	Moss Trim Lines	(B16)
Water Marks (B1)	X Oxidized Rhizospheres on Liv	ring Roots (C3) Dry-Season Wat	er Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iron (C4		
Drift Deposits (B3)	Recent Iron Reduction in Tille		e on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C7)	Geomorphic Pos	
Iron Deposits (B5)	Other (Explain in Remarks)	Shallow Aquitard	
Inundation Visible on Aerial Imagery ( Water-Stained Leaves (B9)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	X FAC-Neutral Tes	s (D8) <b>(LRR T,U)</b>
Field Observations:			
Surface Water Present? Yes X	No Depth (inches): 1		
Water Table Present? Yes	No X Depth (inches):	—	
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present?	Yes X No
(includes capillary fringe)			
Describe Recorded Data (stream gauge,	monitoring well, aerial photos, previou	is inspections), if available:	

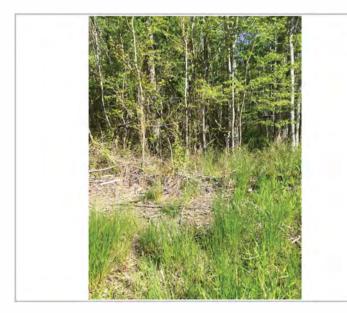
Remarks:

Sampling Point: JA\_W\_002B

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	% Cover	Species?	Status	Dominance Test worksheet:
1. Pinus taeda	10	Yes	FAC	Number of Dominant Species
2. Acer rubrum	5	Yes	FAC	That Are OBL, FACW, or FAC: 6 (A)
3. Liquidambar styraciflua	5	Yes	FAC	Total Number of Dominant
4. Taxodium distichum	5	Yes	OBL	Species Across All Strata: 6 (B)
5.				
				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
		=Total Cover		Prevalence Index worksheet:
	13 20%	of total cover:	5	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
3.				FACU species x 4 =
4.				UPL species x 5 =
5				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
0				
500/ 51 1		=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	20%	of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				X 2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4.				
5.				
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
···		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				(7.6 cm) or larger in diameter at breast height (DBH).
1. Juncus effusus	60	Yes	OBL	
2. Carex lurida	25	Yes	OBL	Sapling – Woody plants, excluding woody vines,
3. Typha latifolia	10	No	OBL	approximately 20 ft (6 m) or more in height and less
4. Sagittaria latifolia	10	No	OBL	than 3 in. (7.6 cm) DBH.
5.				Shrub - Woody Plants, excluding woody vines,
6.				approximately 3 to 20 ft (1 to 6 m) in height.
7.				
8.				Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
9.				plants, except woody vines, less than approximately 3
				ft (1 m) in height.
10				Weedy Vine All woody vince reportless of height
11				Woody Vine – All woody vines, regardless of height.
	105	=Total Cover		
50% of total cover: 5	53 20%	of total cover:	21	
Woody Vine Stratum (Plot size:)				
1				
2.				
3.				
5		Tatal C		Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present?         Yes X         No
Remarks: (If observed, list morphological adaptatio				

	cription: (Describe	to the dep							0410101		
Depth	Matrix			x Featur	4	. 2			_		
(inches)	Color (moist)	%	Color (moist)	%	Туре'	Loc <sup>2</sup>	Texture		Remar	ks	
0-2	10YR 3/2	100					Loamy/Clayey	Silty Cl	ay		
2-24	10YR 5/1	90	5YR 4/3	10	С	PL	Loamy/Clayey		Silty Cl	ау	
						·					
71	oncentration, D=Depl	,	,			l Grains.			re Lining, M=Ma		
-	Indicators: (Applica	ble to all L							oblematic Hydri	ic Soils':	
Histosol			Thin Dark S	`	<i>,</i> , ,			``	9) <b>(LRR O)</b>		
Histic Epipedon (A2)				Barrier Islands 1 cm Muck (S12)					2 cm Muck (A10) (LRR S)		
	Histic (A3) (MLRA 153B, 153D)						Redox (A16)				
_ · ·	en Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR O) (ou				utside ML	_RA 150A)			
Stratifie	d Layers (A5)		Loamy Gley	ed Matrix	x (F2)		Red	uced Vert	ic (F18)		
Organic	Organic Bodies (A6) (LRR, P, T, U)			X Depleted Matrix (F3)					(outside MLRA 150A, 150B)		
5 cm Mı	ucky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	Surface	(F6)		Pied	mont Floo	odplain Soils (F1	9) <b>(LRR P, T</b>	
Muck Pr	esence (A8) (LRR U)	)	Depleted Da	irk Surfa	ce (F7)		Anor	nalous Br	right Floodplain	Soils (F20)	
1 cm Mu	uck (A9) <b>(LRR P, T)</b>		Redox Depr	essions	(F8)		(M	LRA 1531	В)		
X Deplete	d Below Dark Surface	e (A11)	Marl (F10) (	LRR U)			Red	Parent M	aterial (F21)		
Thick Da	ark Surface (A12)		Depleted Oc	hric (F1 <sup>-</sup>	1) (MLRA	A 151)	Very	Shallow	Dark Surface (F	22)	
Coast P	rairie Redox (A16) ( <b>M</b>	LRA 150A	) Iron-Mangar	nese Mas	sses (F12	2) (LRR O	), P, T) (oi	utside ML	LRA 138, 152A i	in FL, 154)	
Sandy N	/lucky Mineral (S1) <b>(L</b>	RR O, S)	Umbric Surf	ace (F13	B) (LRR F	P, T, U)	Barr	er Islands	s Low Chroma M	Aatrix (TS7)	
	Gleyed Matrix (S4)		Delta Ochrid					LRA 1531			
	Redox (S5)		Reduced Ve				i <b>0B)</b> Othe	r (Explair	n in Remarks)		
 Stripped	I Matrix (S6)		Piedmont Fl	oodplain	Soils (F	19) <b>(MLR</b>	A 149A)	ς .	,		
	rface (S7) (LRR P, S	, T, U)	Anomalous	•	`	<i>,</i> , ,	,				
	le Below Surface (S8		(MLRA 14	0	•	`	,	cators of	hydrophytic veg	etation and	
	S, T, U)	,	Very Shallov						drology must be		
(	-, -, -,		(MLRA 13		`	'		,	urbed or problem		
Restrictive	Layer (if observed):										
Type:											
Depth (i	nches):						Hydric Soil Pre	esent?	Yes X	No	
Remarks:											

### Feature ID: JA\_\_\_W\_\_002B Date 04/20/2022



Photograph Number \_\_1\_

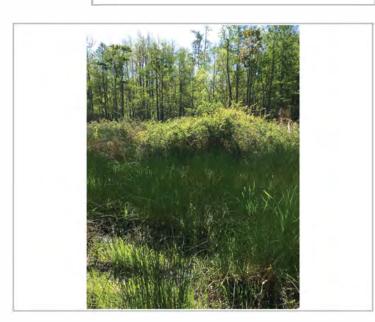
Photograph Direction North

Comments:



Photograph Number 2 \_\_\_\_\_ Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

#### U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: CVOW	City/County: City of Che	esapeake	Sampling Date: 4/20/2022
Applicant/Owner: Dominion Energy		State: VA	Sampling Point: JA_W_002B_PFO
Investigator(s): Justin Ahn	Section, Township, Range: 1	N/A	EF_W_009_PFO
Landform (hillside, terrace, etc.): Depression	Local relief (concave, convex, r	none): Concave	Slope (%): 1
Subregion (LRR or MLRA): LRR T, MLRA 153B Lat: 36.74	466961561667 Long: -76	6.1323004888333	Datum: NAD83
Soil Map Unit Name: Acredale-Chapanoke complex, 0 to 1 p	ercent slopes	NWI classification	on: None
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	No (If no, ex	xplain in Remarks.)
Are Vegetation, Soil, or Hydrologysignit	icantly disturbed? Are "Normal Cir	rcumstances" present?	Yes X No
Are Vegetation, Soil, or Hydrologynatur	ally problematic? (If needed, expl	lain any answers in Re	marks.)
SUMMARY OF FINDINGS – Attach site map sh	lowing sampling point location	ons, transects, in	nportant features, etc.
Hydrophytic Vegetation Present?       Yes X       No         Hydric Soil Present?       Yes X       No         Wetland Hydrology Present?       Yes X       No	within a Wetland?	Yes_X_	No
Remarks: Area located in a powerline easeemnt right-of-way. Area cla			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (I	minimum of two required)
Primary Indicators (minimum of one is required: check all the	at apply)	Surface Soil Cracks	s (B6)

Primary Indicators (minimum of one is req	Surface Soil Cracks (B6)	
X Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)	
High Water Table (A2)	Marl Deposits (B15) (LRR U)	X Drainage Patterns (B10)
Saturation (A3)	Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1)	X Oxidized Rhizospheres on Living Roots (	(C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils (C6	Saturation Visible on Aerial Imagery (C9)
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 X	No Depth (inches): 1	
Water Table Present? Yes	No X Depth (inches):	
		otland Hudralamu Dracant? Vac. V Na
Saturation Present? Yes	NO X Depth (Inches): W	etland Hydrology Present? Yes X No
Saturation Present? Yes (includes capillary fringe)	No X Depth (inches): We	etland Hydrology Present? Yes X No
(includes capillary fringe)		
(includes capillary fringe)	monitoring well, aerial photos, previous inspection	
(includes capillary fringe)		
(includes capillary fringe)		
(includes capillary fringe) Describe Recorded Data (stream gauge, r		
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Sampling Point: JA\_W\_002B\_PFO

Trac Stratum (Diat size) 20	Absolute	Dominant	Indicator	EF_W_009_PFO
ree Stratum (Plot size: 30 )	% Cover	Species?	Status	Dominance Test worksheet:
. Taxodium ascendens		Yes	OBL	Number of Dominant Species
2. <u>Salix nigra</u>	20	Yes	OBL	That Are OBL, FACW, or FAC:(A)
Catalpa speciosa	5	No	FACU	Total Number of Dominant
l				Species Across All Strata: 11 (B)
				Percent of Dominant Species
S				That Are OBL, FACW, or FAC: 90.9% (A/E
	55	=Total Cover		Prevalence Index worksheet:
50% of total cover:	28 20%	o of total cover:	11	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30)				OBL species 85 x 1 = 85
. Acer rubrum	30	Yes	FAC	FACW species 15 x 2 = 30
2. Liquidambar styraciflua	30	Yes	FAC	FAC species 85 x 3 = 255
3. Taxodium ascendens	10	No	OBL	FACU species 10 x 4 = 40
I. Salix nigra	10	No	OBL	UPL species $0   x 5 = 0$
5. Ulmus americana	5	No	FAC	Column Totals 195 (A) 410 (I
S				Prevalence Index = $B/A = 2.10$
	85	=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	43 20%	of total cover:	17	1 - Rapid Test for Hydrophytic Vegetation
				X 2 - Dominance Test is >50%
. Taxodium ascendens	15	Yes	OBL	X 3 - Prevalence Index is $\leq 3.0^{1}$
2. Acer rubrum	5	Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Liquidambar styraciflua	5	Yes	FAC	
Catalpa speciosa	5	Yes	FACU	
5.		100		1
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic.
	30	=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:		of total cover:	6	
	15 2078	or total cover.	0	<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
/	10	Vaa		(7.6 cm) or larger in diameter at breast height (DBH
		Yes	FACW	
2. Carex tribuloides	5	Yes	FACW	<b>Sapling</b> – Woody plants, excluding woody vines,
3				approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
ł				
5				<b>Shrub -</b> Woody Plants, excluding woody vines,
З				approximately 3 to 20 ft (1 to 6 m) in height.
7				Herb - All herbaceous (non-woody) plants, includin
3				herbaceous vines, regardless of size, and woody
)				plants, except woody vines, less than approximately ft (1 m) in height.
10				
11				Woody Vine – All woody vines, regardless of heigh
	15	=Total Cover		
50% of total cover:	8 20%	of total cover:	3	
Moody Vine Stratum (Plot size: 30	)			
Smilax rotundifolia	10	Yes	FAC	
2.	_			
3.				
1				
5.				
	10	=Total Cover		Hydrophytic
			0	Vegetation
50% of total cover:	5 20%	of total cover:	2	Present? Yes X No

SOIL

Sampling Point: JA\_W\_002B\_PFO

Depth            inches)            0-2            2-24	Matrix Color (moist)				ie inuica	tor or cor	nfirm the abse	ence of indica	1013.)	EF_W_009_P
0-2	Color (moist)	0/		x Featu		1 . 2	т ·		5	ul
		%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Rema	rks
2-24	10YR 3/2	100					Loamy/Clay	ey	Silt C	lay
	10YR 5/1	90	5YR 4/3	10	С	pl	Loamy/Clay	rey Pi	rominent redox	concentrations
		<u> </u>				<u> </u>				
		·				·				
		·				·				
						<u> </u>				
vpe: C=Conc	centration D=Depl	etion, RM=	Reduced Matrix, N	IS=Mas	ked Sand	Grains	<sup>2</sup> L oca	ition: PI =Por	e Lining, M=Ma	trix
			_RRs, unless othe			oranio.			blematic Hydri	â
Histosol (A1			Thin Dark S			S, T, U)		cm Muck (A9	•	
Histic Epipe	edon (A2)		Barrier Islan					cm Muck (A1		
Black Histic			(MLRA 15					oast Prairie F	,,	
Hydrogen S	. ,		Loamy Muck	y Miner	al (F1) <b>(L</b>	RR O)		(outside ML	RA 150A)	
Stratified La	. ,		Loamy Gley			-	F	Reduced Vertion	c (F18)	
-	dies (A6) (LRR P,	T, U)	X Depleted Ma						RA 150A, 150E	5)
5 cm Mucky	/ Mineral (A7) (LR	R P, T, U)	Redox Dark	Surface	(F6)		_ F	eiedmont Floo	dplain Soils (F1	9) (LRR P, T)
Muck Prese	ence (A8) <b>(LRR U)</b>		Depleted Da				Anomalous Bright Floodplain Soils (			
1 cm Muck	(A9) (LRR P, T)		Redox Depr	essions	(F8)		(MLRA 153B)			
Depleted Be	elow Dark Surface	e (A11)	Marl (F10) (I	.RR U)			Red Parent Material (F21)			
Thick Dark	Surface (A12)		Depleted Oc	hric (F1	1) (MLRA	151)	Very Shallow Dark Surface (F22)			22)
Coast Prairi	ie Redox (A16) ( <b>M</b>	LRA 150A	) Iron-Mangar	ese Ma	sses (F12	2) (LRR O	, P, T)	(outside ML	RA 138, 152A i	n FL, 154)
Sandy Muc	ky Mineral (S1) <b>(Ll</b>	RR O, S)	Umbric Surfa	ace (F13	B) (LRR P	, T, U)	E	arrier Islands	Low Chroma M	latrix (TS7)
Sandy Gley	ed Matrix (S4)		Delta Ochric	(F17) <b>(</b>	MLRA 15	1)		(MLRA 153B	8, 153D)	
Sandy Redo	ox (S5)		Reduced Ve	rtic (F18	6) <b>(MLRA</b>	150A, 15	0B)	ther (Explain)	in Remarks)	
Stripped Ma	atrix (S6)		Piedmont Fl	oodplain	Soils (F1	9) <b>(MLRA</b>	(149A)			
Dark Surfac	ce (S7) (LRR P, S,	, T, U)	Anomalous I	Bright Fl	oodplain	Soils (F20	))			
Polyvalue B	Below Surface (S8)	)	(MLRA 14	9A, 153	C, 153D)		3	ndicators of h	ydrophytic vege	etation and
(LRR S, 1	T, U)		Very Shallow	v Dark S	Surface (F	22)		wetland hyd	rology must be	present,
			(MLRA 13	8, 152A	in FL, 1	54)		unless distu	rbed or problem	atic.
_ •	/er (if observed):									
Type: Depth (inch	es):						Hydric Soil	Present?	Yes X	No
emarks:										

# Photograph Log Feature ID: <u>JA\_W\_002B\_PFO</u>,EF\_W\_009\_PFO



Photograph Number \_\_\_\_1

Photograph Direction NE

Comments:



Photograph Number 2 Photograph Direction East

Comments:

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph	Number	4

Photograph Direction \_\_\_\_\_

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal See ERDC/EL TR-07-24; the proponent agency is CECW-CO-	-	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW City/County: City of Cl	nesapeake	Sampling Date: <u>4/20/2022</u>
Applicant/Owner: Dominion Energy	State: VA	Sampling Point: JA_W_002B_U
Investigator(s): Justin Ahn Section, Township, Range:	N/A	EF_W_009_UP
Landform (hillside, terrace, etc.): Plain Local relief (concave, convex,	none): None	Slope (%): 1
Subregion (LRR or MLRA): LRR T, MLRA 153B Lat: 36.746409602 Long: -		
Soil Map Unit Name: Acredale-Chapanoke complex, 0 to 1 percent slopes	NWI classific	ation: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X	No (If no,	, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal C	Circumstances" presen	nt? Yes X No
Are Vegetation, Soil, or Hydrologynaturally problematic? (If needed, ex	plain any answers in F	Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locat	ions, transects, i	mportant features, etc.
Hydrophytic Vegetation Present?     Yes     No     X       Hydric Soil Present?     Yes     X     No       Wetland Hydrology Present?     Yes     No     X	Yes	No <u>X</u>
Remarks: Area located in a powerline easement right-of-way.		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators	s (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Aquatic Fauna (B13)	Surface Soil Cra	acks (B6) ated Concave Surface (B8)

	TOTOTIC IS TEQUILE							
Surface Water (A1)	_	_	Sparsely Vegetated	Concave Surface (B8)				
High Water Table (A2)	_	Marl D	eposits (B15) <b>(LRR U)</b>	_	Drainage Patterns (B10)			
Saturation (A3)		Hydrog	gen Sulfide Odor (C1)		Moss Trim Lines (B16)			
Water Marks (B1)		loots (C3)	Dry-Season Water Table (C2)					
Sediment Deposits (B2)	_		Crayfish Burrows (C8)					
Drift Deposits (B3)	-	ls (C6)	Saturation Visible on	Aerial Imagery (C9)				
Algal Mat or Crust (B4)	_		Geomorphic Position	n (D2)				
Iron Deposits (B5)	-	_	Shallow Aquitard (D3	3)				
Inundation Visible on Ae	rial Imagery (B7)	_	FAC-Neutral Test (D	5)				
Water-Stained Leaves (	B9)				Sphagnum Moss (D8	B) (LRR T,U)		
Field Observations:								
Surface Water Present?	Yes	No X	Depth (inches):					
Water Table Present?	Yes	No X	Depth (inches):					
Saturation Present?	Yes	No X	Depth (inches):	Wetland Hy	drology Present?	Yes No X		
(includes capillary fringe)								
Describe Recorded Data (str	ream gauge, mor	nitoring wel	l, aerial photos, previous insp	pections), if ava	ilable:			
Remarks:								
1								

Sampling Point: JA-W-002B-Up

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	% Cover	Species?	Status	Dominance Test worksheet:
1.       2.				Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
3.				Total Number of Dominant
4				Species Across All Strata: 1 (B)
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
		Total Cover		Prevalence Index worksheet:
50% of total cover:	20%	of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
3.				FACU species x 4 =
4.				UPL species x 5 =
5.				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
		Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:		of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				2 - Dominance Test is >50%
1.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2				
4				
5				1. All shows a file of the set of
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:		of total cover:		, i i i i i i i i i i i i i i i i i i i
50% of total cover: <u>Herb Stratum</u> (Plot size: 5' radius )				<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
			FACU	<b>Tree</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5' radius )	20%	of total cover:		<b>Tree</b> – 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).
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> ) 1. <i>Poa pratensis</i>	20% 80	of total cover: Yes	FACU	<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum       (Plot size: 5' radius )         1. Poa pratensis         2. Rubus argutus	20% 80 10	of total cover: Yes No	FACU FAC	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines,</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1. Poa pratensis	20% 80 10 5 5	of total cover: Yes No No	FACU FAC FACW	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1.       Poa pratensis         2.       Rubus argutus         3.       Arundinaria gigantea         4.       Andropogon glomeratus         5.       Acer rubrum	20% 80 10 5 5 2	of total cover: Yes No No No	FACU FAC FACW FACW	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1.       Poa pratensis         2.       Rubus argutus         3.       Arundinaria gigantea         4.       Andropogon glomeratus         5.       Acer rubrum         6.       7	20% 80 10 5 5 2	of total cover: Yes No No No	FACU FAC FACW FACW	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1.       Poa pratensis         2.       Rubus argutus         3.       Arundinaria gigantea         4.       Andropogon glomeratus         5.       Acer rubrum         6.	20% 80 10 5 5 2	of total cover: Yes No No No	FACU FAC FACW FACW	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1.       Poa pratensis         2.       Rubus argutus         3.       Arundinaria gigantea         4.       Andropogon glomeratus         5.       Acer rubrum         6.	20% 80 10 5 5 2	of total cover: Yes No No No	FACU FAC FACW FACW	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3</li> </ul>
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Herb Stratum       (Plot size:5' radius)         1.       Poa pratensis         2.       Rubus argutus         3.       Arundinaria gigantea         4.       Andropogon glomeratus         5.       Acer rubrum         6.	20% 80 10 5 2 	of total cover:          Yes         No         No         No         No         No         Total Cover         of total cover:	FACU FAC FACW FAC FAC	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> <li>Hydrophytic Vegetation</li> </ul>

Depth	Matrix		Redo	x Featu	res				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0-4	10YR 5/1	100					Loamy/Clayey Silty Clay		
4-20	10YR 6/1	85	7.5YR 6/4	15	С	PL	Loamy/Clay	/ey	Clay
					_				
Type: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, N	//S=Mas	ked Sanc	Grains.			re Lining, M=Matrix.
lydric Soil	Indicators: (Applica	ble to all L	RRs, unless oth	erwise r	oted.)		Indic	ators for Pro	oblematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Thin Dark S	urface (S	59) <b>(LRR</b>	S, T, U)		cm Muck (A	, , ,
Histic Ep	pipedon (A2) Barrier Islands 1 cm Muck (S12)				2	2 cm Muck (A	(10) (LRR S)		
Black Hi	stic (A3)		(MLRA 15	53B, 153	D)			Coast Prairie	Redox (A16)
Hydroge	en Sulfide (A4)		Loamy Mucl	ky Miner	al (F1) <b>(L</b>	RR O)		(outside M	LRA 150A)
Stratified	d Layers (A5)		Loamy Gley	ed Matri	x (F2)		F	Reduced Vert	tic (F18)
Organic	Bodies (A6) (LRR, P	, T, U)	X Depleted Ma	atrix (F3)	)			(outside M	LRA 150A, 150B)
5 cm Mu	ucky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	Surface	(F6)		F	Piedmont Flo	odplain Soils (F19) <b>(LRR P</b>
Muck Pr	esence (A8) (LRR U)		Depleted Da	ırk Surfa	ce (F7)		A	Anomalous B	right Floodplain Soils (F20)
	uck (A9) (LRR P, T)		Redox Depr	essions	(F8)			(MLRA 153	
	d Below Dark Surface	e (A11)	Marl (F10) (		( )		F	Red Parent M	
	ark Surface (A12)	( )	Depleted Oc		1) (MLRA	(151)			Dark Surface (F22)
	rairie Redox (A16) ( <b>M</b>	LRA 150A		`	<i>,</i> .	,		•	LRA 138, 152A in FL, 154)
	/lucky Mineral (S1) <b>(L</b>		Umbric Surf		`	, <b>、</b>		•	s Low Chroma Matrix (TS7)
	Gleved Matrix (S4)	,-,,	Delta Ochric	`	, <b>、</b>			(MLRA 153	· · · · · · · · · · · · · · · · · · ·
	Redox (S5)		Reduced Ve	· / ·		,	50B) (		n in Remarks)
	Matrix (S6)		Piedmont Fl		<i>,</i> ,		·		Thirteenance,
	rface (S7) <b>(LRR P, S</b>	тт	Anomalous	•	``	, <b>、</b>	,		
	ie Below Surface (S8		(MLRA 14	-				Indicators of	hydrophytic vegetation and
		/	Very Shallov						
	S, T, U)				`	,		-	drology must be present,
			(MLRA 13	0, 152A	. III FL, 18	94) 			urbed or problematic.
	Layer (if observed):								
Type:									
Type.	Depth (inches):								

Feature ID: JA\_\_W\_\_002B\_\_UP,<sup>E</sup>F\_\_W\_\_009\_\_UP Date 04/20/2022



Photograph Number \_\_\_\_\_

Photograph Direction North

Comments:



Photograph Number 2 \_\_\_\_\_ Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

U.S. Army Corps of Engin WETLAND DETERMINATION DATA SHEET – Atlantic See ERDC/EL TR-07-24; the proponent age	c and Gulf Coastal Plain Region	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW	City/County: City of Virginia Beach	Sampling Date: 4/20/2022
Applicant/Owner: Dominion Energy	State: VA	Sampling Point: JA_W_003B
Investigator(s): Justin Ahn Sec	ction, Township, Range: <u>N/A</u>	
Landform (hillside, terrace, etc.): Plain Local	relief (concave, convex, none): <u>None</u>	Slope (%): 0
Subregion (LRR or MLRA): LRR T, MLRA 153B Lat: 36.7548982965	Long: -76.1150310345	Datum: NAD83
Soil Map Unit Name: Tomotley loam	NWI classifica	ation: None
Are climatic / hydrologic conditions on the site typical for this time of year?	? Yes X No (If no,	explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantly distur	Irbed? Are "Normal Circumstances" present	t? Yes X No
Are Vegetation, Soil, or Hydrologynaturally problems		(emarks.)
SUMMARY OF FINDINGS – Attach site map showing sar		
Hydrophytic Vegetation Present?       Yes X       No         Hydric Soil Present?       Yes X       No         Wetland Hydrology Present?       Yes X       No	Is the Sampled Area within a Wetland? Yes X	No
Remarks: Area located in a powerline easement right-of-way connected to Stream J	JA-S-03. Area determined to be a PEM wetland	d.

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is requi	Surface Soil Cracks (B6)							
X Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)					
X High Water Table (A2)	X Drainage Patterns (B10)							
X Saturation (A3)	Moss Trim Lines (B16)							
Water Marks (B1)	X Oxidized Rhizospheres on Living Ro	oots (C3)	Dry-Season Water Table (C2)					
Sediment Deposits (B2)	Presence of Reduced Iron (C4)		Crayfish Burrows (C8)					
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils	s (C6)	Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		X Geomorphic Position (D2)					
Iron Deposits (B5)	Other (Explain in Remarks)		Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B	7)		X FAC-Neutral Test (D5)					
Water-Stained Leaves (B9)			Sphagnum Moss (D8) (LRR T,U)					
Field Observations:								
Surface Water Present? Yes X	No Depth (inches):1							
Water Table Present? Yes X	No Depth (inches):0							
Saturation Present? Yes X	No Depth (inches): 0	Wetland	Hydrology Present? Yes X No					
(includes capillary fringe)								
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, previous insp	ections), if a	available:					
Remarks:								

Sampling Point: JA\_W\_003B

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species
2.				That Are OBL, FACW, or FAC:(A)
3.				Total Number of Dominant
4				Species Across All Strata: 2 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC:100.0% (A/B)
		Total Cover		Prevalence Index worksheet:
50% of total cover:	20%	of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals:(A)(B)
6				Prevalence Index = B/A =
		Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	20%	of total cover:		1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size:)				X 2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6				present, unless disturbed or problematic.
	=	Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		Tree – Woody plants, excluding woody vines,
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				approximately 20 ft (6 m) or more in height and 3 in.
1. Solidago gigantea	20	Yes	FACW	(7.6 cm) or larger in diameter at breast height (DBH).
2. Juncus effusus	15	Yes	OBL	Sapling – Woody plants, excluding woody vines,
3. Scirpus cyperinus	5	No	OBL	approximately 20 ft (6 m) or more in height and less
4. Lonicera japonica	5	No	FACU	than 3 in. (7.6 cm) DBH.
5				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.
11.				Woody Vine – All woody vines, regardless of height.
	45 =	Total Cover		
50% of total cover:2	20%	of total cover:	9	
Woody Vine Stratum (Plot size:				
1				
2.				
3.				
4.				
5.				l hudun u hu địn
		Total Cover		Hydrophytic Vegetation
50% of total cover:	20%	of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptatio	ns below.)			· <u> </u>

Donth	Motrix	-	Dede		~~~		onfirm the abs		,			
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Featur %	Type <sup>1</sup>	Loc <sup>2</sup>	- Texture		Re	marks		
0-20	10YR 4/1	85	7.5YR 5/8	15	<u> </u>	PL ·	Loamy/Clay					
						·		 				
	oncentration, D=Depl					Grains.	Indic	ators for Pr		=Matrix. <b>ydric Soils<sup>3</sup>:</b>		
Histosol			Thin Dark S		<i>,</i> .				49) <b>(LRR O)</b>			
	pipedon (A2)		Barrier Islan		`	12)		2 cm Muck (A10) (LRR S)				
Black Hi			(MLRA 153B, 153D) Coast Prairie Redox (A16)							)		
_ ` `	n Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR O) (outside MI									
	d Layers (A5)		Loamy Gleyed Matrix (F2) Reduced Vertic						( )			
	Bodies (A6) (LRR, P	LRR, P, T, U) X Depleted Matrix (F3)					(outside MLRA 150A, 150B)					
5 cm Mu	icky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	Surface	(F6)		Piedmont Floodplain Soils (F19) (LRR P,					
Muck Pr	esence (A8) (LRR U)		Depleted Da	ark Surfa	ce (F7)		Anomalous Bright Floodplain Soils (F20)					
1 cm Mu	ıck (A9) <b>(LRR P, T)</b>		Redox Depr	essions (	(F8)		(MLRA 153B)					
Depleted	d Below Dark Surface	(A11)	Marl (F10) (	LRR U)			Red Parent Material (F21)					
Thick Da	ark Surface (A12)		Depleted Oc	chric (F1	1) <b>(MLR</b> A	A 151)	Very Shallow Dark Surface (F22)					
Coast Pi	rairie Redox (A16) ( <b>M</b>	LRA 150A	) Iron-Mangar	nese Mas	sses (F12	2) (LRR C	O, P, T) (outside MLRA 138, 152A in FL, 154)					
Sandy N	lucky Mineral (S1) <b>(L</b>	RR O, S)	Umbric Surf	ace (F13	B) (LRR F	9, T, U)	E	Barrier Island	Is Low Chron	na Matrix (TS7)		
Sandy G	leyed Matrix (S4)		Delta Ochrid	(F17) <b>(</b>	MLRA 15	1)		(MLRA 153	3B, 153D)			
Sandy R	ledox (S5)		Reduced Ve	ertic (F18	) (MLRA	150A, 15	<b>0B)</b>	Other (Explai	n in Remarks	3)		
Stripped	Matrix (S6)		Piedmont Fl	oodplain	Soils (F	19) <b>(MLR</b>	A 149A)					
Dark Su	rface (S7) <b>(LRR P, S</b>	T, U)	Anomalous	Bright Fl	oodplain	Soils (F2	0)					
Polyvalu	e Below Surface (S8	)	(MLRA 14	9A, 153	C, 153D)		3	Indicators of	hydrophytic	vegetation and		
(LRR	S, T, U)		Very Shallov	v Dark S	urface (F	22)	wetland hydrology must be present,					
			(MLRA 13	88, 152A	in FL, 1	54)		unless dis	turbed or prol	olematic.		
Restrictive I	Layer (if observed):											
Type:												
Depth (ir	nches):						Hydric Soil	Present?	Yes	X No		
Remarks:												

#### Feature ID: JA\_\_\_W\_\_003B Date : 04/20/2022



Photograph Number \_\_\_\_

Photograph Direction North\_

Comments:



Photograph Number <u>2</u> Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

WETLAND DETERMINATION	S. Army Corps of Eng DATA SHEET – Atlant -07-24; the proponent a	ic and Gulf Coasta	•	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)			
Project/Site: CVOW	Sampling Date: 4/20/2022						
Applicant/Owner: Dominion Energy			State: VA	Sampling Point: JA_W_003B_U			
Investigator(s): Justin Ahn	S	Section, Township, Rang	e: N/A				
Landform (hillside, terrace, etc.): Plain	Loc	al relief (concave, conve	x, none): None	Slope (%): 0			
Subregion (LRR or MLRA): LRR T, MLRA				Datum: NAD83			
Soil Map Unit Name: Tomotley loam			NWI classific				
	nite two least for this time of you						
Are climatic / hydrologic conditions on the s			No (If no				
Are Vegetation, Soil, or Hyd				nt? Yes X No			
Are Vegetation, Soil, or Hyd	rology naturally proble	matic? (If needed,	explain any answers in I	Remarks.)			
SUMMARY OF FINDINGS – Attac	ch site map showing s	ampling point loca	tions, transects, i	mportant features, etc.			
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Area located in a powerline easement righ	Yes         X         No           Yes         No         X           Yes         No         X           Yes         No         X	Is the Sampled Area within a Wetland?		No <u>X</u>			
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indicator	s (minimum of two required)			
Primary Indicators (minimum of one is req			Surface Soil Cra				
Surface Water (A1)	Aquatic Fauna (B13)			ated Concave Surface (B8)			
High Water Table (A2)	Marl Deposits (B15) (		Drainage Patter				
Saturation (A3)	Hydrogen Sulfide Odd		Moss Trim Lines				
Water Marks (B1)		es on Living Roots (C3)	Dry-Season Wa	( )			
Sediment Deposits (B2)	Presence of Reduced		Crayfish Burrow				
Drift Deposits (B3)	Recent Iron Reduction	( )		le on Aerial Imagery (C9)			
Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)							
Iron Deposits (B5) Inundation Visible on Aerial Imagery (		iaiks)	FAC-Neutral Te				
Water-Stained Leaves (B9)	51)			s (D8) <b>(LRR T,U)</b>			
Field Observations:		1					
Field Observations:         Surface Water Present?       Yes         Water Table Present?       Yes         Saturation Present?       Yes	No X Depth (inche No X Depth (inche No X Depth (inche	s):	d Hydrology Present?	Yes <u>No X</u>			

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

(includes capillary fringe)

Sampling Point: <u>JA\_W\_003B\_UP</u>

	Absolute Dominant	Indicator	
Tree Stratum (Plot size:)	% Cover Species?	Status	Dominance Test worksheet:
1			Number of Dominant Species
2			That Are OBL, FACW, or FAC: <u>3</u> (A)
3			Total Number of Dominant
4			Species Across All Strata: 4 (B)
5			Percent of Dominant Species
6.			That Are OBL, FACW, or FAC: 75.0% (A/B)
	=Total Cover		Prevalence Index worksheet:
50% of total cover:	20% of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)			OBL species x 1 =
1			FACW species x 2 =
2.			FAC species x 3 =
3.			FACU species x 4 =
Λ			UPL species x 5 =
5			Column Totals: (A) (B)
6.			Prevalence Index = B/A =
0.	=Total Cover		Hydrophytic Vegetation Indicators:
E00/ of total acyary			
50% of total cover:	20% of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 15' radius )			X 2 - Dominance Test is >50%
1. Morella cerifera	<u>15 Yes</u>	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3			
4			
5			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6			present, unless disturbed or problematic.
	15 =Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:8	20% of total cover:	3	<b>Tree</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5' radius )			approximately 20 ft (6 m) or more in height and 3 in.
1. Sorghum halepense	25 Yes	FACU	(7.6 cm) or larger in diameter at breast height (DBH).
2. Solidago gigantea	10 Yes	FACW	Sapling – Woody plants, excluding woody vines,
3. Rubus argutus	10 Yes	FAC	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,
6.			approximately 3 to 20 ft (1 to 6 m) in height.
7			
7. 8.			<b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
			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 while - All woody whes, regardless of height.
	45 =Total Cover		
50% of total cover: 2	3 20% of total cover:	9	
Woody Vine Stratum (Plot size:)			
1			
2			
3.			
4.			
5.			Libertine who die
	=Total Cover		Hydrophytic Vegetation
50% of total cover:	20% of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation			
I nomaina. In observed, list morphological adaptation	13 DEIOW./		

	•						nfirm the absence	; or mulc	1013.)			
Depth (inches)	Matrix Color (moist)	%	Redo Color (moist)	x Featur %	res Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Ror	narks		
,				70	туре							
0-4	10YR 3/2	100			·		Loamy/Clayey		Silty Cl	ay Loam		
4-20	2.5Y 6/4	85	7.5YR 5/6	15			Loamy/Clayey Silty Clay Lo					
					·			- <u> </u>				
	oncentration, D=Depl Indicators: (Applica					Grains.			ELining, M=		3.	
Histosol			Thin Dark S			S T II)					•	
	oipedon (A2)		Barrier Islan	`	<i>,</i> , ,		1 cm Muck (A9) <b>(LRR O)</b> 2 cm Muck (A10) <b>(LRR S)</b>					
Black Hi			(MLRA 15			)			edox (A16)			
	n Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR O) (outside MLRA 150A)									
_ ` `	d Layers (A5)		Loamy Gleyed Matrix (F2) Reduced Vertic (F18)									
	Bodies (A6) (LRR, P	T. U)	Depleted Ma		· · /				RA 150A, 1	50B)		
	icky Mineral (A7) <b>(LR</b>	,	Redox Dark	• •	, ,		Piedmont Floodplain Soils (F19) (LRR P					
	esence (A8) (LRR U)		Depleted Da		( )		Anomalous Bright Floodplain Soils (F20)					
	ıck (A9) (LRR P, T)		Redox Depr		. ,		(MLRA 153B)					
	d Below Dark Surface	(A11)	 Marl (F10) <b>(</b> I		· /		Red Parent Material (F21)					
	ark Surface (A12)	( )	Depleted Oc		1) (MLRA	A 151)	Very Shallow Dark Surface (F22)					
	rairie Redox (A16) ( <b>M</b>	LRA 150A)	Iron-Mangar	`	<i>,</i> , ,	,						
	lucky Mineral (S1) <b>(L</b>		Umbric Surf			, .	Barrier Islands Low Chroma Matrix					
	Gleyed Matrix (S4)		Delta Ochric	(F17) <b>(</b>	MLRA 15	1)	(MLRA 153B, 153D)					
	Redox (S5)		Reduced Ve	rtic (F18	B) (MLRA	150A, 15						
 Stripped	Matrix (S6)		Piedmont Fl	oodplair	n Soils (F	19) <b>(MLR</b>				, ,		
Dark Su	rface (S7) (LRR P, S	, T, U)	Anomalous	Bright Fl	loodplain	Soils (F20	) )					
	e Below Surface (S8			-	•		,	ators of h	ydrophytic \	egetation a	and	
(LRR	S, T, U)		•	(MLRA 149A, 153C, 153D) <sup>3</sup> Ir Very Shallow Dark Surface (F22)						be present,		
			(MLRA 13	8, 152A	in FL, 1	54)	unl	ess distur	bed or prob	lematic.		
Restrictive I	Layer (if observed):											
Type:												
Depth (inches):						Hydric Soil Pres	sent?	Yes	No	Х		

## Feature ID: JA\_\_W\_\_003B\_\_UP Date 04/20/2022



Photograph Number \_\_\_\_

Photograph Direction North\_

Comments:



Photograph Number 2 \_\_\_\_\_ Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)								
Project/Site: CVOW City/County: City of Chesapeake	Sampling Date: 4/11/2022								
Applicant/Owner: Dominion Energy State: VA	Sampling Point: JA_W_004								
Investigator(s): Justin Ahn Section, Township, Range: N/A									
Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave	Slope (%): 0								
Subregion (LRR or MLRA):         LRR T, MLRA 153B         Lat:         36.6906053133333         Long: -76.1714989721667	Datum: NAD83								
Soil Map Unit Name: Acredale silt loam, 0-1% slopes NWI classific	ation: None								
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)									
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Circumstances" preser	nt? Yes X No								
Are Vegetation, Soil, or Hydrologynaturally problematic? (If needed, explain any answers in F	Remarks.)								
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, in	mportant features, etc.								
Hydrophytic Vegetation Present?       Yes X       No       Is the Sampled Area         Hydric Soil Present?       Yes X       No       within a Wetland?       Yes X         Wetland Hydrology Present?       Yes X       No       No       Yes X	No								
Remarks: Area located within an open depressional area within a powerline right-of-way. Area identified as a PEM wetland									
HYDROLOGY	IYDROLOGY								

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is requ	ired; 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)	X Oxidized Rhizospheres on Living R	oots (C3)	Dry-Season Water Table (C2)					
Sediment Deposits (B2)		Crayfish Burrows (C8)						
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soil	s (C6)	Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		X Geomorphic Position (D2)					
Iron Deposits (B5)	Other (Explain in Remarks)		Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B	7)		X FAC-Neutral Test (D5)					
X Water-Stained Leaves (B9)			Sphagnum Moss (D8) (LRR T,U)					
Field Observations:								
Surface Water Present? Yes	No X Depth (inches):							
Water Table Present? Yes	No X Depth (inches):							
Saturation Present? Yes	No X Depth (inches):	Wetland	Hydrology Present? Yes X No					
(includes capillary fringe)								
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous insp	ections), if a	vailable:					
Remarks:								

Sampling Point: JA\_W\_004

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That Are OBL, FACW, or FAC: 2 (A)
3.				Total Number of Dominant
4				Species Across All Strata: 2 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
	=T	otal Cover		Prevalence Index worksheet:
50% of total cover:	20% of	total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
3.				FACU species x 4 =
4.				UPL species x 5 =
5				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
		otal Cover		Hydrophytic Vegetation Indicators:
50% of total cover:		total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)	2070 01			X 2 - Dominance Test is >50%
				$3 - Prevalence Index is \leq 3.0^{1}$
1				
2.		·		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4				
5.		·		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6		·		present, unless disturbed or problematic.
	=T	otal Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20% of	total cover:		Tree – Woody plants, excluding woody vines,
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1. Andropogon glomeratus	30	Yes	FACW	
2. Juncus effusus	20	Yes	OBL	Sapling – Woody plants, excluding woody vines,
3. Carex lurida	15	No	OBL	approximately 20 ft (6 m) or more in height and less
4. Ludwigia alternifolia	10	No	OBL	than 3 in. (7.6 cm) DBH.
5. Rubus argutus	5	No	FAC	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.
11.				Woody Vine – All woody vines, regardless of height.
	80 =T	otal Cover		
50% of total cover: 4		total cover:	16	
Woody Vine Stratum (Plot size: )		iotal cover.	10	
1.				
		·		
2				
3.		·		
4.				
5		· ·		Hydrophytic
		otal Cover		Vegetation
50% of total cover:	20% of	total cover:		Present?         Yes X         No
Remarks: (If observed, list morphological adaptation	ns below.)			

Depth	Matrix			x Featu				e absence of in			
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Те	kture	Remar	rks	
0-6	10YR 4/1	90	10YR 4/3	10	С	PL	Loamy	/Clayey	Silty Loam		
6-20	10YR 5/1	85	7.5YR 6/8	15	С	PL	Loamy	//Clayey	Silty C	lay	
		·									
	oncentration, D=Depl Indicators: (Applica					Grains.			Pore Lining, M=Ma Problematic Hydr		
	Dosol (A1) Thin Dark Surface (S9) (LRR S, T, I						-		(A9) <b>(LRR O)</b>		
	bipedon (A2)		Barrier Islan			12)					
Black Hi			(MLRA 1				Coast Prairie Redox (A16)				
	n Sulfide (A4)			-	y Mineral (F1) (LRR O) (outside MLRA 150A)						
	d Layers (A5)		Loamy Gley				Reduced Vertic (F18)				
	Bodies (A6) (LRR, P		X Depleted Ma				(outside MLRA 150A, 150B)				
	icky Mineral (A7) <b>(LR</b>				` '		Piedmont Floodplain Soils (F19) (LF				
	esence (A8) (LRR U)		Depleted Da		· · /		Anomalous Bright Floodplain Soils (F20				
	ick (A9) <b>(LRR P, T)</b>	essions	(F8)			(MLRA 1					
	d Below Dark Surface	e (A11)	Marl (F10) (				-		Material (F21)		
	ark Surface (A12)		Depleted Oc	``	, <b>、</b>	,			w Dark Surface (F	,	
_	rairie Redox (A16) ( <b>N</b>		· <u> </u>		`	, <b>、</b>					
	lucky Mineral (S1) <b>(L</b>	RR 0, 5)	Umbric Surf				-		nds Low Chroma N	Matrix (TS7)	
	Bleyed Matrix (S4)		Delta Ochrid				(MLRA 153B, 153D)				
	edox (S5)		Reduced Ve		<i>,</i> .		· ·	Other (Expla	ain in Remarks)		
	Matrix (S6)		Piedmont Fl								
	rface (S7) <b>(LRR P, S</b>		Anomalous	-			0)	31	<b>6</b> h h h <del></del>		
	e Below Surface (S8	)	(MLRA 14						of hydrophytic veg		
(LRR	S, T, U)		Very Shallov		•	,	wetland hydrology must be present,				
			(MLRA 13	38, 152A	( In FL, 1	54)		unless di	sturbed or problen	natic.	
	Layer (if observed):										
Type:											
Depth (ir	nches):						Hydric	Soil Present?	Yes X	No	
Remarks:											

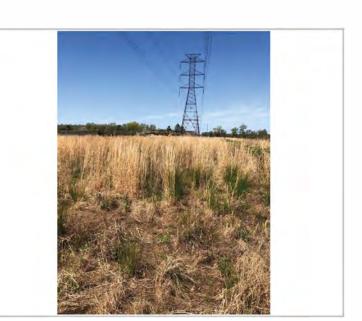
#### Feature ID: JA\_\_\_004 Date : 04/11/2022



Photograph Number 1

Photograph Direction North\_\_\_

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_\_ Photograph Direction \_West\_\_

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R									on	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)		
Project/Site: CVOW	1				City/C	ounty: <u>Cit</u>	ty of C	Chesape	ake		_Sampling Da	ate: <u>4/11/2022</u>
Applicant/Owner:	Dominion E	Energy							State:	VA	Sampling Po	oint: JA_W_004_U
Investigator(s): Justi	n Ahn			S	ection, T	ownship, F	Range	: N/A				
Landform (hillside, te	rrace, etc.):	Plain		Loc	al relief (c	oncave, c	onvex	, none):	None		Slope (	%): 1
Subregion (LRR or M	LRA): LRR	T, MLRA 153B	Lat:	36.6909365396	667	I	Long:	-76.171	452262	5	Datun	n: NAD83
Soil Map Unit Name:	Acredale s	ilt loam, 0-1% slop	bes -						NWI	classifica	tion: None	
Are climatic / hydrolo	gic condition	is on the site typic	al for	this time of yea	r?	Yes	Х	No	)	(lf no,	explain in Rem	arks.)
Are Vegetation						-						X No
Are Vegetation											emarks.)	
SUMMARY OF F Hydrophytic Vegetat Hydric Soil Present? Wetland Hydrology Remarks:	tion Present		X X	No No	Is the	g point   Sampled	Area			ects, in	-	atures, etc.
Area located within a HYDROLOGY Wetland Hydrology Primary Indicators (ISurface Water (Surface Tab	r Indicators: minimum of A1)	: one is required; cl	neck a						Surface Sparsely	Soil Crac	ed Concave S	
	. ,								-		. ,	

Saturation (A3)	Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)					
Water Marks (B1)	Oxidized Rhizospheres on Living Ro	Roots (C3) Dry-Season Water Table (C2)					
Sediment Deposits (B2)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)					
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils	(C6) Saturation Visible on Aerial Imagery (C9)					
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)		X FAC-Neutral Test (D5)					
Water-Stained Leaves (B9)		Sphagnum Moss (D8) (LRR T,U)					
Field Observations:							
Surface Water Present? Yes	No X Depth (inches):						
Water Table Present? Yes	No X Depth (inches):						
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present? Yes <u>No X</u>					
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mon	toring well, aerial photos, previous insp	ections), if available:					
Remarks:							

Sampling Point: JA\_W\_004\_Up

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
1.       2.				Number of Dominant Species           That Are OBL, FACW, or FAC:         2         (A)
3. 4.				Total Number of Dominant Species Across All Strata: 2 (B)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC:100.0% (A/B)
		=Total Cover		Prevalence Index worksheet:
50% of total cover:	20%	of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3.				FACU species x 4 =
4.				UPL species x 5 =
5.				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
		=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:		of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				X 2 - Dominance Test is >50%
				$3 - Prevalence Index is \leq 3.0^{1}$
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2				
· · · · · · · · · · · · · · · · · · ·				
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6				present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		<b>Tree</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5' radius )				approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>5' radius</u> ) 1. Andropogon glomeratus	40	Yes	FACW	
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> ) 1. Andropogon glomeratus 2. Rumex crispus	40 30		FACW FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). <b>Sapling</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: <u>5' radius</u> ) 1. Andropogon glomeratus	40	Yes	FACW	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> ) 1. Andropogon glomeratus 2. Rumex crispus	40 30	Yes Yes	FACW FAC	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). <b>Sapling</b> – Woody plants, excluding woody vines,
Herb Stratum       (Plot size: 5' radius )         1. Andropogon glomeratus         2. Rumex crispus         3. Trifolium repens         4. Symphyotrichum pilosum         5.	40 30 10	Yes Yes No	FACW FAC FACU	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines,</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	40 30 10	Yes Yes No	FACW FAC FACU	approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
Herb Stratum       (Plot size: 5' radius )         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	40 30 10	Yes Yes No	FACW FAC FACU	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1. Andropogon glomeratus         2. Rumex crispus         3. Trifolium repens         4. Symphyotrichum pilosum         5.         6.         7.         8.	40 30 10	Yes Yes No	FACW FAC FACU	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	40 30 10	Yes Yes No	FACW FAC FACU	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	40 30 10	Yes Yes No	FACW FAC FACU	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	<u>40</u> <u>30</u> <u>10</u> <u>10</u> <u></u>	Yes Yes No No	FACW FAC FACU	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	40 30 10 10 	Yes No No Total Cover	FACW FAC FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	40 30 10 10 	Yes Yes No No	FACW FAC FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	40 30 10 10 	Yes No No Total Cover	FACW FAC FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size: 5' radius )         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.       6.         7.       8.         9.       10.         11.       50% of total cover: 4	40 30 10 10 	Yes No No Total Cover	FACW FAC FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
Herb Stratum       (Plot size:5' radius)         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	40 30 10 10 	Yes No No Total Cover	FACW FAC FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size:5' radius)         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	<u>40</u> <u>30</u> <u>10</u> <u>10</u> <u>10</u> <u>5</u> <u>90</u> <u>5</u> <u>20%</u>	Yes No No Total Cover	FACW FAC FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size:5' radius)         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	<u>40</u> <u>30</u> <u>10</u> <u>10</u> <u>10</u> <u>5</u> <u>90</u> <u>5</u> <u>20%</u>	Yes No No Total Cover	FACW FAC FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
Herb Stratum       (Plot size:5' radius)         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	<u>40</u> <u>30</u> <u>10</u> <u>10</u> <u>10</u> <u>5</u> <u>90</u> <u>5</u> <u>20%</u>	Yes No No Total Cover	FACW FAC FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> </ul>
Herb Stratum       (Plot size:5' radius)         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	<u>40</u> <u>30</u> <u>10</u> <u>10</u> <u></u>	Yes No No No Total Cover of total cover:	FACW FAC FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> <li>Woody Vine – All woody vines, regardless of height.</li> <li>Hydrophytic</li> </ul>
Herb Stratum       (Plot size:5' radius)         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	<u>40</u> <u>30</u> <u>10</u> <u>10</u> <u>10</u> <u>5</u> <u>90</u> <u>5</u> <u>20%</u>	Yes No No No Total Cover of total cover:	FACW FAC FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> </ul>
Herb Stratum       (Plot size:5' radius)         1.       Andropogon glomeratus         2.       Rumex crispus         3.       Trifolium repens         4.       Symphyotrichum pilosum         5.	<u>40</u> <u>30</u> <u>10</u> <u>10</u> <u>10</u> <u>5</u> <u>90</u> <u>5</u> <u>20%</u>	Yes No No No Total Cover of total cover:	FACW FAC FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> <li>Woody Vine – All woody vines, regardless of height.</li> <li>Hydrophytic</li> </ul>

							nfirm the absence	of indicators.)	
Depth	Matrix			x Featu	4	. 2	-		
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc <sup>2</sup>	Texture	Remarks	
0-6	10YR 3/3	100					Loamy/Clayey	Silty Loam	
6-20	10YR 6/1	90	7.5YR 5/8	10	<u> </u>	PL	Sandy	Loamy Sand	
	oncentration, D=Depl					Grains.		PL=Pore Lining, M=Matrix.	
•	ndicators: (Applica	DIE TO AII LI			,	о т II)		for Problematic Hydric Soils <sup>3</sup> :	
Histosol			Thin Dark S		, .			Muck (A9) <b>(LRR O)</b>	
	vipedon (A2)		Barrier Islands 1 cm Muck (S12) 2 cm Muck (A10) (LF						
Black His	n Sulfide (A4)							Prairie Redox (A16) side MLRA 150A)	
	l Layers (A5)		Loamy Gleyed Matrix (F2)				,	ed Vertic (F18)	
	Bodies (A6) <b>(LRR, P</b>	τ	Depleted Matrix (F3)					side MLRA 150A, 150B)	
	cky Mineral (A7) <b>(LR</b>						•	ont Floodplain Soils (F19) <b>(LRR P,</b> '	
	esence (A8) (LRR U)		Depleted Dark Surface (F6)				Anomalous Bright Floodplain Soils (F2		
	ck (A9) (LRR P, T)		Redox Depr		( )		(MLRA 153B)		
	Below Dark Surface	Δ11)	Marl (F10) (I		(10)		Red Parent Material (F21)		
	irk Surface (A12)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Depleted Oc		1) (MI R/	151)	Very Shallow Dark Surface (F22)		
	airie Redox (A16) ( <b>M</b>	II RA 150A)		`	<i>,</i> , ,	,			
	lucky Mineral (S1) <b>(L</b>	,	Umbric Surf		`	, <b>、</b>		Islands Low Chroma Matrix (TS7)	
	leyed Matrix (S4)		Delta Ochric	•	<i>,</i> ,			RA 153B, 153D)	
X Sandy R	<b>,</b> , , , , , , , , , , , , , , , , , ,							(Explain in Remarks)	
	X       Sandy Redox (S5)       Reduced Vertic (F18) (MLRA 150A, 150         Stripped Matrix (S6)       Piedmont Floodplain Soils (F19) (MLRA				-	()			
	face (S7) <b>(LRR P, S</b>	. T. U)							
	e Below Surface (S8		Anomalous Bright Floodplain Soils (F20) (MLRA 149A, 153C, 153D)					tors of hydrophytic vegetation and	
	S, T, U)	/	Very Shallow Dark Surface (F22)					and hydrology must be present,	
(	, , -,		(MLRA 13		`	,		ess disturbed or problematic.	
Restrictive L	ayer (if observed):								
Туре:									
	nches):						Hydric Soil Pres	ent? Yes X No	

#### Feature ID: JA-W-004-UP Date: 04/11/2022



Photograph Number \_\_\_\_\_

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

wettand Hydrology Indicators:		Secondary indicators (minimum of two required)
Primary Indicators (minimum of one is require	Surface Soil Cracks (B6)	
X Surface Water (A1)	Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
X High Water Table (A2)	Marl Deposits (B15) (LRR U)	X Drainage Patterns (B10)
X Saturation (A3)	Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1)	X Oxidized Rhizospheres on Living Roots	(C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils (C	C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C7)	X Geomorphic Position (D2)
Iron Deposits (B5)	Other (Explain in Remarks)	Shallow Aquitard (D3)
X Inundation Visible on Aerial Imagery (B7	7)	X FAC-Neutral Test (D5)
Water-Stained Leaves (B9)		Sphagnum Moss (D8) (LRR T,U)
Field Observations:		
Surface Water Present? Yes X	No Depth (inches):3	
Water Table Present? Yes X	No Depth (inches): 0	
Saturation Present? Yes X	No Depth (inches): 0	Wetland Hydrology Present?         Yes         X         No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous inspecti	ions), if available:
Remarks:		

Sampling Point: JA\_W\_004B

	Absolute Dominan	t Indicator	
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	% Cover Species?	Status	Dominance Test worksheet:
1. Acer rubrum	40 Yes	FAC	Number of Dominant Species
2. Liquidambar styraciflua	20 Yes	FAC	That Are OBL, FACW, or FAC: (A)
3. Taxodium distichum	10 No	OBL	Total Number of Dominant
4.			Species Across All Strata: 4 (B)
5			Percent of Dominant Species
6.			That Are OBL, FACW, or FAC: 100.0% (A/B)
	70 =Total Cove	er	Prevalence Index worksheet:
50% of total cover: 3	35 20% of total cov	er: 14	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)			OBL species x 1 =
1			FACW species x 2 =
2			FAC species x 3 =
3.			FACU species x 4 =
4.			UPL species x 5 =
5			Column Totals: (A) (B)
6.			Prevalence Index = B/A =
0.	=Total Cove		Hydrophytic Vegetation Indicators:
50% of total cover:			1 - Rapid Test for Hydrophytic Vegetation
	20% of total cov	er	X 2 - Dominance Test is >50%
Shrub Stratum (Plot size:)			
1			3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.			
4			
5			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6			present, unless disturbed or problematic.
	=Total Cove	er	Definitions of Five Vegetation Strata:
50% of total cover:	20% of total cov	er:	Tree – Woody plants, excluding woody vines,
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )			approximately 20 ft (6 m) or more in height and 3 in.
1. Carex lurida	20 Yes	OBL	(7.6 cm) or larger in diameter at breast height (DBH).
2. <i>Phragmites australis</i>	15 Yes	FACW	Sapling – Woody plants, excluding woody vines,
3. Juncus effusus	<u>    5     No</u>	OBL	approximately 20 ft (6 m) or more in height and less
4. Solidago gigantea	5 No	FACW	than 3 in. (7.6 cm) DBH.
5			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.
11.			Woody Vine – All woody vines, regardless of height.
	45 =Total Cove	er	
50% of total cover: 2	23 20% of total cov	er: 9	
Woody Vine Stratum (Plot size: )			
1.			
2			
3.			
5			Hydrophytic
	=Total Cove		Vegetation
50% of total cover:	20% of total cov	сі. 	Present?         Yes X         No
Remarks: (If observed, list morphological adaptatio	ns below.)		

SOIL

Depth         Matrix         Redox Features           Color (moist)         %         Type         Loc         Texture         Remarks           0-10         10YR 4/1         100         Loamy/Clayey         Silty Clay           10-20         10YR 5/1         100         Loamy/Clayey         Clay           10         Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.         *         Loamy/Clayey           10         Concatiorin	Dopth Matrix	Deday C+	uroo			
0-10       10YR 4/1       100       Loamy/Clayey       Silty Clay         10-20       10YR 5/1       100       Loamy/Clayey       Clay         10-20       10/20 LR       100       Loamy/Clayey       Clay         10-20       200       Barier Islands 1 cm Muck (S12)       1 cm Muck (A10) (LR 8)       1 cm Muck (A10) (LR 8)         11       Black Histic (A3)       (MLRA 153B, 153D)       Coast Prairie Redox (A16)       (outside MLRA 150A) 150B)         12       Crastrified Layers (A5)       Loamy Gleyed Matrix (F2)       Reduced Vertic (F18)       Reduced Vertic (F18)         12       <	•		4	Loc <sup>2</sup>	Texture	Remarks
10-20       10YR 5/1       100       Loamy/Clayey       Clay         10-20       10YR 5/1       100       Loamy/Clayey       Clay         110-20       10       Loamy/Clayey       Clay         110-20       10       Loamy/Clayey       Clay         110-20       10       Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators: (Applicable to all LRRs, unless otherwise noted.)         Histic Epipedon (A2)       Barrier Islands 1 cm Muck (S12)       2 cm Muck (A0) (LRR O)       Coutside MLRA 150A)         Black Histic (A3)       (MLRA 153, 153D)       Coast Prairie Redox (A16)       Coast Prairie Redox (A16)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1) (LRR O)       Coutside MLRA 150A, 150B)       Coutside MLRA 150A, 150B)         Sem Muck Mineral (A7) (LRR P, T, U)       Redox Dark Surface (F7)       Anomalous Bright Floodplain Soils (F20)       Pledmont Floodplain Soils (F21)         1 cm Muck (A9) (LRR P, T)       Depleted Dark Surfa					Loamv/Clavev	Silty Clav
Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         Hydric Soil Indicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Thin Dark Surface (S9) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histosol (A2)       Barrier Islands 1 cm Muck (S12)       2 cm Muck (A10) (LRR S)         Black Histic CA3)       (MLRA 153B, 153D)       Coast Prairie Redox (A16)         Hydrogen Sulfde (A4)       Loarny Mucky Mineral (F1) (LRR O)       (outside MLRA 150A)         Stratified Layers (A5)       Loarny Mucky Mineral (F1) (LRR O)       (outside MLRA 150A), 150B)         5 cm Mucky Mineral (A7) (LRR P, T, U)       X Depleted Dark Surface (F6)       Piedmont Floodplain Soils (F19) (LRR Muck (A9) (LRR V)         1 cm Muck (A9) (LRR P, T)       Redox Depressions (F8)       (MLRA 153B)       Red Parent Material (F21)         1 cm Muck (A16) (MLRA 150A)       Iron-Manganese Masses (F12) (LRR O, P, T)       Very Shallow Dark Surface (F22)       (outside MLRA 138, 152A in FL, 15         2 coast Prairie Redox (S5)       Reduced Vertic (F13) (MLRA 150A, 150B)       Other (Explain in Remarks)       Stripped Matrix (S4)       Delta Ochric (F17) (MLRA 151)       Ustype Shallow Dark Surface (F22)       (MLRA 153B, 153D)       Other (Explain in Remarks)       Stripped Matrix (S5)       Reduced Vertic (F18)						
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Thin Dark Surface (S9) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histic Epipedon (A2)       Barrier Islands 1 cm Muck (S12)       2 cm Muck (A10) (LRR S)         Black Histic (A3)       (MLRA 153B, 153D)       Coast Prairie Redox (A16)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1) (LRR O)       (outside MLRA 150A)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Reduced Vertic (F18)         Organic Bodies (A6) (LRR P, T, U)       X Depleted Matrix (F3)       (outside MLRA 150A, 150B)         S cm Mucky Mineral (A7) (LRR P, T, U)       Redox Dark Surface (F6)       Piedmont Floodplain Soils (F19) (LRR         Muck Presence (A8) (LRR U)       Depleted Dark Surface (F7)       Anomalous Bright Floodplain Soils (F20)         1 cm Muck (A9) (LRR P, T)       Redox Depressions (F8)       (MLRA 153B)         Depleted Below Dark Surface (A11)       Mari (F10) (LRR U)       Red Parent Material (F21)         Thick Dark Surface (A12)       Depleted Ochric (F11) (MLRA 150, 1)       Very Shallow Dark Surface (F22)         Coast Prairie Redox (A16) (MLRA 150A)       Iron-Manganese Masses (F12) (LRR O, P, T)       Barrier Islands Low Chroma Matrix (TS         Sandy Mucky Mineral (S1) (LRR O, S)       Umbric Surface (F13) (MLRA 150A, 150B)			·	·		Clay
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils <sup>3</sup> :         Histosol (A1)       Thin Dark Surface (S9) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histic Epipedon (A2)       Barrier Islands 1 cm Muck (S12)       2 cm Muck (A10) (LRR S)         Black Histic (A3)       (MLRA 153B, 153D)       Coast Prairie Redox (A16)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1) (LRR O)       (outside MLRA 150A)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Reduced Vertic (F18)         Organic Bodies (A6) (LRR P, T, U)       X Depleted Matrix (F3)       (outside MLRA 150A, 150B)         5 cm Mucky Mineral (A7) (LRR P, T, U)       Redox Dark Surface (F6)       Piedmont Floodplain Soils (F19) (LRR         Muck Presence (A8) (LRR U)       Depleted Dark Surface (F7)       Anomalous Bright Floodplain Soils (F20)         1 cm Muck (A9) (LRR P, T)       Redox Depressions (F8)       (MLRA 153B)         Depleted Below Dark Surface (A11)       Mari (F10) (LRR U)       Red Parent Material (F21)         Thick Dark Surface (A12)       Depleted Ochric (F11) (MLRA 150)       Very Shallow Dark Surface (F22)         Coast Prairie Redox (A16) (MLRA 150A)       Iron-Manganese Masses (F12) (LRR O, P, T)       Barrier Islands Low Chroma Matrix (TS         Sandy Mecky Mineral (S1) (LRR O, S)       Umbric Surface (F13) (MLRA 150A, 150B)		=Reduced Matrix_MS=M		  Grains	<sup>2</sup> l ocation: PI	=Pore Lining M=Matrix
Histosol (A1)Thin Dark Surface (S9) (LRR S, T, U)1 cm Muck (A9) (LRR O)Histic Epipedon (A2)Barrier Islands 1 cm Muck (S12)2 cm Muck (A10) (LRR S)Black Histic (A3)(MLRA 153B, 153D)Coast Prairie Redox (A16)Hydrogen Sulfide (A4)Loamy Mucky Mineral (F1) (LRR O)(outside MLRA 150A)Striatfiled Layers (A5)Loamy Gleyed Matrix (F2)Reduced Vertic (F18)Organic Bodies (A6) (LRR P, T, U)X Depleted Matrix (F3)(outside MLRA 150A, 150B)5 cm Mucky Mineral (A7) (LRR P, T, U)Redox Dark Surface (F6)Piedmont Floodplain Soils (F19) (LRRMuck Presence (A8) (LRR U)Depleted Dark Surface (F7)Anomalous Bright Floodplain Soils (F20)1 cm Muck (A9) (LRR P, T)Redox Depressions (F8)(MLRA 153B)Depleted Below Dark Surface (A11)Marl (F10) (LRR U)Red Parent Material (F21)Thick Dark Surface (A12)Depleted Ochric (F11) (MLRA 151)Very Shallow Dark Surface (F22)Coast Prairie Redox (A16) (MLRA 150A)Iron-Manganese Masses (F12) (LRR O, P, T)Barrier Islands Low Chroma Matrix (TSSandy Mucky Mineral (S1) (LRR O, S)Umbric Surface (F13) (MLRA 150A, 150B)Other (Explain in Remarks)Sandy Redox (S5)Reduced Vertic (F18) (MLRA 150A, 150B)Other (Explain in Remarks)Stripped Matrix (S6)Piedmont Floodplain Soils (F20)Other (Explain in Remarks)Polyvalue Below Surface (S8)(MLRA 149A, 153C, 153D) <sup>3</sup> Indicators of hydrophytic vegetation ar wetland hydrology must be present, unless disturbed or problematic.Restrictive Layer (if observed):Very Shallow Dark Surface (F22) (MLRA				oranis.		
Black Histic (A3)(MLRA 153B, 153D)Coast Prairie Redox (A16)Hydrogen Sulfide (A4)Loamy Mucky Mineral (F1) (LRR O)(outside MLRA 150A)Stratified Layers (A5)Loamy Gleyed Matrix (F2)Reduced Vertic (F18)Organic Bodies (A6) (LRR, P, T, U)XDepleted Matrix (F3)(outside MLRA 150A, 150B)5 cm Mucky Mineral (A7) (LRR P, T, U)Redox Dark Surface (F6)Piedmont Floodplain Soils (F19) (LRRMuck Presence (A8) (LRR U)Depleted Dark Surface (F7)Anomalous Bright Floodplain Soils (F20)1 cm Muck (A9) (LRR P, T)Redox Depressions (F8)(MLRA 153B)Depleted Below Dark Surface (A11)Marl (F10) (LRR U)Red Parent Material (F21)Thick Dark Surface (A12)Depleted Ochric (F11) (MLRA 151)Very Shallow Dark Surface (F22)Coast Prairie Redox (A16) (MLRA 150A)Iron-Manganese Masses (F12) (LRR O, P, T)Barrier Islands Low Chroma Matrix (TSSandy Mucky Mineral (S1) (LRR O, S)Delta Ochric (F13) (MLRA 150A, 150B)Other (Explain in Remarks)Stripped Matrix (S6)Piedmont Floodplain Soils (F19) (MLRA 149A)Other (Explain in Remarks)Dark Surface (S7) (LRR P, S, T, U)Anomalous Bright Floodplain Soils (F20)3 <sup>1</sup> Indicators of hydrophytic vegetation ar wetland hydrology must be present, unless disturbed or problematic.Restrictive Layer (if observed):KetretKetretKetret				6, T, U)		•
Black Histic (A3)(MLRA 153B, 153D)Coast Prairie Redox (A16)Hydrogen Sulfide (A4)Loamy Mucky Mineral (F1) (LRR O)(outside MLRA 150A)Stratified Layers (A5)Loamy Gleyed Matrix (F2)Reduced Vertic (F18)Organic Bodies (A6) (LRR P, T, U)XDepleted Matrix (F3)(outside MLRA 150A, 150B)5 cm Mucky Mineral (A7) (LRR P, T, U)Redox Dark Surface (F6)Piedmont Floodplain Soils (F19) (LRRMuck Presence (A8) (LRR U)Depleted Dark Surface (F7)Anomalous Bright Floodplain Soils (F20)1 cm Muck (A9) (LRR P, T)Redox Depressions (F8)(MLRA 153B)Depleted Below Dark Surface (A11)Marl (F10) (LRR U)Red Parent Material (F21)Thick Dark Surface (A12)Depleted Ochric (F11) (MLRA 151)Very Shallow Dark Surface (F22)Coast Prairie Redox (A16) (MLRA 150A)Iron-Manganese Masses (F12) (LRR O, P, T)Barrier Islands Low Chroma Matrix (TSSandy Mucky Mineral (S1) (LRR O, S)Umbric Surface (F13) (MLRA 150A, 150B)Other (Explain in Remarks)Stripped Matrix (S6)Piedmont Floodplain Soils (F19) (MLRA 149A)Other (Explain in Remarks)Dark Surface (S7) (LRR P, S, T, U)Anomalous Bright Floodplain Soils (F20)3 <sup>1</sup> Indicators of hydrophytic vegetation ar wetland hydrology must be present, unless disturbed or problematic.Restrictive Layer (if observed):Ketrictive Layer (if observed):Sandy Clever (Si	Histic Epipedon (A2)	Barrier Islands 1 c	m Muck (S1	2)	2 cm Muc	k (A10) <b>(LRR S)</b>
Stratified Layers (A5)Loamy Gleyed Matrix (F2)Reduced Vertic (F18)Organic Bodies (A6) (LRR, P, T, U)XDepleted Matrix (F3)(outside MLRA 150A, 150B)5 cm Mucky Mineral (A7) (LRR P, T, U)Redox Dark Surface (F6)Piedmont Floodplain Soils (F19) (LRRMuck Presence (A8) (LRR U)Depleted Dark Surface (F7)Anomalous Bright Floodplain Soils (F20)1 cm Muck (A9) (LRR P, T)Redox Depressions (F8)(MLRA 153B)Depleted Below Dark Surface (A11)Marl (F10) (LRR U)Red Parent Material (F21)Thick Dark Surface (A12)Depleted Ochric (F11) (MLRA 151)Very Shallow Dark Surface (F22)Coast Prairie Redox (A16) (MLRA 150A)Iron-Manganese Masses (F12) (LRR O, P, T)(outside MLRA 138, 152A in FL, 154)Sandy Mucky Mineral (S1) (LRR O, S)Umbric Surface (F13) (LRR P, T, U)Barrier Islands Low Chroma Matrix (TSSandy Redox (S5)Reduced Vertic (F18) (MLRA 150A, 150B)Other (Explain in Remarks)Stripped Matrix (S6)Piedmont Floodplain Soils (F19) (MLRA 149A)Other (Explain in Remarks)Dark Surface (S7) (LRR P, S, T, U)Anomalous Bright Floodplain Soils (F20)3Polyvalue Below Surface (S8)(MLRA 138, 152A in FL, 154)3Restrictive Layer (if observed):Very Shallow Dark Surface (F22)wetland hydrology must be present, unless disturbed or problematic.				,		
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5 cm Mucky Mineral (A7) (LRR P, T, U)       Redox Dark Surface (F6)       Piedmont Floodplain Soils (F19) (LRR         Muck Presence (A8) (LRR U)       Depleted Dark Surface (F7)       Anomalous Bright Floodplain Soils (F20)         1 cm Muck (A9) (LRR P, T)       Redox Depressions (F8)       (MLRA 153B)         Depleted Below Dark Surface (A11)       Marl (F10) (LRR U)       Red Parent Material (F21)         Thick Dark Surface (A12)       Depleted Ochric (F11) (MLRA 151)       Very Shallow Dark Surface (F22)         Coast Prairie Redox (A16) (MLRA 150A)       Iron-Manganese Masses (F12) (LRR O, P, T)       (outside MLRA 138, 152A in FL, 15-         Sandy Mucky Mineral (S1) (LRR O, S)       Umbric Surface (F13) (LRR P, T, U)       Barrier Islands Low Chroma Matrix (TS         Sandy Redox (S5)       Reduced Vertic (F18) (MLRA 150A, 150B)       Other (Explain in Remarks)         Stripped Matrix (S6)       Piedmont Floodplain Soils (F20)       Other (Explain in Remarks)         Dark Surface (S7) (LRR P, S, T, U)       Anomalous Bright Floodplain Soils (F20)       Other (Explain in Remarks)         Polyvalue Below Surface (S8)       (MLRA 149A, 153C, 153D) <sup>3</sup> Indicators of hydrophytic vegetation ar wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Restrictive Layer (if observed):       Very Shallow Dark Surface (F22)       wetland hydrology must be present, unless disturbed or problematic. <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Muck Presence (A8) (LRR U)Depleted Dark Surface (F7)Anomalous Bright Floodplain Soils (F20)1 cm Muck (A9) (LRR P, T)Redox Depressions (F8)(MLRA 153B)Depleted Below Dark Surface (A11)Marl (F10) (LRR U)Red Parent Material (F21)Thick Dark Surface (A12)Depleted Ochric (F11) (MLRA 151)Very Shallow Dark Surface (F22)Coast Prairie Redox (A16) (MLRA 150A)Iron-Manganese Masses (F12) (LRR O, P, T)(outside MLRA 138, 152A in FL, 154)Sandy Mucky Mineral (S1) (LRR O, S)Umbric Surface (F13) (LRR P, T, U)Barrier Islands Low Chroma Matrix (TSSandy Gleyed Matrix (S4)Delta Ochric (F17) (MLRA 151)(MLRA 153B, 153D)Sandy Redox (S5)Reduced Vertic (F18) (MLRA 150A, 150B)Other (Explain in Remarks)Stripped Matrix (S6)Piedmont Floodplain Soils (F19) (MLRA 149A)Other (Explain in Remarks)Dark Surface (S7) (LRR P, S, T, U)Anomalous Bright Floodplain Soils (F20) <sup>3</sup> Indicators of hydrophytic vegetation ar wetland hydrology must be present, unless disturbed or problematic.Restrictive Layer (if observed):Restrictive Layer (if observed):Surface (F22)			,		•	
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Depleted Below Dark Surface (A11)Marl (F10) (LRR U)Red Parent Material (F21)Thick Dark Surface (A12)Depleted Ochric (F11) (MLRA 151)Very Shallow Dark Surface (F22)Coast Prairie Redox (A16) (MLRA 150A)Iron-Manganese Masses (F12) (LRR O, P, T)(outside MLRA 138, 152A in FL, 154)Sandy Mucky Mineral (S1) (LRR O, S)Umbric Surface (F13) (LRR P, T, U)Barrier Islands Low Chroma Matrix (TSSandy Gleyed Matrix (S4)Delta Ochric (F17) (MLRA 151)(MLRA 153B, 153D)Sandy Redox (S5)Reduced Vertic (F18) (MLRA 150A, 150B)Other (Explain in Remarks)Stripped Matrix (S6)Piedmont Floodplain Soils (F19) (MLRA 149A)Other (Explain in Remarks)Dark Surface (S7) (LRR P, S, T, U)Anomalous Bright Floodplain Soils (F20) <sup>3</sup> Indicators of hydrophytic vegetation ar wetland hydrology must be present, unless disturbed or problematic.Restrictive Layer (if observed):Kestrictive Layer (if observed):Sandy Redox (S1)		·	( )			<b>e</b> 1 ( )
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Sandy Mucky Mineral (S1) (LRR O, S)       Umbric Surface (F13) (LRR P, T, U)       Barrier Islands Low Chroma Matrix (TS         Sandy Gleyed Matrix (S4)       Delta Ochric (F17) (MLRA 151)       (MLRA 153B, 153D)         Sandy Redox (S5)       Reduced Vertic (F18) (MLRA 150A, 150B)       Other (Explain in Remarks)         Stripped Matrix (S6)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Other (Explain in Remarks)         Dark Surface (S7) (LRR P, S, T, U)       Anomalous Bright Floodplain Soils (F20) <sup>3</sup> Indicators of hydrophytic vegetation ar wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):       Kestrictive Layer (if observed):       Sandy Surface (S1) (LRR P, S, T, U)       Sandy Redox (S2)		`	, <b>、</b>	,		
Sandy Gleyed Matrix (S4)       Delta Ochric (F17) (MLRA 151)       (MLRA 153B, 153D)         Sandy Redox (S5)       Reduced Vertic (F18) (MLRA 150A, 150B)       Other (Explain in Remarks)         Stripped Matrix (S6)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Other (Explain in Remarks)         Dark Surface (S7) (LRR P, S, T, U)       Anomalous Bright Floodplain Soils (F20)       Indicators of hydrophytic vegetation ar         Very Shallow Dark Surface (F22)       Wetland hydrology must be present, unless disturbed or problematic.       Indicator problematic.			,	•		
Sandy Redox (S5)       Reduced Vertic (F18) (MLRA 150A, 150B)       Other (Explain in Remarks)         Stripped Matrix (S6)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Other (Explain in Remarks)         Dark Surface (S7) (LRR P, S, T, U)       Anomalous Bright Floodplain Soils (F20)       Indicators of hydrophytic vegetation ar         Polyvalue Below Surface (S8)       (MLRA 149A, 153C, 153D)       Indicators of hydrophytic vegetation ar         Very Shallow Dark Surface (F22)       wetland hydrology must be present,         (MLRA 138, 152A in FL, 154)       unless disturbed or problematic.						
Stripped Matrix (S6)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Dark Surface (S7) (LRR P, S, T, U)       Anomalous Bright Floodplain Soils (F20)         Polyvalue Below Surface (S8)       (MLRA 149A, 153C, 153D)         (LRR S, T, U)       Very Shallow Dark Surface (F22)         Wetland hydrology must be present, (MLRA 138, 152A in FL, 154)       unless disturbed or problematic.			•	•	•	. ,
Dark Surface (S7) (LRR P, S, T, U)       Anomalous Bright Floodplain Soils (F20)         Polyvalue Below Surface (S8)       (MLRA 149A, 153C, 153D)         (LRR S, T, U)       Very Shallow Dark Surface (F22)         (MLRA 138, 152A in FL, 154)       unless disturbed or problematic.			, ,		,	,
Polyvalue Below Surface (S8)       (MLRA 149A, 153C, 153D) <sup>3</sup> Indicators of hydrophytic vegetation ar         (LRR S, T, U)       Very Shallow Dark Surface (F22)       wetland hydrology must be present,         (MLRA 138, 152A in FL, 154)       unless disturbed or problematic.				<i>,</i> ,	•	
(LRR S, T, U)       Very Shallow Dark Surface (F22)       wetland hydrology must be present, unless disturbed or problematic.         (MLRA 138, 152A in FL, 154)       unless disturbed or problematic.			•	(	,	s of hydrophytic vegetation and
(MLRA 138, 152A in FL, 154) unless disturbed or problematic. Restrictive Layer (if observed):		<b>i</b>	. ,	2)		
	(, _, _, _, _,		``	,		
Туре:	Restrictive Layer (if observed):					
	Туре:					
Depth (inches): Hydric Soil Present? Yes X No	Depth (inches):				Hydric Soil Present	? Yes X No

### Feature ID: JA-W-004B

Date : 04/20/2022



Photograph Number \_\_1\_

Photograph Direction North\_

Comments:



Photograph Number \_ 2 \_\_\_\_ Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_\_ Photograph Direction \_West\_\_

WETLAND DETERMINATION	<b>.S. Army Corps of E</b> N DATA SHEET – Atl R-07-24; the proponer	antic and Gu			Requirement Contu EXEMP1 (Authority: AR paragraph 5	- 335-15,
Project/Site: CVOW		City/Cou	nty: City of Vi	rginia Beach	Sampling Date:	4/20/2022
Applicant/Owner: Dominion Energy				State: VA	Sampling Point:	JA_W_004B_UI
Investigator(s): Justin Ahn		Section, Towr	nship, Range:	N/A	_	
Landform (hillside, terrace, etc.): Plain		Local relief (cond	cave, convex,	none): None	Slope (%):	2
Subregion (LRR or MLRA): LRR T, MLR		, , , , , , , , , , , , , , , , , , ,		76.113052	Datum:	
Soil Map Unit Name: Acredale silt loam			°_	NWI classifica	ation: None	
Are climatic / hydrologic conditions on the	site typical for this time of	vear?	Yes X	No (If no,		s)
Are Vegetation, Soil, or Hy		-		Circumstances" presen		
Are Vegetation, Soil, or Hy				plain any answers in R		
SUMMARY OF FINDINGS – Atta	ch site map showing	g sampling p	oint locati	ions, transects, ir	nportant featu	res, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Area located in a powerline easement rig	Yes X No Yes X No Yes No X		mpled Area Wetland?	Yes	No <u>X</u>	
L HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indicators	(minimum of two	required)
Primary Indicators (minimum of one is re	equired; check all that apply	y)		Surface Soil Cra		
Surface Water (A1)	Aquatic Fauna (B	13)			ted Concave Surfa	ce (B8)
High Water Table (A2)	Marl Deposits (B1	15) <b>(LRR U)</b>		Drainage Pattern	is (B10)	
Saturation (A3)	Hydrogen Sulfide	Odor (C1)		Moss Trim Lines	(B16)	
Water Marks (B1)	Oxidized Rhizosp	heres on Living F	Roots (C3)	Dry-Season Wat	er Table (C2)	
Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows				s (C8)		
			e on Aerial Imager	y (C9)		
Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Pos				ition (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) <b>(LRR T,U)</b>	
Field Observations:						
Surface Water Present? Yes	No X Depth (in	iches):				
Water Table Present? Yes	No X Depth (in					
Saturation Present? Yes	No X Depth (in	iches):	Wetland	Hydrology Present?	Yes	No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

No X Depth (inches):

Remarks:

(includes capillary fringe)

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

Sampling Point: JA\_W\_004B\_UP

Tree Stratum (Distaire) 20 radius	Absolute	Dominant	Indicator	Deminence Test werkeheet
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> ) 1. <i>Pinus taeda</i>	<u>% Cover</u> 40	Species?	Status FAC	Dominance Test worksheet:
2.		Yes	FAC	Number of Dominant SpeciesThat Are OBL, FACW, or FAC:3(A)
1				Total Number of Dominant Species Across All Strata: 3 (B)
				、
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
	40	=Total Cover		Prevalence Index worksheet:
50% of total cover: 20		of total cover:	8	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
3.				FACU species x 4 =
4.				UPL species x 5 =
5.				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
		=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	20%	of total cover:		1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: 15' radius )				X 2 - Dominance Test is >50%
1. Morella cerifera	10	Yes	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4.				
5.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6.				present, unless disturbed or problematic.
	10	=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:5	20%	of total cover:	2	<b>Tree</b> – Woody plants, excluding woody vines,
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				approximately 20 ft (6 m) or more in height and 3 in.
1. Microstegium vimineum	35	Yes	FAC	(7.6 cm) or larger in diameter at breast height (DBH).
2. Arundinaria gigantea	10	No	FACW	Sapling – Woody plants, excluding woody vines,
3. <i>Rubus argutus</i>	5	No	FAC	approximately 20 ft (6 m) or more in height and less
4. Quercus falcata	2	No	FACU	than 3 in. (7.6 cm) DBH.
5				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 ft (1 m) in height.
10				
11				Woody Vine – All woody vines, regardless of height.
	52	=Total Cover		
50% of total cover:2	6 20%	of total cover:	11	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4.				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present?         Yes X         No
Remarks: (If observed, list morphological adaptation	ns below.)			

Depth	Matrix		Redo	x Featu	es			absence of in	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture	Remarks
0-1	10YR 4/1	100					Loamy	Clayey	Silty Clay Loam
1-20	10YR 6/1	85	7.5YR 5/8	15	С	PL	Loamy	Clayey	Clay
		·				·			
	oncentration, D=Depl					Grains.			Pore Lining, M=Matrix. Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Thin Dark S	urface (S	59) <b>(LRR</b>	S, T, U)			(A9) <b>(LRR O)</b>
Histic E	pipedon (A2)						2 cm Muck	(A10) (LRR S)	
Black H	istic (A3)		(MLRA 153B, 153D) Coast Prairie Redox (A16)					ie Redox (A16)	
	en Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR O) (outside ML					MLRA 150A)	
Stratifie	d Layers (A5)		Loamy Gleyed Matrix (F2)					Reduced V	ertic (F18)
	Bodies (A6) (LRR, P	. T. U)	X Depleted Matrix (F3)				-	(outside	MLRA 150A, 150B)
	ucky Mineral (A7) (LR		·				Piedmont Floodplain Soils (F19) (LRR		
	resence (A8) (LRR U)		Depleted Dark Surface (F7)				Anomalous Bright Floodplain Soils (F20		
	uck (A9) (LRR P, T)		Redox Depre		( )		(MLRA 153B)		
	d Below Dark Surface	(A11)	Marl (F10) (I		()				t Material (F21)
	ark Surface (A12)	()	Depleted Oc		1) (MI RA	151)	Very Shallow Dark Surface (F22)		
	rairie Redox (A16) ( <b>M</b>	I RA 1504		``	<i>,</i> , ,	,	) р т) –		MLRA 138, 152A in FL, 154)
	/lucky Mineral (S1) <b>(L</b>		Umbric Surfa		`	, <b>、</b>	,,,,,,		nds Low Chroma Matrix (TS7)
	Gleved Matrix (S4)		Delta Ochric	`	, <b>、</b>	,	-		53B, 153D)
	Redox (S5)		Reduced Ve	· / ·			(0B)		ain in Remarks)
	I Matrix (S6)		Piedmont Fl		, ,		· -		
	rface (S7) <b>(LRR P, S</b>	<b>T</b> II)	Anomalous	•	`	<i>,</i> , ,	,		
	le Below Surface (S8			0	•	`	0)	<sup>3</sup> Indicators	of hydrophytic vegetation and
		)	(MLRA 149A, 153C, 153D) Very Shallow Dark Surface (F22)						
	S, T, U)		(MLRA 13						hydrology must be present, isturbed or problematic.
Restrictive	Layer (if observed):		(	, ivin		, 			
Type:									
Depth (i	nches):						Hydric	Soil Present?	Yes X No
. 、							-		

### Feature ID: JA-W-004B-UP Date: 04/20/2022



Photograph Number \_\_\_\_\_

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number 4

Photograph Direction West

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: CVOW Commercial	City/County: Chesapeake/C	hesapeake	Sampling Date:	4/6/2022
Applicant/Owner: Dominion		State: VA	Sampling Point: JA	_W_005_PFO
Investigator(s): E. Foster, Tristan Conard	_ Section, Township, Range: _			
Landform (hillslope, terrace, etc.): Backswamp	Local relief (concave, conve	(, none): <u>Concave</u>	Slope	(%): <u>0-5</u>
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat: 36.72	4756 Long:	-76.175019	Datur	n: <u>WGS84</u>
Soil Map Unit Name: Psamments, 0 to 10 percent slopes		NWI classifica	ation: _ <sup>N/A</sup>	
Are climatic / hydrologic conditions on the site typical for this time of y	rear? Yes <u>x</u> No	(If no, explain in Re	emarks.)	
Are Vegetation, Soil, or Hydrology significant	y disturbed? Are "Norm	al Circumstances" pr	resent? Yes <u>x</u>	No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed,	explain any answer	s 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 <u>×</u> No Yes <u>×</u> No Yes <u>×</u> No	Is the Sampled Area within a Wetland?	Yes <u>×</u> No			
Remarks:			Observed Classifications:			
PFO abutting Intracoastal waterway	2, renamed to JA_W_005	Cowardin: PFO				

#### 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 R	oots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (	C6) Saturation Visible on Aerial Imagery (C9)
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         Nox         Depth (inches):	
Water Table Present?         Yesx No Depth (inches): 12	
Saturation Present? Yes <u>×</u> No Depth (inches): <u>9</u>	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	ione\ if available:
besche Recorded Data (stream gauge, monitoring weil, aenai photos, previous inspect	
Deventer	
Remarks:	
Low point in topography.	
	·

Sampling Point: JA\_W\_005

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft</u> )	% Cover	Species?	Status	Number of Dominant Species
1. Acer rubrum, Red Maple	35	Yes	FAC	That Are OBL, FACW, or FAC: (A)
2. Liquidambar styraciflua, Sweet-Gum	30	Yes	FAC	Total Number of Dominant
3. Pinus taeda, Loblolly Pine	15	No	FAC	Species Across All Strata:4 (B)
4. Taxodium distichum, Southern Bald-Cypress	5	No	OBL	Demont of Deminant Operator
5				Percent of Dominant Species That Are OBL, FACW, or FAC:100.0% (A/B)
6				
		= Total Cov	er	Prevalence Index worksheet:
50% of total cover: _ 42.5	20% of	total cover:	17	Total % Cover of:Multiply by:
Sapling Stratum (Plot size: 30 ft)				OBL species5 x 1 =5
1. Acer rubrum, Red Maple	20	Voc	FAC	FACW species x 2 =0
				FAC species <u>125</u> x 3 = <u>375</u>
2				FACU species x 4 =
3				UPL species x 5 =0
4				Column Totals: <u>130</u> (A) <u>380</u> (B)
5				
6				Prevalence Index = B/A =2.92
	20	= Total Cov	er	Hydrophytic Vegetation Indicators:
50% of total cover: 10	20% of	total cover:	4	1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: <u>30 ft</u> )				X 2 - Dominance Test is >50%
1				$\frac{x}{3}$ - Prevalence Index is $\leq 3.0^{1}$
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
				1
4				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				
6				Definitions of Five Vegetation Strata:
		= Total Cov		Tree - Woody plants, excluding woody vines,
50% of total cover: 0	20% of	total cover:	0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )				(7.6 cm) or larger in diameter at breast height (DBH).
1				Sapling – Woody plants, excluding woody vines,
2				approximately 20 ft (6 m) or more in height and less
3				than 3 in. (7.6 cm) DBH.
4				Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6				Herb – All herbaceous (non-woody) plants, including
7.				herbaceous vines, regardless of size, and woody
				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Woody vine - All woody vines, regardless of height.
10				
11				
		= Total Cov		
50% of total cover: <u>0</u>	20% of	total cover:	0	
Woody Vine Stratum (Plot size: <u>30 ft</u> )				
1. Smilax rotundifolia, Horsebrier	25	Yes	FAC	
2				
3				
4				
5				Hudronbutio
		= Total Cov	er	Hydrophytic Vegetation
50% of total cover: _ 12.5				Present? Yes <u>×</u> No
Remarks: (If observed, list morphological adaptations belo				
Remains. (II observed, list morphological adaptations beid	ww.).			
L				

#### SOIL

Depth	Matrix		Redo	x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc <sup>2</sup>	Texture	Remarks
0-6	10yr 2/1	100%					Sandy loam	fine sandy loam
6-12	10yr 5/2	100%					Sand	fine sand - fill material?
12-18	10yr 2/1	100%					Sandy loam	100% masked sand grains
18-22	10yr 4/2	100%					clayey sand	
	Concentration, D=Dep Indicators: (Applic					ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils <sup>3</sup> :
Black H Hydrog Stratifie 5 cm M Muck F 1 cm M × Deplete Coast F Sandy Sandy Sandy Strippe Dark S	Epipedon (A2) distic (A3) en Sulfide (A4) ed Layers (A5) c Bodies (A6) (LRR P lucky Mineral (A7) (Ll Presence (A8) (LRR L luck (A9) (LRR P, T) ed Below Dark Surface Dark Surface (A12) Prairie Redox (A16) (I Mucky Mineral (S1) (I Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR P, S	RR P, T, U) e (A11) VILRA 150A LRR O, S) S, T, U)	Delta Ochric Reduced Ver Piedmont Flo	rface (S9) y Mineral ( d Matrix (F trix (F3) Surface (F6 k Surface essions (F8 <b>RR U)</b> hric (F11) ( ese Masse ce (F13) (I (F17) (MLI tic (F18) (I wodplain So	(LRR S, F1) (LRR 2) (F7) ) MLRA 1! (F7) (F7) (F7) (F7) (F7) (F7) (F7) (F7)	T, U) O) LRR O, P, U) 0A, 150B) (MLRA 14	2 cm M Reduce Piedm Anoma (MLI Red P Very S Other T) <sup>3</sup> Indice web	Muck (A9) <b>(LRR O)</b> Muck (A10) <b>(LRR S)</b> ed Vertic (F18) <b>(outside MLRA 150A</b> nont Floodplain Soils (F19) <b>(LRR P, S,</b> alous Bright Loamy Soils (F20) <b>RA 153B)</b> Parent Material (TF2) Shallow Dark Surface (TF12) (Explain in Remarks) cators of hydrophytic vegetation and tland hydrology must be present, less disturbed or problematic.
Туре:	Layer (if observed)						Hydric Soil	l Present? Yes <u>×</u> No

Remarks:

Some fill material observed in top two layers from abutting access road, might explain the two organic layers.

Feature ID: JA\_W\_005 Date: 04/06/2022



Photograph Number <u>1</u>

Photograph Direction North

Comments:



Photograph Number <u>2</u> Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

WETLAND DETERMINATION	S. Army Corps of Engineers I DATA SHEET – Atlantic and C 2-07-24; the proponent agency is	•	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW	City/C	ounty: City of Chesapeake	Sampling Date: 4/12/2022
Applicant/Owner: Dominion Energy		State: VA	Sampling Point: JA_W_005,006
nvestigator(s): Justin Ahn	Section, To	ownship, Range: <u>N/A</u>	
andform (hillside, terrace, etc.): <u>Toe Sl</u>	opeLocal relief (c	oncave, convex, none): <u>None</u>	Slope (%):1
Subregion (LRR or MLRA): LRR T, MLRA	A 153B Lat: 36.7248612841667	Long: -76.1796732798333	Datum: NAD83
Soil Map Unit Name: Psamments, 0-10%	slopes	NWI classif	cation: None
Are climatic / hydrologic conditions on the	site typical for this time of year?	Yes X No (If no	o, explain in Remarks.)
Are Vegetation, Soil, or Hy	drology significantly disturbed?	Are "Normal Circumstances" prese	
Are Vegetation, Soil, or Hy		(If needed, explain any answers in	
SUMMARY OF FINDINGS – Atta			
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?		Sampled Area a Wetland? Yes	NoX
Remarks: Area located within a toeslope within a m	ixed hardwood forest, near the Intercoas	stal Waterway	
Area located within a toeslope within a m	ixed hardwood forest, near the Intercoas	stal Waterway	
Area located within a toeslope within a m		Secondary Indicato	rs (minimum of two required)
Area located within a toeslope within a m <b>IYDROLOGY</b> Wetland Hydrology Indicators: Primary Indicators (minimum of one is re	quired; check all that apply)	<u>Secondary Indicato</u> Surface Soil Cr	racks (B6)
Area located within a toeslope within a m <b>IYDROLOGY</b> Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1)	quired; check all that apply) Aquatic Fauna (B13)	<u>Secondary Indicato</u> Surface Soil Cr Sparsely Vege	acks (B6) ated Concave Surface (B8)
Area located within a toeslope within a m <b>IYDROLOGY</b> Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2)	quired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b>	<u>Secondary Indicato</u> Surface Soil Cr Sparsely Vege Drainage Patte	acks (B6) ated Concave Surface (B8) rns (B10)
Area located within a toeslope within a m  IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is re  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	<u>quired; check all that apply)</u> Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1)	Secondary Indicato Surface Soil Cr Sparsely Veger Drainage Patte Moss Trim Line	acks (B6) ated Concave Surface (B8) rns (B10) es (B16)
Area located within a toeslope within a m  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2)	quired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b>	Secondary Indicato Surface Soil Cr Sparsely Vege Drainage Patte Moss Trim Line Ig Roots (C3) Dry-Season W	acks (B6) ated Concave Surface (B8) rns (B10) es (B16) ater Table (C2)
Area located within a toeslope within a m HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	<u>quired; check all that apply)</u> Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Livin	Secondary Indicato Surface Soil Cr Sparsely Veget Drainage Patte Moss Trim Line ag Roots (C3) Crayfish Burrow	acks (B6) ated Concave Surface (B8) rns (B10) es (B16) ater Table (C2)
Area located within a toeslope within a m <b>IYDROLOGY</b> Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	quired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7)	Soils (C6)	acks (B6) tated Concave Surface (B8) rns (B10) es (B16) ater Table (C2) vs (C8) ole on Aerial Imagery (C9) osition (D2)
Area located within a toeslope within a m Area located within a toeslope within a m Algal Mat or Crust (B4) Iron Deposits (B5)	<u>quired; check all that apply)</u> Aquatic Fauna (B13)Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1)Oxidized Rhizospheres on LivinPresence of Reduced Iron (C4)Recent Iron Reduction in TilledThin Muck Surface (C7)Other (Explain in Remarks)	Soils (C6) Secondary Indicato Surface Soil Cr Sparsely Veget Drainage Patte Moss Trim Line Crayfish Burrov Saturation Visil Geomorphic Po Shallow Aquita	acks (B6) tated Concave Surface (B8) rns (B10) tes (B16) ater Table (C2) vs (C8) ble on Aerial Imagery (C9) bsition (D2) rd (D3)
Area located within a toeslope within a m Area located within a toeslope within a	<u>quired; check all that apply)</u> Aquatic Fauna (B13)Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1)Oxidized Rhizospheres on LivinPresence of Reduced Iron (C4)Recent Iron Reduction in TilledThin Muck Surface (C7)Other (Explain in Remarks)	Soils (C6) Soils (C6) Secondary Indicato Surface Soil Cr Sparsely Veget Drainage Patte Moss Trim Line Crayfish Burrov Saturation Visil Geomorphic Po Shallow Aquita FAC-Neutral To	acks (B6) tated Concave Surface (B8) rns (B10) es (B16) ater Table (C2) vs (C8) ble on Aerial Imagery (C9) bsition (D2) rd (D3) est (D5)
Area located within a toeslope within a m Area located within a toeslope within a toeslope within a m Area located within a toeslope w	<u>quired; check all that apply)</u> Aquatic Fauna (B13)Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1)Oxidized Rhizospheres on LivinPresence of Reduced Iron (C4)Recent Iron Reduction in TilledThin Muck Surface (C7)Other (Explain in Remarks)	Soils (C6) Soils (C6) Secondary Indicato Surface Soil Cr Sparsely Veget Drainage Patte Moss Trim Line Crayfish Burrov Saturation Visil Geomorphic Po Shallow Aquita FAC-Neutral To	acks (B6) tated Concave Surface (B8) rns (B10) tes (B16) ater Table (C2) vs (C8) ble on Aerial Imagery (C9) bsition (D2) rd (D3)
Area located within a toeslope within a m IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations:	quired; check all that apply)        Aquatic Fauna (B13)        Mari Deposits (B15) (LRR U)        Hydrogen Sulfide Odor (C1)        Oxidized Rhizospheres on Livin        Presence of Reduced Iron (C4)        Recent Iron Reduction in Tilled        Other (Explain in Remarks)         (B7)	Soils (C6) Soils (C6) Secondary Indicato Surface Soil Cr Sparsely Veget Drainage Patte Moss Trim Line Crayfish Burrov Saturation Visil Geomorphic Po Shallow Aquita FAC-Neutral To	acks (B6) tated Concave Surface (B8) rns (B10) es (B16) ater Table (C2) vs (C8) ble on Aerial Imagery (C9) bsition (D2) rd (D3) est (D5)
Area located within a toeslope within a m <b>IYDROLOGY</b> Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes	quired; check all that apply)        Aquatic Fauna (B13)        Marl Deposits (B15) (LRR U)        Hydrogen Sulfide Odor (C1)        Oxidized Rhizospheres on Livin        Presence of Reduced Iron (C4)        Recent Iron Reduction in Tilled        Other (Explain in Remarks)         (B7)         No       X         Depth (inches):	Soils (C6) Soils (C6) Secondary Indicato Surface Soil Cr Sparsely Veget Drainage Patte Moss Trim Line Crayfish Burrov Saturation Visil Geomorphic Po Shallow Aquita FAC-Neutral To	acks (B6) tated Concave Surface (B8) rns (B10) es (B16) ater Table (C2) vs (C8) ble on Aerial Imagery (C9) bsition (D2) rd (D3) est (D5)
Area located within a toeslope within a m <b>IYDROLOGY</b> Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations:	quired; check all that apply)        Aquatic Fauna (B13)        Marl Deposits (B15) (LRR U)        Hydrogen Sulfide Odor (C1)        Oxidized Rhizospheres on Livin        Presence of Reduced Iron (C4)        Recent Iron Reduction in Tilled        Other (Explain in Remarks)         (B7)         No       X         Depth (inches):	Soils (C6) Soils (C6) Secondary Indicato Surface Soil Cr Sparsely Veget Drainage Patte Moss Trim Line Crayfish Burrov Saturation Visil Geomorphic Po Shallow Aquita FAC-Neutral To	racks (B6) tated Concave Surface (B8) rns (B10) es (B16) ater Table (C2) vs (C8) ole on Aerial Imagery (C9) osition (D2) rd (D3) est (D5) ess (D8) <b>(LRR T,U)</b>

Sampling Point: \_JA\_W\_005,006\_UP

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: 30' radius )	% Cover	Species?	Status	Dominance Test worksheet:
1. Liriodendron tulipifera	35	Yes	FACU	Number of Dominant Species
2. Quercus alba	30	Yes	FACU	That Are OBL, FACW, or FAC: 1 (A)
3.				
4.				Total Number of DominantSpecies Across All Strata:5(B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 20.0% (A/B)
	65	=Total Cover		Prevalence Index worksheet:
	3 20%	of total cover:	13	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species 0 x 1 = 0
1				FACW species <u>5</u> x 2 = <u>10</u>
2				FAC species 20 x 3 = 60
3.				FACU species 105 x 4 = 420
4.				UPL species 0 x 5 = 0
5.				Column Totals: 130 (A) 490 (B)
6.				Prevalence Index = $B/A = 3.77$
		=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	20%	of total cover:		1 - Rapid Test for Hydrophytic Vegetation
	20%			
Shrub Stratum (Plot size: 15' radius )	_			2 - Dominance Test is >50%
1. Quercus alba	5	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6.				present, unless disturbed or problematic.
	5	=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	3 20%	of total cover:	1	<b>Tree</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5' radius )				approximately 20 ft (6 m) or more in height and 3 in.
1. Lonicera japonica	25	Yes	FACU	(7.6 cm) or larger in diameter at breast height (DBH).
2. Toxicodendron radicans	15	Yes	FAC	
				<b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
3. Parthenocissus quinquefolia		No	FACU	than 3 in. (7.6 cm) DBH.
4. Vitis rotundifolia	5	No	FAC	
5. Arundinaria gigantea	5	No	FACW	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.
11.				Woody Vine – All woody vines, regardless of height.
	60	=Total Cover		
50% of total cover: 3		of total cover:	12	
	2070		12	
Woody Vine Stratum (Plot size:)				
1.				
2				
3				
4				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes No X
Remarks: (If observed, list morphological adaptation	ns below )			·

Depth	Matrix		Redo	x Featu	res					
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-6	10YR 4/3	100					Loamy/Clayey	Loam		
6-20	10YR 5/1	90	7.5YR 5/8	10	С	PL	Loamy/Clayey	Clay		
						·				
	oncentration, D=Depl					Grains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils <sup>3</sup> :		
Histosol			Thin Dark S			S, T, U)		/luck (A9) (LRR O)		
	pipedon (A2)		Barrier Islan	`	<i>,</i> , ,			/luck (A10) <b>(LRR S)</b>		
	istic (A3)		(MLRA 15					Prairie Redox (A16)		
	en Sulfide (A4)		Loamy Mucl			RR O)		side MLRA 150A)		
_ ` `	d Layers (A5)		Loamy Gley		• • •		•	d Vertic (F18) ide MLRA 150A, 150B)		
	Bodies (A6) (LRR, P	TIN	X Depleted Ma		` '					
	ucky Mineral (A7) (LR		Redox Dark					ont Floodplain Soils (F19) (LRR P, T		
					· · /					
	resence (A8) (LRR U)	)	Depleted Da		( )			alous Bright Floodplain Soils (F20)		
	uck (A9) <b>(LRR P, T)</b>	(	Redox Depr		(го)		•	RA 153B)		
	d Below Dark Surface	e (ATT)	Marl (F10) (					arent Material (F21)		
	ark Surface (A12)		Depleted Oc	`	<i>,</i> , ,	,		hallow Dark Surface (F22)		
	rairie Redox (A16) ( <b>N</b>	,			`	, <b>、</b>		side MLRA 138, 152A in FL, 154)		
	/lucky Mineral (S1) <b>(L</b>	.RR 0, S)	Umbric Surf	`	, <b>.</b>		Barrier Islands Low Chroma Matrix (TS7)			
	Gleyed Matrix (S4)		Delta Ochric					RA 153B, 153D)		
	Redox (S5)		Reduced Ve		<i>,</i> .		-	(Explain in Remarks)		
	l Matrix (S6)		Piedmont Fl	•	`	, <b>、</b>	,			
	rface (S7) (LRR P, S		Anomalous	-						
Polyvalu	Polyvalue Below Surface (S8) (MLRA 149A, 153C, 153D)						<sup>3</sup> Indicators of hydrophytic vegetation and			
(LRR	S, T, U)		Very Shallov (MLRA 13			,		and hydrology must be present, ss disturbed or problematic.		
Restrictive	Layer (if observed):									
Type:										
Depth (i	nches):						Hydric Soil Pres	ent? Yes <u>X</u> No		
Remarks:										

#### Feature ID: JA\_W\_005,006\_UPDate: 04/12/2022



Photograph Number \_\_\_\_

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction South

Comments:

Photograph Number 3

Photograph Direction

Comments:

Photograph Number 4

Photograph Direction

U.S. Army Corps WETLAND DETERMINATION DATA SHEET See ERDC/EL TR-07-24; the pro	- Atlantic and Gulf Coastal Plain Region	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW	City/County: City of Virginia Beach	Sampling Date: 4/21/2022
Applicant/Owner: Dominion Energy	State: VA	Sampling Point: JA_W_005B
Investigator(s): Justin Ahn	Section, Township, Range: <u>N/A</u>	
Landform (hillside, terrace, etc.): Depression	Local relief (concave, convex, none): Concave	Slope (%): 0
Subregion (LRR or MLRA): LRR T, MLRA 153B Lat: 36.7	86254 Long: -76.022425	Datum: NAD83
Soil Map Unit Name: <u>Acredale silt loam</u>	NWI classific	ation: None
Are climatic / hydrologic conditions on the site typical for this		
Are Vegetation, Soil, or Hydrologysigni	ficantly disturbed? Are "Normal Circumstances" preser	nt? Yes X No
Are Vegetation, Soil, or Hydrologynatu	rally problematic? (If needed, explain any answers in I	Remarks.)
SUMMARY OF FINDINGS – Attach site map sh		
Hydric Soil Present? Yes X No	Is the Sampled Area within a Wetland? Yes X	No
Remarks: Area located in a closed depression within a mixed hardwoo	d forest. Wetland identified as a PEM wetland.	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicator	s (minimum of two required)

		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of on	e is required; check all that apply)	Surface Soil Cracks (B6)			
X Surface Water (A1)	Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Marl Deposits (B15) (LRR U)	X Drainage Patterns (B10)			
Saturation (A3)	Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)			
Water Marks (B1)	X Oxidized Rhizospheres on Living Roots (C	C3) Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)			
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)			
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 Im	lagery (B7)	X FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)		Sphagnum Moss (D8) (LRR T,U)			
Field Observations:					
Surface Water Present? Yes	X No Depth (inches): 2				
Water Table Present? Yes	No X Depth (inches):				
Saturation Present? Yes	No X Depth (inches): We	tland Hydrology Present? Yes X No			
(includes capillary fringe)					
Describe Recorded Data (stream of	gauge, monitoring well, aerial photos, previous inspection				
	auge, monitoring well, aenai photos, previous inspection	s), if available:			
	Jauge, monitoring weil, aenai photos, previous inspection	s), if available:			
	auge, monitoring well, aenai photos, previous inspection	s), it available:			
Remarks:		s), if available:			
		s), it available:			
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	auge, montoning well, aenai photos, previous inspection	s), it availadie:			

Sampling Point: JA\_W\_005B

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	% Cover	Species?	Status	Dominance Test worksheet:
1. Salix nigra	25	Yes	OBL	Number of Dominant Species
2				That Are OBL, FACW, or FAC: (A)
3.				Total Number of Dominant
4				Species Across All Strata: (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 100.0% (A/B)
	25	=Total Cover		Prevalence Index worksheet:
50% of total cover: 1	3 20%	of total cover:	5	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30' radius )				OBL species x 1 =
1. Acer rubrum	30	Yes	FAC	FACW species x 2 =
2. Liquidambar styraciflua	45	Yes	FAC	FAC species x 3 =
3. Pinus taeda	10	No	FAC	FACU species x 4 =
4.				UPL species x 5 =
5.				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
0	55	=Total Cover		Hydrophytic Vegetation Indicators:
E00/ of total action 2			11	
50% of total cover: 2	<u> </u>	of total cover:	11	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				X 2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6.				present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:		=Total Cover of total cover:		Definitions of Five Vegetation Strata: Tree – Woody plants, excluding woody vines,
50% of total cover: <u>Herb Stratum</u> (Plot size:5' radius)				<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
			FAC	<b>Tree</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5' radius )	20%	of total cover:		<b>Tree</b> – 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).
Herb Stratum (Plot size: <u>5' radius</u> ) 1. <i>Microstegium vimineum</i>	20% 70	of total cover: Yes	FAC	<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum       (Plot size: 5' radius )         1.       Microstegium vimineum         2.       Sagittaria latifolia         3.       Carex lurida	20% 70 10	of total cover: Yes No	FAC OBL OBL	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines,</li> </ul>
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Herb Stratum       (Plot size:5' radius)         1.       Microstegium vimineum         2.       Sagittaria latifolia         3.       Carex lurida         4.       Juncus effusus         5.	20%	of total cover: Yes No No No Total Cover	FAC OBL OBL OBL	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> </ul>
Herb Stratum       (Plot size:5' radius)         1.       Microstegium vimineum         2.       Sagittaria latifolia         3.       Carex lurida         4.       Juncus effusus         5.	20%	of total cover: Yes No No No Total Cover of total cover:	FAC OBL OBL OBL	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> </ul>
Herb Stratum       (Plot size:5' radius)         1.       Microstegium vimineum         2.       Sagittaria latifolia         3.       Carex lurida         4.       Juncus effusus         5.	20%	of total cover: Yes No No No Total Cover of total cover: Total Cover =Total Cover	FAC OBL OBL OBL	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> </ul>
Herb Stratum       (Plot size:5' radius)         1.       Microstegium vimineum         2.       Sagittaria latifolia         3.       Carex lurida         4.       Juncus effusus         5.	20%	of total cover: Yes No No No Total Cover of total cover:	FAC OBL OBL OBL	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> </ul>

Profile Desc	cription: (Describe	the dep	th needed to doc	ument ti	ne indica	itor or co	onfirm the ab	sence of Ind	icators.)	
Depth	Matrix			x Featur	4					
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc <sup>2</sup>	Texture	·	Remarks	
0-1	10YR 3/2	100					Loamy/Cla	yey	Silty Clay Loam	
1-20	10YR 4/1	90	7.5YR 5/8	10	C	PL	Loamy/Cla	уеу	Silty Clay	
		·				·				
Type: C=C	oncentration, D=Depl	etion, RM=	-Reduced Matrix, I	MS=Masl	ked Sand	I Grains.			ore Lining, M=Matrix.	
lydric Soil	Indicators: (Applica	ble to all	RRs, unless oth	erwise n	oted.)		Indi	cators for Pr	oblematic Hydric Soils <sup>3</sup> :	
Histosol			Thin Dark S	`	<i>,</i> , ,	,		1 cm Muck (A	(LRR O) (LRR O)	
	pipedon (A2)		Barrier Islan			12)		2 cm Muck (A	, , , ,	
Black Hi	istic (A3)		(MLRA 1	53B, 153	D)			Coast Prairie	airie Redox (A16) <b>le MLRA 150A)</b>	
Hydroge	en Sulfide (A4)		Loamy Muc	ky Minera	al (F1) <b>(L</b>	RR O)		(outside M		
Stratified	d Layers (A5)		Loamy Gley	ed Matrix	x (F2)			Reduced Ver	tic (F18)	
Organic	Bodies (A6) (LRR, P	, T, U)	X Depleted Ma	atrix (F3)				(outside M	LRA 150A, 150B)	
5 cm Mu	ucky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	Surface	(F6)			Piedmont Flo	odplain Soils (F19) <b>(LRR P, T</b>	
Muck Pr	resence (A8) (LRR U)		Depleted Da	ark Surfa	ce (F7)			Anomalous B	right Floodplain Soils (F20)	
 1 cm Mu	uck (A9) <b>(LRR P, T)</b>		Redox Depr	essions	(F8)			(MLRA 153	В)	
X Depleted	d Below Dark Surface	(A11)	Marl (F10) (	LRR U)				Red Parent M	laterial (F21)	
Thick Da	ark Surface (A12)		Depleted Oc	chric (F1	1) (MLRA	A 151)		Very Shallow	Dark Surface (F22)	
Coast P	rairie Redox (A16) ( <b>M</b>	LRA 1504	) Iron-Mangai	nese Mas	sses (F12	2) (LRR C	D, P, T)	(outside M	LRA 138, 152A in FL, 154)	
Sandy M	/ucky Mineral (S1) <b>(L</b>	RR O, S)	Umbric Surf	ace (F13	3) (LRR F	, T, U)	,	Barrier Island	s Low Chroma Matrix (TS7)	
	Gleyed Matrix (S4)		Delta Ochrid					(MLRA 153		
	Redox (S5)		Reduced Ve				50B)	•	n in Remarks)	
	Matrix (S6)		Piedmont F						/	
	rface (S7) <b>(LRR P, S</b>	. T. U)	Anomalous	•	`	<i>,</i> , ,				
	ie Below Surface (S8		(MLRA 14	0	•	`	,	<sup>3</sup> Indicators of	hydrophytic vegetation and	
_ `	S, T, U)	,	Very Shallo	•					drology must be present,	
(=:::(	-, , -,		(MLRA 13					-	urbed or problematic.	
Restrictive	Layer (if observed):									
Type:										
Depth (ii	nches):						Hydric Soi	I Present?	Yes X No	
Remarks:										

Feature ID: JA-W-005B Date : 04/21/2022



Photograph Number \_\_\_\_

Photograph Direction North\_\_\_

Comments:



Photograph Number \_ 2 \_\_\_\_ Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

Project/Site:       CVOW       City/County: City of Chesapeake       Sampling Date:       4/12/202         Applicant/Owner:       Dominion Energy       State:       VA       Sampling Point:       Av one         Investigato(S):       Justin Ahn       Section, Township, Range:       NA       Image:       NA         Landform (hillside, terrace, etc.):       Toe Slope       Local relief (concave, convex, none):       None       Slope (%):       1         Subregion (LRA or MLRA):       LRR T. MLRA 153B       Lat:       36.7250923731667       Long:       -76.1805306435       Datum:       NAD83         Soil Map Unit Name:       Paamments, 0-10% slopes       NVMI classification:       None       (If no, explain in Remarks.)         Are degetation       , Soil       or Hydrology	WETLAND DETERMINATION	<b>.S. Army Corps of Engineers</b> N DATA SHEET – Atlantic and Gulf C R-07-24; the proponent agency is CEC	- 1	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Investigator(s): Justin Ahn       Section, Township, Range: N/A         Landform (hillside, terrace, etc.): Toe Slope       Local relief (concave, convex, none): None       Slope (%): 1         Subregion (LRR or MLRA): LRR T, MLRA 153B       Lat: 36.7250923731667       Long: -76.1805306435       Datum: NAD83         Soil Map Unit Name: Psamments, 0-10% slopes       NWi classification: None       No       (if no, explain in Remarks.)         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes X       No       (if no, explain in Remarks.)         Are Vegetation       , Soil       , or Hydrology       isinificantly disturbed?       Are 'Mormal Circumstances' present?       Yes X       No         Hydrophytic Vegetation Present?       Yes X       No       Is the Sampled Area within a Wetland?       Yes X       No         Hydrophytic Vegetation Present?       Yes X       No       Is the Sampled Area within a Wetland?       Yes X       No         Hydrophytic Vegetation Present?       Yes X       No       Is the Sampled Area within a toeslope within a mixed hardwood forest, near the Intercoastal Waterway       Surface Soil Cracks (B6)       Surface Soil Cracks (B6)       Surface Soil Cracks (B6)       Drainage Patterms (B10)       Surface Soil Cracks (B6)       Drainage Patterms (B10)       Surface Soil Cracks (B6)       Drainage Patterms (B10)       Surface Soil Cracks (B6)       Drai	Project/Site: CVOW	City/County:	City of Chesapeake	_Sampling Date: 4/12/2022
Landform (hilliside, terrace, etc.):       Toe Slope       Local relief (concave, convex, none):       None       Slope (%):       1         Subregion (LRR or MLRA):       LRR T, MLRA 153B       Lat:       36.7250923731667       Long: -76.1805306435       Datum:       NAD83         Soil Map Unit Name:       Psamments, 0-10% slopes       NWI classification:       None       None         Are dimatic / hydrologic conditions on the site typical for this time of year?       Yes X       No	Applicant/Owner: Dominion Energy		State: VA	Sampling Point: JA_W_006
Subregion (LRR or MLRA):       LRR T, MLRA 153B       Lat:       36.7250923731667       Long: -76.1805306435       Datum:       NAD83         Soil Map Unit Name:       Psamments, 0-10% slopes       NWI classification:       None         Are elimatic / hydrologic conditions on the site typical for this time of year?       Yes_X       No	nvestigator(s): Justin Ahn	Section, Townshi	p, Range: N/A	_
Soil Map Unit Name:       Psamments, 0-10% slopes       NWI classification:       None         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes X       No	_andform (hillside, terrace, etc.): Toe Sl	ope Local relief (concave	e, convex, none): None	Slope (%): 1
Soil Map Unit Name:       Psamments, 0-10% slopes       NWI classification:       None         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes X       No	Subregion (LRR or MLRA): LRR T, MLR	A 153B Lat: 36.7250923731667	Long: -76.1805306435	Datum: NAD83
Are climatic / hydrologic conditions on the site typical for this time of year?       Yes X       No	Soil Map Unit Name: Psamments, 0-10%	ó slopes	NWI classifica	ation: None
Are Vegetation		· · · ·		
Are Vegetation, Soil, or Hydrologynaturally 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 X No				
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etcl         Hydrophylic Vegetation Present?       Yes       X       No       within a Wetland?       Yes       X       No         Hydric Soil Present?       Yes       X       No       within a Wetland?       Yes       X       No         Remarks:       Area located within a toeslope within a mixed hardwood forest, near the Intercoastal Waterway       Surface Soil Cracks (B6)       Surface Soil Cracks (B6)         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)       Surface Soil Cracks (B6)         Surface Water (A1)       Aquatic Fauna (B13)       Drainage Patterns (B10)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sufface Odor (C1)       Moss Trim Lines (B16)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)       Dry-Season Water Table (C2)         Stallar dual to rClust (B4)       Thin Muck Surface (C7)       Geomorphic Positin (D2)       Shallow Aquitard (D3)         Inucation Visible on Aerial Imagery (B7)       X       K FAC-Neutral Test (D5)       Shallow Aquitard (D3)         Inucation Visible on Aerial Imagery (B7)       X       FAC-Neutral Test (D5)       Sphagnum Moss (D8) (LRR T,U)         Field Observations: <t< td=""><td></td><td></td><td></td><td></td></t<>				
Hydrophytic Vegetation Present?       Yes       X       No       Is the Sampled Area within a Wetland?       Yes       X       No				
Hydric Soil Present?       Yes       X       No       within a Wetland?       Yes       X       No         Wetland Hydrology Present?       Yes       X       No				
Wetland Hydrology Present?       Yes X       No         Remarks:       Area located within a toeslope within a mixed hardwood forest, near the Intercoastal Waterway         HYDROLOGY       Secondary Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (86)         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 on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Inundation Visible on Aerial Imagery (B7)       X       FAC-Neutral Test (D5)         X Water-Stained Leaves (B9)       Shangum Moss (D8) (LRR T,U)         Field Observations:       Shangum Moss (D8) (LRR T,U)         Surface Water Present?       Yes       No         Saturation Present?       Yes       No         Saturation Pres				Na
Remarks:         Area located within a toeslope within a mixed hardwood forest, near the Intercoastal Waterway         HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)       Aquatic Fauna (B13)         High Water Table (A2)       Marl Deposits (B15) (LRR U)         Saturation (A3)       Hydrogen Sulfide Odor (C1)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots (C3)         Drift Deposits (B2)       Presence of Reduced Iron (C4)         Sediment Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)         Iron Deposits (B5)       Other (Explain in Remarks)         Inundation Visible on Aerial Imagery (B7)       X FAC-Neutral Test (D5)         X Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T, U)         Field Observations:       Sphagnum Moss (D8) (LRR T, U)         Surface Water Present?       Yes       No         Surface Water Present?       Yes       No         X       Depth (inches):       Wetland Hydrology Present?       Yes X       No	-		tiand? Yes X	NO
Area located within a toeslope within a mixed hardwood forest, near the Intercoastal Waterway         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 on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         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)       X FAC-Neutral Test (D5)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       Surface Water Present? Yes       No X Depth (inches):       Sphagnum Moss (D8) (LRR T,U)         Water Table Present? Yes       No X Depth (inches):       Wetland Hydrology Presen				
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 on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Inon Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       X       FAC-Neutral Test (D5)         X Water Table Present?       Yes       No       Depth (inches):         Water Table Present?       Yes       No       Depth (inches):         Saturation Present?       Yes       No       X         Depth (inches):       Wetland Hydrology Present?       Yes       X	Area located within a toeslope within a m	ince hardwood forest, hear the interoodstar we	actively	
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 on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         K water-Stained Leaves (B9)       X       FAC-Neutral Test (D5)         Surface Water Present?       Yes       No       X         Water Table Present?       Yes       No       X         Water Table Present?       Yes       No       X         Saturation Present?       Yes       No       X         Depth (inches):       Wetland Hydrology Present?       Yes       X         No       X       Depth (inches):       Wetland Hydrology Present?       Yes       X		ince hardwood lorest, hear the intercoastar we		
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 on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         X Water-Stained Leaves (B9)       X       Pepth (inches):       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       X         Saturation Present?       Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       X	HYDROLOGY Wetland Hydrology Indicators:			(minimum of two required)
Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B16)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         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)       X       FAC-Neutral Test (D5)         X Water-Stained Leaves (B9)       No       X       Depth (inches):         Water Table Present?       Yes       No       X       Depth (inches):         Saturation Present?       Yes       No       X       Depth (inches):         Saturation Present?       Yes       No       X       Depth (inches):	HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re	equired; check all that apply)	Secondary Indicators	cks (B6)
Water Marks (B1)       Oxidized Rhizospheres on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         X Water-Stained Leaves (B9)       X FAC-Neutral Test (D5)         Surface Water Present?       Yes       No         X bepth (inches):       No       X Depth (inches):         Water Table Present?       Yes       No       X Depth (inches):         Saturation Present?       Yes       No       X Depth (inches):	HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1)	equired; check all that apply) Aquatic Fauna (B13)	Secondary Indicators Surface Soil Crac Sparsely Vegeta	cks (B6) red Concave Surface (B8)
Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         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)       X FAC-Neutral Test (D5)         X Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       No       X Depth (inches):         Water Table Present?       Yes       No         X bepth (inches):       Wetland Hydrology Present?       Yes         Yes       No       X Depth (inches):       Wetland Hydrology Present?	HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2)	equired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b>	Secondary Indicators Surface Soil Crad Sparsely Vegeta Drainage Pattern	cks (B6) red Concave Surface (B8) s (B10)
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)       X FAC-Neutral Test (D5)         X Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       Surface Water Present?       Yes         Water Table Present?       Yes       No       X         Saturation Present?       Yes       No       X         Depth (inches):       Wetland Hydrology Present?       Yes       No	HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3)	equired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1)	Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines	cks (B6) ied Concave Surface (B8) s (B10) (B16)
Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       X       FAC-Neutral Test (D5)         X       Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       Surface Water Present?       Yes         No       X       Depth (inches):       Wetland Hydrology Present?         Yes       No       X       Depth (inches):       Yes         Saturation Present?       Yes       No       X       Depth (inches):	HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	equired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root	Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines ts (C3) Dry-Season Wat	cks (B6) eed Concave Surface (B8) s (B10) (B16) er Table (C2)
Inundation Visible on Aerial Imagery (B7)       X       FAC-Neutral Test (D5)         X       Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       Surface Water Present?       Yes       No       X       Depth (inches):         Water Table Present?       Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       X       No         Saturation Present?       Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       X       No	HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	equired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4)	Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines ts (C3) Crayfish Burrows	cks (B6) ted Concave Surface (B8) s (B10) (B16) er Table (C2) - (C8)
X       Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       Surface Water Present?       Yes       No       X       Depth (inches):       Ves       Ves <td>HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)</td> <td>equired; check all that apply) Aquatic Fauna (B13) Aquatic Fauna (B13) Arright (B15) (LRR U) Arright (B15) (LRR U) Arrig</td> <td>Secondary Indicators Surface Soil Crad Sparsely Vegeta Drainage Pattern Moss Trim Lines ts (C3) Dry-Season Wat Crayfish Burrows C6) Saturation Visible Geomorphic Pos</td> <td>cks (B6) ed Concave Surface (B8) s (B10) (B16) er Table (C2) (C8) e on Aerial Imagery (C9) ition (D2)</td>	HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	equired; check all that apply) Aquatic Fauna (B13) Aquatic Fauna (B13) Arright (B15) (LRR U) Arright (B15) (LRR U) Arrig	Secondary Indicators Surface Soil Crad Sparsely Vegeta Drainage Pattern Moss Trim Lines ts (C3) Dry-Season Wat Crayfish Burrows C6) Saturation Visible Geomorphic Pos	cks (B6) ed Concave Surface (B8) s (B10) (B16) er Table (C2) (C8) e on Aerial Imagery (C9) ition (D2)
Field Observations:         Surface Water Present?       Yes         No       X       Depth (inches):         Water Table Present?       Yes         No       X       Depth (inches):         Saturation Present?       Yes       No         X       Depth (inches):       Wetland Hydrology Present?         Yes       X       Depth (inches):	HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is regenerations)         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)	equired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils ( Thin Muck Surface (C7) Other (Explain in Remarks)	Secondary Indicators Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines ts (C3) Dry-Season Wat Crayfish Burrows C6) Saturation Visible Geomorphic Pos Shallow Aquitard	cks (B6) eed Concave Surface (B8) s (B10) (B16) er Table (C2) c (C8) e on Aerial Imagery (C9) ition (D2) (D3)
Surface Water Present?       Yes       No       X       Depth (inches):	HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is regent of the second	equired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils ( Thin Muck Surface (C7) Other (Explain in Remarks)	Secondary Indicators         Surface Soil Craw         Sparsely Vegetar         Drainage Pattern         Moss Trim Lines         ts (C3)         Crayfish Burrows         C6)         Saturation Visible         Geomorphic Pos         Shallow Aquitard         X	cks (B6) eed Concave Surface (B8) s (B10) (B16) er Table (C2) c (C8) e on Aerial Imagery (C9) ition (D2) (D3) t (D5)
Water Table Present?       Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       X       No         Saturation Present?       Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       X       No	HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is regenerations)         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial Imagery         X	equired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils ( Thin Muck Surface (C7) Other (Explain in Remarks)	Secondary Indicators         Surface Soil Craw         Sparsely Vegetar         Drainage Pattern         Moss Trim Lines         ts (C3)         Crayfish Burrows         C6)         Saturation Visible         Geomorphic Pos         Shallow Aquitard         X	cks (B6) eed Concave Surface (B8) s (B10) (B16) er Table (C2) c (C8) e on Aerial Imagery (C9) ition (D2) (D3) t (D5)
Saturation Present?         Yes         No         X         Depth (inches):         Wetland Hydrology Present?         Yes         X         No	HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is regoverned)         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial Imagery         X         Water-Stained Leaves (B9)	equired; check all that apply) Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils ( Thin Muck Surface (C7) Other (Explain in Remarks) (B7)	Secondary Indicators         Surface Soil Craw         Sparsely Vegetar         Drainage Pattern         Moss Trim Lines         ts (C3)         Crayfish Burrows         C6)         Saturation Visible         Geomorphic Pos         Shallow Aquitard         X	cks (B6) eed Concave Surface (B8) s (B10) (B16) er Table (C2) c (C8) e on Aerial Imagery (C9) ition (D2) (D3) t (D5)
	HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is regenerations)         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial Imagery         X         Water Present?         Yes	equired; check all that apply) Aquatic Fauna (B13) Aquatic Fauna (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils ( Thin Muck Surface (C7) Other (Explain in Remarks) (B7) No X Depth (inches):	Secondary Indicators         Surface Soil Craw         Sparsely Vegetar         Drainage Pattern         Moss Trim Lines         ts (C3)         Crayfish Burrows         C6)         Saturation Visible         Geomorphic Pos         Shallow Aquitard         X	cks (B6) eed Concave Surface (B8) s (B10) (B16) er Table (C2) c (C8) e on Aerial Imagery (C9) ition (D2) (D3) t (D5)
	HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is regovername)         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Inundation Visible on Aerial Imagery         X         Water-Stained Leaves (B9)	equired; check all that apply)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Living Root  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils ( Thin Muck Surface (C7) Other (Explain in Remarks) (B7)  No X Depth (inches):	Secondary Indicators         Surface Soil Craw         Sparsely Vegetar         Drainage Patterm         Moss Trim Lines         ts (C3)         Dry-Season Wat         Crayfish Burrows         C6)         Saturation Visible         Geomorphic Pos         Shallow Aquitard         X         FAC-Neutral Tes         Sphagnum Moss	cks (B6) ted Concave Surface (B8) s (B10) (B16) ter Table (C2) (C8) te on Aerial Imagery (C9) ition (D2) (D3) t (D5) (D8) <b>(LRR T,U)</b>

Remarks:

Sampling Point: JA\_W\_006

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30' radius )	% Cover	Species?	Status	Dominance Test worksheet:
1. Pinus taeda		Yes	FAC	Number of Dominant Species
2. Acer rubrum	30	Yes	FAC	That Are OBL, FACW, or FAC:5(A)
3. Liquidambar styraciflua	10	No	FAC	Total Number of Dominant
4.				Species Across All Strata: 5 (B)
5.				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
50% 64.44		=Total Cover	40	Prevalence Index worksheet:
	45 20%	of total cover:	18	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30' radius )	45	N	540	OBL species x 1 =
1. Liquidambar styraciflua	15	Yes	FAC	FACW species x2 =
2.				FAC species x3 =
3.				FACU species x4 =
4.				UPL species $x 5 =$
5.				Column Totals:(A)(B) Prevalence Index = B/A =
6	45	-Total Cavar		
50% - 54-64		=Total Cover	0	Hydrophytic Vegetation Indicators:
	8 20%	of total cover:	3	1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: <u>15' radius</u> )	10	Vee		X 2 - Dominance Test is >50% 3 - Prevalence Index is $\leq 3.0^{1}$
1. Liquidambar styraciflua	10	Yes	FAC	
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4.				
5.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6	10	=Total Cover		present, unless disturbed or problematic.
FOW of total action			2	Definitions of Five Vegetation Strata:
50% of total cover: Herb Stratum (Plot size: 5' radius )	5 20%	of total cover:	2	<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
1. Arundinaria gigantea	35	Yes	FACW	(7.6 cm) or larger in diameter at breast height (DBH).
2. Persea borbonia	5	<u>No</u>	FACW	
3. Smilax rotundifolia	2	No	FAC	<b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
		110	TAU	than 3 in. (7.6 cm) DBH.
5				Shrub - Woody Plants, excluding woody vines,
6.				approximately 3 to 20 ft (1 to 6 m) in height.
7				
7. 8.				Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
				plants, except woody vines, less than approximately 3
10				ft (1 m) in height.
				Woody Vine – All woody vines, regardless of height.
11	42	=Total Cover		······································
50% of total cover: 2		of total cover:	9	
	2070		9	
Woody Vine Stratum         (Plot size:)           1.        )				
2				
3.				
4 5				
5		=Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation Present? Yes X No
				Present?         Yes X         No
Remarks: (If observed, list morphological adaptation	nis below.)			

SOIL

	•						///////////////////////////////////////	absence of i		
Depth (inchos)	Matrix Color (moist)	%	Color (moist)	x Featur %	4	Loc <sup>2</sup>	Ter	rturo	Pomorko	
(inches)	Color (moist)			70	Туре'		Texture		Remarks	
0-4	10YR 3/3	100					Loamy/Clayey		Silty Loam	
4-14	10YR 5/1	90	7.5YR 5/8	10	C	PL_	Loamy	/Clayey	Clay	
14-20	10YR 5/1	90	7.5YR 5/8	10			Loamy	/Clayey	Sandy Loam	
						·				
71	oncentration, D=Depl					d Grains.			Pore Lining, M=Matrix.  Problematic Hydric Soils <sup>3</sup> :	
Histosol	Indicators: (Applica	Die to all	Thin Dark S			S T III			(A9) (LRR O)	
	pipedon (A2)		Barrier Islan	`	, <b>`</b>	,	-		(A10) <b>(LRR S)</b>	
Black Hi	,		(MLRA 1		``	12)	-		rie Redox (A16)	
	n Sulfide (A4)		Loamy Muc			RR ()	-		e MLRA 150A) Vertic (F18) e MLRA 150A, 150B)	
	d Layers (A5)		Loamy Gley	-						
	Bodies (A6) (LRR, P	TIN	X Depleted Ma		. ,		-			
_ `	icky Mineral (A7) (LR			, ,					Floodplain Soils (F19) <b>(LRR P, T</b>	
	esence (A8) (LRR U		Depleted Dark		· · /		-		Bright Floodplain Soils (F20)	
		)			( )		-	(MLRA 1	• • • • • •	
	ick (A9) <b>(LRR P, T)</b>	(111)	Redox Depr		(го)				,	
	d Below Dark Surface	e (ATT)	Marl (F10) (			4 = 4)	-		t Material (F21)	
	ark Surface (A12)		Depleted Oc	``	, <b>、</b>		, , , , , , , , , , , , , , , , , , ,		bw Dark Surface (F22)	
	rairie Redox (A16) (N		· <u> </u>		``	, <b>、</b>	O, P, T) (outside MLRA 138, 152A in FL, 154)			
	lucky Mineral (S1) <b>(L</b>	.RR 0, 5)	Umbric Surf	`	, <b>、</b>	,	-		nds Low Chroma Matrix (TS7)	
	Bleyed Matrix (S4)		Delta Ochrid						53B, 153D)	
	edox (S5)		Reduced Ve		, .		-	Other (Exp	lain in Remarks)	
	Matrix (S6)		Piedmont F	•	`	, <b>,</b>	,			
	rface (S7) <b>(LRR P, S</b>		Anomalous	-			0)	3		
	e Below Surface (S8	)	(MLRA 14						of hydrophytic vegetation and	
(LRR	S, T, U)		Very Shallov (MLRA 13		`	,			hydrology must be present, listurbed or problematic.	
Restrictive I	Layer (if observed):			-					· .	
Type:										
- Depth (ir	nches):						Hydric	Soil Present?	Yes X No	

Feature ID: JA\_W\_006 Date: 04/12/2022



Photograph Number 1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction South

Comments:

Photograph Number <u>3</u>

Photograph Direction

Comments:

Photograph Number 4

Photograph Direction

U.S. Army Corps of I WETLAND DETERMINATION DATA SHEET – At See ERDC/EL TR-07-24; the propone	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)					
Project/Site: CVOW	City/County: City of Chesapeake	Sampling Date: 4/12/2022				
Applicant/Owner: Dominion Energy	State: VA	Sampling Point: JA_W_007,JA_W_008				
Investigator(s): Justin Ahn	Section, Township, Range: <u>N/A</u>					
Landform (hillside, terrace, etc.): Depression	Local relief (concave, convex, none): <u>Concave</u>	Slope (%): 0				
Subregion (LRR or MLRA): LRR T, MLRA 153B Lat: 36.724270	7461667 Long: <u>-76.1858282526667</u>	Datum: NAD83				
Soil Map Unit Name: Psamments, 0-10% slopes	NWI classific	ation: PSS1E				
Are climatic / hydrologic conditions on the site typical for this time of year?       Yes X       No (If no, explain in Remarks.)         Are Vegetation, Soil, or Hydrology significantly disturbed?       Are "Normal Circumstances" present?       Yes X       No         Are Vegetation, Soil, or Hydrology naturally problematic?       (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing	ig sampling point locations, transects, i	nportant features, etc.				
Hydrophytic Vegetation Present?       Yes       X       No         Hydric Soil Present?       Yes       X       No         Wetland Hydrology Present?       Yes       X       No	Is the Sampled Area within a Wetland? Yes X	No				
Remarks: Area located within a emergent wetland, adjacent to JA-S-01. Area <b>HYDROLOGY</b>	a is classified as a PEM wetland					
Wetland Hydrology Indicators:	Secondary Indicators	(minimum of two required)				

Wetland Hydrology Indica	ators:				Secondary Indicators (m	inimum of two required)	
Primary Indicators (minimu	<u>m of one is requ</u>	Surface Soil Cracks (B6)					
Surface Water (A1)	ter (A1) Aquatic Fauna (B13)				Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)		Marl D	eposits (B15) <b>(LRR U)</b>		Drainage Patterns (	B10)	
Saturation (A3)		Hydrog	gen Sulfide Odor (C1)		Moss Trim Lines (B	16)	
Water Marks (B1)		Oxidize	ed Rhizospheres on Living F	Roots (C3)	Dry-Season Water 1	Table (C2)	
Sediment Deposits (B2	2)	Preser	nce of Reduced Iron (C4)		Crayfish Burrows (C	8)	
Drift Deposits (B3)		Recen	t Iron Reduction in Tilled Sc	oils (C6)	Saturation Visible or	n Aerial Imagery (C9)	
Algal Mat or Crust (B4)	)	Thin M	luck Surface (C7)		Geomorphic Position	n (D2)	
Iron Deposits (B5)		Other (	(Explain in Remarks)		Shallow Aquitard (D	3)	
Inundation Visible on A	erial Imagery (E	37)			X FAC-Neutral Test (D	05)	
Water-Stained Leaves	(B9)				Sphagnum Moss (D	8) <b>(LRR T,U)</b>	
Field Observations:							
Surface Water Present?	Yes	No X	Depth (inches):				
Water Table Present?	Yes	No X	Depth (inches):				
Saturation Present?	Yes	No X	Depth (inches):	Wetland	I Hydrology Present?	Yes X No	
(includes capillary fringe)							
Describe Recorded Data (s	tream gauge, m	nonitoring well	l, aerial photos, previous ins	spections), if	available:		
Remarks:							

Sampling Point: JA\_W\_007, JA\_W\_008

	Absolute Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	% Cover Species?	Status	Dominance Test worksheet:
1. Pinus taeda	40 Yes	FAC	Number of Dominant Species
2. Acer rubrum	30 Yes	FAC	That Are OBL, FACW, or FAC: 3 (A)
3.			Total Number of Dominant
4.			Species Across All Strata: 3 (B)
			、
			Percent of Dominant Species
6			That Are OBL, FACW, or FAC: 100.0% (A/B)
	70 =Total Cover		Prevalence Index worksheet:
	5 20% of total cover:	14	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)			OBL species x 1 =
1			FACW species x 2 =
2.			FAC species x 3 =
3.			FACU species x 4 =
4.			UPL species x 5 =
5			Column Totals: (A) (B)
6.			Prevalence Index = B/A =
· · · · · · · · · · · · · · · · · · ·	-Total Cover		
	=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	20% of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)			X 2 - Dominance Test is >50%
1			3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3			
4.			
5.			
6.			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20% of total cover:		<b>Tree</b> – Woody plants, excluding woody vines,
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )			approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1. Phragmites australis	80 Yes	FACW	
2. Carex lurida	10 No	OBL	Sapling – Woody plants, excluding woody vines,
3. Lonicera japonica	10 No	FACU	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,
6.			approximately 3 to 20 ft (1 to 6 m) in height.
7			
			<b>Herb</b> – All herbaceous (non-woody) plants, including
8.			herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3
9			ft (1 m) in height.
10			
11			<b>Woody Vine</b> – All woody vines, regardless of height.
	100 =Total Cover		
50% of total cover: 5	0 20% of total cover:	20	
Woody Vine Stratum (Plot size: )			
, 1.			
2			
2.			
3			
4			
5			Hydrophytic
	=Total Cover		Vegetation
50% of total cover:	20% of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation	ns below.)		·
	,		

Depth	Matrix		Read	x Featu	res					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture	Re	emarks
0-4	10YR 2/1	100					Loamy	/Clayey	l	_oam
4-20	10YR 4/2	90	7.5YR 4/6	10	<u> </u>		Sa	ndy	Loai	my Sand
				_						
			- due of Matrix					21		
	entration, D=Deplica					Grains.			=Pore Lining, M r Problematic H	
Histosol (A1 Histic Epipe Black Histic Hydrogen Si	, don (A2) (A3)	-	Thin Dark S Barrier Islan (MLRA 19 Loamy Muc	ds 1 cm 53B, 153	Muck (S <sup>.</sup> BD)	12)	-	2 cm Muc Coast Pra	ck (A9) <b>(LRR O)</b> ck (A10) <b>(LRR S</b> airie Redox (A16 <b>e MLRA 150A)</b>	)
Stratified La	( )	-	Loamy Gleyed Matrix (F2) Reduced Vertic (F18							
Organic Boo	lies (A6) <b>(LRR, P</b>	-, T, U) -	Depleted Matrix (F3)				-	(outsid	e MLRA 150A,	150B)
5 cm Mucky	Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark Surface (F6)				Piedmont Floodplain Soils (F19) (LRR P,			
Muck Prese	nce (A8) <b>(LRR U</b> )	)	Depleted Da	ark Surfa	ace (F7)		Anomalous Bright Floodplain Soils (F20)			
1 cm Muck (	(A9) <b>(LRR P, T)</b>	_	Redox Depr	essions	(F8)		(MLRA 153B)			
Depleted Be	low Dark Surface	e (A11)	Marl (F10) (	LRR U)			Red Parent Material (F21)			
Thick Dark S	Surface (A12)	_	Depleted O	chric (F1	1) (MLRA	151)	Very Shallow Dark Surface (F22)			
Coast Prairie	e Redox (A16) ( <b>N</b>	ILRA 150A)	Iron-Mangai	nese Ma	sses (F12	2) (LRR O	O, P, T) (outside MLRA 138, 152A in FL, 154			
Sandy Muck	xy Mineral (S1) <b>(L</b>	.RR O, S)	Umbric Surf	ace (F13	3) (LRR P	, T, U)	Barrier Islands Low Chroma Matrix (TS			
Sandy Gleye	ed Matrix (S4)	_	Delta Ochrid	; (F17) <b>(</b> I	MLRA 15	1)	(MLRA 153B, 153D)			
X Sandy Redo	ox (S5)	_	Reduced Ve	ertic (F18	B) (MLRA	150A, 15	0B)	Other (Ex	plain in Remark	.s)
Stripped Ma	trix (S6)	_	Piedmont F	oodplair	n Soils (F´	19) <b>(MLR</b> /	A 149A)			
Dark Surfac	e (S7) <b>(LRR P, S</b>	, T, U) _	Anomalous	Bright Fl	loodplain	Soils (F20	D)			
Polyvalue B	elow Surface (S8	)	(MLRA 149A, 153C, 153D)			<sup>3</sup> Indicators of hydrophytic vegetation a			vegetation and	
(LRR S, T	<sup>-</sup> , U)	-	Very Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)			wetland hydrology must be present, unless disturbed or problematic.				
Restrictive Lay	er (if observed):									
Туре:										
Depth (inche	es):						Hydric	Soil Present	t? Yes	X No

Feature ID: JA\_W\_007,008 Date: 04/12/2022



Photograph Number 1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction West

Comments:

Photograph Number 3

Photograph Direction \_\_\_\_\_

Comments:

Photograph	Number	4
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Photograph Direction \_\_\_\_\_

U.S. Army Corp WETLAND DETERMINATION DATA SHEET See ERDC/EL TR-07-24; the pro	Requirement Con EXEMP (Authority: AR paragraph	T 2 335-15,		
Project/Site: CVOW	City/County: City of Chesap	eake	Sampling Date:	4/12/2022
Applicant/Owner: Dominion Energy		State: VA	Sampling Point	
Investigator(s): Justin Ahn	Section, Township, Range: <u>N/A</u>			
Landform (hillside, terrace, etc.): Berm	Local relief (concave, convex, none	): None	Slope (%):	2
Subregion (LRR or MLRA): LRR T, MLRA 153B Lat: 36.7	7242398584837 Long: -76.18	5921955474	Datum:	NAD83
Soil Map Unit Name: Psamments, 0-10% slopes		NWI classifi	cation: None	
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes X	o (If no	o, explain in Remark	(s.)
Are Vegetation, Soil, or Hydrologysigr	nificantly disturbed? Are "Normal Circur	nstances" prese	ent? Yes X	No
Are Vegetation, Soil, or Hydrology natu	urally problematic? (If needed, explain	any answers in	Remarks.)	
SUMMARY OF FINDINGS – Attach site map sl	nowing sampling point locations	transects,	important featu	ures, etc.
	Is the Sampled Area       x       x       x	Yes	<u>No X</u>	
Remarks: Area located adjacent to an access road, adjacent to JA-S-				
HYDROLOGY				
Wetlend III wheele my Indiante ye.	0		··· (···!·!····· · · · · · · · · · · · ·	

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is requ	Surface Soil Cracks (B6)				
Surface Water (A1)	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 on Living Ro	oots (C3)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Presence of Reduced Iron (C4)		Crayfish Burrows (C8)		
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils	s (C6)	Saturation Visible on Aerial Imagery (C9)		
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 (B	7)		FAC-Neutral Test (D5)		
Water-Stained Leaves (B9)			Sphagnum Moss (D8) (LRR T,U)		
Field Observations:					
Surface Water Present? Yes	No X Depth (inches):				
Water Table Present? Yes	No X Depth (inches):				
Saturation Present? Yes	No X Depth (inches):	Wetland	d Hydrology Present? Yes No X		
(includes capillary fringe)					
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, previous insp	ections), if	available:		
Remarks:					

Sampling Point: JA\_W\_007, JA\_W\_008\_UP

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	% Cover	Species?	Status	Dominance Test worksheet:
1. <i>Pinus taeda</i>	70	Yes	FAC	Number of Dominant Species
2. Acer rubrum	20	Yes	FAC	That Are OBL, FACW, or FAC: 2 (A)
3.				Total Number of Dominant
4.				Species Across All Strata: 3 (B)
5.				
6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)
	90 :	=Total Cover		Prevalence Index worksheet:
			10	
50% of total cover: 4	5 20%	of total cover:	18	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals:(A)(B)
6.				Prevalence Index = B/A =
		=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:		of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				X 2 - Dominance Test is >50%
1				$3 - Prevalence Index is \leq 3.0^{1}$
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6				present, unless disturbed or problematic.
	:	=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		<b>Tree</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5' radius )				approximately 20 ft (6 m) or more in height and 3 in.
1. Lonicera japonica	80	Yes	FACU	(7.6 cm) or larger in diameter at breast height (DBH).
2				Sapling – Woody plants, excluding woody vines,
3.				approximately 20 ft (6 m) or more in height and less
0				than 3 in. (7.6 cm) DBH.
4.				
5.				<b>Shrub</b> - 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
8				herbaceous vines, regardless of size, <u>and</u> woody
9				plants, except woody vines, less than approximately 3
10				ft (1 m) in height.
11.				Woody Vine – All woody vines, regardless of height.
	80 :	=Total Cover		
50% of total cover: 40	20%	of total cover:	16	
Woody Vine Stratum (Plot size: )				
1				
2				
2.				
3				
4				
5				Hydrophytic
	:	=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation	is below.)			

SOIL

nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Te	xture	Ren	narks
0-20	10YR 3/1	100					Sa	andy	Loam	y Sand
51	oncentration, D=Dep					Grains.		<sup>2</sup> Location: PL=F Indicators for P		
Histosol			Thin Dark S			S, T, U)			(A9) (LRR O)	
Histic Ep	pipedon (A2)		Barrier Islan						(A10) <b>(LRR S)</b>	
Black Hi	stic (A3)		(MLRA 15	53B, 153	D)			Coast Prairie	e Redox (A16)	
Hydroge	n Sulfide (A4)		Loamy Mucł	ky Minera	al (F1) <b>(L</b>	RR O)		(outside N	/ILRA 150A)	
Stratified	l Layers (A5)		Loamy Gleyed Matrix (F2)				Reduced Vertic (F18)			
Organic Bodies (A6) (LRR, P, T, U) Depleted Matrix (F3)				(outside MLRA 150A, 150B)						
5 cm Mu	cky Mineral (A7) <b>(LF</b>	R P, T, U)	Redox Dark	Surface	(F6)			Piedmont Fl	oodplain Soils	(F19) <b>(LRR P, T</b> )
Muck Pre	esence (A8) <b>(LRR U</b>	)	Depleted Da	irk Surfa	ce (F7)			Anomalous	Bright Floodpla	in Soils (F20)
1 cm Mu	ck (A9) <b>(LRR P, T)</b>		Redox Depressions (F8)				(MLRA 153B)			
Depleted	Below Dark Surface	e (A11)	Marl (F10) <b>(</b> I	LRR U)				Red Parent	Material (F21)	
Thick Da	ark Surface (A12)		Depleted Oc	hric (F1	1) (MLRA	A 151)		Very Shallow	v Dark Surface	(F22)
Coast Pr	airie Redox (A16) ( <b>N</b>	ILRA 150A)	Iron-Mangar	nese Mas	sses (F12	2) (LRR O	, P, T)	(outside N	/ILRA 138, 152	A in FL, 154)
_Sandy M	lucky Mineral (S1) <b>(L</b>	RR O, S)	Umbric Surf	ace (F13	B) (LRR P	P, T, U)		Barrier Islan	ds Low Chrom	a Matrix (TS7)
Sandy G	ileyed Matrix (S4)		Delta Ochric	; (F17) <b>(</b>	MLRA 15	1)		(MLRA 15	3B, 153D)	
	edox (S5)		Reduced Ve	ertic (F18	) (MLRA	150A, 15	0B)	Other (Expla	ain in Remarks)	)
Stripped	Matrix (S6)		Piedmont FI	oodplain	Soils (F	19) <b>(MLR/</b>	A 149A)			
	face (S7) <b>(LRR P, S</b>		Anomalous	Bright Fl	oodplain	Soils (F20	D)	<u>,</u>		
	e Below Surface (S8	)	(MLRA 14						of hydrophytic v	
(LRR \$	S, T, U)		Very Shallow						ydrology must	
			(MLRA 13	8, 152A	in FL, 1	54)		unless dis	sturbed or prob	ematic.
estrictive L Type:	_ayer (if observed):									
- Depth (ir	nches):						Hydrid	c Soil Present?	Yes	No X
emarks:	, <u> </u>									
omanto.										

#### Feature ID: JA\_W\_007,008\_UPDate: 04/12/2022



Photograph Number \_\_\_\_

Photograph Direction West

Comments:



Photograph Number <u>2</u> Photograph Direction North

Comments: North facing with soil profile.

Photograph Number <u>3</u>

Photograph Direction

Comments:

Photograph	Number	4
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Photograph Direction \_\_\_\_\_

U.S. WETLAND DETERMINATION D See ERDC/EL TR-0	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)		
Project/Site: CVOW	City	/County: Virginia Beach	Sampling Date: 4/22/2022
Applicant/Owner: Dominion Energy		State: VA	
Investigator(s): Justin Ahn	Section.	Township, Range: N/A	
Landform (hillside, terrace, etc.): Plain		(concave, convex, none): None	Slope (%): 0
Subregion (LRR or MLRA): LRR T, MLRA 1		Long: -76.1208861	Datum: NAD83
			cation: None
	to tunical for this time of year?		
Are climatic / hydrologic conditions on the sit			, explain in Remarks.)
Are Vegetation, Soil, or Hydro			
Are Vegetation, Soil, or Hydro	plogynaturally problematic?	(If needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach	n site map showing sampli	ng point locations, transects, i	mportant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Area located in a powerline easement right	Yes X No with Yes X No	ne Sampled Area nin a Wetland? Yes X	No
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requ X Surface Water (A1)	ired; check all that apply) Aquatic Fauna (B13)	Surface Soil Cra	<u>s (minimum of two required)</u> acks (B6) ated Concave Surface (B8)
X High Water Table (A2)	Marl Deposits (B15) (LRR U)	X Drainage Patter	ns (B10)
Saturation (A3)	Hydrogen Sulfide Odor (C1)	Moss Trim Line	. ,
Water Marks (B1)	X Oxidized Rhizospheres on Liv		
Sediment Deposits (B2) Drift Deposits (B3)	Presence of Reduced Iron (C Recent Iron Reduction in Tille	· _ ·	le on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C7)	Geomorphic Po	
Iron Deposits (B5)	Other (Explain in Remarks)	Shallow Aquitar	
X Inundation Visible on Aerial Imagery (B	7)	X FAC-Neutral Te	st (D5)
Water-Stained Leaves (B9)		Sphagnum Mos	s (D8) <b>(LRR T,U)</b>
Field Observations:         Surface Water Present?       Yes         Water Table Present?       Yes         Saturation Present?       Yes         (includes capillary fringe)         Describe Recorded Data (stream gauge, methods)	No       Depth (inches):       6         No       Depth (inches):       0         No       Depth (inches):       0         onitoring well, aerial photos, previou		Yes X No
Remarks:			

Sampling Point: JA\_W\_008B\_PEM

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	% Cover	Species?	Status	Dominance Test worksheet:
1.       2.				Number of Dominant Species         That Are OBL, FACW, or FAC:       3       (A)
3				Total Number of Dominant Species Across All Strata: 3 (B)
5				、
6.				Percent of Dominant Species That Are OBL, FACW, or FAC:100.0% (A/B)
		=Total Cover		Prevalence Index worksheet:
50% of total cover:	20%	of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30' radius )				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3.				FACU species x 4 =
4.				UPL species x 5 =
5.				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
		=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:		of total cover:		1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: 15' radius )				X 2 - Dominance Test is >50%
				$3 - Prevalence Index is \leq 3.0^{1}$
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
4.				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6		Tatal Cause		present, unless disturbed or problematic.
<b>50</b> % of table 1 and <b>1</b>		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 5' radius )				(7.6 cm) or larger in diameter at breast height (DBH).
1. Carex lupulina	30	Yes	OBL	
2. Juncus effusus	20	Yes	OBL	<b>Sapling</b> – Woody plants, excluding woody vines,
3. Peltandra virginica	20	Yes	OBL	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
4. Alternanthera philoxeroides	10	No	OBL	
5. <i>Phragmites australis</i>	10	No	FACW	Shrub - Woody Plants, excluding woody vines,
6. Rubus argutus	5	No	FAC	approximately 3 to 20 ft (1 to 6 m) in height.
7. Smilax rotundifolia	5	No	FAC	Herb – All herbaceous (non-woody) plants, including
8				herbaceous vines, regardless of size, <u>and</u> woody
9				plants, except woody vines, less than approximately 3 ft (1 m) in height.
10				
11				<b>Woody Vine</b> – All woody vines, regardless of height.
	100	=Total Cover		
50% of total cover:	50 20%	of total cover:	20	
Woody Vine Stratum (Plot size:				
1.				
2.				
3.				
5.				
J		-Total Orient		Hydrophytic
		=Total Cover		Vegetation
50% of total cover:		of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation	ns below.)			

Depth	Matrix		Redo	x Featur	res							
(inches)	Color (moist)	% 0	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Te	xture	Re	marks		
0-20	10YR 4/1	90	7.5YR 4/6	10	C		Loam	//Clayey	Silty C	Clay Loam		
						·						
Type: C=C	oncentration, D=Depl	etion, RM=Re	duced Matrix, I	 MS=Mas	ked Sand	Grains.		<sup>2</sup> Location: PL=	-Pore Lining, M	=Matrix.		
lydric Soil	Indicators: (Applica	ble to all LRF	Rs, unless oth	erwise n	noted.)			Indicators for	Problematic H	ydric Soils <sup>3</sup> :		
Histosol	(A1)	_	Thin Dark S	urface (S	59) <b>(LRR</b>	S, T, U)		1 cm Mucl	(A9) <b>(LRR O)</b>			
Histic Ep	oipedon (A2)	_	Barrier Islan		``	12)		2 cm Muck (A10) (LRR S)				
Black Hi	stic (A3)		(MLRA 1	53B, 153	SD)			Coast Prai	rie Redox (A16	)		
Hydroge	_ Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR O)					RR O)		(outside	MLRA 150A)			
Stratified	Stratified Layers (A5) Loamy Gleyed Matrix (F2)						Reduced \	/ertic (F18)				
Organic Bodies (A6) (LRR, P, T, U) X Depleted Matrix (F3)						(outside	MLRA 150A, 1	50B)				
5 cm Mu	ıcky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	Surface	(F6)			Piedmont	Floodplain Soils	s (F19) <b>(LRR P, 1</b>		
Muck Pr	esence (A8) (LRR U)	· _	Depleted Da	ark Surfa	ice (F7)			Anomalou	s Bright Floodpl	ain Soils (F20)		
1 cm Mu	ıck (A9) <b>(LRR P, T)</b>		Redox Depr	essions	(F8)			(MLRA <sup>^</sup>	I53B)			
Depleted	d Below Dark Surface	(A11)	Marl (F10) <b>(</b>	LRR U)				Red Parer	t Material (F21)	)		
Thick Da	ark Surface (A12)		Depleted O	chric (F1	1) (MLRA	151)		Very Shall	ow Dark Surfac	e (F22)		
Coast P	rairie Redox (A16) ( <b>M</b>	LRA 150A)	Iron-Manga	nese Ma	sses (F12	2) (LRR C	), P, T)	(outside	MLRA 138, 15	2A in FL, 154)		
Sandy M	lucky Mineral (S1) <b>(L</b>	RR O, S)	Umbric Surf	ace (F13	3) (LRR P	, T, U)		Barrier Isla	ands Low Chron	na Matrix (TS7)		
Sandy G	Bleyed Matrix (S4)		Delta Ochric (F17) (MLRA 151)					(MLRA <sup>2</sup>	I53B, 153D)			
Sandy R	Redox (S5)	_	Reduced Ve	ertic (F18	B) (MLRA	150A, 15	60B)	Other (Exp	lain in Remarks	s)		
Stripped	Matrix (S6)	_	Piedmont F	oodplain	n Soils (F	19) <b>(MLR</b>	A 149A)					
Dark Su	rface (S7) (LRR P, S	, T, U) —	Anomalous	Bright Fl	loodplain	Soils (F2	0)					
	e Below Surface (S8		 (MLRA 14	19A, 153	C, 153D)			<sup>3</sup> Indicators	of hydrophytic	vegetation and		
	S, T, U)		Very Shallo			22)	wetland hydrology must be pre			0		
,	,	_	(MLRA 13	38, 152A	in FL, 1	54)			disturbed or pro			
Restrictive	Layer (if observed):											
Type:												
Depth (ii	nches):						Hydrid	: Soil Present	? Yes	X No		
Remarks:										_		

#### Feature ID: JA-W-008B-WET Date: 04/22/2022



Photograph Number 1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

U.S. Army WETLAND DETERMINATION DATA S See ERDC/EL TR-07-24; t	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)		
Project/Site: CVOW	Sampling Date: 6/7/2022		
Applicant/Owner: Dominion		State: VA	Sampling Point: JA_W_008B_PFC
Investigator(s): E. Foster, K. Shephard	Section, Township, Range	e:	
Landform (hillside, terrace, etc.):			
Subregion (LRR or MLRA): LRR T, MLRA 153B La	at: 36.752653 Long:	-76.119087	Datum: WGS84
Soil Map Unit Name: Nawney Silt Loam		NWI classific	ation: PFO
Are climatic / hydrologic conditions on the site typical Are Vegetation, Soil, or Hydrology Are Vegetation, Soil, or Hydrology SUMMARY OF FINDINGS – Attach site m	significantly disturbed? Are "Normal naturally problematic? (If needed, e	Circumstances" preser	nt? Yes <u>X</u> No Remarks.)
	X         No         Is the Sampled Area           X         No         within a Wetland?           X         No	Yes <u>X</u>	No
Remarks: Forested wetland			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicator	s (minimum of two required)
Primary Indicators (minimum of one is required; che	ck all that apply)	Surface Soil Cra	acks (B6)

Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Cracks (B6)		
X Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)		
X High Water Table (A2)	Marl Deposits (B15) (LRR U)		Drainage Patterns (B10)		
X Saturation (A3)	Hydrogen Sulfide Odor (C1)		Moss Trim Lines (B16)		
X Water Marks (B1)	Oxidized Rhizospheres on Living Ro	ots (C3)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Presence of Reduced Iron (C4)		Crayfish Burrows (C8)		
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils	(C6)	Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		X Geomorphic Position (D2)		
Iron Deposits (B5)	Other (Explain in Remarks)		Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7	7)		X FAC-Neutral Test (D5)		
X Water-Stained Leaves (B9)			Sphagnum Moss (D8) (LRR T,U)		
Field Observations:					
Surface Water Present? Yes X	No Depth (inches):1				
Water Table Present? Yes X	No Depth (inches): 0				
Saturation Present? Yes X	No Depth (inches): 0	Wetland Hydrology Present? Yes X No			
(includes capillary fringe)					
(includes capillary fringe) Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous insp	ections), if av	ailable:		
	nitoring well, aerial photos, previous insp	ections), if av	ailable:		
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous insp	ections), if av	ailable:		
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous insp	ections), if av	ailable:		
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous insp	ections), if av	ailable:		
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous insp	ections), if av	ailable:		
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous insp	ections), if av	ailable:		
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous insp	ections), if av	ailable:		
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous insp	ections), if av	ailable:		
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous insp	ections), if av	ailable:		
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous insp	ections), if av	ailable:		

Sampling Point: JA\_W\_008B\_PFO

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30ft )	% Cover	Species?	Status	Dominance Test worksheet:
1. Fraxinus pennsylvanica	60	Yes	FACW	Number of Dominant Species
2. Acer rubrum	15	Yes	FAC	That Are OBL, FACW, or FAC: 6 (A)
3				Total Number of Dominant
4				Species Across All Strata: 6 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
	75	=Total Cover		Prevalence Index worksheet:
50% of total cover:	38 20%	of total cover:	15	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30ft )				OBL species X 1 = 30
1. Fraxinus pennsylvanica	10	Yes	FACW	FACW species 75 x 2 = 150
2. Acer rubrum	5	Yes	FAC	FAC species 25 x 3 = 75
3. Carpinus caroliniana	5	Yes	FAC	FACU species 0 x 4 = 0
4.				UPL species 0 x 5 = 0
5.				Column Totals: 130 (A) 255 (B)
6.				Prevalence Index = $B/A = 1.96$
	20	=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:		of total cover:	4	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: )				X 2 - Dominance Test is >50%
1.				X 3 - Prevalence Index is $\leq 3.0^{1}$
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4		<u> </u>		
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6				present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30ft )				approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1. Saururus cernuus	25	Yes	OBL	
2. <u>Carex crinita</u>	5	No	FACW	Sapling – Woody plants, excluding woody vines,
3. Osmunda spectabilis	5	No	OBL	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,
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.
		=Total Cover		
E0% of total anyon			7	
50% of total cover:	16 20%	of total cover:	/	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation	ons below.)			-
None				

Depth Matrix		Redox Features									
nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Ie	exture	Re	emarks	
0-6	10YR 3/2	100					Loam	y/Clayey	SILT	TY CLAY	
6-20	10yr 4/1	98	10YR 5/4	2	C	Μ	S	andy	SILT	TY CLAY	
Type: C=Cc	oncentration, D=Dep	etion, RM=	Reduced Matrix, I	MS=Mas	sked Sano	d Grains.		<sup>2</sup> Location: PL=	Pore Lining, M	I=Matrix.	
lydric Soil I	ndicators: (Applica	ble to all L						Indicators for	Problematic H	lydric Soils <sup>3</sup> :	
Histosol	(A1)		Thin Dark S	urface (S	S9) <b>(LRR</b>	S, T, U)		1 cm Muck	(A9) <b>(LRR O)</b>		
Histic Ep	ipedon (A2)		Barrier Islan	ds 1 cm	Muck (S	12)		2 cm Muck	(A10) <b>(LRR S</b>	)	
Black His	stic (A3)		(MLRA 1	53B, 153	BD)			Coast Prairie Redox (A16)			
Hydroger	n Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR O)					(outside MLRA 150A)			
Stratified	Layers (A5)		Loamy Gleyed Matrix (F2)					x Reduced Vertic (F18)			
x Organic I	Bodies (A6) <b>(LRR, P</b>	Depleted Matrix (F3)					(outside	MLRA 150A,	150B)		
5 cm Mu	cky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark Surface (F6)					Piedmont	Floodplain Soils	s (F19) <b>(LRR P, T</b>	
	esence (A8) (LRR U		Depleted Dark Surface (F7)							lain Soils (F20)	
1 cm Mu	ck (A9) <b>(LRR P, T)</b>		Redox Depressions (F8)					(MLRA 1			
	Below Dark Surface	e (A11)	Marl (F10) (		· · ·			Red Parer	t Material (F21	)	
	rk Surface (A12)	( )	Depleted Oc		1) (MLRA	A 151)			ow Dark Surfac		
	airie Redox (A16) (N	ILRA 150A					). P. T)			52A in FL, 154)	
	ucky Mineral (S1) (L		Umbric Surf							ma Matrix (TS7)	
	leyed Matrix (S4)	-,-,	Delta Ochric						53B, 153D)	( ,	
	edox (S5)		Reduced Ve				60B)		lain in Remark	(3)	
	Matrix (S6)		Piedmont Fl		, <b>.</b>					0)	
	face (S7) <b>(LRR P, S</b>	т н)	Anomalous	•	`	, <b>、</b>	,				
	e Below Surface (S8		(MLRA 14	-			5)	<sup>3</sup> Indicators	of hydrophytic	vegetation and	
	S, T, U)	)	Very Shallov						hydrology mus	•	
	5, 1, 0)		(MLRA 13		,	,			listurbed or pro	•	
Restrictive L	ayer (if observed):		•								
Type:											
Depth (in	iches):						Hydri	c Soil Present?	Yes_	X No	
Remarks:											
Vone											
-											

JA\_W\_008B\_PFO Feature ID \_\_\_\_\_ Date06/07/2022



Photograph Number \_\_\_\_

Photograph Direction North

Comments:



Photograph Number <u>2</u> Photograph Direction <u>East</u>

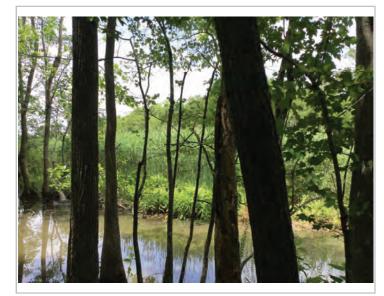
Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

	Applicant/Owner:       Dominion Energy         Investigator(s):       Justin Ahn       Section, Township, Rai         Landform (hillside, terrace, etc.):       Plain       Local relief (concave, con         Subregion (LRR or MLRA):       LRR T, MLRA 153A       Lat:       36.7517554       Local         Soil Map Unit Name:       Acredale silt loam         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes         Are Vegetation      , Soil      , or Hydrology       significantly disturbed?       Are "Norm	State:         VA         Sampling Point:         JA_W_008B_UJ           nge:         N/A           ivex, none):         None         Slope (%):         2           ng:         -76.1212477         Datum:         NAD83          NWI classification:         None         X
Investigator(s): Justin Ahn       Section, Township, Range: N/A         Landform (hillside, terrace, etc.):       Plain       Local relief (concave, convex, none):       None       Slope (%):       2         Subregion (LRR or MLRA):       LRR T, MLRA 153A       Lat:       36.7517554       Long:76.122477       Datum:       NADB3         Soil Map Unit Name:       Acredates ill loam       NWI classification:       None       None       Are climate / hydrologic conditions on the site typical for this time of year?       Yes X       No(If no, explain in Remarks.)         Are Vegetation	Investigator(s): Justin AhnSection, Township, Rai Landform (hillside, terrace, etc.): PlainLocal relief (concave, con Subregion (LRR or MLRA): LRR T, MLRA 153A Lat: 36.7517554Loc Soil Map Unit Name: Acredale silt loam Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Norm	nge: N/A Nex, none): None Slope (%): 2 ng: -76.1212477 Datum: NAD83 NWI classification: None X No (If no, explain in Remarks.)
Landform (hillside, terrace, etc.):       Plain       Local relief (concave, convex, none):       None       Slope (%):       2         Subregion (LRR or MLRA):       LRR T, MLRA 153A       Lat:       36.7517554       Long:      76.1212477       Datum::       NADB3         Solit May Unit Name:       Acredate silt Doam       NVVI classification:: None       None       None         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes_X       No (fr.o, explain in Remarks.)         Are Vegetation       , Soil, or Hydrologyindicantly disturbed?       Are "Normal Circumstances" present? Yes_X       No         BYUMDARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.       Hydrophytic Vegetation Present?       Yes_X       No	Landform (hillside, terrace, etc.):       Plain       Local relief (concave, con         Subregion (LRR or MLRA):       LRR T, MLRA 153A       Lat:       36.7517554       Local         Soil Map Unit Name:       Acredale silt loam         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes       Yes         Are Vegetation       , Soil       , or Hydrology       significantly disturbed?       Are "Normality"	None         Slope (%):         2           ng:         -76.1212477         Datum:         NAD83           NWI classification:         None           X         No         (If no, explain in Remarks.)
Subregion (LRR or MLRA):       LRR T, MLRA 153A       Lat:       36.7517554       Long:       -76.1212477       Datum:       NAD83         Soil Map Unit Name:       Acredale silt loam       NWI classification:       Nome         Are dimatic / hydrologic conditions on the site typical for this time of year?       Yes_X       No	Subregion (LRR or MLRA):       LRR T, MLRA 153A       Lat:       36.7517554       Lot         Soil Map Unit Name:       Acredale silt loam         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes       Yes         Are Vegetation       , Soil       , or Hydrology       significantly disturbed?       Are "Normality"	ng: Datum: NAD83 NWI classification: None X No (If no, explain in Remarks.)
Subregion (LRR or MLRA):       LRR T, MLRA 153A       Lat:       36.7617554       Long:       -76.1212477       Datum:       NAD83         Soil Map Unit Name:       Acredale silt loam       NWI classification:       Nome         Are dimatic / hydrologic conditions on the site typical for this time of year?       Yes_X       No	Subregion (LRR or MLRA):       LRR T, MLRA 153A       Lat:       36.7517554       Lot         Soil Map Unit Name:       Acredale silt loam       Acredale silt loam       Acredale silt loam       Acredale silt loam         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes       Acre Significantly disturbed?       Are "Normality of the site typical for typical for the site typical for the site t	ng: Datum: NAD83 NWI classification: None X No (If no, explain in Remarks.)
Soil Map Unit Name:       Acredale sill loam       NWI classification:       None         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes       X       No       (If no, explain in Remarks.)         Are Vegetation       , Soil       , or Hydrology       isignificantly disturbed?       Are "Normal Circumstances" present?       Yes       X       No         Are Vegetation       , Soil       , or Hydrology       naturally problematic?       (If needed, explain any answers in Remarks.)         SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.         Hydrophytic Vegetation Present?       Yes       No       X         Wetland Hydrology Present?       Yes       No       X         Remarks:       Area located in a powerline easement right of way on a plain adjacent to a PEM wetland         HYDROLOGY       Surface Water (A1)       Aquatic Fauna (B13)       Sparsely Vegetated Concave Surface (B8)         Surface Water (A1)       Aquatic Fauna (B13)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Man Deposits (B15) (LRR U)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B16)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots (C3)       Ory-Season Water Table (C	Soil Map Unit Name:       Acredale silt loam         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes         Are Vegetation      , or Hydrology       significantly disturbed?       Are "Normalized"	NWI classification:       None         X       No       (If no, explain in Remarks.)
Are climatic / hydrologic conditions on the site typical for this time of year?       Yes X       No	Are climatic / hydrologic conditions on the site typical for this time of year? Yes _> Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Norm	X No (If no, explain in Remarks.)
Are Vegetation	Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Norm	
Are Vegetation, Soll, 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.         Hydric Soll Present?       Yes No         Wetland Hydrology Present?       Yes No         Remarks:       Area located in a powerline easement right of way on a plain adjacent to a PEM wetland         HYDROLOGY         Wetland Hydrology Indicators:         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 on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Dift Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Innundation Visible on Aerial Imagery (B7)       X FAC-Neutral Test (D5)         Water Table Oraser (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)		
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.         Hydrophytic Vegetation Present?       Yes       No       x         Hydric Soil Present?       Yes       No       x         Wetland Hydrology Present?       Yes       No       x         Remarks:       Area located in a powerline easement right of way on a plain adjacent to a PEM wetland         HYDROLOGY         Wetland Hydrology Indicators:       Secondary 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 on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B3)       Recent for Reduction in Tilled Solis (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Positin (D2)       Shallow Aquitard (D3)         Innundation Visible on Aerial Imagery (B7)       X       FAC-Neutral Test (D5)       Sphagnum Moss (D8) (LRR T,U)         Hindet Present?       Yes       No		· · · · · · · · · · · · · · · · · · ·
Hydrophytic Vegetation Present?       Yes       No		
Hydric Soil Present?       Yes       No       X       within a Wetland?       Yes       No       X         Remarks:       Area located in a powerline easement right of way on a plain adjacent to a PEM wetland       PEM wetland       PEM wetland         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)       Moess Trin Lines (B16)         Water Marks (B1)       Oxidzed Rhizospheres on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inudation Visible on Aerial Imagery (B7)       X FAC-Neutral Test (D5)       Shallow Actural Test (D5)         Water Present?       Ye	SUMMARY OF FINDINGS – Attach site map showing sampling point lo	cations, transects, important features, etc.
Wetland Hydrology Present?       Yes       No       X         Remarks:       Area located in a powerline easement right of way on a plain adjacent to a PEM wetland         HYDROLOGY       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Hydrophytic Vegetation Present? Yes X No Is the Sampled A	rea
Remarks:       Area located in a powerline easement right of way on a plain adjacent to a PEM wetland         HYDROLOGY       Wetland Hydrology Indicators:         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 Sulfde Odor (C1)       Most Sufface Soil Cracks (B6)         Water Marks (B1)       Oxid/zed Rhi/zospheres on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Positin (D2)         Inon Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       No       X       Depth (inches):         Water Table Present?       Yes       No       X         Water Table Present?       Yes       No       X         Suface Water Present?       Yes	Hydric Soil Present? Yes No X within a Wetland?	? Yes <u>No X</u>
Area located in a powerline easement right of way on a plain adjacent to a PEM wetland         HYDROLOGY         Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Present? Yes No X	
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 on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         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)       X FAC-Neutral Test (D5)         Water Table Present?       Yes       No         X       Depth (inches):       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       Yes       No       X         Saturation Present?       Yes       No       X         Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       No       X <td< th=""><th>HYDROLOGY</th><th></th></td<>	HYDROLOGY	
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 on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B3)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         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)       X FAC-Neutral Test (D5)         Water Table Present?       Yes       No         Surface Water Present?       Yes       No         No       X       Depth (inches):         Saturation Present?       Yes       No         No       X       Depth (inches):         Saturation Present?       Yes       No         No       X       Depth (inches):       Wetland Hydrology Present?       Yes       No         Saturation Present?       Yes       No <th>Wetland Hydrology Indicators:</th> <th>Secondary Indicators (minimum of two required)</th>	Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
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 on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         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)       X       FAC-Neutral Test (D5)         Water Table Present?       Yes       No       X         Surface Water Present?       Yes       No       X         No       X       Depth (inches):       Wetland Hydrology Present?       Yes       No       X         Saturation Present?       Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       No       X         (includes capillary fringe)       Wetland Hydrology Present?       Yes       No       X	Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B16)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Water-Stained Leaves (B9)       X       FAC-Neutral Test (D5)         Water Table Present?       Yes       No       X       Depth (inches):         Saturation Present?       Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       No       X         (includes capillary fringe)       Wetland Hydrology Present?       Yes       No       X       Depth (inches):		
Water Marks (B1)       Oxidized Rhizospheres on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Water-Stained Leaves (B9)       X       FAC-Neutral Test (D5)         Surface Water Present?       Yes       No       X         Saturation Present?       Yes       No       X         No       X       Depth (inches):       Wetland Hydrology Present?       Yes       No         Saturation Present?       Yes       No       X       Depth (inches):       No       X         (includes capillary fringe)       Wetland Hydrology Present?       Yes       No       X		
Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         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)       X FAC-Neutral Test (D5)         Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       No       X Depth (inches):         Surface Water Present?       Yes       No         No       X Depth (inches):       Wetland Hydrology Present?       Yes       No         Saturation Present?       Yes       No       X Depth (inches):       Wetland Hydrology Present?       Yes       No       X		
Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         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)       X FAC-Neutral Test (D5)         Water-Stained Leaves (B9)       Depth (inches):         Field Observations:       No         Surface Water Present?       Yes         No       X       Depth (inches):         Saturation Present? <t< td=""><td></td><td></td></t<>		
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)       X FAC-Neutral Test (D5)         Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       No       X       Depth (inches):         Surface Water Present?       Yes       No       X       Depth (inches):         Water Table Present?       Yes       No       X       Depth (inches):         Saturation Present?       Yes       No       X       Depth (inches):         (includes capillary fringe)       Wetland Hydrology Present?       Yes       No       X		
Inundation Visible on Aerial Imagery (B7)       X       FAC-Neutral Test (D5)         Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       Surface Water Present?       Yes         Water Table Present?       Yes       No       X         Saturation Present?       Yes       No       X         No       X       Depth (inches):       Wetland Hydrology Present?       Yes       No         (includes capillary fringe)       Ves       Ves       No       X	—	
Water-Stained Leaves (B9)	Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Field Observations:         Surface Water Present?       Yes       No       X       Depth (inches):	Inundation Visible on Aerial Imagery (B7)	
Surface Water Present?       Yes       No       X       Depth (inches):          Water Table Present?       Yes       No       X       Depth (inches):          Saturation Present?       Yes       No       X       Depth (inches):          No       X       Depth (inches):        Depth (inches):	Water-Stained Leaves (B9)	Sphagnum Moss (D8) (LRR T,U)
Water Table Present?       Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       No       X         Saturation Present?       Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       No       X         (includes capillary fringe)       Ves       Ves       Ves       No       X		
Saturation Present?       Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       No       X         (includes capillary fringe)       Ves       Ves       No       X <t< td=""><td></td><td></td></t<>		
(includes capillary fringe)		and Hydrology Present? Yes No Y

Sampling Point: JA\_W\_008B\_UP

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
1.       2.				Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
3.				Total Number of Dominant
4.				Species Across All Strata:4 (B)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)
		=Total Cover		Prevalence Index worksheet:
50% of total cover:	20%	of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
3.				FACU species x 4 =
4.				UPL species x 5 =
5.				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
		=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:		of total cover:		1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: 15' radius )				X 2 - Dominance Test is >50%
1. <u>Acer rubrum</u>	10	Yes	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Pinus taeda	5	Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				
5				1
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	15	=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover: 8		of total cover:	3	<b>Tree</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5' radius )				approximately 20 ft (6 m) or more in height and 3 in.
1. Sorghum halepense	60	Yes	FACU	(7.6 cm) or larger in diameter at breast height (DBH).
2. Andropogon glomeratus	30	Yes	FACW	Sapling – Woody plants, excluding woody vines,
3. Rubus argutus	10	No	FAC	approximately 20 ft (6 m) or more in height and less
4. Symphyotrichum pilosum	10	No	FAC	than 3 in. (7.6 cm) DBH.
5. Juncus effusus	5	No	OBL	Shrub - Woody Plants, excluding woody vines,
6.				approximately 3 to 20 ft (1 to 6 m) in height.
7.				
Q				<b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
				plants, except woody vines, less than approximately 3
10				ft (1 m) in height.
11				Woody Vine – All woody vines, regardless of height.
	115	=Total Cover		
50% of total cover: 5		of total cover:	23	
Woody Vine Stratum (Plot size: )				
1.				
2				
3.				
1				
5		=Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation Present? Yes X No
Remarks: (If observed, list morphological adaptation	is below.)			

	ription: (Describe	to the deptr				tor or co	onfirm the	e absence of inc	licators.)		
Depth	Matrix			x Featur		2					
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	kture	Remarks		
0-24	2.5Y 5/3	100	7.5YR 5/6	10	C	PL	Loamy	/Clayey	Silty C	lay Loam	
	oncentration, D=Depl Indicators: (Applica					Grains.		<sup>2</sup> Location: PL=P Indicators for P	-		
Histosol	(A1)		Thin Dark S	urface (S	69) <b>(LRR</b>	S, T, U)	_	1 cm Muck (	A9) <b>(LRR O)</b>		
Histic Ep	oipedon (A2)		Barrier Islan	ds 1 cm	Muck (S	12)		2 cm Muck (	Muck (A10) <b>(LRR S)</b>		
Black His	stic (A3)		(MLRA 15	53B, 153	D)		-	Coast Prairie	e Redox (A16)		
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (L				RR O)		(outside M	ILRA 150A)				
Stratified	Loamy Gley	-				Reduced Ve	rtic (F18)				
Organic Bodies (A6) (LRR, P, T, U) Depleted Matrix (F3)						-		ILRA 150A, 1	50B)		
	cky Mineral (A7) <b>(LR</b>		Redox Dark					•	•	(F19) <b>(LRR P</b> , <sup>1</sup>	
	esence (A8) <b>(LRR U</b> )		Depleted Da		· /		-			ain Soils (F20)	
	ick (A9) <b>(LRR P, T)</b>	/	Redox Depr		` '		•	(MLRA 15	-		
	Below Dark Surface	(A11)	Marl (F10) (		(10)			•	Material (F21)		
	ark Surface (A12)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Depleted Oc		1) (MI R/	151)	-		/ Dark Surface		
	airie Redox (A16) ( <b>N</b>	II DA 150A)	Iron-Mangar				. ד ס ר			2A in FL, 154)	
	lucky Mineral (S1) <b>(L</b>		Umbric Surf		`	, <b>、</b>	,,,,,,	•		na Matrix (TS7)	
_	ileyed Matrix (S4)		Delta Ochric	`	, <b>、</b>		-	(MLRA 15			
	edox (S5)		Reduced Ve				50B)		in in Remarks	•)	
	Matrix (S6)		Piedmont Fl							•)	
	face (S7) <b>(LRR P, S</b>	τ	Anomalous								
				-			.0)	<sup>3</sup> Indicatora a	fbydrophyticy	vegetation and	
Polyvalue Below Surface (S8) (MLRA 149A, 153C, 153D) (LRR S, T, U) Very Shallow Dark Surface (F22)							/drology must				
	5, 1, 0)			w Dark Surface (F22) 38, 152A in FL, 154)					•••		
	and the last of the second states and the se			00, 152A	. III F⊾, 18	)++)			turbed or prob		
Type:	_ayer (if observed):										
Depth (ir	nches).						Hydric	Soil Present?	Yes	No X	
Remarks:							ingand	- contributiti			

#### Feature ID: JA-W-008B-UP Date: 04/22/2022



Photograph Number <u>1</u>

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

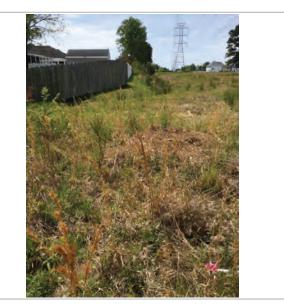
Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R									Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)		
Project/Site: CVOW	,			City/C	County: City of C	hesapeake		_Sampling Date:	4/12/2022		
Applicant/Owner:	Dominion E	inergy				State:	VA	Sampling Point	JA_W_009		
Investigator(s): Justir	n Ahn			Section, T	ownship, Range	: N/A					
Landform (hillside, ter	race, etc.):	Toe Slope		Local relief (c	oncave, convex	, none): None		Slope (%)	1		
Subregion (LRR or MI	LRA): LRR	T, MLRA 153B	Lat: 36.7245995	521667	Long:	-76.182787160	6667	Datum:	NAD83		
Soil Map Unit Name:	Psamments	s, 0-10% slopes				NWI	classifica	ation: None			
Are climatic / hydrolog	gic condition	s on the site typic	al for this time of	year?	Yes X	No	(lf no,	explain in Remarl	<s.)< td=""></s.)<>		
Are Vegetation								t? Yes X			
Are Vegetation					(If needed, e	xplain any answ	ers in R	emarks.)			
SUMMARY OF F					g point loca	tions, transe	ects, in	nportant feat	ures, etc.		
Hydrophytic Vegetat Hydric Soil Present? Wetland Hydrology F		Yes_ Yes_ Yes	X No		Sampled Area a Wetland?	Ye	s_X_	No			
Remarks: Area located within a	a depression	within a mixed ha	ardwood forest, a	djacent to the	Intercoastal Wa	aterway. Wetlar	ıd is ider	ntified as a PEM v	vetland		
HYDROLOGY											
Wetland Hydrology	Indicators:					Secondary In	dicators	(minimum of two	required)		
Primary Indicators (r		-				Surface		( )			
Surface Water (A	,		Aquatic Fauna (B	,			0	ed Concave Surfa	ace (B8)		
High Water Tabl	( )		/larl Deposits (B1	, ,		Drainage Moss Tri		. ,			

High Water Table (A2)	_	iviari De	posits (B15) (LRR U)	_	Drainage Patterns (BTU)				
Saturation (A3)	_	Hydroge	en Sulfide Odor (C1)	_	Moss Trim Lines (B1	6)			
Water Marks (B1)		Oxidize	d Rhizospheres on Living Ro	oots (C3)	Dry-Season Water Ta	able (C2)			
Sediment Deposits (B2	.)	Presend	ce of Reduced Iron (C4)	_	Crayfish Burrows (C8	3)			
Drift Deposits (B3)		Recent	Iron Reduction in Tilled Soils	s (C6)	Saturation Visible on	Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Thin Mu	ick Surface (C7)	_	X Geomorphic Position	(D2)			
Iron Deposits (B5)		Other (E	Explain in Remarks)	_	Shallow Aquitard (D3	5)			
Inundation Visible on A	erial Imagery (B7)		. ,	-	X FAC-Neutral Test (D	5)			
X Water-Stained Leaves	(B9)			_	Sphagnum Moss (D8	(LRR T,U)			
Field Observations:									
Surface Water Present?	Yes N	No X	Depth (inches):						
Water Table Present?	Yes N	No X	Depth (inches):						
Saturation Present?	Yes N	No X	Depth (inches):	Wetland H	ydrology Present?	Yes X No			
(includes capillary fringe)									
Describe Recorded Data (s	tream gauge, moni <sup>,</sup>	toring well,	aerial photos, previous insp	ections), if ava	ailable:				
Remarks:									

Sampling Point: JA\_W\_009

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	% Cover	Species?	Status	Dominance Test worksheet:
1. Acer rubrum	40	Yes	FAC	Number of Dominant Species
2. Pinus taeda	20	Yes	FAC	That Are OBL, FACW, or FAC:3 (A)
3.				Total Number of Dominant
4				Species Across All Strata: 4 (B)
5				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 75.0% (A/B)
	60	=Total Cover		Prevalence Index worksheet:
50% of total cover: 3	30 20%	of total cover:	12	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species         x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
3				FACU species x 4 =
4.				UPL species x 5 =
5.				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
0		=Total Cover		Hydrophytic Vegetation Indicators:
E00/ of total action				
50% of total cover:	20%	of total cover:		1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size:)				X 2 - Dominance Test is >50%
1.				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6				present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		<b>Tree</b> – Woody plants, excluding woody vines,
<u>Herb Stratum</u> (Plot size: <u>5'</u> radius )				approximately 20 ft (6 m) or more in height and 3 in.
1. Arundinaria gigantea	15	Yes	FACW	(7.6 cm) or larger in diameter at breast height (DBH).
2. Lonicera japonica	10	Yes	FACU	Sapling – Woody plants, excluding woody vines,
3. Carex vulpinoidea	5	No	FACW	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,
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, <u>and</u> woody 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.
		=Total Cover		
50% of total cover:	15 20%	of total cover:	6	
Woody Vine Stratum (Plot size:)				
1				
2.				
3.				
5.				
		=Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation Present? Yes X No
Remarks: (If observed, list morphological adaptatio	ns below.)			

		-			tor or confi	m the absence of indicators.)				
Depth	Matrix		x Feature		. 2	<b>.</b>				
(inches)	Color (moist) %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Rema	rks			
0-10	10YR 3/2 100					Sandy Loamy S	Sand			
10-24	2.5Y 6/2 90	10YR 6/8	10	C		Sandy Loamy S	Sand			
<sup>1</sup> Type: C=Co	oncentration, D=Depletion, RI	 M=Reduced Matrix, N	/S=Mask		Grains.	<sup>2</sup> Location: PL=Pore Lining, M=M	atrix.			
Hydric Soil	Indicators: (Applicable to al	I LRRs, unless othe	erwise no	oted.)		Indicators for Problematic Hydr	ric Soils <sup>3</sup> :			
Histosol	(A1)	Thin Dark Su	urface (S	9) <b>(LRR</b>	S, T, U)	1 cm Muck (A9) (LRR O)				
Histic Ep	oipedon (A2)	Barrier Islan	ds 1 cm I	Muck (S	12)	2 cm Muck (A10) (LRR S)				
Black Hi	istic (A3)	(MLRA 15	3B, 153D	<b>)</b> )		Coast Prairie Redox (A16)				
Hydroge	en Sulfide (A4)	Loamy Muck	y Minera	al (F1) <b>(L</b>	RR O)	(outside MLRA 150A)				
Stratified	d Layers (A5)	Loamy Gleye	ed Matrix	(F2)		Reduced Vertic (F18)				
Organic	Bodies (A6) (LRR, P, T, U)	Depleted Ma	trix (F3)			(outside MLRA 150A, 150	В)			
5 cm Mu	ucky Mineral (A7) <b>(LRR P, T, I</b>	J) Redox Dark	Surface (	(F6)		Piedmont Floodplain Soils (F	19) <b>(LRR P, T</b>			
Muck Pr	resence (A8) <b>(LRR U)</b>	Depleted Da	rk Surfac	ce (F7)		Anomalous Bright Floodplain	Soils (F20)			
1 cm Mu	uck (A9) <b>(LRR P, T)</b>	Redox Depre	essions (l	F8)		(MLRA 153B)				
Depleted	d Below Dark Surface (A11)	Marl (F10) <b>(I</b>	.RR U)			Red Parent Material (F21)				
Thick Da	ark Surface (A12)	Depleted Oc	hric (F11	) (MLRA	151)	Very Shallow Dark Surface (F	-22)			
Coast P	rairie Redox (A16) (MLRA 15	0A) Iron-Mangan	ese Mas	ses (F12	2) (LRR O, P	T) (outside MLRA 138, 152A	in FL, 154)			
Sandy N	/ucky Mineral (S1) (LRR O, S	) Umbric Surfa	ace (F13)	) (LRR F	, T, U)	Barrier Islands Low Chroma I	Matrix (TS7)			
Sandy G	Gleyed Matrix (S4)	Delta Ochric	(F17) <b>(M</b>	ILRA 15	1)	(MLRA 153B, 153D)				
X Sandy R	Redox (S5)	Reduced Ve	rtic (F18)	) (MLRA	150A, 150B)	Other (Explain in Remarks)				
	Matrix (S6)	Piedmont Fl	odplain	Soils (F	19) <b>(MLRA 1</b> 4					
Calippou	rface (S7) <b>(LRR P, S, T, U)</b>	Anomalous I	Bright Flo	odplain	Soils (F20)	-				
		(MLRA 14	-	•	. ,	<sup>3</sup> Indicators of hydrophytic veg	etation and			
Dark Su	e Below Surface (S8)	•	•	. ,		wetland hydrology must be present,				
Dark Su Polyvalu	ie Below Surface (S8) <b>S, T, U)</b>	Very Shallov	Dunk Ot		,					
Dark Su Polyvalu	( )	Very Shallov (MLRA 13		in FL, 1	54)	unless disturbed or probler	matic.			
Dark Su Polyvalu (LRR Restrictive I	( )			in FL, 1	54)	unless disturbed or probler	matic.			
Dark Su Polyvalu (LRR	S, T, U)			in FL, 1	54)	unless disturbed or probler	matic.			

### Feature ID: JA-W-009-WET Date: 04/12/2022



Photograph Number \_\_\_\_\_

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4

Photograph Direction West

WETLAND DETERMINATION DA	Army Corps of Engin ATA SHEET – Atlantic 7-24; the proponent ag	c and Gulf Coastal	-	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW		City/County: City of Cl	hesapeake	Sampling Date: 4/12/2022
Applicant/Owner: Dominion Energy			State: VA	Sampling Point: JA_W_009_UP
Investigator(s): Justin Ahn	Se	ection, Township, Range:	N/A	
Landform (hillside, terrace, etc.): Toe Slope	Loca	l relief (concave, convex,	none): None	Slope (%): 1
Subregion (LRR or MLRA): LRR T, MLRA 15		,	76.1826072728333	Datum: NAD83
Soil Map Unit Name: Psamments, 0-10% slop		0 _	NWI classific	
Are climatic / hydrologic conditions on the site		? Yes X		explain in Remarks.)
Are Vegetation, Soil, or Hydrold				nt? Yes X No
Are Vegetation, Soil, or Hydrold			plain any answers in F	
SUMMARY OF FINDINGS – Attach	site map showing sa	mpling point locat	ions, transects, i	mportant features, etc.
Hydric Soil Present?	Yes X No Yes No X	Is the Sampled Area within a Wetland?	Yes	No_X
Wetland Hydrology Present?	Yes <u>No X</u>			
Remarks: Area located within a mixed hardwood forest, HYDROLOGY	adjacent to the Intercoasta	ıl Waterway.		
[				
Wetland Hydrology Indicators:				s (minimum of two required)
Primary Indicators (minimum of one is require			Surface Soil Cra	· · ·
Surface Water (A1) High Water Table (A2)	Aquatic Fauna (B13) Marl Deposits (B15) <b>(L</b>		Drainage Patterr	ted Concave Surface (B8)
Saturation (A3)	Hydrogen Sulfide Odor		Moss Trim Lines	
Water Marks (B1)	Oxidized Rhizospheres	( )	Dry-Season Wat	· · /
Sediment Deposits (B2)	Presence of Reduced	• • • •	Crayfish Burrows	, <i>,</i> ,

Recent Iron Reduction in Tilled Soils (C6)

Thin Muck Surface (C7)

No X Depth (inches):

No X Depth (inches):

Other (Explain in Remarks)

Depth (inches):

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Describe Recorded Data	(stream gauge,	monitoring well,	aerial photos,	previous inspections), if available:
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No X

Remarks:

Drift Deposits (B3)

Field Observations: Surface Water Present?

Water Table Present?

(includes capillary fringe)

Saturation Present?

Algal Mat or Crust (B4) Iron Deposits (B5)

Water-Stained Leaves (B9)

Inundation Visible on Aerial Imagery (B7)

Yes

Yes Yes Saturation Visible on Aerial Imagery (C9)

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

Geomorphic Position (D2)

Sphagnum Moss (D8) (LRR T,U)

Shallow Aquitard (D3)

FAC-Neutral Test (D5)

Wetland Hydrology Present?

Sampling Point: JA\_W\_009\_UP

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	% Cover	Species?	Status	Dominance Test worksheet:
1. Acer rubrum	40	Yes	FAC	Number of Dominant Species
2				That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant
4				Species Across All Strata: <u>3</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)
	40	=Total Cover		Prevalence Index worksheet:
50% of total cover:2	20%	of total cover:	8	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals:(A)(B)
6.				Prevalence Index = B/A =
		=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	20%	of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				X 2 - Dominance Test is >50%
1,				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5				1
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
· · · · · · · · · · · · · · · · · · ·		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:		of total cover:		-
	2070			<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> ) 1. <i>Lonicera japonica</i>	20	Yes	FACU	(7.6 cm) or larger in diameter at breast height (DBH).
2. Vitis rotundifolia	10	Yes	FACU FAC	
	5		FAC	<b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
· · · · · · · · · · · · · · · · · · ·		No	FAC	than 3 in. (7.6 cm) DBH.
4.				
5.				<b>Shrub</b> - 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
8.				herbaceous vines, regardless of size, <u>and</u> woody 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.
		=Total Cover		
50% of total cover:1	<u> </u>	of total cover:	7	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
	:	=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation	is below.)			

SOIL

Depth Matrix Redox Features									f indicators.)		
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Те	xture	Rei	marks	
0-24	10YR 2/1	100					Loamy/Clayey		L	Loam	
						·					
21	oncentration, D=Depl	-				Grains.		<sup>2</sup> Location: PL=P			2
•	Indicators: (Applica	ble to all LR			,			Indicators for P		ydric Soils°	:
Histosol	( )	_	Thin Dark S		<i>,</i> .			1 cm Muck (			
	pipedon (A2)	Barrier Islan	ds 1 cm	Muck (S	12)		2 cm Muck (	A10) <b>(LRR S)</b>			
Black Histic (A3) (MLRA 153B, 153D)								Coast Prairie	Redox (A16)		
Hydroge	en Sulfide (A4)	_	Loamy Muc	ky Miner	al (F1) <b>(L</b>	RR O)		(outside N	LRA 150A)		
Stratified	d Layers (A5)	_	Loamy Gley	ed Matri	x (F2)			Reduced Ve	tic (F18)		
Organic	Bodies (A6) (LRR, P	, T, U) _	Depleted Ma	atrix (F3)	)			(outside N	LRA 150A, 1	50B)	
5 cm Mu	ucky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	Surface	(F6)			Piedmont Flo	odplain Soils	(F19) <b>(LRR</b>	P, 1
Muck Pr	esence (A8) (LRR U)	) _	Depleted Da	ark Surfa	ice (F7)			Anomalous E	Bright Floodpl	ain Soils (F2	20)
1 cm Mu	uck (A9) (LRR P, T)		Redox Depr	essions	(F8)			(MLRA 15	3B)		
Depleted	d Below Dark Surface	e (A11)	Marl (F10) (	LRR U)				Red Parent I	/laterial (F21)		
Thick Da	ark Surface (A12)		Depleted Oc	chric (F1	1) (MLRA	151)		Very Shallow	Dark Surface	e (F22)	
Coast P	rairie Redox (A16) ( <b>N</b>	ILRA 150A)	Iron-Mangar	nese Ma	sses (F12	2) (LRR C	), P, T)	(outside N	LRA 138, 15	2A in FL, 15	54)
Sandy M	/lucky Mineral (S1) <b>(L</b>	RR O, S)	Umbric Surf	ace (F13	3) (LRR P	, T, U)	Barrier Islands Low Chroma Matrix (TS7)				S7)
Sandy G	Gleyed Matrix (S4)	-	Delta Ochrid	; (F17) <b>(</b> I	MLRA 15	1)		(MLRA 15	3B, 153D)		
Sandy F	Redox (S5)	-	Reduced Ve	ertic (F18	B) (MLRA	150A, 15	60B)	Other (Expla	n in Remarks	;)	
Stripped	l Matrix (S6)	-	Piedmont Fl	oodplair	n Soils (F	9) <b>(MLR</b>	A 149A)				
Dark Su	rface (S7) (LRR P, S	, T, U) –	Anomalous	Bright Fl	loodplain	Soils (F2	0)				
	e Below Surface (S8	-		-		`	÷	<sup>3</sup> Indicators o	hydrophytic	vegetation a	nd
	S, T, U)		، Very Shallo			22)			drology must	•	
		_	(MLRA 13					-	turbed or prot		
Restrictive	Layer (if observed):										
Type:											
Depth (i	nches):						Hydrid	: Soil Present?	Yes	No	Х
Remarks:											

### Feature ID: JA-W-009-UP Date 04/12/2022



Photograph Number \_\_\_\_\_

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number 4

Photograph Direction West

WETLAND DETERMINATION D							
Project/Site: CVOW	City/Coun	ty: Virginia Beach	Sampling Date: 4/22/2022				
Applicant/Owner: Dominion Energy		State: VA	Sampling Point: JA_W_009B_PFO				
Investigator(s): Justin Ahn	Section Towns	ship, Range: N/A					
Landform (hillside, terrace, etc.): Depressio		ave, convex, none): Concave					
Subregion (LRR or MLRA): LRR T, MLRA 1	53A Lat: <u>36.770121</u>	Long: <u>-76.054535</u>	Datum: NAD83				
Soil Map Unit Name: Tomotley loam		NWI classific	ation: None				
Are climatic / hydrologic conditions on the site	e typical for this time of year?	Yes X No (If no,	explain in Remarks.)				
Are Vegetation, Soil, or Hydro	logy significantly disturbed? A	Are "Normal Circumstances" presen	t? Yes X No				
Are Vegetation, Soil, or Hydro		If needed, explain any answers in F					
SUMMARY OF FINDINGS – Attach	site map snowing sampling po	oint locations, transects, li	nportant features, etc.				
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes     X     No     Is the Sam       Yes     X     No     within a V       Yes     X     No     Within a V	npled Area Vetland? Yes X	No				
HYDROLOGY		Socondary Indicator	(minimum of two required)				
Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi	red: check all that apply)	Secondary Indicators	(minimum of two required)				
Surface Water (A1)	Aquatic Fauna (B13)		ted Concave Surface (B8)				
X High Water Table (A2)	Marl Deposits (B15) (LRR U)	X Drainage Patterr					
Saturation (A3)	Hydrogen Sulfide Odor (C1)	Moss Trim Lines					
Water Marks (B1)	Oxidized Rhizospheres on Living R						
Sediment Deposits (B2)	Presence of Reduced Iron (C4)	X Crayfish Burrows					
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soil		e on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Thin Muck Surface (C7)	X Geomorphic Pos	ition (D2)				
Iron Deposits (B5)	Other (Explain in Remarks)	Shallow Aquitarc	(D3)				
Inundation Visible on Aerial Imagery (B7	7)	X FAC-Neutral Tes	it (D5)				
X Water-Stained Leaves (B9)		Sphagnum Moss	s (D8) <b>(LRR T,U)</b>				
Field Observations:							
Surface Water Present? Yes	No X Depth (inches):						
Water Table Present? Yes X	No Depth (inches):4						
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present?	Yes X No				
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	pnitoring well, aerial photos, previous insp	pections), if available:					
Pomarka							
Remarks:							

Sampling Point: JA\_W\_009B\_PFO

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	% Cover	Species?	Status	Dominance Test worksheet:
1. Quercus phellos	20	Yes	FACW	Number of Dominant Species
2. Salix nigra	5	Yes	OBL	That Are OBL, FACW, or FAC: 8 (A)
3.				Total Number of Dominant
4.				Species Across All Strata: 8 (B)
				( /
				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
	25 =	=Total Cover		Prevalence Index worksheet:
50% of total cover:	13 20%	of total cover:	5	Total % Cover of: Multiply by:
<u>Sapling Stratum</u> (Plot size: <u>30' radius</u> )				OBL species x 1 =
1. Acer rubrum	10	Yes	FAC	FACW species x 2 =
2. Populus heterophylla	10	Yes	OBL	FAC species x 3 =
3. Pinus taeda	5	Yes	FAC	FACU species x 4 =
4.				UPL species x 5 =
5.				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
о		Total Cause		
		=Total Cover	_	Hydrophytic Vegetation Indicators:
	13 20%	of total cover:	5	1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: <u>15' radius</u> )				X 2 - Dominance Test is >50%
1. Morella cerifera	10	Yes	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4.				
5.				1
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
0	10	=Total Cover		
50% ( ) )			0	Definitions of Five Vegetation Strata:
	5 20%	of total cover:	2	<b>Tree</b> – Woody plants, excluding woody vines,
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1. Carex lurida	40	Yes	OBL	
2. Juncus effusus	30	Yes	OBL	Sapling – Woody plants, excluding woody vines,
3. Smilax rotundifolia	5	No	FAC	approximately 20 ft (6 m) or more in height and less
4. Rubus argutus	5	No	FAC	than 3 in. (7.6 cm) DBH.
5. Lonicera japonica	2	No	FACU	Shrub - Woody Plants, excluding woody vines,
6.			17,00	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, <u>and</u> woody
9				plants, except woody vines, less than approximately 3 ft (1 m) in height.
10				
11.				Woody Vine – All woody vines, regardless of height.
	82 :	=Total Cover		
50% of total cover:	41 20%	of total cover:	17	
Woody Vine Stratum (Plot size: )				
1				
2				
3				
4				
5				Hydrophytic
		=Total Cover		Vegetation
50% of total cover:		=Total Cover of total cover:		Vegetation Present? Yes X No
50% of total cover:	20%			-

SOIL

Depth	Matrix		Redo	x Feature	s					
nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	<u> </u>	Remarks	
0-20	10YR 5/1	100					Loamy/Cla	iyey	Silty Loam	ı
						·				
vpe: C=C	oncentration, D=Depl	etion. RM=	Reduced Matrix.	//S=Maske	 ed Sand	Grains.	<sup>2</sup> Loo	ation: PL=F	Pore Lining, M=Matri	x.
	Indicators: (Applica								Problematic Hydric	
Histosol (A1) Thin Dark Surface (S9) (LRR S, T, U					S, T, U)		1 cm Muck	(A9) <b>(LRR O)</b>		
Histic Epipedon (A2) Barrier Islands 1 cm Muck (S12)					2)	2 cm Muck (A10) <b>(LRR S)</b>				
Black Histic (A3) (MLRA 153B, 153D)							Coast Prairi	e Redox (A16)		
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR O)					RR O)		(outside l	VILRA 150A)		
Stratified	d Layers (A5)		Loamy Gley	ed Matrix	(F2)			Reduced Ve	ertic (F18)	
Organic	Bodies (A6) (LRR, P	, T, U)	X Depleted Ma	atrix (F3)				(outside l	MLRA 150A, 150B)	
5 cm Mu	ucky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	Surface (	F6)			Piedmont F	oodplain Soils (F19)	(LRR P, 1
Muck Pr	esence (A8) (LRR U)	)	Depleted Da	ark Surface	e (F7)			Anomalous	Bright Floodplain So	ils (F20)
1 cm Mu	uck (A9) (LRR P, T)		Redox Depr	essions (F	8)			(MLRA 15	i3B)	
Depleted	d Below Dark Surface	e (A11)	Marl (F10) (	LRR U)				Red Parent	Material (F21)	
Thick Da	ark Surface (A12)		Depleted Oc	chric (F11)	(MLRA	151)		Very Shallov	w Dark Surface (F22	)
Coast P	rairie Redox (A16) ( <b>N</b>	ILRA 150A	Iron-Mangar	nese Mass	ses (F12	) (LRR C	), P, T)	(outside l	MLRA 138, 152A in	FL, 154)
Sandy N	/lucky Mineral (S1) <b>(L</b>	RR O, S)	Umbric Surf	ace (F13)	(LRR P	T, U)		Barrier Islan	ids Low Chroma Mat	rix (TS7)
Sandy G	Gleyed Matrix (S4)		Delta Ochric	: (F17) <b>(M</b>	LRA 151	)		(MLRA 15	53B, 153D)	
Sandy F	Redox (S5)		Reduced Ve	ertic (F18)	(MLRA	150A, 15	60B)	Other (Expla	ain in Remarks)	
Stripped	l Matrix (S6)		Piedmont Fl	oodplain S	Soils (F1	9) <b>(MLR</b>	A 149A)			
Dark Su	rface (S7) <b>(LRR P, S</b>	, T, U)	Anomalous	Bright Flo	odplain \$	Soils (F2	0)			
Polyvalu	e Below Surface (S8	)	(MLRA 14	I9A, 153C	, 153D)			<sup>3</sup> Indicators of	of hydrophytic vegeta	ation and
(LRR	S, T, U)		Very Shallov	v Dark Su	rface (F2	22)		wetland h	ydrology must be pro	esent,
			(MLRA 13	88, 152A i	n FL, 15	4)		unless dis	sturbed or problemat	ic.
estrictive	Layer (if observed):									
Type:										
Depth (ii	nches):						Hydric So	il Present?	Yes X	No
Remarks:										

#### Feature ID: JA-W-009-B-WET Date: 04/22/2022



Photograph Number 1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number 4

Photograph Direction West

WETLAND DETERMINATION D	t/Owner: Dominion Energy State:						
Project/Site: CVOW		City/County: Vir	ginia Beach	_ Sampling Date: <u>4/22/2022</u>			
Applicant/Owner: Dominion Energy			State: VA	Sampling Point: JA_W_009B_UP			
Investigator(s): Justin Ahn	S	ection, Township, F	Range: N/A				
Landform (hillside, terrace, etc.): Berm	Loca	I relief (concave, c	onvex, none): None	Slope (%): 3			
Subregion (LRR or MLRA): LRR T, MLRA 1			Long: -76.054357	Datum: NAD83			
Soil Map Unit Name: Tomotley loam			NWI classific	ation <sup>.</sup> None			
Are climatic / hydrologic conditions on the sit	e typical for this time of year	·2 Ves		explain in Remarks.)			
		-		t? Yes X No			
Are Vegetation, Soil, or Hydro							
Are Vegetation, Soil, or Hydro			ded, explain any answers in R				
SUMMARY OF FINDINGS – Attach	site map showing sa	ampling point	locations, transects, ir	nportant features, etc.			
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes No X Yes No X	Is the Sampled within a Wetlan		No_X			
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators	(minimum of two required)			
Primary Indicators (minimum of one is requi	red; check all that apply)		Surface Soil Cra				
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegeta	ted Concave Surface (B8)			
High Water Table (A2)	Marl Deposits (B15) (L	.RR U)	Drainage Pattern	ns (B10)			
Saturation (A3)	Hydrogen Sulfide Odo		Moss Trim Lines				
Water Marks (B1)	Oxidized Rhizospheres						
Sediment Deposits (B2)	Presence of Reduced	( )	Crayfish Burrows				
Drift Deposits (B3)	Recent Iron Reduction	· · ·		e on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Iron Deposits (B5)	Thin Muck Surface (C Other (Explain in Rem		X Geomorphic Pos Shallow Aquitard				
Inundation Visible on Aerial Imagery (B		airs)	FAC-Neutral Tes				
Water-Stained Leaves (B9)	,		Sphagnum Moss				
Field Observations:		I					
Surface Water Present? Yes	No X Depth (inches	.):					
Water Table Present? Yes	No X Depth (inches						
Saturation Present? Yes	No X Depth (inches	s): We	etland Hydrology Present?	Yes No _X			
(includes capillary fringe)							

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Sampling Point: JA\_W\_009B\_UP

	Absolute Dominant	Indicator	
Tree Stratum (Plot size: <u>30' radius</u> )	% Cover Species?	Status	Dominance Test worksheet:
1. Liquidambar styraciflua	<u>40 Yes</u>	FAC	Number of Dominant Species
2. Acer rubrum	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
3. Liriodendron tulipifera	<u>    10      No    </u>	FACU	Total Number of Dominant
4			Species Across All Strata: 5 (B)
5			Percent of Dominant Species
6			That Are OBL, FACW, or FAC: 80.0% (A/B)
	75 =Total Cover		Prevalence Index worksheet:
	8 20% of total cover:	15	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30' radius )			OBL species x 1 =
1. Fagus grandifolia	<u>    5     Yes</u>	FACU	FACW species x 2 =
2			FAC species x 3 =
3			FACU species x 4 =
4			UPL species x 5 =
5			Column Totals:(A)(B)
6			Prevalence Index = B/A =
	5 =Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	3 20% of total cover:	1	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: 15' radius )			X 2 - Dominance Test is >50%
1. Morella cerifera	5 Yes	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.			
4.			
5.			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6.			present, unless disturbed or problematic.
	5 =Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	3 20% of total cover:	1	<b>Tree</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5' radius )			approximately 20 ft (6 m) or more in height and 3 in.
1. Smilax rotundifolia	5 Yes	FAC	(7.6 cm) or larger in diameter at breast height (DBH).
2.			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,
6.			approximately 3 to 20 ft (1 to 6 m) in height.
7.			
8.			Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody
			herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3
9.			herbaceous vines, regardless of size, and woody
9 10			herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3
9.			herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
9. 10. 11.			herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
9 10 11 50% of total cover:		1	herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
9			herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
9	= =	1	herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
9	= = = = = 20% of total cover:	1	herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
9	=Total Cover 20% of total cover:	1	herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
9	=Total Cover 20% of total cover:	 1	herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
9	=Total Cover =Total Cover 3 20% of total cover: 	1	herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody Vine – All woody vines, regardless of height.
9	= Total Cover 3 20% of total cover: = =		herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody Vine – All woody vines, regardless of height. Hydrophytic Vegetation
9	=Total Cover 3 20% of total cover: =Total Cover =Total Cover 20% of total cover:		herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody Vine – All woody vines, regardless of height.

Depth	 Matrix	•		x Featu					indicators.)		
Jepin (inches)	Color (moist)	%	Color (moist)	% reatu	Type <sup>1</sup>	Loc <sup>2</sup>	Те	exture	Re	emarks	
0-4	10YR 3/3	100					Loam	y/Clayey		Loam	
4-24	10YR 4/2	100			·					my Sand	
4-24	10 TK 4/2							andy	LUa		
					·	·		2			
	oncentration, D=Deple Indicators: (Applicab					Grains.		<sup>2</sup> Location: PL=			
Histosol		Thin Dark S		,	STIN		Indicators for Problematic Hydric Soils <sup>3</sup> : 1 cm Muck (A9) (LRR O)				
	pipedon (A2)	Barrier Islar	```	<i>,</i> <b>,</b>			2 cm Muck (A10) (LRR S)				
	istic (A3)	(MLRA 1			12)			rie Redox (A16			
	Loamy Muc		,				MLRA 150A)	))			
_ ` `	en Sulfide (A4) d Layers (A5)			-	· / ·	KK 0)		•	/ertic (F18)		
		<b>T</b> II)	Loamy Gley							450D)	
	Bodies (A6) (LRR, P,		Depleted Ma	``	,				MLRA 150A,	,	
	ucky Mineral (A7) <b>(LRR</b>	P, I, U)	Redox Dark		· · /				•	s (F19) <b>(LRR P,</b>	
	resence (A8) (LRR U)		Depleted Da		· · /				0 1	olain Soils (F20)	
	uck (A9) <b>(LRR P, T)</b>		Redox Depr		(F8)			(MLRA 1		`	
	d Below Dark Surface (	A11)	Marl (F10) (						t Material (F21	,	
	ark Surface (A12)		Depleted O	`	, <b>、</b>	,			ow Dark Surfac	( )	
	rairie Redox (A16) ( <b>ML</b>				,	<i>,</i> .	O, P, T) (outside MLRA 138, 152A in FL, <sup>2</sup>				
	/lucky Mineral (S1) <b>(LR</b>	R O, S)	Umbric Surf	`	, <b>、</b>		Barrier Islands Low Chroma Matrix				
	Gleyed Matrix (S4)		Delta Ochrid	. , .		,			A 153B, 153D)		
	Redox (S5)		Reduced Ve	`	, .		,	Other (Exp	lain in Remark	(s)	
	l Matrix (S6)		Piedmont F	oodplaiı	n Soils (F	19) <b>(MLR</b>	A 149A)				
Dark Su	rface (S7) <b>(LRR P, S,</b> '	T, U)	Anomalous	Bright F	loodplain	Soils (F2	0)				
Polyvalu	e Below Surface (S8)		(MLRA 14	I9A, 153	3C, 153D)			<sup>3</sup> Indicators	of hydrophytic	vegetation and	
(LRR	S, T, U)		Very Shallo	v Dark S	Surface (F	22)		wetland	hydrology mus	st be present,	
			(MLRA 1	88, 152 <i>A</i>	4 in FL, 1	54)		unless o	listurbed or pro	oblematic.	
	Layer (if observed):										
Type:											
Depth (inches):					Hydri	c Soil Present	Yes	No X			

### Feature ID: JA-W-009B-UP Date: 04/22/2022



Photograph Number \_\_\_\_\_

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

Project/Site       C/UW       City/County: Virginia Beach       Sampling Date: 4/22/20         Applicant/County:	WETLAND DETERMINATION	S. Army Corps of Eng I DATA SHEET – Atlant R-07-24; the proponent ag	ic and Gulf Coasta	•	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Applicant/Owner:       Dominion Energy       State:       VA       Sampling Point:       Accurate         Investigator(s):       Justin Ahn       Section, Township, Range:       N/A         Landform (hillside, lerrace, etc.):       Depression       Local relief (concave, convex, none):       Concave       Slope (%):       3         Solid Map Unit Name:       Townotely loam       NWI classification:       None         Are elimatic / hydrologic conditions on the site typical for this time of year?       Yes       No	Project/Site: CVOW		City/County: Virginia	Beach	Sampling Date: 4/22/2022
Investigator(s): Justin Ahn	-				
Landform (hillside, terrace, etc.):       Depression       Local relief (concave, corvex, none):       Concave       Slope (%):       3         Subregion (LRR or MLRA):       LRR T, MLRA 163A       Lat:       36.770274       Long -76.055113       Datum:       NADB3         Solit May Unit Name:       Tomotley Loam       None       None       None         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes X       No       (If no, explain in Remarks.)         Are Vegetation       , Soli       , or Hydrology       naturally problematic?       (If needed, explain any answers in Remarks.)         SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, et       Is the Sampled Area within a Wetland?       Yes X       No         Hydrophytic Vegetation Present?       Yes X       No       Is the Sampled Area within a Wetland?       Yes X       No         Hydrophytic Vegetation Present?       Yes X       No       Is the Sampled Area within a Wetland?       Yes X       No		S	ection Townshin Range		
Subregion (LRR or MLRA):       IRR T, MLRA 153A       Lat:       36.770274       Long: -76.055113       Datum:       NADB3.         Soil Map Unit Name:       Tomotley loam       NWI classification:       Nome         Are dimatic / hydrologic conditions on the site typical for this time of year?       Yes X       No       (ff no. explain in Remarks.)         Are Vegetation       , Soil       , or Hydrology       naturally problematic?       (ff needed, explain any answers in Remarks.)         SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc       Is the Sampled Area         Hydrophylic Vegetation Present?       Yes X       No       is the Sampled Area         Wetland Hydrology Present?       Yes X       No					Slope $(%)$ : 3
Soil Map Unit Name:       Tomotley loam       NWI classification:       None         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes X       No					
Are climatic / hydrologic conditions on the site typical for this time of year?       Yes X       No		A 153A Lat: <u>36.770274</u>	Long:		
Are Vegetation					
Are Vegetation	Are climatic / hydrologic conditions on the	site typical for this time of year			
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, et         Hydrophytic Vegetation Present?       Yes       X       No       is the Sampled Area within a Wetland?       Yes       X       No	Are Vegetation, Soil, or Hy	drologysignificantly dist	urbed? Are "Normal	Circumstances" presen	t? Yes X No
Hydrophytic Vegetation Present?       Yes X No       Is the Sampled Area within a Wetland?       Yes X No         Wetland Hydrology Present?       Yes X No       within a Wetland?       Yes X No         Remarks:       Area located in a sparcely vegetated depression with a powerline easement right-of-way       Secondary Indicators (minimum of two required)         HYDROLOGY       Surface Vater (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         Surface Water (A1)       Aquatic Fauna (B13)       X Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Suffide Odor (C1)       Moss Trim Lines (B16)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Startation (X3B)       Startation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       X Geomorphic Position (D2)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       X Depth (inches):       Shallow Aquitard (D3)       Shallow Aquitard (D3)         Water Table Present?       Yes       No X       Depth (inches):       Spresent?       Yes X No         Inundation Visible on Aerial Im	Are Vegetation, Soil, or Hy	drology naturally problem	matic? (If needed, e	explain any answers in F	Remarks.)
Hydric Soil Present?       Yes       X       No       within a Wetland?       Yes       X       No         Remarks:       Area located in a sparcely vegetated depression with a powerline easement right-of-way       Area located in a sparcely vegetated depression with a powerline easement right-of-way         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)       Surface Soil Cracks (B6)         High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       X Geomorphic Positin (D2)         In Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       X FAC-Neutral Test (D5)       Shallow Aquitard (D3)         Water Present?       Yes       No       X       Depth (inches):         Sutare Water Present?       Yes       No       X       Depth (inches):         Water Table Present?       Yes       No       X       Depth (inches):         Water Table Presen	SUMMARY OF FINDINGS – Atta	ch site map showing sa	ampling point loca	tions, transects, i	nportant features, etc.
HYDROLOGY         Wetland Hydrology 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 on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       X Crayfish Burrows (C8)         Soff Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       X Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       X FAC-Neutral Test (D5)         Water Table Present?       Yes       No       X Depth (inches):         Water Table Present? <th>Hydric Soil Present? Wetland Hydrology Present?</th> <th>Yes X No</th> <th>-</th> <th></th> <th>No</th>	Hydric Soil Present? Wetland Hydrology Present?	Yes X No	-		No
Primary Indicators (minimum of one is required; check all that apply)					
Surface Water (A1)       Aquatic Fauna (B13)       X 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 on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       X Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       X Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       X FAC-Neutral Test (D5)         Water Table Present?       Yes       No         X       Depth (inches):       Sphagnum Moss (D8) (LRR T,U)         Field Observations:         Surface Water Present?       Yes       No         X       Depth (inches):       Wetland Hydrology Present?       Yes       X         Georride Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Yes       X       No <th></th> <th></th> <th></th> <th>-</th> <th></th>				-	
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 on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       X Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       X Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       X FAC-Neutral Test (D5)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       Surface Water Present? Yes       No X       Depth (inches):       Wetland Hydrology Present? Yes X No_         Saturation Present?       Yes       No X       Depth (inches):       Wetland Hydrology Present? Yes X No_         Cincludes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Yes X No_					( )
Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B16)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       X Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       X Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       X FAC-Neutral Test (D5)         Water Table Present?       Yes       No         X       Depth (inches):       Shallow Aquitard (D3)         Saturation Present?       Yes       No         X       Depth (inches):       Yes         Saturation Present?       Yes       No         X       Depth (inches):		,	_RR U)		
Water Marks (B1)       Oxidized Rhizospheres on Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       X       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       X       FAC-Neutral Test (D5)         Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       Saturation Present?       Yes         Saturation Present?       Yes       No       X         Mater Table Present?       Yes       No       X         Mater Table Present?       Yes       No       X         Mater Table Present?       Yes       No       X         Depth (inches):       Wetland Hydrology Present?       Yes       No         Georded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Ves       X			•		
Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       X Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       X FAC-Neutral Test (D5)         Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       Saturation Present?         Surface Water Present?       Yes       No         X       Depth (inches):       Wetland Hydrology Present?         Yes       No       X         Depth (inches):       Wetland Hydrology Present?         Yes       X       No         Depth (inches):       Wetland Hydrology Present?         Yes       X       No         Cincludes capillary fringe)       Depth (aerial photos, previous inspections), if available:					
Algal Mat or Crust (B4)       Thin Muck Surface (C7)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       X       FAC-Neutral Test (D5)         Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       Surface Water Present?       Yes         Surface Water Present?       Yes       No       X       Depth (inches):         Saturation Present?       Yes       No       X       Depth (inches):         (includes capillary fringe)       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       X       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       If available:       If available:       If available:	Sediment Deposits (B2)	Presence of Reduced	Iron (C4)	X Crayfish Burrows	s (C8)
Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       X FAC-Neutral Test (D5)         Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       Surface Water Present? Yes       No X       Depth (inches):         Water Table Present?       Yes       No X       Depth (inches):       Wetland Hydrology Present?       Yes X       No         Saturation Present?       Yes       No X       Depth (inches):       Wetland Hydrology Present?       Yes X       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Ves X       No	Drift Deposits (B3)	Recent Iron Reduction	n in Tilled Soils (C6)	Saturation Visibl	e on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7)       X       FAC-Neutral Test (D5)         Water-Stained Leaves (B9)       Sphagnum Moss (D8) (LRR T,U)         Field Observations:       Surface Water Present? Yes       No         Surface Water Table Present? Yes       No       X       Depth (inches):         Saturation Present? Yes       No       X       Depth (inches):         (includes capillary fringe)       Wetland Hydrology Present?       Yes       X         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Image: Construction of the stream gauge is the stream gauge of the stream gauge is the stream gauge of the stream gauge is the stream gauge is the stream gauge of the stream gauge is the stream gauge of the stream gauge is the s	<b>—</b> •				( )
Water-Stained Leaves (B9)			arks)		
Field Observations:         Surface Water Present?       Yes       No       X       Depth (inches):		(87)			
Surface Water Present?       Yes       No       X       Depth (inches):					(D0) (LKK 1,U)
Water Table Present?       Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       X       No         Saturation Present?       Yes       Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       X       No         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Ves       X       No		No X Depth (inches	s).		
Saturation Present?       Yes       No       X       Depth (inches):       Wetland Hydrology Present?       Yes       X       No         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Ves       X       No					
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				d Hydrology Present?	Yes X No
Remarks:	Describe Recorded Data (stream gauge,	monitoring well, aerial photos,	previous inspections), if	available:	
	Remarks:				

Sampling Point: JA\_W\_009B\_PEM

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That Are OBL, FACW, or FAC: (A)
3.				Total Number of Dominant
4				Species Across All Strata: 4 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 75.0% (A/B)
		Total Cover		Prevalence Index worksheet:
50% of total cover:	20%	of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species x 1 =
1				FACW species x 2 =
2.				FAC species x 3 =
2				FACU species x 4 =
4.				UPL species x 5 =
5				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
		Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:		of total cover:		1 - Rapid Test for Hydrophytic Vegetation
	2070			X 2 - Dominance Test is >50%
Shrub Stratum (Plot size:)				
1				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6				present, unless disturbed or problematic.
	<sup>_</sup>	Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		Tree – Woody plants, excluding woody vines,
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )				approximately 20 ft (6 m) or more in height and 3 in.
1. Juncus effusus	10	Yes	OBL	(7.6 cm) or larger in diameter at breast height (DBH).
2. Carex lurida	5	Yes	OBL	Sapling – Woody plants, excluding woody vines,
3. Sorghum halepense	5	Yes	FACU	approximately 20 ft (6 m) or more in height and less
4. Eclipta prostrata	5	Yes	FACW	than 3 in. (7.6 cm) DBH.
5.				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.
11				Woody Vine – All woody vines, regardless of height.
	25 =	Total Cover		
50% of total cover: 1		of total cover:	5	
	20%			
Woody Vine Stratum (Plot size:)				
1				
2.				
3				
4				
5				Hydrophytic
	=	Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptatio	ns below.)			

Depth Matrix		Redo	ox Featu	res						
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Textur	re	Remarks	
0-4	10YR 4/1	95	7.5YR 4/6	5	C	PL	Loamy/Cl	ayey	Silty Loam	
4-20	10YR 4/1	95	7.5YR 4/6	5	<u> </u>	PL	Loamy/Cl	ayey	Silty Clay	
					·					
71	oncentration, D=Dep	,	,			Grains.			Pore Lining, M=Matrix. Problematic Hydric Soils	s <sup>3</sup> :
Histosol	(A1)		Thin Dark S	urface (	S9) <b>(LRR</b>	S, T, U)		1 cm Muck	(A9) <b>(LRR O)</b>	
Histic Ep	pipedon (A2)		Barrier Islar	ids 1 cm	Muck (S	12)		2 cm Muck	(A10) <b>(LRR S)</b>	
Black Hi	stic (A3)		(MLRA 1	53B, 153	BD)			Coast Prair	ie Redox (A16)	
Hydroge	n Sulfide (A4)		Loamy Muc	ky Miner	ral (F1) <b>(L</b>	RR O)		(outside	MLRA 150A)	
Stratified	d Layers (A5)		Loamy Gley	ed Matri	ix (F2)			Reduced Ve	ertic (F18)	
Organic	Bodies (A6) (LRR, P	, T, U)	X Depleted Ma	atrix (F3	)			(outside	MLRA 150A, 150B)	
5 cm Mu	ucky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	Surface	e (F6)			Piedmont F	loodplain Soils (F19) <b>(LR</b> I	R P, <sup>-</sup>
Muck Pr	esence (A8) (LRR U	)	Depleted Da	ark Surfa	ace (F7)			Anomalous	Bright Floodplain Soils (F	20)
1 cm Mu	ick (A9) (LRR P, T)		Redox Depr	essions	(F8)			(MLRA 1	53B)	
Depleted	d Below Dark Surface	e (A11)	Marl (F10) (	LRR U)				Red Parent	Material (F21)	
Thick Da	ark Surface (A12)		Depleted O	chric (F1	1) (MLRA	A 151)		Very Shallo	w Dark Surface (F22)	
Coast P	rairie Redox (A16) ( <b>N</b>	ILRA 150A	)Iron-Manga	nese Ma	isses (F12	2) (LRR C	), P, T)	(outside	MLRA 138, 152A in FL, 1	54)
Sandy M	lucky Mineral (S1) <b>(L</b>	RR O, S)	Umbric Sur	ace (F1	3) (LRR P	P, T, U)		Barrier Islar	nds Low Chroma Matrix (1	ſS7)
Sandy G	Gleyed Matrix (S4)		Delta Ochrid	c (F17) <b>(</b>	MLRA 15	1)		(MLRA 1	53B, 153D)	
Sandy R	Redox (S5)		Reduced Ve	ertic (F18	8) <b>(MLRA</b>	150A, 15	50B)	Other (Expl	ain in Remarks)	
Stripped	Matrix (S6)		Piedmont F	loodplair	n Soils (F	19) <b>(MLR</b>	A 149A)			
Dark Su	rface (S7) <b>(LRR P, S</b>	, T, U)	Anomalous	Bright F	loodplain	Soils (F2	0)			
Polyvalu	e Below Surface (S8	)	(MLRA 14	49A, 153	BC, 153D)			<sup>3</sup> Indicators	of hydrophytic vegetation	and
(LRR	S, T, U)		Very Shallo	w Dark S	Surface (F	22)		wetland h	nydrology must be presen	t,
			(MLRA 1	38, 152A	in FL, 1	54)		unless di	sturbed or problematic.	
Restrictive	Layer (if observed):									
Type:	•									
Depth (ii	nches):						Hydric So	oil Present?	Yes X No	
Remarks:							-			

Feature ID: JA-W-009B-PEM Date: 04/22/2022



Photograph Number 1

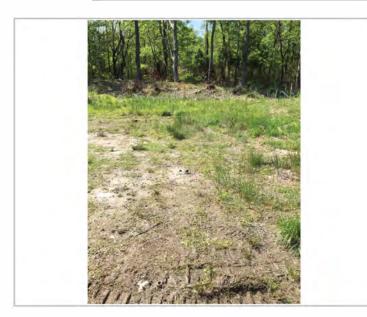
Photograph Direction North\_

Comments:



Photograph Number \_ 2 \_\_\_\_ Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

U.S. Army Corps of Engi WETLAND DETERMINATION DATA SHEET – Atlanti See ERDC/EL TR-07-24; the proponent ag	ic and Gulf Coastal Plain Region	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW	City/County: City of Virgina Beach	Sampling Date: 4/22/2022
Applicant/Owner: Dominon Energy	State: VA	Sampling Point: JA_W_010
Investigator(s): Justin Ahn Se	ection, Township, Range: <u>N/A</u>	
Landform (hillside, terrace, etc.): Depression Loca	al relief (concave, convex, none): <u>Concave</u>	Slope (%): 0
Subregion (LRR or MLRA): LRR T, MLRA 153B Lat: 36.79362870266	667 Long: -76.0206851111667	Datum: NAD83
Soil Map Unit Name: Tomotley loam	NWI classific	ation: None
Are climatic / hydrologic conditions on the site typical for this time of year	? Yes X No (If no,	explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantly dist	urbed? Are "Normal Circumstances" presen	nt? Yes X No
Are Vegetation, Soil, or Hydrologynaturally problem	matic? (If needed, explain any answers in F	Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	ampling point locations, transects, in	mportant features, etc.
Hydrophytic Vegetation Present?     Yes     X     No       Hydric Soil Present?     Yes     X     No       Wetland Hydrology Present?     Yes     X     No	Is the Sampled Area within a Wetland? Yes X	No
Remarks: Area located within a agricultural field utilized for the cultivation of row cr	rops. Area is classified as a PEM wetland	

HYDROLOGY
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Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is rec	uired; check all that apply)		Surface Soil Cracks (B6)		
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)		
X High Water Table (A2)	Marl Deposits (B15) (LRR U)		Drainage Patterns (B10)		
X Saturation (A3)	Moss Trim Lines (B16)				
Water Marks (B1)	Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Presence of Reduced Iron (C4)		Crayfish Burrows (C8)		
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils	(C6)	Saturation Visible on Aerial Imagery (C9)		
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)		
X Water-Stained Leaves (B9)			Sphagnum Moss (D8) (LRR T,U)		
Field Observations:					
Surface Water Present? Yes	No X Depth (inches):				
Water Table Present? Yes X	No Depth (inches): 4				
Saturation Present? Yes X	No Depth (inches): 4	Wetland	Hydrology Present? Yes X No		
(includes capillary fringe)					
Describe Recorded Data (stream gauge, r	monitoring well, aerial photos, previous inspe	ections), if a	available:		
Remarks:					

Sampling Point: JA\_W\_010

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
1.       2.				Number of Dominant Species           That Are OBL, FACW, or FAC:         3         (A)
3. 4.				Total Number of Dominant Species Across All Strata: 3 (B)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC:100.0% (A/B)
		=Total Cover		Prevalence Index worksheet:
50% of total cover:	20%	of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3.				FACU species x 4 =
4.				UPL species x 5 =
5.				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
		=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:		of total cover:		1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: 15' radius )				X 2 - Dominance Test is >50%
· · · · · · · · · · · · · · · · · · ·	30	Yes	OBL	$3 - Prevalence Index is \leq 3.0^{1}$
1. <u>Salix nigra</u> 2.		103		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4.				
5.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6				present, unless disturbed or problematic.
		=Total Cover	0	Definitions of Five Vegetation Strata:
	5 20%	of total cover:	6	<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 5' radius )				(7.6 cm) or larger in diameter at breast height (DBH).
1. Juncus effusus	15	Yes	OBL	(
2. Typha latifolia	10	Yes	OBL	Sapling – Woody plants, excluding woody vines,
3. Salix nigra	5	No	OBL	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
4				
5				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, <u>and</u> woody
9				plants, except woody vines, less than approximately 3 ft (1 m) in height.
10				
11				Woody Vine – All woody vines, regardless of height.
	30	=Total Cover		
50% of total cover: 1		=Total Cover of total cover:	6	
			6	
50% of total cover: <u>1</u> <u>Woody Vine Stratum</u> (Plot size:) 1.			6	
Woody Vine Stratum         (Plot size:)           1.			6	
Woody Vine Stratum         (Plot size:)           1.            2.	520%		6	
Woody Vine Stratum         (Plot size:)           1.	520%		6	
Woody Vine Stratum         (Plot size:)           1.            2.	520%		6	
Woody Vine Stratum         (Plot size:)           1.	<u>5</u> 20%	of total cover:	<u>6</u>	Hydrophytic
Woody Vine Stratum (Plot size:)         1.         2.         3.         4.         5.	<u>5</u> 20%	of total cover:	6	Vegetation
Woody Vine Stratum         (Plot size:)           1.            2.            3.	<u>5</u> 20%	of total cover:	6 	

Depth	Matrix		Dodo	x Featur							
inches)	Color (moist)	% (	Color (moist)	% realur	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Re	marks	
0-18	10YR 5/2	95	7.5YR 5/6	5	C	PL -	Loamy/Claye		Sandy	Clay Loam	
						·					
	oncentration, D=Deple					d Grains.			ore Lining, M		<sup>3</sup> :
Histosol		_	Thin Dark S	`	, <b>`</b>			`	49) <b>(LRR O)</b>		
	pipedon (A2)	_	Barrier Islan			12)			A10) <b>(LRR S</b> )		
Black Hi	stic (A3)		(MLRA 15	3B, 153	D)		C	oast Prairie	Redox (A16	)	
Hydroge	n Sulfide (A4)	_	Loamy Muck	y Miner	al (F1) <b>(L</b>	.RR O)		(outside M	LRA 150A)		
Stratified	d Layers (A5)	_	Loamy Gley	ed Matriz	x (F2)		R	educed Ver	tic (F18)		
Organic	Bodies (A6) (LRR, P,	T, U)	X Depleted Ma	trix (F3)	)			(outside M	LRA 150A, 1	50B)	
5 cm Mu	icky Mineral (A7) <b>(LRF</b>	R P, T, U)	Redox Dark	Surface	(F6)		P	edmont Flo	odplain Soils	(F19) <b>(LRF</b>	R P, T
Muck Pr	esence (A8) (LRR U)		Depleted Da	rk Surfa	ce (F7)		A	nomalous E	Bright Floodpl	ain Soils (F	20)
	ıck (A9) <b>(LRR P, T)</b>	_	Redox Depre	essions	(F8)			(MLRA 153	BB)		
Depleted	d Below Dark Surface	(A11) —	Marl (F10) (I	.RR U)			R	ed Parent N	Aterial (F21)		
Thick Da	ark Surface (A12)	· · · -	Depleted Oc	hric (F1	1) (MLR/	A 151)		ery Shallow	Dark Surfac	e (F22)	
	rairie Redox (A16) ( <b>M</b> I	_RA 150A)	Iron-Mangar					-	LRA 138, 15		54)
Sandy M	lucky Mineral (S1) (LF	RR O, S)	Umbric Surfa	ace (F13	3) (LRR F	P, T, U)	В	arrier Island	Is Low Chron	na Matrix (T	S7)
Sandv G	Bleyed Matrix (S4)		Delta Ochric					(MLRA 153		,	,
	Redox (S5)	_	Reduced Ve	· / ·		,	<b>0B)</b> O	•	n in Remarks	5)	
	Matrix (S6)	_	Piedmont Fl		, .					,	
	rface (S7) (LRR P, S,	T. U) —	Anomalous	•	`	<i>,</i> , ,					
	e Below Surface (S8)	, -,		-				ndicators of	hydrophytic	vegetation a	and
	S, T, U)		Very Shallov						drology must	•	
(	-, -, -,	_	(MLRA 13					-	turbed or prol		-,
Restrictive	Layer (if observed):										
Type:											
Depth (ii	nches):						Hydric Soil	Present?	Yes	X No	
Remarks:											

### Feature ID: JA-W-010-WET Date: 04/22/2022



Photograph Number 1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

WETLAND DETERMINA See ERDC/E	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)			
Project/Site: CVOW		City/County: City of Virgin	ia Beach	Sampling Date: 4/22/2022
Applicant/Owner: Dominion En	lergy		State: VA	Sampling Point: JA_W_010,011,012
Investigator(s): Justin Ahn	S	ection, Township, Range: N	A	
Landform (hillside, terrace, etc.):	Plain Loca	al relief (concave, convex, noi	ne): None	Slope (%): 2
- Subregion (LRR or MLRA): LRR T	, MLRA 153B Lat: 36.7937177718	333 Long: -76.	)206762888333	Datum: NAD83
Soil Map Unit Name: Tomotley loa	m		NWI classific	ation: None
Are climatic / hydrologic conditions	on the site typical for this time of year	r? Yes X		explain in Remarks.)
Are Vegetation , Soil	, or Hydrology significantly dist			it? Yes X No
	, or Hydrology naturally probler		n any answers in F	
SUMMARY OF FINDINGS -	- Attach site map showing sa	ampling point location	s, transects, i	mportant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         X         No           Yes         X         No           Yes         No         X	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>
Remarks: Area located within an agricultural	field, cultivated with row crops			
				( · · · · · · · · · · · · · · · · · · ·
Wetland Hydrology Indicators: Primary Indicators (minimum of or	ne is required; check all that apply)	Se	Surface Soil Cra	s (minimum of two required)
Surface Water (A1)	Aquatic Fauna (B13)		_	ted Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (L	_RR U)	Drainage Patterr	· · /
Saturation (A3)	Hydrogen Sulfide Odo		Moss Trim Lines	s (B16)

Saturation (A3)		Hydrog	en Sulfide Odor (C1)		Moss Trim Lines (B16)	1		
Water Marks (B1)	_	Oxidize	d Rhizospheres on Living Ro	ots (C3)	Dry-Season Water Tak	ole (C2)		
Sediment Deposits (B2	)	Presen	ce of Reduced Iron (C4)		Crayfish Burrows (C8)			
Drift Deposits (B3)		Recent	Iron Reduction in Tilled Soils	(C6)	Saturation Visible on A	erial Imagery	′ (C9)	
Algal Mat or Crust (B4)		Thin Mu	uck Surface (C7)		Geomorphic Position (	D2)		
Iron Deposits (B5)		Other (	Explain in Remarks)		Shallow Aquitard (D3)			
Inundation Visible on A	erial Imagery (B7)			Х	FAC-Neutral Test (D5)	1		
Water-Stained Leaves	(B9)				Sphagnum Moss (D8)	(LRR T,U)		
Field Observations:								
Surface Water Present?	Yes N	No X	Depth (inches):					
Water Table Present?	Yes N	No X	Depth (inches):					
Saturation Present?	Yes N	No X	Depth (inches):	Wetland Hyd	rology Present?	Yes	No_X	
(includes capillary fringe)								
Describe Recorded Data (st	tream gauge, monit	toring well,	, aerial photos, previous inspe	ections), if availa	ble:			
Drainage patterns area pres	sent							

Remarks:

Sampling Point: \_JA\_W\_010,011,012\_UP

Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
			Number of Dominant Species That Are OBL, FACW, or FAC:3(A)
			Total Number of Dominant Species Across All Strata: 4 (B)
			Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)
	=Total Cover		Prevalence Index worksheet:
			Total % Cover of: Multiply by:
			OBL species         x 1 =
			FACW species         x 2 =
			FAC species         x 3 =
			FACU species x4 =
			UPL species x 5 =(A)
			Column Totals: (A) (B)
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
20%	of total cover:		1 - Rapid Test for Hydrophytic Vegetation
			X 2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0 <sup>1</sup>
			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
			present, unless disturbed or problematic.
			Definitions of Five Vegetation Strata:
20%	of total cover:		<b>Tree</b> – 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).
15	Yes	FACW	
5	Yes	FACU	Sapling – Woody plants, excluding woody vines,
5	Yes	OBL	approximately 20 ft (6 m) or more in height and less
5	Yes	FAC	than 3 in. (7.6 cm) DBH.
			<b>Shrub</b> - 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.
	Tatal Quart		
		~	
5 200/	of total cover:	6	
5 20%			
<u> </u>			
<u> </u>			
<u>5     20%</u>			
			Hudrophytic
	=Total Cover		Hydrophytic Vegetation
	<u>% Cover</u> <u>20%</u> <u>20%</u> <u>20%</u> <u>20%</u> <u>15</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u> <u></u>	% Cover         Species?	% Cover         Species?         Status

nches) 0-8 8-20	Color (moist) 10YR 4/2	<u>%</u> <u>C</u> 100	Color (moist)	% Type		Texture Remarks	
					Loc <sup>2</sup>		
8-20		100			·	Loamy/Clayey Sandy Loam	
	10YR 5/1	100			·	Loamy/Clayey Clay Loam	
					·		
	ncentration, D=Depl				nd Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils	s <sup>3</sup> :
Histosol (/	A1)	_	Thin Dark S	urface (S9) <b>(LR</b> I	R S, T, U)	1 cm Muck (A9) (LRR O)	
Histic Epi	pedon (A2)		Barrier Islan	ds 1 cm Muck (	S12)	2 cm Muck (A10) (LRR S)	
Black Hist	tic (A3)		(MLRA 15	3B, 153D)		Coast Prairie Redox (A16)	
Hydrogen	Sulfide (A4)		Loamy Muck	xy Mineral (F1) <b>(</b>	LRR O)	(outside MLRA 150A)	
Stratified I	Layers (A5)		Loamy Gley	ed Matrix (F2)		Reduced Vertic (F18)	
Organic B	Bodies (A6) <b>(LRR, P</b>	, T, U)	X Depleted Ma	ıtrix (F3)		(outside MLRA 150A, 150B)	
5 cm Muc	ky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	Surface (F6)		Piedmont Floodplain Soils (F19) (LR	R P, T
Muck Pres	sence (A8) (LRR U)	) —	Depleted Da	rk Surface (F7)		Anomalous Bright Floodplain Soils (F	-20)
1 cm Muc	k (A9) <b>(LRR P, T)</b>		Redox Depre	essions (F8)		(MLRA 153B)	
Depleted	Below Dark Surface	e (A11)	Marl (F10) <b>(I</b>	.RR U)		Red Parent Material (F21)	
Thick Dar	k Surface (A12)		Depleted Oc	hric (F11) <b>(MLF</b>	RA 151)	Very Shallow Dark Surface (F22)	
Coast Pra	airie Redox (A16) ( <b>N</b>	ILRA 150A)	Iron-Mangar	ese Masses (F	12) (LRR (	D, P, T) (outside MLRA 138, 152A in FL, 1	154)
Sandy Mu	ucky Mineral (S1) <b>(L</b>	.RR O, S)		ace (F13) (LRR		Barrier Islands Low Chroma Matrix (	ΓS7)
Sandy Gle	eyed Matrix (S4)		Delta Ochric	(F17) (MLRA 1	51)	(MLRA 153B, 153D)	
Sandy Re	edox (S5)	_	Reduced Ve	rtic (F18) (MLR	A 150A, 18	<b>50B)</b> Other (Explain in Remarks)	
Stripped N	Matrix (S6)	_	Piedmont Fl	odplain Soils (I	=19) <b>(MLR</b>	A 149A)	
Dark Surf	ace (S7) <b>(LRR P, S</b>	, T, U) —	Anomalous	Bright Floodplai	n Soils (F2	0)	
	Below Surface (S8	· · · -		9A, 153C, 153E	`	<sup>3</sup> Indicators of hydrophytic vegetation	and
(LRR S		,		v Dark Surface		wetland hydrology must be presen	ıt,
				8, 152A in FL,	, ,	unless disturbed or problematic.	
estrictive La	ayer (if observed):						
Туре:							
Depth (inc	ches):					Hydric Soil Present? Yes X No	

### Feature ID: JA-W-010-UP Date: 04/22/2022



Photograph Number \_\_\_\_\_

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

WETLAND DETERMINATION D	Army Corps of Engineers ATA SHEET – Atlantic and 7-24; the proponent agency is		-	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
				0
Project/Site: CVOW	City/C	County: Virginia I		Sampling Date: 4/22/2022
Applicant/Owner: Dominion Energy			State: VA	Sampling Point: JA_W_010B_PEM
Investigator(s): Justin Ahn		ownship, Range		
Landform (hillside, terrace, etc.): Berm	Local relief (o	concave, convex	, none): <u>None</u>	Slope (%): 3
Subregion (LRR or MLRA): LRR T, MLRA 1	53A Lat: 36.770240	Long:	-76.052854	Datum: NAD83
Soil Map Unit Name: Tomotley loam			NWI classific	ation: PSS1A
Are climatic / hydrologic conditions on the site	e typical for this time of year?	Yes X	No (If no,	explain in Remarks.)
Are Vegetation, Soil, or Hydro	logy significantly disturbed?	Are "Normal	Circumstances" presen	t? Yes X No
Are Vegetation, Soil, or Hydro	logy naturally problematic?	(If needed, e	xplain any answers in F	Remarks.)
SUMMARY OF FINDINGS – Attach		g point locat	ions, transects, i	nportant features, etc.
			•	
Hydrophytic Vegetation Present?		Sampled Area	No V	N
Hydric Soil Present? Wetland Hydrology Present?	Yes X No within Yes X No	n a Wetland?	Yes X	No
Remarks:				
Area located in a powerline easement right-	of-way. Area classified as a PEM we	tland		
	,			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is requi	red; check all that apply)		Surface Soil Cra	· ,
X Surface Water (A1)	Aquatic Fauna (B13)			ted Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (LRR U)		Drainage Patterr	
Saturation (A3) Water Marks (B1)	Hydrogen Sulfide Odor (C1) X Oxidized Rhizospheres on Livin	a Poots (C3)	Moss Trim Lines	
Sediment Deposits (B2)	Presence of Reduced Iron (C4		Dry-Season Wat Crayfish Burrows	
Drift Deposits (B3)	Recent Iron Reduction in Tilled			e on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		X Geomorphic Pos	
Iron Deposits (B5)	Other (Explain in Remarks)		Shallow Aquitarc	
Inundation Visible on Aerial Imagery (B7			X FAC-Neutral Tes	
X Water-Stained Leaves (B9)			Sphagnum Moss	s (D8) <b>(LRR T,U)</b>
Field Observations:				
Surface Water Present? Yes X	No Depth (inches): 2			
Water Table Present? Yes	No X Depth (inches):			
Saturation Present? Yes	No X Depth (inches):	Wetland	Hydrology Present?	Yes X No
(includes capillary fringe)				
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, previous	inspections), if	available:	
Remarks:				

Sampling Point: JA\_W\_010B\_PEM

	Absolute Dominant In	dicator
Tree Stratum (Plot size:)	% Cover Species? S	Status Dominance Test worksheet:
1		Number of Dominant Species
2		That Are OBL, FACW, or FAC: 2 (A)
3.		Total Number of Dominant
4.		Species Across All Strata: 2 (B)
5.		Percent of Dominant Species
6.		That Are OBL, FACW, or FAC: 100.0% (A/B)
	=Total Cover	Prevalence Index worksheet:
50% of total cover:	20% of total cover:	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)		OBL species         x 1 =
1/		
2		FAC species x 3 =
3		FACU species x 4 =
1		UPL species x 5 =
5		Column Totals: (A) (B)
6.		Prevalence Index = B/A =
0.	-Total Cover	
	=Total Cover	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of total cover:	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)		X 2 - Dominance Test is >50%
1		3 - Prevalence Index is ≤3.0 <sup>1</sup>
2		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3		
4		
5		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6		present, unless disturbed or problematic.
	=Total Cover	Definitions of Five Vegetation Strata:
50% of total cover:	20% of total cover:	<b>Tree</b> – Woody plants, excluding woody vines,
<u>Herb Stratum</u> (Plot size:5' radius)		approximately 20 ft (6 m) or more in height and 3 in.
1. Juncus effusus	30 Yes	OBL (7.6 cm) or larger in diameter at breast height (DBH).
2. Carex Iurida	20 Yes	OBL Sapling – Woody plants, excluding woody vines,
3. Peltandra virginica	10 No	OBL approximately 20 ft (6 m) or more in height and less
4. Phragmites australis		ACW than 3 in. (7.6 cm) DBH.
5.		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 herbaceous vines, regardless of size, <u>and</u> woody
0		plants, except woody vines, less than approximately 3
10		ft (1 m) in height.
		Woody Vine – All woody vines, regardless of height.
11	65 =Total Cover	
		10
50% of total cover: <u>3</u>	3 20% of total cover:	<u>13</u>
Woody Vine Stratum (Plot size:)		
1		
2		
3		
4		
5		Hydrophytic
	=Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes X No
Remarks: (If observed, list morphological adaptation	ns below.)	

	•	o the depth				itor or co	onfirm the ab	sence of Ind	icators.)		
Depth	Matrix			x Featur	1	12	<b>T i</b>		-		
inches)	Color (moist)	% (	Color (moist)	%	Type'	Loc <sup>2</sup>	Texture	·	Re	emarks	5
0-18	10YR 4/1	90	5YR 4/6	10	<u>C</u>	PL	Loamy/Cla	уеу	Sil	ty Clay	ý
71	oncentration, D=Depl	,	,			Grains.		ation: PL=Pe	-		
Histosol	Indicators: (Applica	Die to all LRI	Thin Dark S		,	S T IN		<b>cators for Pr</b> 1 cm Muck ( <i>I</i>		-	30115
	(AT) bipedon (A2)	-	Barrier Islan					2 cm Muck (/			
	stic (A3)	-	(MLRA 15		`	12)		Z CHI MUCK (7 Coast Prairie			
	n Sulfide (A4)		Loamy Much						LRA 150A)	)	
_ · ·	. ,	-		-	· / ·	KK U)			,		
	l Layers (A5) Bodies (A6) <b>(LRR, P</b>	т II) —	Loamy Gley X Depleted Ma					Reduced Ver	LRA 150A,	4 E 0 D \	
	icky Mineral (A7) <b>(LR</b>		Redox Dark	. ,				Piedmont Flo	•	,	
	esence (A8) (LRR U)		Depleted Da		. ,			Anomalous E			
	ick (A9) (LRR P, T)	_	Redox Depr		• •			(MLRA 153	• •		5113 (1 20)
	Below Dark Surface		Marl (F10) (I		(10)			Red Parent N	,	`	
·	ark Surface (A12)		Depleted Oc		1) <b>(MI D</b>	(151)		Very Shallow	`	<i>,</i>	2)
	rairie Redox (A16) ( <b>M</b>		Iron-Mangar	``	, <b>.</b>	,		2	LRA 138, 1	`	'
	lucky Mineral (S1) <b>(L</b>	· _	Umbric Surf		`	, <b>.</b>	,	Barrier Island			
_ `	Bleyed Matrix (S4)		Delta Ochric					(MLRA 153			
	edox (S5)	-	Reduced Ve				(0B)	Other (Explai		s)	
	Matrix (S6)	-	Piedmont Fl		, .					,	
	rface (S7) <b>(LRR P, S</b>	т ш) —	Anomalous								
	e Below Surface (S8	· · · -	(MLRA 14	0	•	`	,	<sup>3</sup> Indicators of	hydrophytic	Venet	ation and
	S, T, U)	/	Very Shallov						drology mus	-	
	0, 1, 0)	-	(MLRA 13		`	,		,	urbed or pro	•	
Restrictive	Layer (if observed):										
Type:	. ,										
Depth (ii	nches):						Hydric Soi	I Present?	Yes	Х	No
Remarks:	·						-				

Feature ID: JA-W-010B-PEM Date : 04/22/2022



Photograph Number \_\_\_\_\_

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

WETLAND DETER See EF	MINATION	I DATA SH	Corps of Eng IEET – Atlan e proponent a	tic and G		•	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW				City/Co	unty: Virginia E	Beach	Sampling Date: 4/22/2022
Applicant/Owner: Domin	ion Energy				-	State: VA	Sampling Point: JA_W_010B_PFO
Investigator(s): Justin Ahn				Section Tov	vnship, Range:	· N/A	
Landform (hillside, terrace, et						, none): None	Slope (%): 3
		A 450A Lat					
Subregion (LRR or MLRA):		A 153A Lat:	36.770037		Long:		Datum: NAD83
Soil Map Unit Name: Tomot	ey loam						ication: PSS1A
Are climatic / hydrologic conc	itions on the	site typical fo	r this time of yea	ar?	Yes X	No (If no	o, explain in Remarks.)
Are Vegetation, Soil	, or Hy	drology	significantly dis	sturbed?	Are "Normal (	Circumstances" prese	ent? Yes X No
Are Vegetation, Soil	, or Hy	drology	_naturally proble	ematic?	(If needed, ex	xplain any answers in	Remarks.)
SUMMARY OF FINDIN	GS – Atta	ch site ma	p showing s	ampling	point locat	ions, transects,	important features, etc.
Hydrophytic Vegetation Pres Hydric Soil Present? Wetland Hydrology Present		Yes X Yes X Yes X	No	1	ampled Area a Wetland?	Yes X	No
HYDROLOGY Wetland Hydrology Indicat						-	ors (minimum of two required)
Wetland Hydrology Indicat Primary Indicators (minimum						Surface Soil Cr	racks (B6)
Wetland Hydrology Indicat Primary Indicators (minimum X Surface Water (A1)		Aqua	atic Fauna (B13)			Surface Soil Cr	racks (B6) tated Concave Surface (B8)
X         Surface Water (A1)           X         High Water Table (A2)		Aqua Marl	atic Fauna (B13) Deposits (B15)	(LRR U)		Surface Soil Cr Sparsely Veget Drainage Patte	racks (B6) tated Concave Surface (B8) erns (B10)
X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)		Aqua Marl Hydro	atic Fauna (B13) Deposits (B15) ogen Sulfide Od	( <b>LRR U)</b> or (C1)	Roots (C3)	Surface Soil Cr Sparsely Veger Drainage Patte Moss Trim Line	racks (B6) tated Concave Surface (B8) erns (B10) es (B16)
X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)	n of one is rea	Aqua Marl Hydro X Oxidi	atic Fauna (B13) Deposits (B15) ogen Sulfide Od ized Rhizosphere	( <b>LRR U)</b> or (C1) es on Living	Roots (C3)	Surface Soil Cr Sparsely Veger Drainage Patte Moss Trim Line Dry-Season Wa	racks (B6) tated Concave Surface (B8) orns (B10) es (B16) ater Table (C2)
Wetland Hydrology Indicator         Primary Indicators (minimum         X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)       Sediment Deposits (B2)	n of one is rea	Aqua Marl Hydro X Oxidi	atic Fauna (B13) Deposits (B15) ogen Sulfide Od ized Rhizospher ence of Reduced	( <b>LRR U)</b> or (C1) es on Living d Iron (C4)		Surface Soil Cr Sparsely Vege Drainage Patte Moss Trim Line Dry-Season Wa Crayfish Burrov	racks (B6) tated Concave Surface (B8) rrns (B10) es (B16) ater Table (C2) ws (C8)
X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)	n of one is rea	Aqua Marl Hydro X Oxidi Rece	atic Fauna (B13) Deposits (B15) ogen Sulfide Od ized Rhizosphere	( <b>LRR U)</b> or (C1) es on Living d Iron (C4) on in Tilled S		Surface Soil Cr Sparsely Vege Drainage Patte Moss Trim Line Dry-Season Wa Crayfish Burrov	racks (B6) tated Concave Surface (B8) erns (B10) es (B16) ater Table (C2) ws (C8) ble on Aerial Imagery (C9)
Wetland Hydrology Indicators         Primary Indicators (minimum         X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)       Sediment Deposits (B2)         Drift Deposits (B3)       Drift Deposits (B3)	n of one is rea	Aqua Marl Hydro X Oxidi Preso Rece	atic Fauna (B13) Deposits (B15) ogen Sulfide Od ized Rhizospher ence of Reduced ent Iron Reductio	( <b>LRR U)</b> or (C1) es on Living d Iron (C4) on in Tilled S C7)		Surface Soil Cr Sparsely Vege Drainage Patte Moss Trim Line Dry-Season W Crayfish Burrov Saturation Visil	racks (B6) tated Concave Surface (B8) erns (B10) es (B16) ater Table (C2) ws (C8) ble on Aerial Imagery (C9) osition (D2)
Wetland Hydrology Indicators         Primary Indicators (minimum         X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)       Sediment Deposits (B2)         Drift Deposits (B3)       Algal Mat or Crust (B4)	n of one is re	Aqua Marl Hydru X Oxidi Presu Rece Thin Othe	atic Fauna (B13) Deposits (B15) ogen Sulfide Od ized Rhizosphere ence of Reduced ent Iron Reductio Muck Surface ((	( <b>LRR U)</b> or (C1) es on Living d Iron (C4) on in Tilled S C7)		Surface Soil Cr Sparsely Vegel Drainage Patte Moss Trim Line Dry-Season W Crayfish Burrov Saturation Visil X Geomorphic Po	racks (B6) tated Concave Surface (B8) erns (B10) es (B16) ater Table (C2) ws (C8) ble on Aerial Imagery (C9) osition (D2) rd (D3)
Wetland Hydrology Indicators         Primary Indicators (minimum         X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)       Sediment Deposits (B2)         Drift Deposits (B3)       Algal Mat or Crust (B4)         Iron Deposits (B5)       Set	<u>n of one is re</u> erial Imagery	Aqua Marl Hydru X Oxidi Presu Rece Thin Othe	atic Fauna (B13) Deposits (B15) ogen Sulfide Od ized Rhizosphere ence of Reduced ent Iron Reductio Muck Surface ((	( <b>LRR U)</b> or (C1) es on Living d Iron (C4) on in Tilled S C7)		Surface Soil Cr Sparsely Vege Drainage Patte Moss Trim Line Dry-Season W Crayfish Burrov Saturation Visil X Geomorphic Po Shallow Aquita X FAC-Neutral Te	racks (B6) tated Concave Surface (B8) erns (B10) es (B16) ater Table (C2) ws (C8) ble on Aerial Imagery (C9) osition (D2) rd (D3)
Wetland Hydrology Indicators         Primary Indicators (minimum         X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)       Sediment Deposits (B2)         Drift Deposits (B3)       Algal Mat or Crust (B4)         Iron Deposits (B5)       Inundation Visible on Ae	<u>n of one is re</u> erial Imagery	Aqua Marl Hydru X Oxidi Presu Rece Thin Othe	atic Fauna (B13) Deposits (B15) ogen Sulfide Od ized Rhizosphere ence of Reduced ent Iron Reductio Muck Surface ((	( <b>LRR U)</b> or (C1) es on Living d Iron (C4) on in Tilled S C7)		Surface Soil Cr Sparsely Vege Drainage Patte Moss Trim Line Dry-Season W Crayfish Burrov Saturation Visil X Geomorphic Po Shallow Aquita X FAC-Neutral Te	racks (B6) tated Concave Surface (B8) rms (B10) es (B16) ater Table (C2) ws (C8) ble on Aerial Imagery (C9) osition (D2) rd (D3) est (D5)
Wetland Hydrology Indicators         Primary Indicators (minimum         X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)       Sediment Deposits (B2)         Drift Deposits (B3)       Algal Mat or Crust (B4)         Iron Deposits (B5)       Inundation Visible on Ae         X       Water-Stained Leaves (	erial Imagery B9) Yes <u>X</u>	Aqua Marl Hydru X Oxidi Presu Rece Thin Othe	atic Fauna (B13) Deposits (B15) ogen Sulfide Od ized Rhizosphere ence of Reduced ent Iron Reductio Muck Surface ((	(LRR U) or (C1) es on Living d Iron (C4) on in Tilled S C7) marks)		Surface Soil Cr Sparsely Vege Drainage Patte Moss Trim Line Dry-Season W Crayfish Burrov Saturation Visil X Geomorphic Po Shallow Aquita X FAC-Neutral Te	racks (B6) tated Concave Surface (B8) rms (B10) es (B16) ater Table (C2) ws (C8) ble on Aerial Imagery (C9) osition (D2) rd (D3) est (D5)
Wetland Hydrology Indicators         Primary Indicators (minimum         X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)       Sediment Deposits (B2)         Drift Deposits (B3)       Algal Mat or Crust (B4)         Iron Deposits (B5)       Inundation Visible on Ae         X       Water-Stained Leaves (         Field Observations:       Surface Water Present?         Water Table Present?       Water Table Present?	erial Imagery B9) Yes <u>X</u> Yes <u>X</u>	Aqua Marl Hydru X Oxidi Preso Recce Thin Othe (B7)	atic Fauna (B13) Deposits (B15) ( ogen Sulfide Od ized Rhizosphere ence of Reduced ant Iron Reduction Muck Surface (0 r (Explain in Rer Depth (inche	(LRR U) or (C1) es on Living d Iron (C4) on in Tilled S C7) marks) marks) es): <u>1</u> es): <u>0</u>	Soils (C6)	Surface Soil Cr Sparsely Vegel Drainage Patte Moss Trim Line Dry-Season Wa Crayfish Burrov Saturation Visil X Geomorphic Po Shallow Aquita X FAC-Neutral To Sphagnum Mos	racks (B6) tated Concave Surface (B8) erns (B10) es (B16) ater Table (C2) ws (C8) ble on Aerial Imagery (C9) osition (D2) rd (D3) est (D5) ss (D8) <b>(LRR T,U)</b>
Wetland Hydrology Indicat         Primary Indicators (minimum         X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)       Sediment Deposits (B2)         Drift Deposits (B3)       Algal Mat or Crust (B4)         Iron Deposits (B5)       Inundation Visible on Ae         X       Water-Stained Leaves (         Field Observations:       Surface Water Present?         Water Table Present?       Saturation Present?	erial Imagery B9) Yes <u>X</u>	Aqua Marl Hydru X Oxidi Presu Rece Thin Othe (B7)	atic Fauna (B13) Deposits (B15) ogen Sulfide Od ized Rhizosphere ence of Reduced ent Iron Reductio Muck Surface (C r (Explain in Rer	(LRR U) or (C1) es on Living d Iron (C4) on in Tilled S C7) marks) marks) es): <u>1</u> es): <u>0</u>	Soils (C6)	Surface Soil Cr Sparsely Vege Drainage Patte Moss Trim Line Dry-Season W Crayfish Burrov Saturation Visil X Geomorphic Po Shallow Aquita X FAC-Neutral Te	racks (B6) tated Concave Surface (B8) erns (B10) es (B16) ater Table (C2) ws (C8) ble on Aerial Imagery (C9) osition (D2) rd (D3) est (D5) ss (D8) <b>(LRR T,U)</b>
Wetland Hydrology Indicat         Primary Indicators (minimum         X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)       Sediment Deposits (B2)         Drift Deposits (B3)       Algal Mat or Crust (B4)         Iron Deposits (B5)       Inundation Visible on Ae         X       Water-Stained Leaves (         Field Observations:       Surface Water Present?         Water Table Present?       Saturation Present?         Gaturation Present?       (includes capillary fringe)	erial Imagery B9) Yes X Yes X Yes X	Aqua Marl Hydro X Oxidi Preso Rece Thin Othe (B7)	atic Fauna (B13) Deposits (B15) ( ogen Sulfide Od ized Rhizosphere ence of Reduced ant Iron Reduction Muck Surface (C r (Explain in Rer Depth (inche Depth (inche	(LRR U) or (C1) es on Living d Iron (C4) on in Tilled S C7) marks) es): 1 es): 0 es): 0	Soils (C6)	Surface Soil Cr Sparsely Vegel Drainage Patte Moss Trim Line Dry-Season W Crayfish Burrov Saturation Visil X Geomorphic Po Shallow Aquita X FAC-Neutral To Sphagnum Mos	racks (B6) tated Concave Surface (B8) erns (B10) es (B16) ater Table (C2) ws (C8) ble on Aerial Imagery (C9) osition (D2) rd (D3) est (D5) ss (D8) <b>(LRR T,U)</b>
Wetland Hydrology Indicat         Primary Indicators (minimum         X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)       Sediment Deposits (B2)         Drift Deposits (B3)       Algal Mat or Crust (B4)         Iron Deposits (B5)       Inundation Visible on Ae         X       Water-Stained Leaves (         Field Observations:       Surface Water Present?         Water Table Present?       Saturation Present?	erial Imagery B9) Yes X Yes X Yes X	Aqua Marl Hydro X Oxidi Preso Rece Thin Othe (B7)	atic Fauna (B13) Deposits (B15) ( ogen Sulfide Od ized Rhizosphere ence of Reduced ant Iron Reduction Muck Surface (C r (Explain in Rer Depth (inche Depth (inche	(LRR U) or (C1) es on Living d Iron (C4) on in Tilled S C7) marks) es): 1 es): 0 es): 0	Soils (C6)	Surface Soil Cr Sparsely Vegel Drainage Patte Moss Trim Line Dry-Season W Crayfish Burrov Saturation Visil X Geomorphic Po Shallow Aquita X FAC-Neutral To Sphagnum Mos	racks (B6) tated Concave Surface (B8) erns (B10) es (B16) ater Table (C2) ws (C8) ble on Aerial Imagery (C9) osition (D2) rd (D3) est (D5) ss (D8) <b>(LRR T,U)</b>
Wetland Hydrology Indicat         Primary Indicators (minimum         X       Surface Water (A1)         X       High Water Table (A2)         X       Saturation (A3)         Water Marks (B1)       Sediment Deposits (B2)         Drift Deposits (B3)       Algal Mat or Crust (B4)         Iron Deposits (B5)       Inundation Visible on Ae         X       Water-Stained Leaves (         Field Observations:       Surface Water Present?         Water Table Present?       Saturation Present?         Gaturation Present?       (includes capillary fringe)	erial Imagery B9) Yes X Yes X Yes X	Aqua Marl Hydro X Oxidi Preso Rece Thin Othe (B7)	atic Fauna (B13) Deposits (B15) ( ogen Sulfide Od ized Rhizosphere ence of Reduced ant Iron Reduction Muck Surface (C r (Explain in Rer Depth (inche Depth (inche	(LRR U) or (C1) es on Living d Iron (C4) in in Tilled S C7) marks) es): 1 es): 0 es): 0	Soils (C6)	Surface Soil Cr Sparsely Vegel Drainage Patte Moss Trim Line Dry-Season W Crayfish Burrov Saturation Visil X Geomorphic Po Shallow Aquita X FAC-Neutral To Sphagnum Mos	racks (B6) tated Concave Surface (B8) erns (B10) es (B16) ater Table (C2) ws (C8) ble on Aerial Imagery (C9) osition (D2) rd (D3) est (D5) ss (D8) <b>(LRR T,U)</b>

Sampling Point: JA\_W\_010B\_PFO

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	% Cover	Species?	Status	Dominance Test worksheet:
1. Acer rubrum	60	Yes	FAC	Number of Dominant Species
2. Quercus phellos	20	Yes	FACW	That Are OBL, FACW, or FAC: 6 (A)
3.				Total Number of Dominant
4.				Species Across All Strata: 6 (B)
				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
		=Total Cover		Prevalence Index worksheet:
50% of total cover:	40 20%	of total cover:	16	Total % Cover of: Multiply by:
<u>Sapling Stratum</u> (Plot size: <u>30' radius</u> )				OBL species x 1 =
1. Acer rubrum	20	Yes	FAC	FACW species x 2 =
2.				FAC species x 3 =
3				FACU species x 4 =
				UPL species x 5 =
4 5				
6				Prevalence Index = B/A =
		=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	10 20%	of total cover:	4	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				X 2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				(
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6				present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		<b>Tree</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5' radius )				approximately 20 ft (6 m) or more in height and 3 in.
1. Arundinaria gigantea	40	Yes	FACW	(7.6 cm) or larger in diameter at breast height (DBH).
2. Woodwardia areolata	30	Yes	OBL	Sapling – Woody plants, excluding woody vines,
3. Carex vulpinoidea	20	Yes	FACW	approximately 20 ft (6 m) or more in height and less
· · · · · · · · · · · · · · · · · · ·				than 3 in. (7.6 cm) DBH.
4. Smilax rotundifolia	5	No	FAC	
5				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.				
10				plants, except woody vines, less than approximately 3 ft (1 m) in height.
10 11				plants, except woody vines, less than approximately 3
11.	-	=Total Cover		plants, except woody vines, less than approximately 3 ft (1 m) in height.
11	-	=Total Cover of total cover:		plants, except woody vines, less than approximately 3 ft (1 m) in height.
11.	-		19	plants, except woody vines, less than approximately 3 ft (1 m) in height.
11	-		19	plants, except woody vines, less than approximately 3 ft (1 m) in height.
11.	-			plants, except woody vines, less than approximately 3 ft (1 m) in height.
11.	4 <u>8</u> 20%		19	plants, except woody vines, less than approximately 3 ft (1 m) in height.
11.	4 <u>8</u> 20%		19	plants, except woody vines, less than approximately 3 ft (1 m) in height.
11.	4 <u>8</u> 20%		19	plants, except woody vines, less than approximately 3 ft (1 m) in height.
11.	4 <u>8</u> 20%	of total cover:	  	plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody Vine – All woody vines, regardless of height. Hydrophytic
11.	4820%	of total cover:		plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody Vine – All woody vines, regardless of height. Hydrophytic Vegetation
11.	4820%	of total cover:	  	plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody Vine – All woody vines, regardless of height. Hydrophytic

SOIL

Depth	Matrix		Redo	x Featur	es						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture	Re	emarks	
0-20	10YR 5/1	100					Loamy	/Clayey	Sil	lty Clay	
						·					
	oncentration, D=Depl					Grains.		Location: PL=			
•	Indicators: (Applica	DIE to all LR			,	о т II)	1	ndicators for I			•
Histosol	( )	_	Thin Dark S	•	, ,		-		(A9) (LRR O)		
	pipedon (A2)	_	Barrier Islan		``	2)	-		(A10) (LRR S		
	istic (A3)		(MLRA 15				-		ie Redox (A16	5)	
<u> </u>	en Sulfide (A4)	_	Loamy Mucl		. , .	RR O)		•	MLRA 150A)		
	d Layers (A5)		Loamy Gley		` '		_	Reduced V	( )	(	
	Bodies (A6) (LRR, P	_	X Depleted Ma	```				•	MLRA 150A,	,	
	ucky Mineral (A7) (LR		Redox Dark		· · /		_		·	s (F19) <b>(LRR</b>	
	esence (A8) (LRR U)	) –	Depleted Da				-			olain Soils (F20	J)
	uck (A9) <b>(LRR P, T)</b>	-	Redox Depr		(F8)			(MLRA 1			
	d Below Dark Surface	e (A11) _	Marl (F10) (	,		454)	-		Material (F21	,	
	ark Surface (A12)	-	Depleted Oc						w Dark Surfac	( )	
	rairie Redox (A16) ( <b>N</b>	,	Iron-Mangar		`	, <b>、</b>	<b>D</b> , <b>P</b> , <b>I</b> )	•		52A in FL, 154	
	/lucky Mineral (S1) <b>(L</b>	.KK U, S) _	Umbric Surf				-			ma Matrix (TS	.()
	Bleyed Matrix (S4)	_	Delta Ochric	. , .				•	53B, 153D)		
_ `	Redox (S5)	_	Reduced Ve	•	, .		-	Other (Expl	ain in Remark	.s)	
	Matrix (S6)		Piedmont Fl								
	rface (S7) <b>(LRR P, S</b>	· · · -	Anomalous	0	•	50115 (F2	0)	<sup>3</sup> Indianters	of budroph +:-	vegetation	ad
	e Below Surface (S8	)	(MLRA 14			222				vegetation an	a
(LRR	S, T, U)	-	Very Shallov (MLRA 13		`	,			hydrology mus isturbed or pro		
Restrictive	Layer (if observed):				-						
Type:											
Depth (ii	nches):						Hydric	Soil Present?	Yes	X No	
Remarks:											_

### Feature ID: JA-W-010B-PFO Date : 04/22/2022



Photograph Number \_\_1\_

Photograph Direction North\_

Comments:



Photograph Number <u>2</u> Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_\_ Photograph Direction \_West\_\_

Investigator(s): Justin Ahn	State:       VA       Sampling Point:       JA_W_010B_UF         :       N/A         :       N/A         :       None       Slope (%):       3         :       -76.053308       Datum:       NAD83         .       NWI classification:       None         No       (If no, explain in Remarks.)         Circumstances" present?       Yes X       No         xplain any answers in Remarks.)       No
Investigator(s): Justin Ahn	<ul> <li>N/A</li> <li>None</li> <li>Slope (%): 3</li> <li>76.053308</li> <li>Datum: NAD83</li> <li>NWI classification: None</li> <li>No (If no, explain in Remarks.)</li> <li>Circumstances" present? Yes X No</li> <li>xplain any answers in Remarks.)</li> <li>ions, transects, important features, etc.</li> </ul>
Landform (hillside, terrace, etc.):       Toe Slope       Local relief (concave, convex, Subregion (LRR or MLRA):       LRR T, MLRA 153A       Lat:       36.769952       Long: -         Soil Map Unit Name:       Tomotley loam	, none): None       Slope (%): 3         .76.053308       Datum: NAD83         .NWI classification: None       None         No (If no, explain in Remarks.)       Circumstances" present?       Yes X No         Kplain any answers in Remarks.)       Sincest, important features, etc.
Subregion (LRR or MLRA): LRR T, MLRA 153A Lat: 36.769952 Long:   Soil Map Unit Name: Tomotley loam Are climatic / hydrologic conditions on the site typical for this time of year? Yes X Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Q Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, e) SUMMARY OF FINDINGS – Attach site map showing sampling point locat Hydrophytic Vegetation Present? Yes X No X Wetland Hydrology Present? Yes No X Is the Sampled Area within a Wetland? HYDROLOGY Wetland Hydrology Indicators:	-76.053308       Datum: NAD83         NWI classification: None         No (If no, explain in Remarks.)         Circumstances" present?       Yes X No         xplain any answers in Remarks.)         ions, transects, important features, etc.
Soil Map Unit Name:       Tomotley loam         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes X         Are Vegetation       , Soil       , or Hydrology       significantly disturbed?       Are "Normal O         Are Vegetation       , Soil       , or Hydrology       naturally problematic?       (If needed, ex         SUMMARY OF FINDINGS – Attach site map showing sampling point locat         Hydrophytic Vegetation Present?       Yes       No       X         Hydrology Present?       Yes       No       X       Is the Sampled Area         Wetland Hydrology Present?       Yes       No       X       Is the land?         HYDROLOGY       Max       HYDROLOGY       Hydrology Indicators:	NWI classification:       None         No       (If no, explain in Remarks.)         Circumstances" present?       Yes X No         kplain any answers in Remarks.)       None         ions, transects, important features, etc.
Soil Map Unit Name:       Tomotley loam         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes X         Are Vegetation       , Soil       , or Hydrology       significantly disturbed?       Are "Normal O         Are Vegetation       , Soil       , or Hydrology       naturally problematic?       (If needed, ex         SUMMARY OF FINDINGS – Attach site map showing sampling point locat         Hydrophytic Vegetation Present?       Yes       No       X         Hydrology Present?       Yes       No       X       Is the Sampled Area         Wetland Hydrology Present?       Yes       No       X       Is the land?         HYDROLOGY       Max Mark Mark Mark Mark Mark Mark Mark Mark	No (If no, explain in Remarks.) Circumstances" present? Yes X No xplain any answers in Remarks.) ions, transects, important features, etc.
Are climatic / hydrologic conditions on the site typical for this time of year?       Yes X         Are Vegetation, Soil, or Hydrologynaturally disturbed?       Are "Normal (Are "Normal (Interest in the interest	No (If no, explain in Remarks.) Circumstances" present? Yes X No xplain any answers in Remarks.) ions, transects, important features, etc.
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Q         Are Vegetation, Soil, or Hydrologynaturally problematic? (If needed, ex         SUMMARY OF FINDINGS – Attach site map showing sampling point locat         Hydrophytic Vegetation Present? YesNoX       Is the Sampled Area         Hydric Soil Present? YesNo       No         Wetland Hydrology Present? YesNo       Is the Sampled Area         Remarks:       Area located in a mixed hardwood forest.         HYDROLOGY       Wetland Hydrology Indicators:	Circumstances" present? Yes X No xplain any answers in Remarks.) ions, transects, important features, etc.
Are Vegetation       , Soil       , or Hydrology       naturally problematic?       (If needed, example of the second	xplain any answers in Remarks.) ions, transects, important features, etc.
SUMMARY OF FINDINGS – Attach site map showing sampling point locat         Hydrophytic Vegetation Present?       Yes       No       X       Is the Sampled Area within a Wetland?         Hydric Soil Present?       Yes       No       X       No       X         Wetland Hydrology Present?       Yes       No       X       Wetland?         Remarks:       Area located in a mixed hardwood forest.       HYDROLOGY         HYDROLOGY       Wetland Hydrology Indicators:       Hydrology Indicators:	ions, transects, important features, etc.
Hydric Soil Present?       Yes X       No       within a Wetland?         Wetland Hydrology Present?       Yes No       X       within a Wetland?         Remarks:       Area located in a mixed hardwood forest.       Ves       Ves       Ves         HYDROLOGY       Wetland Hydrology Indicators:       Ves       Ves       Ves	Yes <u>No X</u>
Wetland Hydrology Present?       Yes       No       X         Remarks:       Area located in a mixed hardwood forest.       Image: Comparison of the second sec	Yes <u>No X</u>
Remarks: Area located in a mixed hardwood forest. HYDROLOGY Wetland Hydrology Indicators:	
Area located in a mixed hardwood forest. HYDROLOGY Wetland Hydrology Indicators:	
Drimony Indiactors (minimum of one is required; check all that apply)	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)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots (C3)	Moss Trim Lines (B16) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)
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 X Depth (inches):	
Water Table Present?     Yes     No     X     Depth (inches):       Saturation Present2     Yes     No     X     Depth (inches):	
Saturation Present? Yes No X Depth (inches): Wetland (includes capillary fringe)	Hydrology Present? Yes No X
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	available:

Remarks:

Sampling Point: JA\_W\_010B\_UP

	Absolute	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: 30' radius )	% Cover	Species?	Status	Dominance Test worksheet:
/				
1. Fagus grandifolia	60	Yes	FACU	Number of Dominant Species
2				That Are OBL, FACW, or FAC: (A)
3.				Tatal Number of Dominant
4.				Total Number of Dominant Species Across All Strata: 4 (B)
				Species Across All Strata:4 (B)
5				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 50.0% (A/B)
	60	=Total Cover		Prevalence Index worksheet:
50% of total cover: 3		of total cover:	12	Total % Cover of: Multiply by:
	2070		12	
<u>Sapling Stratum</u> (Plot size: <u>30' radius</u> )				OBL species x 1 =
1. Fagus grandifolia	20	Yes	FACU	FACW species 20 x 2 = 40
2.				FAC species 25 x 3 = 75
3.				FACU species 90 x 4 = 360
4				UPL species x 5 =
5				Column Totals: <u>135</u> (A) <u>475</u> (B)
6.				Prevalence Index = $B/A = 3.52$
	20	=Total Cover		Hydrophytic Vegetation Indicators:
			4	
	0 20%	of total cover:	4	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				
5.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6.				present, unless disturbed or problematic.
		=Total Cover		· · · · · · · · · · · · · · · · · · ·
				Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 5' radius )				approximately 20 ft (6 m) or more in height and 3 in.
1. Microstegium vimineum	20	Yes	FAC	(7.6 cm) or larger in diameter at breast height (DBH).
2. Osmundastrum cinnamomeum	15	Yes	FACW	
				<b>Sapling</b> – Woody plants, excluding woody vines,
3. Lonicera japonica	10	No	FACU	approximately 20 ft (6 m) or more in height and less
4. Arundinaria gigantea	5	No	FACW	than 3 in. (7.6 cm) DBH.
5. Toxicodendron radicans	5	No	FAC	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
8				herbaceous vines, regardless of size, and woody
0				plants, except woody vines, less than approximately 3
10				ft (1 m) in height.
10				
				Manahu Mina Alluuraahu ujuaan namandhaan af hajaht
11				Woody Vine – All woody vines, regardless of height.
11		=Total Cover		Woody Vine – All woody vines, regardless of height.
	55			Woody Vine – All woody vines, regardless of height.
50% of total cover:2	55	=Total Cover of total cover:	11	Woody Vine – All woody vines, regardless of height.
50% of total cover: <u>Woody Vine Stratum</u> (Plot size:)	55		11	Woody Vine – All woody vines, regardless of height.
50% of total cover:2	<u>55</u> 8 20%	of total cover:	11	Woody Vine – All woody vines, regardless of height.
50% of total cover: <u>Woody Vine Stratum</u> (Plot size:) 1	<u>55</u> 820%	of total cover:	11	Woody Vine – All woody vines, regardless of height.
50% of total cover:2 <u>Woody Vine Stratum</u> (Plot size:) 1 2	<u>55</u> 8 20%	of total cover:		Woody Vine – All woody vines, regardless of height.
50% of total cover:2 <u>Woody Vine Stratum</u> (Plot size:) 1 2 3	<u>55</u> 8 20%	of total cover:		Woody Vine – All woody vines, regardless of height.
50% of total cover:2         Woody Vine Stratum (Plot size:)         1         2         3         4	<u>55</u> 8 20%	of total cover:	 	Woody Vine – All woody vines, regardless of height.
50% of total cover:2 <u>Woody Vine Stratum</u> (Plot size:) 1 2 3	<u>55</u> 8 20%	of total cover:	 	
50% of total cover:2         Woody Vine Stratum (Plot size:)         1         2         3         4	55 820% 	of total cover:		Hydrophytic
50% of total cover:       2         Woody Vine Stratum       (Plot size:       )         1.	 820% 	of total cover:		Hydrophytic Vegetation
50% of total cover:2         Woody Vine Stratum (Plot size:)         1         2         3         4	 820% 	of total cover:		Hydrophytic

Depth	rofile Description: (Describe to the depth needed to document the indicator or c epth Matrix Redox Features								,	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Te	xture	Re	marks
0-4	10YR 4/1	60	10YR 3/2	40	С	М	Loamy	//Clayey	Silty C	Clay Loam
4-20	10YR 5/1	90	10YR 5/8	10	<u> </u>	PL	Loamy	//Clayey	Silt	ty Clay
71	oncentration, D=Dep	,	,			l Grains.			=Pore Lining, M	
-	Indicators: (Applica	ble to all LR							Problematic H	lydric Soils':
Histosol	( )	-	Thin Dark S	`	<i>,</i> , ,	,			k (A9) <b>(LRR O)</b>	
	pipedon (A2)	-	Barrier Islands 1 cm Muck (S12)						k (A10) <b>(LRR S</b> )	•
	stic (A3)		(MLRA 153B, 153D)						irie Redox (A16	)
_ ` `	n Sulfide (A4)	-	Loamy Mucky Mineral (F1) (LRR O)				(outside MLRA 150A)			
	d Layers (A5)		Loamy Gleyed Matrix (F2)					Reduced Vertic (F18)		
	Bodies (A6) (LRR, P	-	X Depleted Matrix (F3)				(outside MLRA 150A, 150B)			
	ıcky Mineral (A7) <b>(LR</b>		Redox Dark Surface (F6)				Piedmont Floodplain Soils (F19) (LRR P, T)			
	esence (A8) (LRR U	) _	Depleted Da		. ,		Anomalous Bright Floodplain Soils (F20)			
	ıck (A9) <b>(LRR P, T)</b>	-	Redox Depr		(F8)		(MLRA 153B)			
·	d Below Dark Surface	e (A11)	Marl (F10) (	LRR U)			Red Parent Material (F21)			
Thick Da	ark Surface (A12)	-	Depleted O	chric (F1	1) (MLRA	A 151)	Very Shallow Dark Surface (F22)			
Coast P	rairie Redox (A16) ( <b>N</b>	ILRA 150A)	Iron-Manga		`	, <b>、</b>	O, P, T) (outside MLRA 138, 152A in FL, 154)			
Sandy N	lucky Mineral (S1) <b>(L</b>	.RR O, S)	Umbric Sur	face (F13	3) (LRR P	9, T, U)		Barrier Isla	ands Low Chror	na Matrix (TS7)
Sandy G	Bleyed Matrix (S4)	_	Delta Ochri	c (F17) <b>(</b>	MLRA 15	1)		(MLRA	153B, 153D)	
Sandy F	Redox (S5)	_	Reduced Ve	ertic (F18	B) <b>(MLRA</b>	150A, 15	50B)	Other (Exp	olain in Remark	s)
Stripped	Matrix (S6)	_	Piedmont F	loodplain	n Soils (F	19) <b>(MLR</b>	A 149A)			
Dark Su	rface (S7) <b>(LRR P, S</b>	, T, U) _	Anomalous	Bright Fl	loodplain	Soils (F2	0)			
Polyvalu	e Below Surface (S8	)	(MLRA 14	49A, 153	C, 153D)			<sup>3</sup> Indicators	of hydrophytic	vegetation and
(LRR	S, T, U)	_	Very Shallo	w Dark S	Surface (F	22)		wetland	hydrology mus	t be present,
			(MLRA 1	38, 152A	in FL, 1	54)		unless	disturbed or pro	blematic.
Restrictive	Layer (if observed):									
Type:										
Depth (ii	nches):						Hydrid	Soil Present	? Yes_	X No
Remarks:										

## **Photograph Page**

#### Feature ID: JA-W-010B-UP Date: 04/22/2022



Photograph Number 1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number 4

Photograph Direction West

U.S. Army Corps of Engi WETLAND DETERMINATION DATA SHEET – Atlant See ERDC/EL TR-07-24; the proponent ac	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)	
Project/Site: CVOW Applicant/Owner: Dominon Energy	City/County: City of Virgina Beach State: VA	
Investigator(s): Justin Ahn S	ection, Township, Range: <u>N/A</u>	—
Landform (hillside, terrace, etc.):       Depression       Loca         Subregion (LRR or MLRA):       LRR T, MLRA 150B       Lat:       36.7945200736	al relief (concave, convex, none): <u>Concave</u>	
Soil Map Unit Name: Tomotley loam	NWI classific	ation: None
Are climatic / hydrologic conditions on the site typical for this time of year Are Vegetation, Soil, or Hydrologysignificantly dist Are Vegetation, Soil, or Hydrologynaturally problem SUMMARY OF FINDINGS – Attach site map showing sa	urbed? Are "Normal Circumstances" presen matic? (If needed, explain any answers in F	nt? Yes X No Remarks.)
Hydrophytic Vegetation Present?       Yes       X       No         Hydric Soil Present?       Yes       X       No         Wetland Hydrology Present?       Yes       X       No	Is the Sampled Area within a Wetland? Yes X	No
Remarks: Area located within a ditch in an agricultural field utilized for the cultivati	on of row crops. Area classified as a PEM wetla	nd
Wetland Hydrology Indicators:	Surface Soil Cra	s (minimum of two required)

wetland Hydrology Indicators:	Secondary indicators (minimum of two required)	
Primary Indicators (minimum of one is rec	Surface Soil Cracks (B6)	
Surface Water (A1)	Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (LRR U)	X Drainage Patterns (B10)
Saturation (A3)	Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1)	Oxidized Rhizospheres on Living Roots	s (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iron (C4)	X Crayfish Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils (C	C6) Saturation Visible on Aerial Imagery (C9)
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 X Depth (inches):	
Water Table Present? Yes	No X Depth (inches):	
		Wetland Hydrology Present? Yes X No
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present? Yes X No
Saturation Present? Yes (includes capillary fringe)	No X Depth (inches):	
(includes capillary fringe)	No X Depth (inches):	
(includes capillary fringe)		
(includes capillary fringe)		
(includes capillary fringe)		
(includes capillary fringe) Describe Recorded Data (stream gauge, r		
(includes capillary fringe) Describe Recorded Data (stream gauge, r		
(includes capillary fringe) Describe Recorded Data (stream gauge, r		
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(includes capillary fringe) Describe Recorded Data (stream gauge, r		
(includes capillary fringe) Describe Recorded Data (stream gauge, r		

Sampling Point: JA\_W\_011

, ,	Absolute Dominant I	Indicator	
Tree Stratum (Plot size:)	% Cover Species?	Status	Dominance Test worksheet:
1			Number of Dominant Species
2.			That Are OBL, FACW, or FAC:(A)
3.			Total Number of Dominant
4.			Species Across All Strata: 1 (B)
5			Percent of Dominant Species
6.			That Are OBL, FACW, or FAC: 100.0% (A/B)
	=Total Cover		Prevalence Index worksheet:
50% of total cover:	20% of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size: )			OBL species         x 1 =
1			FACW species x 2 =
2.			FAC species x 3 =
3.			FACU species x 4 =
4.			UPL species x 5 =
5			Column Totals: (A) (B)
6.			Prevalence Index = B/A =
	=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:			1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: )			X 2 - Dominance Test is >50%
			$3$ - Prevalence Index is $\leq 3.0^{1}$
2			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.			
4			
5.			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6			present, unless disturbed or problematic.
	=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20% of total cover:		<b>Tree</b> – Woody plants, excluding woody vines,
<u>Herb Stratum</u> (Plot size: <u>5' radius</u> )			approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1. Juncus effusus	80 Yes	OBL	
2. Carex lurida	<u>    10     No                           </u>	OBL	Sapling – Woody plants, excluding woody vines,
3			approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
4			
5			<b>Shrub</b> - 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, <u>and</u> woody
9			plants, except woody vines, less than approximately 3 ft (1 m) in height.
10			
11			<b>Woody Vine</b> – All woody vines, regardless of height.
	90 =Total Cover		
50% of total cover: 4	5 20% of total cover:	18	
Woody Vine Stratum (Plot size:)			
1			
2.			
3.			
4.			
5.			Understand
	=Total Cover		Hydrophytic Vegetation
50% of total cover:	20% of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation	ns below.)		·
	,		

Depth	 Matrix			x Featur				e absence	,	
inches)	Color (moist)	%	Color (moist)	× r eatur %	Type <sup>1</sup>	Loc <sup>2</sup>	Те	xture	Remarks	
0-20	10YR 4/1	90	7.5YR 5/8	10	C	PL	Loam	y/Clayey	Silty Loam	
						·				
						·				
	oncentration, D=Depl					Grains.			PL=Pore Lining, M=Matrix. for Problematic Hydric Soils <sup>3</sup> :	
Histosol		Die to all			,	S T U)			/luck (A9) (LRR O)	
	pipedon (A2)	2) Thin Dark Surface (S9) (LRR S, T, U) Barrier Islands 1 cm Muck (S12)							/luck (A10) <b>(LRR S)</b>	
Black Hi	,		(MLRA 153B, 153D)					Coast Prairie Redox (A16)		
	n Sulfide (A4)		Loamy Mucky Mineral (F1) <b>(LRR O)</b>						side MLRA 150A)	
_ ′ ँ	Layers (A5)		Loamy Gleyed Matrix (F2)					•	ed Vertic (F18)	
	Bodies (A6) (LRR, P	. T. U)	X Depleted Matrix (F3)					(outside MLRA 150A, 150B)		
_ `	icky Mineral (A7) <b>(LR</b>		·	```				•	ont Floodplain Soils (F19) <b>(LRR P, T</b>	
	esence (A8) (LRR U)		Depleted Da						alous Bright Floodplain Soils (F20)	
	ıck (A9) <b>(LRR P, T)</b>		Redox Depr		· · /				RA 153B)	
	d Below Dark Surface	e (A11)	Marl (F10) (		( - )				arent Material (F21)	
	ark Surface (A12)	()	Depleted Oc		1) (MLRA	151)			hallow Dark Surface (F22)	
	rairie Redox (A16) ( <b>N</b>	LRA 150	·	``	, <b>.</b>	,	). P. T)		side MLRA 138, 152A in FL, 154)	
	lucky Mineral (S1) <b>(L</b>		Umbric Surf				, , ,		Islands Low Chroma Matrix (TS7)	
_	Bleyed Matrix (S4)	-, -,	Delta Ochric						RA 153B, 153D)	
_ `	ledox (S5)		Reduced Ve	. , .		,	60B)	•	(Explain in Remarks)	
	Matrix (S6)		Piedmont Fl		, ,				, ,	
	rface (S7) <b>(LRR P, S</b>	. T. U)	Anomalous	•	``	<i>,</i> , ,	,			
	e Below Surface (S8		(MLRA 14	0	•	`	,	<sup>3</sup> Indica	tors of hydrophytic vegetation and	
(LRR	S, T, U)		Very Shallov	v Dark S	Surface (F	22)			and hydrology must be present,	
			(MLRA 13	8, 152A	in FL, 1	54)		unle	ess disturbed or problematic.	
	Layer (if observed):									
Type:										
Depth (ir	nches):						Hydrid	c Soil Pres	ent? Yes X No	

## **Photograph Page**

#### Feature ID: JA-W-011-WET Date: 04/22/2022



Photograph Number \_\_\_\_\_

Photograph Direction North

Comments:



Photograph Number <u>2</u> Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

U. WETLAND DETERMINATION See ERDC/EL TR	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)		
Project/Site: CVOW		City/County: City of Virgina Beach	Sampling Date: 04/22/2022
Applicant/Owner: Dominon Energy		State: VA	Sampling Point: JA_W_012
Investigator(s): Justin Ahn		Section, Township, Range: N/A	
Landform (hillside, terrace, etc.): Depres	sion Lo	cal relief (concave, convex, none): <u>Concave</u>	Slope (%): 0
Subregion (LRR or MLRA): LRR T, MLRA	150B Lat: <u>36.793967788</u>	33333 Long: -76.020647163	Datum: NAD83
Soil Map Unit Name: <u>Tomotley loam</u>		NWI classific	ation: None
Are climatic / hydrologic conditions on the	site typical for this time of ye	ear? Yes <u>X</u> No (If no	
Are Vegetation, Soil, or Hyd	łrology significantly di	isturbed? Are "Normal Circumstances" preser	nt? Yes X No
Are Vegetation, Soil, or Hyd	rology naturally probl	lematic? (If needed, explain any answers in F	Remarks.)
		sampling point locations, transects, i	
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area	
Hydric Soil Present?	Yes X No	within a Wetland? Yes X	No
Wetland Hydrology Present?	Yes X No		
Remarks: Area located within a ditch in an agricultur	al field utilized for the cultiva	ation of row crops. Area classified as a PEM wetla	ind
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicator	s (minimum of two required)
Primary Indicators (minimum of one is rec	juired; check all that apply)	Surface Soil Cra	acks (B6)

	wetiand hydrology indicators.					
Primary Indicators (minimum of one is requ		Surface Soil Cracks (B6)				
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Marl Deposits (B15) (LRR U)		X Drainage Patterns (B10)			
Saturation (A3)	Hydrogen Sulfide Odor (C1)		Moss Trim Lines (B16)			
Water Marks (B1)	Oxidized Rhizospheres on Living Ro	oots (C3)	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Presence of Reduced Iron (C4)		X Crayfish Burrows (C8)			
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils	s (C6)	Saturation Visible on Aerial Imagery (C9)			
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 (E	37)		FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)			Sphagnum Moss (D8) (LRR T,U)			
Field Observations:						
Surface Water Present? Yes	No X Depth (inches):					
Water Table Present? Yes	No X Depth (inches):					
Saturation Present? Yes	No X Depth (inches):	Wetland	Hydrology Present? Yes X No			
(includes capillary fringe)						
(includes capillary fringe) Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous insp	ections), if a	vailable:			
	onitoring well, aerial photos, previous insp	ections), if a	wailable:			
	onitoring well, aerial photos, previous insp	ections), if a	vailable:			
	onitoring well, aerial photos, previous insp	ections), if a	wailable:			
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous insp	ections), if a	ivailable:			
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous insp	ections), if a	ivailable:			
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous insp	ections), if a	ivailable:			
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous insp	ections), if a	wailable:			
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous insp	ections), if a	ıvailable:			
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous insp	ections), if a	ıvailable:			
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous insp	ections), if a	ıvailable:			

Sampling Point: JA\_W\_012

	Absolute Dominant Indicator	
Tree Stratum (Plot size:)	% Cover Species? Status	Dominance Test worksheet:
1		Number of Dominant Species
2.		That Are OBL, FACW, or FAC: 1 (A)
3		Total Number of Deminent
4.		Total Number of Dominant Species Across All Strata: 1 (B)
		、
		Percent of Dominant Species
6		That Are OBL, FACW, or FAC: 100.0% (A/B)
	=Total Cover	Prevalence Index worksheet:
50% of total cover:	20% of total cover:	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)		OBL species x 1 =
1		FACW species x 2 =
2.		FAC species x 3 =
3		FACU species x 4 =
4.		UPL species x 5 =
5		Column Totals: (A) (B)
6.		Prevalence Index = B/A =
	=Total Cover	Hydrophytic Vegetation Indicators:
50% of total cover:	20% of total cover:	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)		X 2 - Dominance Test is >50%
1		3 - Prevalence Index is ≤3.0 <sup>1</sup>
2		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3		
4.		
5.		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6.		present, unless disturbed or problematic.
	=Total Cover	Definitions of Five Vegetation Strata:
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 5' radius )		<b>Tree</b> – 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).
1. Juncus effusus	80 Yes OBL	
2. Carex lurida	<u>    10     No    OBL    </u>	Sapling – Woody plants, excluding woody vines,
3		approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
4		
5		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
0		plants, except woody vines, less than approximately 3
10		ft (1 m) in height.
		Woody Vine – All woody vines, regardless of height.
11		
	90 =Total Cover	
50% of total cover:4	5 20% of total cover: 18	
Woody Vine Stratum (Plot size:)		
1		
2.		
3.		
4.		
5.		
	=Total Cover	Hydrophytic
50% of total cover:	20% of total cover:	Vegetation Present? Yes X No
Remarks: (If observed, list morphological adaptation	ns below.)	

Depth	. 、 Matrix			x Featur				nce of indicators.)		
inches)	Color (moist)	%	Color (moist)	% realur	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-20	10YR 4/1	90	7.5YR 5/8	10	C	PL	Loamy/Claye	y Silty Loam		
ype: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, N	 //S=Masl	 ked Sand	Grains.	<sup>2</sup> Locati	ion: PL=Pore Lining, M=Matrix.		
ydric Soil	Indicators: (Applica	ble to all L	RRs, unless oth	erwise n	oted.)		Indica	tors for Problematic Hydric Soils <sup>3</sup> :		
Histosol			Thin Dark S	`	<i>,</i> , ,			cm Muck (A9) <b>(LRR O)</b>		
Histic Ep	pipedon (A2)		Barrier Islands 1 cm Muck (S12)				2 0	cm Muck (A10) <b>(LRR S)</b>		
Black Hi	stic (A3)		(MLRA 15	3B, 153	D)		Cc	Coast Prairie Redox (A16)		
Hydroge	n Sulfide (A4)		Loamy Mucl	ky Minera	al (F1) <b>(L</b>	RR O)	(	(outside MLRA 150A)		
Stratified	d Layers (A5)		Loamy Gley	ed Matrix	x (F2)		Re	Reduced Vertic (F18)		
Organic	Bodies (A6) (LRR, P	T, U)	X Depleted Ma	atrix (F3)	. ,			(outside MLRA 150A, 150B)		
	icky Mineral (A7) (LR						Piedmont Floodplain Soils (F19) (LRR P, T			
	esence (A8) (LRR U)		Depleted Da		. ,		Anomalous Bright Floodplain Soils (F20)			
	ick (A9) <b>(LRR P, T)</b>		Redox Depr		` '		(MLRA 153B)			
	d Below Dark Surface	(Δ11)	Marl (F10) (		(10)		Red Parent Material (F21)			
·	ark Surface (A12)	((411)	Depleted Oc		1) (MI P	151)	Very Shallow Dark Surface (F22)			
	rairie Redox (A16) ( <b>M</b>	I DA 150A		•	<i>,</i> .					
	lucky Mineral (S1) <b>(L</b>		Umbric Surf		`	, <b>、</b>		arrier Islands Low Chroma Matrix (TS7)		
_ `		i (i		`	, <b>、</b>	,				
	Bleyed Matrix (S4)		Delta Ochric Reduced Ve					( <b>MLRA 153B, 153D)</b> her (Explain in Remarks)		
	Redox (S5)				<i>,</i> .		·	ner (Explain in Remarks)		
	Matrix (S6)	<b>T</b> 10	Piedmont Fl	•	`	, <b>,</b>				
	rface (S7) <b>(LRR P, S</b> ,		Anomalous	-				dia da na s <b>e</b> ha dia ang dia ang da dia na sa d		
	e Below Surface (S8)	)	(MLRA 14					dicators of hydrophytic vegetation and		
	S, T, U)		Very Shallov		`	,		wetland hydrology must be present,		
			(MLRA 13	ið, 152A	in FL, 1	54)		unless disturbed or problematic.		
Restrictive I	Layer (if observed):									
Type:										
Depth (ir	nches):						Hydric Soil F	Present? Yes X No		
Remarks:	· · ·						-			

## **Photograph Page**

#### Feature ID: JA-W-012-WET Date: 04/22/2022



Photograph Number 1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

U.S. Army WETLAND DETERMINATION DATA SI See ERDC/EL TR-10-20; the		-	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: Dominion CVOW	С	ity/County: Virginia Beach	Sampling Date: 12/20/2021
Applicant/Owner: Dominion			State:VASampling Point: JC_W_101
Investigator(s): James Cook	Sectio	n, Township, Range: N/a	
Landform (hillside, terrace, etc.): Slope		ef (concave, convex, none	): Concave Slope (%): 2
Subregion (LRR or MLRA): LRR P, MLRA 13	5B Lat: 36.800897	Long: -76.00	4191 Datum: NAD83
Soil Map Unit Name: Tomotley Loam			NWI classification: N/a
Are climatic / hydrologic conditions on the site	typical for this time of year?	Yes x N	lo (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolo			nstances" present? Yes x No
Are Vegetation, Soil, or Hydrolo			any answers in Remarks.)
			, transects, important features, etc.
Hydrophytic Vegetation Present? Y Hydric Soil Present? Y	/es_X_No Is	the Sampled Area ithin a Wetland?	Yes_X_No
Remarks: Wetland status was likely created or exascerb		asemtn. Soil was compacte	ed with clear presense of rutting
HYDROLOGY			
Wetland Hydrology Indicators:		Sec	ondary Indicators (minimum of two required)
Primary Indicators (minimum of one is require	d; 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 )		Drainage Patterns (B10)
Saturation (A3) Water Marks (B1)	Hydrogen Sulfide Odor (C1 X Oxidized Rhizospheres on		Moss Trim Lines (B16) Dry-Season Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iron		Crayfish Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction in T		Saturation Visible on Aerial Imagery (C9)
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)		X	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)			Sphagnum Moss (D8) (LRR T, U)
Field Observations:			
	No X Depth (inches): No X Depth (inches):		
	No Depth (inches):	14 Wetland Hydr	ology Present? Yes X No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, prev	ious inspections), if availa	ble:
Remarks:			
Remarks.			

Г

Sampling Point: JC\_W\_101\_WET

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 )	% Cover	Species?	Status	Dominance Test worksheet:
1 2				Number of Dominant SpeciesThat Are OBL, FACW, or FAC:4(A)
3.				Total Number of Dominant
4				Species Across All Strata:(B)
5 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
· · · · · · · · · · · · · · · · · · ·	·	=Total Cover		Prevalence Index worksheet:
50% of total cover:		of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30)				OBL species 80 x 1 = 80
1. Liquidambar styraciflua	5	Yes	FAC	FACW species 5 x 2 = 10
2.				FAC species 10 x 3 = 30
3.				FACU species 0 x 4 = 0
4.				UPL species 0 x 5 = 0
5.				Column Totals: 95 (A) 120 (B)
6.				Prevalence Index = B/A = 1.26
	5 :	=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	3 20%	of total cover:	1	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				X 2 - Dominance Test is >50%
1.				X 3 - Prevalence Index is $\leq 3.0^1$
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4.				
5.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6.				present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30 )				approximately 20 ft (6 m) or more in height and 3 in.
1. Juncus effusus	40	Yes	OBL	(7.6 cm) or larger in diameter at breast height (DBH).
2. Scirpus cyperinus	40	Yes	OBL	Sapling – Woody plants, excluding woody vines,
3. Solidago gigantea	5	No	FACW	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,
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, <u>and</u> woody
9				plants, except woody vines, less than approximately 3 ft (1 m) in height.
10				
11				Woody Vine – All woody vines, regardless of height.
		=Total Cover		
	3 20%	of total cover:	17	
Woody Vine Stratum (Plot size: 30)				
1. Smilax rotundifolia	5	Yes	FAC	
2				
3				
4				
5				Hydrophytic
		=Total Cover		Vegetation
		of total cover:	1	Present? Yes X No
Remarks: (If observed, list morphological adaptation	ns below.)			

SOIL

(inches)	Matrix Color (moist)		Redo								
· · · · · · · · · · · · · · · · · · ·	(COLOR (MOLET)	%	Color (moist)	x Featur %	res Type <sup>1</sup>	Loc <sup>2</sup>	Ter	cture		Remark	(9
0.2				70	турс					Reman	10
0-3	7.5YR 4/1	100					Loamy	/Clayey			
3-10	7.5YR 4/1	90	5YR 4/4	10	С	PL/M	Loamy	/Clayey	Prominent	redox co	oncentrations
10-20	2.5Y 6/1	90	7.5YR 5/8	10	C	<u>M</u>	Loamy	/Clayey		Spodos	ol
						·					
<b></b>	ncentration, D=Dep					d Grains.			L=Pore Lining	<b>.</b>	
-	dicators: (Applica	ble to all Li				o =			or Problemat	-	c Soils":
Histosol (A	,		Thin Dark S	`	, <b>,</b>		-		ICK (A9) (LRR	,	
	pedon (A2)		Barrier Islan		`	12)	-		ick (A10) <b>(LR</b>	,	
Black Hist	( )		(MLRA 15				-		rairie Redox (	,	
	Sulfide (A4)		Loamy Mucl		· · ·	.RR O)			de MLRA 150	,	
Stratified I	Layers (A5)		Loamy Gley	ed Matri	x (F2)		-	Reduced	d Vertic (F18)		
Organic B	odies (A6) (LRR P,	, T, U)	X Depleted Ma	atrix (F3)	)			(outsi	de MLRA 150	DA, 150B	5)
5 cm Muc	ky Mineral (A7) <b>(LR</b>	R P, T, U)	Redox Dark	Surface	(F6)		-	Piedmor	nt Floodplain	Soils (F1	9) <b>(LRR P, T</b>
Muck Pres	sence (A8) (LRR U	)	Depleted Da	irk Surfa	ce (F7)			Anomalo	ous Bright Flo	odplain S	Soils (F20)
1 cm Muc	k (A9) <b>(LRR P, T)</b>		Redox Depr	essions	(F8)			(MLR/	A 153B)		
Depleted I	Below Dark Surface	e (A11)	Marl (F10) (	LRR U)			_	Red Par	ent Material (	F21)	
Thick Darl	k Surface (A12)		Depleted Oc	hric (F1	1) (MLR/	A 151)	_	Very Sh	allow Dark Su	rface (F2	22)
Coast Pra	iirie Redox (A16) ( <b>N</b>	ILRA 150A)	Iron-Mangar	nese Ma	sses (F1	2) (LRR O	), P, T)	(outsi	de MLRA 138	8, 152A i	n FL, 154)
Sandy Mu	icky Mineral (S1) <b>(L</b>	.RR O, S)	Umbric Surf	ace (F13	B) (LRR F	P, T, U)		Barrier I	slands Low C	hroma M	latrix (TS7)
Sandy Gle	eyed Matrix (S4)		Delta Ochric	(F17) <b>(</b>	MLRA 15	51)	-	(MLR/	A 153B, 153D	)	
Sandy Re	dox (S5)		Reduced Ve	rtic (F18	B) (MLRA	150A, 15	60B)	Other (E	xplain in Rem	narks)	
Stripped N	Matrix (S6)		Piedmont Fl	oodplain	Soils (F	19) <b>(MLR</b> /	A 149A)				
Dark Surfa	ace (S7) <b>(LRR P, S</b>	, T, U)	Anomalous	Bright Fl	oodplain	Soils (F20	D)				
	Below Surface (S8		(MLRA 14	-			-	<sup>3</sup> Indicato	ors of hydroph	ytic vege	etation and
(LRR S	·		Very Shallov						nd hydrology i		
	· · •		(MLRA 13		`	,			s disturbed or		
Restrictive La	ayer (if observed):										
Type:											
Depth (inc	ches):						Hydric	Soil Prese	nt? Ye	s <u>X</u>	No

# Date: 12/20/21



#### Photograph Direction North

Comments:

Feature Name: JC\_W\_101



### Photograph Direction East

Comments:



Photograph Direction South

Comments:



#### Photograph Direction West

WETLAND DETERMIN See ERDC/E	ATION DATA	SHEET -			-	Requirer	rol #: 0710-0024, Ex nent Control Symbo ity: AR 335-15, parag	DI EXEMPT:
Project/Site: Dominion CV	WC			City/County	y: Virginia Beacl	h	Sampling Da	ate: 12/20/202
Applicant/Owner: Domir	nion					State: V	A Sampling Po	pint: JC_W_101_UF
Investigator(s): James Cook	(		S	ection. Townsl	hip, Range: N/a			
Landform (hillside, terrace, e	Mana				ve, convex, non		Slope (	%): 2
Subregion (LRR or MLRA):	,	135B Lat			Long: -76.0			n: NAD83
Soil Map Unit Name: Tomo		Lut.	00.000007		Long0.0		ification: N/a	1. 10/1000
			this time of user			_		)
Are climatic / hydrologic con			-				no, explain in Rem	
Are Vegetation, Soil					e "Normal Circu			x No
Are Vegetation, Soil	, or Hydro	ology	naturally probler	matic? (If	needed, explair	any answers	in Remarks.)	
SUMMARY OF FINDIN	IGS – Attach	n site ma	p showing sa	ampling po	int locations	s, transects	, important fe	atures, etc.
Hydrophytic Vegetation Pre	sent?	Yes X		Is the Sam	•			
Hydric Soil Present?	0	Yes X		within a W	etland?	Yes	<u>No X</u>	
Wetland Hydrology Present Remarks:	?	Yes	No X					
Pine Forest								
HYDROLOGY								
Wetland Hydrology Indica					See		tors (minimum of t	wo required)
Primary Indicators (minimu	<u>n of one is requ</u>					Surface Soil		( (DO)
Surface Water (A1)			tic Fauna (B13)				etated Concave S	urface (B8)
High Water Table (A2) Saturation (A3)			Deposits (B15) <b>(L</b> ogen Sulfide Odo			Drainage Pat Moss Trim Li		
Water Marks (B1)			zed Rhizosphere		oots (C3)	-	Water Table (C2)	
Sediment Deposits (B2	)		ence of Reduced	•		Crayfish Burr		
Drift Deposits (B3)		Rece	nt Iron Reduction	n in Tilled Soils	s (C6)	Saturation Vis	sible on Aerial Ima	gery (C9)
Algal Mat or Crust (B4)			Muck Surface (C	,		Geomorphic	( )	
Iron Deposits (B5)			r (Explain in Rem	arks)		Shallow Aqui		
Inundation Visible on A	0,1	57)			<u></u> X	FAC-Neutral	l est (D5) loss (D8) <b>(LRR T,</b> l	IN
Water-Stained Leaves	(69)					Spriagnum M	OSS(D6) (LKK I,	J)
Field Observations: Surface Water Present?	Yes	No x	Dopth (inchos	.).				
Water Table Present?	Yes	No <u>x</u> No x	Depth (inches Depth (inches					
Saturation Present?	Yes	No x	Depth (inches		Wetland Hyd	rology Preser	nt? Yes	No X
(includes capillary fringe)			- · `	,		0,		
Describe Recorded Data (s	tream gauge, m	onitoring we	ell, aerial photos,	previous inspe	ections), if availa	able:		
Remarks: No apparent hydrology bey	ond fac-neutral '	test. Area is	likely fringe/mar	ginal and on th	ne transitional lin	ie.		

Sampling Point: JC\_W\_101\_UP

1.       Pinus taeda       60       Yes       FAC         2.       Liquidambar styraciflua       10       No       FAC         3.       Acer rubrum       10       No       FAC         4.       10       No       FAC         5.		Absolute	Dominant	Indicator	
2.         Liquidambar styractilua         10         No         FAC           3.         Meer Johum         10         No         FAC           4.         10         No         FAC           5.         10         No         FAC           6.         10         No         FAC           6.         20% of total cover         40           7.         20         Yes         FAC           80         =Total Cover         10           1.         Provalence Index worksheet:         10           1.         Provalence Index worksheet:         10           2.         Liquidambar styractilua         10         Yes           3.         20         Yes         FAC           5.         20         Yes         FAC           6.         20% of total cover:         6         20%           5.         20         75         0           6.         20% of total cover:         6         27.9           7.         20% of total cover:         1         1.         1.           6.         20         1.         2.         2.         1.           7.         20% of total	Tree Stratum (Plot size: 30 )	% Cover	Species?	Status	Dominance Test worksheet:
3. Acer rubrum       10       No       FAC         4.					
4.					That Are OBL, FACW, or FAC: <u>5</u> (A)
5.	3. Acer rubrum	10	No	FAC	
6.	4				Species Across All Strata: 5 (B)
B0         =Total Cover         Total 's Cover of:         Multiply by:           Sapting Stratum (Plot size:         30         20         Yes         FAC           1. Provalence Index worksheet:         Total 's Cover of:         Multiply by:           2. Liquidambar styracifiua         10         Yes         FAC           3.	5	·			Percent of Dominant Species
59% of total cover:         40         20% of total cover:         16           Sapting Stratum         (Plot size:         30         x1 =         0           1. Phus taceda         20         Yes         FAC         FAC           7. Additional synactifue         10         Yes         FAC         FAC           7. Additional synactifue         10         Yes         FAC         FAC           7. Additional synactifue         10         Yes         FAC         FAC           8. Second         20         Yes         FAC         FAC         FAC           9. Softs of total cover:         15         20% of total cover:         6         2.7.9         Phydrophydic Vegetation         Phydrophydic Vegetation           1.         20         = Total Cover         50% of total cover:         2.7.9         Phydrophydic Vegetation         Yes         2.7.9           1.         20         Soft of total cover:         1.         Rapid Test totydrophydic Vegetation         Yes         2.7.9           1.         20% of total cover:         2.0         Problematic Hydrophydic Vegetation         Yes         2.7.9           1.         Anurdinaria gigantea         30         Yes         FACW         Definiticos of tradi coveri	6				
Sabing Stratum (Plot size:         30         Yes         FAC           1 <i>Privas teede</i> 0         Yes         FAC         FAC         PACW species         0         x 1 =         0           3.         10         Yes         FAC         FAC         FAC species         10         x 3         4         4		80	=Total Cover		Prevalence Index worksheet:
1.       Pinus taeda       20       Yes       FAC       FAC       FAC       FAC species       30       x 2 =       60         2.       Liguidambar stymolitua       10       Yes       FAC       FAC species       15       x 3 =       345         3.	50% of total cover:	40 20%	of total cover:	16	
2.       Liquidambar styracillua       10       Yes       FAC       FAC species       115       x 3 =       345         3.       FAC U species       0       x 4 =       0       UPL species       0       x 4 =       0         5.       S.       S.       S.       S.       S.       4.       4.       4.       4.       4.       4.       4.       4.       4.       4.       4.       4.       5.       S.       S.       S.       S.       S.       Y.       S.       4.       A.	Sapling Stratum (Plot size: 30)				
3.	1. Pinus taeda	20	Yes	FAC	FACW species <u>30</u> x 2 = <u>60</u>
4.	2. Liquidambar styraciflua	10	Yes	FAC	FAC species 115 x 3 = 345
5.	3.				FACU species 0 x 4 = 0
6.	4.				UPL species 0 x 5 = 0
	5				Column Totals: 145 (A) 405 (B)
50% of total cover:       15       20% of total cover:       6         Shub Stratum (Plot size:       )	6.				Prevalence Index = B/A = 2.79
Shrub Stratum (Plot size:)      X       2 - Dominance Test is >50%         1.		30	=Total Cover		Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size:)      X       2 - Dominance Test is >50%         1.	50% of total cover:	15 20%	of total cover:	6	1 - Rapid Test for Hydrophytic Vegetation
1.	Shrub Stratum (Plot size: )				
2.					
3.	2.	·			
4.		·			
5.		·			
6.		·			
		·			
50% of total cover:       20% of total cover:	0	·			
Herb Stratum (Plot size:30)       30       Yes       FACW         1.       Arundinaria gigantea       30       Yes       FACW         2.					
1.       Arundinaria gigantea       30       Yes       FACW       (7.6 cm) or larger in diameter at breast height (DBH).         2.		20%	or total cover.		
1.       PACW         2.			X	54.014/	
3.		30	Yes	FACW	
4.		·			
4.		·	<u> </u>		
6.	4				
0.	5				
8.	6				approximately 5 to 20 ft (1 to 6 ff) in height.
9.	7				Herb – All herbaceous (non-woody) plants, including
0.	8				
10.	9				
30       =Total Cover         50% of total cover:       15         20% of total cover:       6         Woody Vine Stratum (Plot size:       30         1.       Smilax rotundifolia         5       Yes         7       FAC         3.	10				
50% of total cover:       15       20% of total cover:       6         Woody Vine Stratum (Plot size:       30       )       7         1.       Smilax rotundifolia       5       Yes       FAC         2.	11				<b>Woody Vine</b> – All woody vines, regardless of height.
Woody Vine Stratum (Plot size:30)         1. Smilax rotundifolia       5       Yes       FAC         23		30	=Total Cover		
1.       Smilax rotundifolia       5       Yes       FAC         2.	50% of total cover:	15 20%	of total cover:	6	
2.	Woody Vine Stratum (Plot size: 30 )				
3.	1. Smilax rotundifolia	5	Yes	FAC	
4. 5. 5. 50% of total cover: 3 20% of total cover: 1 Hydrophytic Vegetation Present? Yes X No_	2.				
5.	3.				
5       =Total Cover       Hydrophytic         50% of total cover:       3       20% of total cover:       1         Present?       Yes       X       No	4.				
5       =Total Cover       Hydrophytic         50% of total cover:       3       20% of total cover:       1         Present?       Yes       X       No	5.				
50% of total cover: <u>3</u> 20% of total cover: <u>1</u> <b>Present? Yes</b> X <b>No</b>		5	=Total Cover		
	50% of total cover:			1	
					<u></u>

SOIL

Depth	Matrix		Redo	x Featu	res				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Te	xture	Remarks
0-3							Р	eat	Duff
3-6	10YR 3/1	100					Loamy	//Clayey	
6-14	10YR 7/1	100					Loamy	//Clayey	Spodosol
14-20	10YR 7/1	99	2.5Y 7/3	1	С	Μ	Loamy	//Clayey	Distinct redox concentrations
		·							
Type: C=Co	oncentration, D=Depl	letion, RM	=Reduced Matrix,	MS=Mas	ked Sand	d Grains.		<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
•	Indicators: (Applica	ble to all			,				for Problematic Hydric Soils <sup>3</sup> :
Histosol	· · ·		Thin Dark S	`	<i>,</i> <b>,</b>				luck (A9) <b>(LRR O)</b>
	pipedon (A2)		Barrier Islar		`	12)			luck (A10) <b>(LRR S)</b>
Black Hi	( )		(MLRA 1		,				Prairie Redox (A16)
Hydroge	n Sulfide (A4)		Loamy Muc	ky Miner	al (F1) <b>(L</b>	RR O)		(outs	side MLRA 150A)
Stratified	l Layers (A5)		Loamy Gley	ed Matri	x (F2)			Reduce	ed Vertic (F18)
Organic	Bodies (A6) (LRR P,	T, U)	X Depleted Ma	atrix (F3)	)			(outs	ide MLRA 150A, 150B)
5 cm Mu	icky Mineral (A7) <b>(LR</b>	R P, T, U	Redox Dark	Surface	e (F6)			Piedmo	ont Floodplain Soils (F19) <b>(LRR P, T</b>
Muck Pr	esence (A8) (LRR U)	)	Depleted Da	ark Surfa	ace (F7)			Anoma	lous Bright Floodplain Soils (F20)
1 cm Mu	ick (A9) (LRR P, T)		Redox Depr	essions	(F8)			(MLR	RA 153B)
X Depleted	d Below Dark Surface	e (A11)	Marl (F10) (	LRR U)			_	Red Pa	arent Material (F21)
Thick Da	ark Surface (A12)		Depleted O	chric (F1	1) (MLRA	151)	•	Very S	hallow Dark Surface (F22)
Coast P	rairie Redox (A16) ( <b>N</b>	ILRA 150	A) Iron-Manga	nese Ma	sses (F12	2) (LRR O	, P, T)	(outs	ide MLRA 138, 152A in FL, 154)
Sandy M	lucky Mineral (S1) <b>(L</b>	.RR O, S)	Umbric Surf	ace (F13	B) (LRR F	, T, U)		Barrier	Islands Low Chroma Matrix (TS7)
Sandy G	ileyed Matrix (S4)		Delta Ochrid	(F17) <b>(</b>	MLRA 15	1)	•	(MLR	RA 153B, 153D)
Sandy R	edox (S5)		Reduced Ve				0B)	Other (	Explain in Remarks)
Stripped	Matrix (S6)		Piedmont Fl	oodplair	n Soils (F	9) <b>(MLR</b>	A 149A)		
Dark Su	rface (S7) (LRR P, S	, T, U)	Anomalous	Bright Fl	loodplain	Soils (F20	)		
	e Below Surface (S8		(MLRA 14	-			-	<sup>3</sup> Indica	tors of hydrophytic vegetation and
	S, T, U)		Very Shallo						and hydrology must be present,
			(MLRA 13	38, 152A	in FL, 1	54)		unle	ss disturbed or problematic.
	Layer (if observed):								
Type:									
Donth (in	nches):						Hvdrid	Soil Prese	ent? Yes X No

# Date: 12/20/21



Photograph Direction North

Comments:

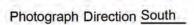
Feature Name: JC\_W\_101 UP



Photograph Direction East

Comments:





Comments:



Photograph Direction West

WETLAND DETERMIN See ERDC	•			•	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW		City/C	ounty: Virginia B	each	Sampling Date: 5/31/2022
Applicant/Owner: Dominion E	Inergy			State: VA	Sampling Point: JC_W_1002
Investigator(s): T. Conard, E. De	ck	Section, To	ownship, Range:	N/a	
Landform (hillside, terrace, etc.):		Local relief (c	oncave, convex.	none): Concave	Slope (%): 2
Subregion (LRR or MLRA): LRR	· · ·			76.110397933	Datum: NAD83
			Long	NWI classifica	
Soil Map Unit Name: Tomotley L					
Are climatic / hydrologic condition		-	Yes X		
Are Vegetation, Soil	, or Hydrologysig	nificantly disturbed?	Are "Normal C	Circumstances" present	? Yes X No
Are Vegetation, Soil	, or Hydrologyna	turally problematic?	(If needed, ex	plain any answers in R	emarks.)
SUMMARY OF FINDINGS	– Attach site map s	showing sampling	g point locati	ons, transects, in	nportant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes X M Yes X M	No within	Sampled Area a Wetland?	Yes X	No
Wetland is located in a mowed/n	naintained ROW. Rutting	present			
HYDROLOGY					
Wetland Hydrology Indicators:	:			Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of o	one is required; check all t	that apply)		Surface Soil Crac	· · ·
X Surface Water (A1)	Aquatic I	Fauna (B13)		Sparsely Vegetat	ed Concave Surface (B8)
High Water Table (A2)	·	bosits (B15) (LRR U)		Drainage Pattern	( )
Saturation (A3)		n Sulfide Odor (C1)		Moss Trim Lines	. ,
Water Marks (B1)		Rhizospheres on Livir	•	Dry-Season Wate	. ,
Sediment Deposits (B2)	Presence	e of Reduced Iron (C4)	1	X Crayfish Burrows	(C8)
Drift Deposits (B3)	Recent I	ron Reduction in Tilled	Soils (C6)	Saturation Visible	e on Aerial Imagery (C9)

HYDROLOGY						
Wetland Hydrology Indicat	tors:				Secondary Indicators (mi	nimum of two required)
Primary Indicators (minimum	n of one is requ	<u>ired; check a</u>	ll that apply)		Surface Soil Cracks	(B6)
X Surface Water (A1)		Aquatio	c Fauna (B13)		Sparsely Vegetated	Concave Surface (B8)
High Water Table (A2)		Marl D	eposits (B15) <b>(LRR U)</b>		Drainage Patterns (B	310)
Saturation (A3)		Hydroç	gen Sulfide Odor (C1)		Moss Trim Lines (B1	6)
Water Marks (B1)		Oxidize	ed Rhizospheres on Living	Roots (C3)	Dry-Season Water T	able (C2)
Sediment Deposits (B2)		Preser	nce of Reduced Iron (C4)		X Crayfish Burrows (C8	3)
Drift Deposits (B3)		Recent	t Iron Reduction in Tilled S	oils (C6)	Saturation Visible on	Aerial Imagery (C9)
Algal Mat or Crust (B4)		Thin M	luck Surface (C7)		Geomorphic Position	(D2)
Iron Deposits (B5)		Other (	(Explain in Remarks)		Shallow Aquitard (D3	3)
Inundation Visible on Ae	erial Imagery (F	37)			X FAC-Neutral Test (D	5)
Water-Stained Leaves (I	B9)				Sphagnum Moss (D8	B) (LRR T,U)
Field Observations:						
Surface Water Present?	Yes X	No	Depth (inches): 1			
Water Table Present?	Yes	No X	Depth (inches):			
Saturation Present?	Yes	No X	Depth (inches):	Wetland	Hydrology Present?	Yes X No
(includes capillary fringe)						
Describe Recorded Data (str	ream gauge, m	onitoring well	, aerial photos, previous in	spections), if	available:	
Remarks:						
Some standing water in ruts	- Crayfish bur	ows present f	throughout.			

Sampling Point: JC\_W\_1002

	Absolute	Dominant	Indicator	Demission Texture deduct
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Dominance Test worksheet:
1 2.				Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
3.				Total Number of Dominant
4.				Species Across All Strata: (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100.0% (A/B)
	:	=Total Cover		Prevalence Index worksheet:
50% of total cover:	20%	of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30)				OBL species X 1 = 70
1				FACW species 0 x 2 = 0
2				FAC species 0 x 3 = 0
3.				FACU species 0 x 4 = 0
4.				UPL species $0 \times 5 = 0$
5.				Column Totals: 70 (A) 70 (B)
6		Tatal Causer		Prevalence Index = B/A = 1.00
		=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	20%	of total cover:		1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50%
Shrub Stratum (Plot size: 30 )				X 3 - Prevalence Index is $\leq 3.0^{1}$
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4.				
5				1
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:		of total cover:		Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30 )				approximately 20 ft (6 m) or more in height and 3 in.
1. Eleocharis obtusa	20	Yes	OBL	(7.6 cm) or larger in diameter at breast height (DBH).
2. Carex lurida	15	Yes	OBL	Sapling – Woody plants, excluding woody vines,
3. Juncus effusus	15	Yes	OBL	approximately 20 ft (6 m) or more in height and less
4. Murdannia keisak	20	Yes	OBL	than 3 in. (7.6 cm) DBH.
5				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, <u>and</u> woody 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 – Air woody vines, regardless of height.
		=Total Cover	4.4	
50% of total cover: <u>3</u>	5 20%	of total cover:	14	
Woody Vine Stratum (Plot size:)				
1 2.				
3.				
4.				
5.				
· · · · · · · · · · · · · · · · · · ·		=Total Cover		Hydrophytic
50% of total cover:		of total cover:		Vegetation Present? Yes X No
Remarks: (If observed, list morphological adaptation	ns below.)		_	
Maintained ROW				

inches)       Color (         0-8       10YF         8-16       10YF         16-18       10YF         16-18       10YF         16-18       10YF         16-18       10YF         Histosol (A1)       10YF         Histosol (A1)       Histic Epipedon (A2         Black Histic (A3)       Hydrogen Sulfide (A         Stratified Layers (A4       Organic Bodies (A6         5 cm Mucky Minera       Muck Presence (A8         1 cm Muck (A9) (LF       Depleted Below Dai         Thick Dark Surface       Coast Prairie Redox         Sandy Mucky Miner       Sandy Gleyed Matri         Sandy Redox (S5)       Stripped Matrix (S6)	4) (LRR, P, T, U (A7) (LRR P, (A7) (LRR P, (A7) (LRR P, (A7) (LRR P, (A7) (LRR P, (A7) (LRR P, (A7) (LRR P, (A12) (A12) (A16) (MLRA	90 10 90 10 90 10 10 90 10 10 10 90 10 10 90 10 10 90 10 10 90 10 10 90 10 10 90 10 10 90 10 10 90 10 10 10 10 10 10 10 10 10 10		erwise n urface (S ds 1 cm i3B, 153 i3B, 153 i3B	<b>oted.)</b> 59) <b>(LRR</b> Muck (S <b>D)</b> al (F1) <b>(L</b> x (F2) (F6) ce (F7)	12)	Loamy Loamy	Indicators f 1 cm M 2 cm M Coast F (outs Reduce (outs Piedmo Anomal	Pror PL=Pore for Prob uck (A9) uck (A10 Prairie Ro ide MLR ad Vertic ide MLR ide MLR ide MLR	E Lining, M=N Dematic Hyd (LRR O) (LRR O) (LRR S) edox (A16) (A 150A) (F18) (A 150A, 15 Iplain Soils ( ght Floodplai	< concentrations
8-16       10YF         16-18	4/1 9 4/1 9 0 D=Depletior (Applicable t ) 4) 6 (LRR, P, T, U (A7) (LRR P, ) (LRR U) 7 R P, T) k Surface (A1 (A12) (A16) (MLRA	90 10 90 10 90 10 10 10 10 10 10 10 10 10 10	ced Matrix, M unless othe Thin Dark Su Barrier Island (MLRA 15 Loamy Muck Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) ( <b>I</b>	10 MS=Masl erwise n urface (S ds 1 cm <b>33B, 153</b> dy Minera ed Matrix atrix (F3) Surface rrk Surface essions (	C ked San ooted.) S9) (LRR Muck (S D) al (F1) (L x (F2) (F6) ce (F7)	PL 	Loamy	<sup>2</sup> Location: F Indicators f 1 cm M 2 cm M Coast F (outs Reduce (outs Piedmo Anomal	Pror PL=Pore for Prob uck (A9) uck (A10 Prairie Ro ide MLR ad Vertic ide MLR ide MLR ide MLR	E Lining, M=N Dematic Hyd (LRR O) (LRR O) (LRR S) edox (A16) (A 150A) (F18) (A 150A, 15 Iplain Soils ( ght Floodplai	<ul> <li>concentrations</li> <li>rcoal</li> <li>Matrix.</li> <li>dric Soils<sup>3</sup>:</li> <li>0B)</li> <li>F19) (LRR P, T</li> </ul>
16-18         Type: C=Concentration         Iydric Soil Indicators:         Histosol (A1)         Histic Epipedon (A2         Black Histic (A3)         Hydrogen Sulfide (A         Stratified Layers (A8         Organic Bodies (A6         5 cm Mucky Minera         Muck Presence (A8         1 cm Muck (A9) (LF         Depleted Below Dar         Thick Dark Surface         Coast Prairie Redox         Sandy Mucky Miner         Sandy Gleyed Matri         Sandy Redox (S5)	(Applicable t (Applicable t ) (A7) (LRR P, T, U (A7) (LRR P, ) (LRR U) (R P, T) k Surface (A1 (A12) (A16) (MLRA	n, RM=Reduction to all LRRs, (0) X I (0) X I (0) X I (1) [1]	ced Matrix, N unless othe Thin Dark St Barrier Island (MLRA 15 Loamy Muck Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (I	MS=Masi erwise n urface (S ds 1 cm i3B, 153 i3B,	ked San oted.) 59) (LRR Muck (S D) al (F1) (L x (F2) (F6) ce (F7)	<u>d Grains.</u> <b>s, T, U)</b> 12)		<sup>2</sup> Location: F Indicators f 1 cm M 2 cm M Coast F (outs Reduce (outs Piedmo Anomal	PL=Pore for Prob uck (A9) uck (A10 Prairie R ide MLR ide MLR ide MLR ide MLR	Char Char	Matrix. dric Soils <sup>3</sup> : 0B) F19) (LRR P, T
Type: C=Concentration lydric Soil Indicators: Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A Stratified Layers (A8 Organic Bodies (A6 5 cm Mucky Minera Muck Presence (A8 1 cm Muck (A9) (LF Depleted Below Dat Thick Dark Surface Coast Prairie Redow Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	(Applicable t 4) 4) (LRR, P, T, U (A7) (LRR P, (LRR U) (R P, T) k Surface (A1 (A12) (A16) (MLRA	to all LRRs,  U) X I (, T, U) 11)I	unless othe Thin Dark Su Barrier Island (MLRA 15 Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (I	erwise n urface (S ds 1 cm i3B, 153 i3B, 153 i3B	<b>oted.)</b> 59) <b>(LRR</b> Muck (S <b>D)</b> al (F1) <b>(L</b> x (F2) (F6) ce (F7)	12)		Indicators f 1 cm M 2 cm M Coast F (outs Reduce (outs Piedmo Anomal	for Prob uck (A9) uck (A10 Prairie Ro ide MLR d Vertic ide MLR ont Flood		Matrix. dric Soils <sup>3</sup> : 0B) F19) (LRR P, T
ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A Stratified Layers (A4 Organic Bodies (A6 5 cm Mucky Minera Muck Presence (A8 1 cm Muck (A9) (LF Depleted Below Dai Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	(Applicable t 4) 4) (LRR, P, T, U (A7) (LRR P, (LRR U) (R P, T) k Surface (A1 (A12) (A16) (MLRA	to all LRRs,  U) X I (, T, U) 11)I	unless othe Thin Dark Su Barrier Island (MLRA 15 Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (I	erwise n urface (S ds 1 cm i3B, 153 i3B, 153 i3B	<b>oted.)</b> 59) <b>(LRR</b> Muck (S <b>D)</b> al (F1) <b>(L</b> x (F2) (F6) ce (F7)	12)		Indicators f 1 cm M 2 cm M Coast F (outs Reduce (outs Piedmo Anomal	for Prob uck (A9) uck (A10 Prairie Ro ide MLR d Vertic ide MLR ont Flood	Defenatic Hyd           (LRR O)           () (LRR S)           edox (A16)           (A 150A)           (F18)           (A 150A, 15)           Iplain Soils (           ght Floodplai	dric Soils <sup>3</sup> : <b>0B)</b> F19) <b>(LRR P, T</b>
ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A Stratified Layers (A4 Organic Bodies (A6 5 cm Mucky Minera Muck Presence (A8 1 cm Muck (A9) (LF Depleted Below Dai Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	(Applicable t 4) 4) (LRR, P, T, U (A7) (LRR P, (LRR U) (R P, T) k Surface (A1 (A12) (A16) (MLRA	to all LRRs,  U) X I (, T, U) 11)I	unless othe Thin Dark Su Barrier Island (MLRA 15 Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (I	erwise n urface (S ds 1 cm i3B, 153 i3B, 153 i3B	<b>oted.)</b> 59) <b>(LRR</b> Muck (S <b>D)</b> al (F1) <b>(L</b> x (F2) (F6) ce (F7)	12)		Indicators f 1 cm M 2 cm M Coast F (outs Reduce (outs Piedmo Anomal	for Prob uck (A9) uck (A10 Prairie Ro ide MLR d Vertic ide MLR ont Flood	Defenatic Hyd           (LRR O)           () (LRR S)           edox (A16)           (A 150A)           (F18)           (A 150A, 15)           Iplain Soils (           ght Floodplai	dric Soils <sup>3</sup> : <b>0B)</b> F19) <b>(LRR P, T</b>
ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A Stratified Layers (A4 Organic Bodies (A6 5 cm Mucky Minera Muck Presence (A8 1 cm Muck (A9) (LF Depleted Below Dai Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	(Applicable t 4) 4) (LRR, P, T, U (A7) (LRR P, (LRR U) (R P, T) k Surface (A1 (A12) (A16) (MLRA	to all LRRs,  U) X I (, T, U) 11)I	unless othe Thin Dark Su Barrier Island (MLRA 15 Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (I	erwise n urface (S ds 1 cm i3B, 153 i3B, 153 i3B	<b>oted.)</b> 59) <b>(LRR</b> Muck (S <b>D)</b> al (F1) <b>(L</b> x (F2) (F6) ce (F7)	12)		Indicators f 1 cm M 2 cm M Coast F (outs Reduce (outs Piedmo Anomal	for Prob uck (A9) uck (A10 Prairie Ro ide MLR d Vertic ide MLR ont Flood	Defenatic Hyd           (LRR O)           () (LRR S)           edox (A16)           (A 150A)           (F18)           (A 150A, 15)           Iplain Soils (           ght Floodplai	dric Soils <sup>3</sup> : <b>0B)</b> F19) <b>(LRR P, T</b>
ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A Stratified Layers (A4 Organic Bodies (A6 5 cm Mucky Minera Muck Presence (A8 1 cm Muck (A9) (LF Depleted Below Dai Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	(Applicable t 4) 4) (LRR, P, T, U (A7) (LRR P, (LRR U) (R P, T) k Surface (A1 (A12) (A16) (MLRA	to all LRRs,  U) X I (, T, U) 11)I	unless othe Thin Dark Su Barrier Island (MLRA 15 Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (I	erwise n urface (S ds 1 cm i3B, 153 i3B, 153 i3B	<b>oted.)</b> 59) <b>(LRR</b> Muck (S <b>D)</b> al (F1) <b>(L</b> x (F2) (F6) ce (F7)	12)		Indicators f 1 cm M 2 cm M Coast F (outs Reduce (outs Piedmo Anomal	for Prob uck (A9) uck (A10 Prairie Ro ide MLR d Vertic ide MLR ont Flood	Defenatic Hyd           (LRR O)           () (LRR S)           edox (A16)           (A 150A)           (F18)           (A 150A, 15)           Iplain Soils (           ght Floodplai	dric Soils <sup>3</sup> : <b>0B)</b> F19) <b>(LRR P, T</b>
Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A Stratified Layers (A4 Organic Bodies (A6 5 cm Mucky Minera Muck Presence (A8 1 cm Muck (A9) <b>(LF</b> Depleted Below Dat Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	4) ( <b>LRR, P, T, U</b> (A7) <b>(LRR P,</b> <b>(LRR U)</b> ( <b>R P, T)</b> k Surface (A1 (A12) (A16) ( <b>MLRA</b>	U) <u>X</u>	Thin Dark Su Barrier Island (MLRA 15 Loamy Muck Loamy Gleyd Depleted Ma Redox Dark Depleted Da Redox Depro Marl (F10) ( <b>I</b>	urface (S ds 1 cm <b>33B, 153</b> (y Minera ed Matrix atrix (F3) Surface urk Surface essions (	69) <b>(LRR</b> Muck (S <b>D)</b> al (F1) <b>(L</b> x (F2) (F6) ce (F7)	12)	-	1 cm M 2 cm M Coast F (outs Reduce (outs Piedmo Anomal	uck (A9) uck (A10 Prairie Ro <b>ide MLR</b> ed Vertic <b>ide MLR</b> ont Flood	(LRR O) (JURR S) (HRR S) (A 150A) (F18) (F18) (F18) (F18) (F18) (F18) (F18) (F16) (F18) (F16) (F	<b>0B)</b> F19) <b>(LRR P, T</b>
Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A Stratified Layers (A4 Organic Bodies (A6 5 cm Mucky Minera Muck Presence (A8 1 cm Muck (A9) <b>(LF</b> Depleted Below Dat Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	4) ( <b>LRR, P, T, I</b> (A7) <b>(LRR P,</b> ) <b>(LRR U)</b> <b>R P, T)</b> k Surface (A1 (A12) : (A16) ( <b>MLRA</b> )	U) <u>X</u> (U) <u>X</u> (T, U) <u></u> (11) <u></u>	(MLRA 15 Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (L	<b>3B, 153</b> (y Minera ed Matrix atrix (F3) Surface urk Surface essions (	<b>D)</b> al (F1) <b>(L</b> x (F2) (F6) ce (F7)		-	Coast F (outs Reduce (outs Piedmo Anomal	Prairie Ro ide MLR ed Vertic ide MLR ont Flood	edox (A16) <b>RA 150A)</b> (F18) <b>RA 150A, 15</b> Iplain Soils ( ght Floodplai	F19) <b>(LRR P, T</b>
Hydrogen Sulfide (A Stratified Layers (A Organic Bodies (A6 5 cm Mucky Minera Muck Presence (A8 1 cm Muck (A9) (LR Depleted Below Dar Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	5) (LRR, P, T, U (A7) (LRR P, (LRR U) (R P, T) k Surface (A1 (A12) (A16) (MLRA	U) <u>X</u> (U) <u>X</u> (T, U) <u></u> (11) <u></u>	(MLRA 15 Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (L	<b>3B, 153</b> (y Minera ed Matrix atrix (F3) Surface urk Surface essions (	<b>D)</b> al (F1) <b>(L</b> x (F2) (F6) ce (F7)		-	(outs Reduce (outs Piedmo Anomal	ide MLR ed Vertic ide MLR ont Flood	<b>RA 150A)</b> (F18) <b>RA 150A, 15</b> Iplain Soils ( ght Floodplai	F19) <b>(LRR P, T</b>
Hydrogen Sulfide (A Stratified Layers (A Organic Bodies (A6 5 cm Mucky Minera Muck Presence (A8 1 cm Muck (A9) (LR Depleted Below Dar Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	5) (LRR, P, T, U (A7) (LRR P, (LRR U) (R P, T) k Surface (A1 (A12) (A16) (MLRA	U) <u>X</u> [ , T, U) <u>F</u> 11) <u>I</u>	Loamy Muck Loamy Gleyd Depleted Ma Redox Dark Depleted Da Redox Depro Marl (F10) <b>(L</b>	ky Minera ed Matrix atrix (F3) Surface ark Surfac essions (	al (F1) <b>(L</b> x (F2) (F6) ce (F7)	.RR 0)	-	Reduce (outs Piedmo Anomal	ed Vertic <b>ide MLR</b> ont Flood lous Brig	(F18) <b>RA 150A, 15</b> Iplain Soils ( ght Floodplai	F19) <b>(LRR P, T</b>
Stratified Layers (At Organic Bodies (A6 5 cm Mucky Minera Muck Presence (A8 1 cm Muck (A9) <b>(LF</b> Depleted Below Dai Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	5) (LRR, P, T, U (A7) (LRR P, (LRR U) (R P, T) k Surface (A1 (A12) (A16) (MLRA	U) <u>X</u> [ , T, U) <u>F</u> 11) <u>I</u>	Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) <b>(L</b>	ed Matrix atrix (F3) Surface ark Surfac essions (	x (F2) (F6) ce (F7)		-	<b>(outs</b> Piedmo Anomal	ide MLR ont Flood lous Brig	<b>RA 150A, 15</b> Iplain Soils ( ght Floodplai	F19) <b>(LRR P, T</b>
Organic Bodies (A6 5 cm Mucky Minera Muck Presence (A8 1 cm Muck (A9) <b>(LF</b> Depleted Below Dar Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	(LRR, P, T, U (A7) (LRR P, (LRR U) (LRR U) (R P, T) k Surface (A1 (A12) (A16) (MLRA	P, <b>T</b> , <b>U</b> )F	Redox Dark Depleted Da Redox Depre Marl (F10) <b>(L</b>	Surface irk Surface essions (	(F6) ce (F7)		-	<b>(outs</b> Piedmo Anomal	ide MLR ont Flood lous Brig	<b>RA 150A, 15</b> Iplain Soils ( ght Floodplai	F19) <b>(LRR P, T</b>
Muck Presence (A8 1 cm Muck (A9) <b>(LF</b> Depleted Below Dar Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	) <b>(LRR U)</b> ( <b>R P, T)</b> (A Surface (A1 (A12) (A16) ( <b>MLRA</b>	P, <b>T</b> , <b>U</b> )F	Redox Dark Depleted Da Redox Depre Marl (F10) <b>(L</b>	Surface irk Surface essions (	(F6) ce (F7)		-	Piedmo Anomal	nt Flood Ious Brig	lplain Soils ( ght Floodplai	F19) <b>(LRR P, T</b>
Muck Presence (A8 1 cm Muck (A9) <b>(LF</b> Depleted Below Dar Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	) <b>(LRR U)</b> ( <b>R P, T)</b> (A Surface (A1 (A12) (A16) ( <b>MLRA</b>		Redox Depre Marl (F10) <b>(L</b>	essions (			-	Anomal	lous Brig	ht Floodplai	
1 cm Muck (A9) <b>(LF</b> Depleted Below Dar Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	<b>R P, T)</b> k Surface (A1 (A12) c (A16) ( <b>MLRA</b>		Redox Depre Marl (F10) <b>(L</b>	essions (			-		-		· · · ·
Depleted Below Day Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	k Surface (A1 (A12) (A16) ( <b>MLRA</b>	11)[	Marl (F10) <b>(L</b>		( - /				A 153B)	)	
Thick Dark Surface Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	(A12) (A16) ( <b>MLRA</b>									, terial (F21)	
Coast Prairie Redox Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)	(A16) ( <b>MLRA</b>			hric (F11	1) (MI R	A 151)	-			ark Surface	(F22)
Sandy Mucky Miner Sandy Gleyed Matri Sandy Redox (S5)			Iron-Mangar				орт) -				A in FL, 154)
Sandy Gleyed Matri Sandy Redox (S5)			Umbric Surfa		`	, <b>、</b>	0,1,1)				a Matrix (TS7)
Sandy Redox (S5)			Delta Ochric				-		A 153B,		
	x (04)		Reduced Ve				50B)			n Remarks)	
					, <b>.</b>		· · -			n Kemarks)	
			Piedmont Flo								
Dark Surface (S7) (		o)/	Anomalous I	-			20)	<sup>3</sup> Indiant	ara of h	draphyticy	egetation and
Polyvalue Below Su	fiace (30)	,	(MLRA 14								•
(LRR S, T, U)			Very Shallov (MLRA 13		`	,			-	ology must b bed or proble	
estrictive Layer (if ob	served):										
Туре:			_								
Depth (inches):			_				Hydric	: Soil Prese	nt?	Yes X	No
emarks: one											

Date: \_\_\_\_\_

Feature ID: <u>JC\_W\_1002</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number <u>4</u> Photograph Direction <u>West</u>

WETLAND DETERMINATION	N DATA SH			-	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW			City/County: Virginia	Beach	Sampling Date: 6/3/2022
Applicant/Owner: Dominion				State: VA	Sampling Point: JC_W_1002-1003_UP
Investigator(s): E. Foster, T. Conard		8	Section, Township, Range:	N/a	
Landform (hillside, terrace, etc.): Hillsid	е	Loc	al relief (concave, convex	, none): None	Slope (%): 5
Subregion (LRR or MLRA): LRR T, MLR	A 153B Lat:	36.7577419945	5 Long: -	76.1091727696667	Datum: NAD 83
Soil Map Unit Name: Tomotley Loam				NWI classifica	ation: N/a
Are climatic / hydrologic conditions on the	site typical fo	r this time of yea	r? Yes X	No (If no,	explain in Remarks.)
Are Vegetation , Soil , or Hy	drology	significantly dis	turbed? Are "Normal (	Circumstances" presen	t? Yes X No
Are Vegetation , Soil , or Hy		-		plain any answers in F	Remarks.)
SUMMARY OF FINDINGS – Atta	ich site ma	p showing s	ampling point locat	ions, transects, ir	mportant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?		No X No X No X	Is the Sampled Area within a Wetland?	Yes	No <u>X</u>
Remarks: Upland in maintained ROW HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is re	quired; check	all that apply)		Surface Soil Cra	cks (B6)
Surface Water (A1)	·	atic Fauna (B13)			ted Concave Surface (B8)
High Water Table (A2)		Deposits (B15) (		Drainage Patterr	· · · /
Saturation (A3)	Hydr	ogen Sulfide Ode	or (C1)	Moss Trim Lines	(B16)

Saturation (A3)		Hydro	ogen Sulfide Odor (C1)		Moss Trim Lines (B1	16)	
Water Marks (B1)		Oxidiz	zed Rhizospheres on Living	g Roots (C3)	Dry-Season Water T	able (C2)	
Sediment Deposits (B	2)	Prese	ence of Reduced Iron (C4)		Crayfish Burrows (C	8)	
Drift Deposits (B3)		Rece	nt Iron Reduction in Tilled	Soils (C6)	Saturation Visible or	n Aerial Image	ery (C9)
Algal Mat or Crust (B4	.)	Thin I	Muck Surface (C7)		Geomorphic Positior	n (D2)	
Iron Deposits (B5)		Other	(Explain in Remarks)		Shallow Aquitard (D3	3)	
Inundation Visible on A	Aerial Imagery (I	B7)			FAC-Neutral Test (D	95)	
Water-Stained Leaves	s (B9)				Sphagnum Moss (Da	8) <b>(LRR T,U)</b>	
Field Observations:							
Surface Water Present?	Yes	No X	Depth (inches):				
Water Table Present?	Yes	No X	Depth (inches):				
Saturation Present?	Yes	No X	Depth (inches):	Wetland	Hydrology Present?	Yes	No X
(includes capillary fringe)				_			
Describe Recorded Data (	stream gauge, n	nonitoring we	ell, aerial photos, previous i	inspections), if a	available:		
Remarks:							
None							
None							

Sampling Point: JC\_W\_1002-1003\_UP

Tree Stratum (Plot size:)	Absolute	Dominant	Indicator	
	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species
2.				That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant
4.				Species Across All Strata: 2 (B)
5				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 0.0% (A/B)
		Total Cover		Prevalence Index worksheet:
50% of total cover:	20% 0	of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species 0 x 1 = 0
1				FACW species $0   x^2 = 0$
2.				FAC species 10 x 3 = 30
3.				FACU species 70 x 4 = 280
4.				UPL species $2 \times 5 = 10$
5.				Column Totals: 82 (A) 320 (B)
6				Prevalence Index = B/A = 3.90
		Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	20% (	of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6				present, unless disturbed or problematic.
		Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20% (	of total cover:		Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30)				approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1 I lalava lanatua		Yes	FACU	(1.0 onl) of larger in diameter at breast height (DDH).
1. Holcus lanatus	20			
2. Anthoxanthum odoratum	25	Yes	FACU	Sapling – Woody plants, excluding woody vines,
<ol> <li>Anthoxanthum odoratum</li> <li>Rubus aboriginum</li> </ol>	25 2	Yes No	UPL	approximately 20 ft (6 m) or more in height and less
<ol> <li>Anthoxanthum odoratum</li> <li>Rubus aboriginum</li> <li>Lespedeza cuneata</li> </ol>	25 2 10	Yes No No	UPL FACU	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
<ol> <li>Anthoxanthum odoratum</li> <li>Rubus aboriginum</li> <li>Lespedeza cuneata</li> <li>Solidago canadensis</li> </ol>	25 2 10 15	Yes No No No	UPL FACU FACU	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. <b>Shrub -</b> Woody Plants, excluding woody vines,
<ol> <li>Anthoxanthum odoratum</li> <li>Rubus aboriginum</li> <li>Lespedeza cuneata</li> <li>Solidago canadensis</li> <li>Toxicodendron radicans</li> </ol>	25 2 10	Yes No No	UPL FACU	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
<ol> <li>Anthoxanthum odoratum</li> <li>Rubus aboriginum</li> <li>Lespedeza cuneata</li> <li>Solidago canadensis</li> </ol>	25 2 10 15	Yes No No No	UPL FACU FACU	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including</li> </ul>
<ol> <li>Anthoxanthum odoratum</li> <li>Rubus aboriginum</li> <li>Lespedeza cuneata</li> <li>Solidago canadensis</li> <li>Toxicodendron radicans</li> <li>8.</li> </ol>	25 2 10 15 10	Yes No No No	UPL FACU FACU	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody</li> </ul>
<ol> <li>Anthoxanthum odoratum</li> <li>Rubus aboriginum</li> <li>Lespedeza cuneata</li> <li>Solidago canadensis</li> <li>Toxicodendron radicans</li> <li>8.</li> <li>9.</li> </ol>	25 2 10 15 10	Yes No No No	UPL FACU FACU	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3</li> </ul>
<ol> <li>Anthoxanthum odoratum</li> <li>Rubus aboriginum</li> <li>Lespedeza cuneata</li> <li>Solidago canadensis</li> <li>Toxicodendron radicans</li> <li>8.</li> </ol>	25 2 10 15 10	Yes No No No	UPL FACU FACU	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
<ol> <li>Anthoxanthum odoratum</li> <li>Rubus aboriginum</li> <li>Lespedeza cuneata</li> <li>Solidago canadensis</li> <li>Toxicodendron radicans</li> <li>8.</li> <li>9.</li> </ol>	25 2 10 15 10	Yes No No No	UPL FACU FACU	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3</li> </ul>
<ol> <li>Anthoxanthum odoratum</li> <li>Rubus aboriginum</li> <li>Lespedeza cuneata</li> <li>Solidago canadensis</li> <li>Toxicodendron radicans</li> <li>7.</li> <li>8.</li> <li>9.</li> <li>10.</li> </ol>	25 2 10 15 10 82 =	Yes No No No Total Cover	UPL FACU FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Anthoxanthum odoratum         3.       Rubus aboriginum         4.       Lespedeza cuneata         5.       Solidago canadensis         6.       Toxicodendron radicans         7.	25 2 10 15 10 82 =	Yes No No No	UPL FACU FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
<ol> <li>Anthoxanthum odoratum</li> <li>Rubus aboriginum</li> <li>Lespedeza cuneata</li> <li>Solidago canadensis</li> <li>Toxicodendron radicans</li> <li>10.</li> <li>11.</li> </ol>	25 2 10 15 10 82 =	Yes No No No Total Cover	UPL FACU FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Anthoxanthum odoratum         3.       Rubus aboriginum         4.       Lespedeza cuneata         5.       Solidago canadensis         6.       Toxicodendron radicans         7.	25 2 10 15 10 82 =	Yes No No No Total Cover	UPL FACU FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Anthoxanthum odoratum         3.       Rubus aboriginum         4.       Lespedeza cuneata         5.       Solidago canadensis         6.       Toxicodendron radicans         7.	$     \begin{array}{r}         25 \\         2 \\         10 \\         15 \\         10 \\         \\         82 \\         = 1 \\         20\% o $	Yes No No No Total Cover	UPL FACU FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Anthoxanthum odoratum         3.       Rubus aboriginum         4.       Lespedeza cuneata         5.       Solidago canadensis         6.       Toxicodendron radicans         7.	$     \begin{array}{r}         25 \\         2 \\         10 \\         15 \\         10 \\         \\         82 \\         = 1 \\         20\% o     $	Yes No No No Total Cover	UPL FACU FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Anthoxanthum odoratum         3.       Rubus aboriginum         4.       Lespedeza cuneata         5.       Solidago canadensis         6.       Toxicodendron radicans         7.	$     \begin{array}{r}         25 \\         2 \\         10 \\         15 \\         10 \\         \\         82 \\         1 \\         20\% \\         0         $	Yes No No No Total Cover	UPL FACU FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Anthoxanthum odoratum         3.       Rubus aboriginum         4.       Lespedeza cuneata         5.       Solidago canadensis         6.       Toxicodendron radicans         7.		Yes No No No Total Cover	UPL FACU FACU FAC	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine - All woody vines, regardless of height.</li> </ul>
2.       Anthoxanthum odoratum         3.       Rubus aboriginum         4.       Lespedeza cuneata         5.       Solidago canadensis         6.       Toxicodendron radicans         7.	25 2 10 15 10 82 = 1 20% 0	Yes No No No Total Cover	UPL FACU FACU FAC 17	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> <li>Woody Vine – All woody vines, regardless of height.</li> <li>Hydrophytic Vegetation</li> </ul>
2.       Anthoxanthum odoratum         3.       Rubus aboriginum         4.       Lespedeza cuneata         5.       Solidago canadensis         6.       Toxicodendron radicans         7.	25 2 10 15 10 82 = 1 20% 0	Yes No No No Total Cover	UPL FACU FACU FAC 17	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine - All woody vines, regardless of height.</li> <li>Hydrophytic</li> </ul>

SOIL

Depth	Matrix		Redo	x Features	s						
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	e		Rei	marks
0-20	10yr 4/4	100					Loamy/Cla	ayey			
		·									
		· ·									
Гуре: С=Со	oncentration, D=Dep	letion, RM=	Reduced Matrix, I	MS=Maske	ed Sand	Grains.	<sup>2</sup> Loo	cation: F	PL=Por	e Lining, M=	=Matrix.
ydric Soil	Indicators: (Applic	able to all I	RRs, unless oth	erwise no	ted.)		Ind	icators f	for Pro	blematic H	ydric Soils <sup>3</sup> :
Histosol	(A1)		Thin Dark S	urface (S9	) <b>(LRR</b>	S, T, U)		1 cm M	uck (A9	) (LRR O)	
Histic Ep	pipedon (A2)		Barrier Islan	ds 1 cm M	luck (S1	2)		2 cm M	uck (A1	0) (LRR S)	
Black Hi	stic (A3)		(MLRA 1	53B, 153D)	)			Coast F	Prairie F	Redox (A16)	)
Hydroge	en Sulfide (A4)		Loamy Muc	ky Mineral	(F1) <b>(LI</b>	RR O)		(outs	ide ML	RA 150A)	
Stratified	d Layers (A5)		Loamy Gley	ed Matrix (	(F2)			Reduce	d Verti	c (F18)	
Organic	Bodies (A6) (LRR, I	P, T, U)	Depleted Ma	atrix (F3)				(outs	ide ML	RA 150A, 1	50B)
5 cm Mu	icky Mineral (A7) <b>(Ll</b>	RR P, T, U)	Redox Dark	Surface (F	F6)			Piedmo	nt Floo	dplain Soils	(F19) <b>(LRR P, 1</b>
Muck Pr	esence (A8) <b>(LRR L</b>	)	Depleted Da	ark Surface	e (F7)			Anomal	ous Bri	ght Floodpl	ain Soils (F20)
1 cm Mu	uck (A9) (LRR P, T)		Redox Depr	essions (F	8)			(MLR	A 153E	8)	
Depleted	d Below Dark Surfac	e (A11)	Marl (F10) (	LRR U)				Red Pa	rent Ma	aterial (F21)	
Thick Da	ark Surface (A12)		Depleted Oc	chric (F11)	(MLRA	151)		Very Sh	allow [	Dark Surface	e (F22)
Coast P	rairie Redox (A16) (I	/LRA 150/	) Iron-Mangai	nese Mass	ses (F12	) (LRR O	, P, T)	(outs	ide ML	RA 138, 15	2A in FL, 154)
Sandy N	lucky Mineral (S1) (I	_RR O, S)	Umbric Surf	ace (F13)	(LRR P	T, U)		Barrier	Islands	Low Chron	na Matrix (TS7)
Sandy G	Gleyed Matrix (S4)		Delta Ochrid	: (F17) <b>(MI</b>	LRA 15 <sup>-</sup>	I)		(MLR	A 153E	8, 153D)	
Sandy R	Redox (S5)		Reduced Ve	ertic (F18)	(MLRA	150A, 15	0B)	Other (E	Explain	in Remarks	6)
Stripped	Matrix (S6)		Piedmont Fl	oodplain S	Soils (F1	9) <b>(MLR</b>	A 149A)	. `			
Dark Su	rface (S7) (LRR P, S	6, T, U)	Anomalous	Bright Floc	odplain \$	Soils (F20	)				
Polyvalu	e Below Surface (S	3)	(MLRA 14	49A, 153C	, 153D)			<sup>3</sup> Indicate	ors of h	ydrophytic	vegetation and
	S, T, U)		Very Shallov			22)					be present,
· ·	,		(MLRA 13	38, 152A ir	n FL, 15	4)		unles	s distu	rbed or prot	olematic.
Restrictive I	Layer (if observed)	:									
Type:											
Depth (ir	nches):						Hydric So	il Prese	nt?	Yes	No X

Date: \_\_\_\_

Feature ID: <u>JC\_W\_1002-1003\_</u>UP



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_ Photograph Direction West\_\_\_

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R								
Project/Site: CVOW City/County: Virgina Beach								
pplicant/Owner: Dominion State: VA								
Local relief (concave, convex,	none): Concave	Slope (%): 3						
		Datum: NAD83						
· · · · · · · · · · · · · · · · · · ·		explain in Remarks.)						
	Circumstances" presen	t? Yes X No						
ynaturally problematic? (If needed, ex	plain any answers in R	Remarks.)						
te map showing sampling point locati	ons, transects, ir	nportant features, etc.						
Is the Sampled Area within a Wetland?	Yes <u>X</u>	No						
	Secondary Indicators	(minimum of two required)						
; check all that apply)		· · · · ·						
Aquatic Fauna (B13)		ted Concave Surface (B8)						
Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)							
Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)							
Oxidized Rhizospheres on Living Roots (C3)	Dry-Season Water Table (C2)							
Presence of Reduced Iron (C4)	X Crayfish Burrows	s (C8)						
Recent Iron Reduction in Tilled Soils (C6)		e on Aerial Imagery (C9)						
Thin Muck Surface (C7)	X Geomorphic Pos							
Other (Explain in Remarks)								
	<b>TA SHEET – Atlantic and Gulf Coastal</b> 24; the proponent agency is CECW-CO-F	TA SHEET – Atlantic and Gulf Coastal Plain Region         24; the proponent agency is CECW-CO-R						

Remarks:
Adjacent to incised stream (impacted by easement development)

Yes

Yes

Yes

No X

Х

Х

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

No

No

Depth (inches):

Depth (inches):

Depth (inches):

Field Observations: Surface Water Present?

Water Table Present?

(includes capillary fringe)

Saturation Present?

Yes X No

Wetland Hydrology Present?

Sampling Point: JC\_W\_1003\_PEM

Tree Stratum       (Plot size:)       % Cover       Species?       Status       Dominance Test worksheet:         1.
2.
3.
5.
6.
50% of total cover:20% of total cover:Total % Cover of:Multiply by:Sapling Stratum (Plot size:)) $OBL species 75$ $x 1 = 75$ 1. $Cover of:$ $x 2 = 20$ 2. $FAC species 0$ $x 3 = 0$ 3. $Cover of:$ $x 4 = 40$ 4. $Cover of:$ $v 4 = 40$ 5. $Cover of:$ $v 4 = 40$ 6. $VPL species 0$ $x 5 = 0$ $Total % Cover of:$ $v 4 = 40$ $VPL species 0$ $v 5 = 0$ $Column Totals: 95$ $A$ $A = 0$ $VPL species 0$ $VPL species 0$ $v 5 = 0$ $Total Cover$ $VPL species 0$ $VPL species 0$ $v 5 = 0$ $VPL species 0$
Sapling Stratum (Plot size:)       OBL species 75 x 1 = 75         1.       FACW species 10 x 2 = 20         2.       FAC species 0 x 3 = 0         3.       FAC species 10 x 4 = 40         4.       OBL species 0 x 5 = 0         5.       Column Totals: 95 (A) 135 (B         6.       Prevalence Index = B/A = 1.42         50% of total cover:20% of total cover:1 - Rapid Test for Hydrophytic Vegetation
1.FACW species10 $x 2 =$ 202.FAC species0 $x 3 =$ 03.FACU species10 $x 4 =$ 404.FACU species0 $x 5 =$ 05.Column Totals:95(A)1356.Frevalence Index = B/A =1.4250% of total cover:20% of total cover:1 - Rapid Test for Hydrophytic Vegetation
1.       FACW species       10       x 2 =       20         2.       FAC species       0       x 3 =       0         3.       FACU species       10       x 4 =       40         4.       UPL species       0       x 5 =       0         5.       Column Totals:       95       (A)       135       (B)         6.
3.
3.       FACU species       10 $x 4 = 40$ 4.       UPL species       0 $x 5 = 0$ 5.       Column Totals:       95       (A)       135         6.
4.       UPL species       0       x 5 =       0         5.       Column Totals:       95       (A)       135       (B)         6.       Prevalence Index = B/A =       1.42       1.42         50% of total cover:       20% of total cover:       1 - Rapid Test for Hydrophytic Vegetation
5.       Column Totals: 95 (A)       135 (B)         6.       Prevalence Index = B/A =       1.42         =Total Cover       Hydrophytic Vegetation Indicators:         50% of total cover:       1 - Rapid Test for Hydrophytic Vegetation
=Total Cover       Hydrophytic Vegetation Indicators:         50% of total cover:       1 - Rapid Test for Hydrophytic Vegetation
50% of total cover: 20% of total cover: 1 - Rapid Test for Hydrophytic Vegetation
50% of total cover: 20% of total cover: 1 - Rapid Test for Hydrophytic Vegetation
2 Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5.
=Total Cover Definitions of Five Vegetation Strata:
50% of total cover: 20% of total cover: Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30 ) approximately 20 ft (6 m) or more in height and 3 in.
1. Persicaria sagittata     50     Yes     OBL     (7.6 cm) or larger in diameter at breast height (DBH).
2. Carex lurida 20 Yes OBL Sapling – Woody plants, excluding woody vines,
3. Carex vulpinoidea 10 No FACW approximately 20 ft (6 m) or more in height and less
4. Holcus lanatus 5 No FACU than 3 in. (7.6 cm) DBH.
5. Ambrosia artemisiifolia 5 No FACU Shrub - Woody Plants, excluding woody vines,
6. Juncus effusus 5 No OBL 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, <u>and</u> woody
9. plants, except woody vines, less than approximately 3
10 ft (1 m) in height.
11. Woody Vine – All woody vines, regardless of height.
95 =Total Cover
50% of total cover: 48 20% of total cover: 19
Woody Vine Stratum (Plot size: )
2
3.
5
Table Orange Hydrophytic
Remarks: (If observed, list morphological adaptations below.)

epth nches)	Matrix Color (moist)	%	Color (moist)	x Featur %	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	ture		Rema	arks
<u> </u>			· · ·								
0-4	10yr 4/2	98	7.5yr 4/6	2	С	PL	Loamy	Clayey	Prom	inent redox	concentrations
4-20	2.5y 4/1	95	7.5yr 4/6	5	С	PL	Loamy	/Clayey	Prom	inent redox	concentrations
ype: C=Co	ncentration, D=Dep	etion, RM=	Reduced Matrix,	MS=Mas	ked San	d Grains.	2	Location: F	PL=Pore	Lining, M=N	latrix.
ydric Soil I	ndicators: (Applica	ble to all L	RRs, unless oth	erwise n	oted.)					ematic Hyd	
Histosol	(A1)		Thin Dark S	urface (S	69) <b>(LRR</b>	S, T, U)	_	1 cm M	uck (A9)	(LRR O)	
Histic Ep	ipedon (A2)		Barrier Islar	ds 1 cm	Muck (S	12)	_	2 cm M	uck (A10	) (LRR S)	
Black His	stic (A3)		(MLRA 1	53B, 153	D)		_	Coast P	rairie Re	dox (A16)	
	n Sulfide (A4)		Loamy Muc	-		.RR O)		•	de MLR	,	
	Layers (A5)		Loamy Gley				-		d Vertic (	,	
	Bodies (A6) (LRR, P		X Depleted M							A 150A, 150	
	cky Mineral (A7) <b>(LR</b>						Piedmont Flo				
	esence (A8) (LRR U)		Depleted Da		` '		Anomalous B			nt Floodplair	n Soils (F20)
	ck (A9) <b>(LRR P, T)</b>	(	Redox Depr		(F8)			•	A 153B)		
	Below Dark Surface	e (A11)	Marl (F10) (			464)	-			erial (F21)	
	rk Surface (A12) airie Redox (A16) ( <b>N</b>		Depleted Oo Iron-Mangar				о в т) <mark>-</mark>			rk Surface (	,
	ucky Mineral (S1) (I		Umbric Surf		``	, <b>、</b>	J, F, T)				<b>in FL, 154)</b> Matrix (TS7)
	leyed Matrix (S4)	itit 0, 0)	Delta Ochrid						Sianus ∟ A 153B,		
	edox (S5)		Reduced Ve	• • •			50B)	•		Remarks)	
	Matrix (S6)		Piedmont Fl				· -			r cinarks)	
	face (S7) <b>(LRR P, S</b>	. T. U)	Anomalous	•	`	, <b>`</b>	,				
	e Below Surface (S8		(MLRA 14	-				<sup>3</sup> Indicate	ors of hvo	drophytic ve	getation and
(LRR S		/	Very Shallo						-	logy must b	-
			(MLRA 13	38, 152A	in FL, 1	54)			-	ed or proble	
estrictive L	ayer (if observed):										
Type:											
Depth (in	ches):						Hydric	Soil Prese	nt?	Yes X	No
emarks:	· · · · · · · · · · · · · · · · · · ·						-				
one											

Feature ID: <u>JC\_W\_1003\_PEM</u>



Photograph Number \_\_\_\_1

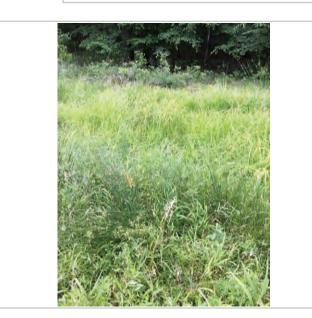
Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_ Photograph Direction West\_\_\_

U.S. Army WETLAND DETERMINATION DATA S See ERDC/EL TR-07-24; t	Region Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)	
Project/Site: CVOW	City/County: Virginia Beach	Sampling Date: 6/3/2022
Applicant/Owner: Dominion		State: VA Sampling Point: JC_W_1003_PFO
Investigator(s): E. Foster, T. Conard	Section, Township, Range: <u>N/a</u>	
Landform (hillside, terrace, etc.): Hillslope	Local relief (concave, convex, none):	None Slope (%): 0-5
Subregion (LRR or MLRA): LRR T, MLRA 153B La	at: <u>36.7582175591667</u> Long: <u>-76.1085</u>	068336667 Datum: NAD83
Soil Map Unit Name: Nawney silt loam		NWI classification: PFOd
Are climatic / hydrologic conditions on the site typical	for this time of year? Yes X No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Normal Circumst	ances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, explain an	y answers in Remarks.)
SUMMARY OF FINDINGS – Attach site n	nap showing sampling point locations, t	ransects, important features, etc.
Hydrophytic Vegetation Present? Yes	No Is the Sampled Area	
	No within a Wetland?	Yes_X_ No
Wetland Hydrology Present? Yes	< No	
Remarks: Part of a large wetland (forested complex) that follow of JD_S_005).	s the northern boundary of the LOD and is tethered	to a large water feature (likely an extension

#### HYDROLOGY

Wetland Hydrology Indica	ators:				Secondary Indicators (minimum of two required)			
Primary Indicators (minimu	m of one is rec	Surface Soil Cracks (B6)						
Surface Water (A1)		X Sparsely Vegetated Concave Surface (B8)						
High Water Table (A2)		Marl	Deposits (B15) <b>(LRR U)</b>	Drainage Patterns (B10)				
Saturation (A3)		Hydro	ogen Sulfide Odor (C1)		Moss Trim Lines (B16)			
Water Marks (B1)		X Oxidi	zed Rhizospheres on Living	Roots (C3)	Dry-Season Water Table (C2)			
Sediment Deposits (B2	2)	Prese	ence of Reduced Iron (C4)		Crayfish Burrows (C8)			
Drift Deposits (B3)		Rece	nt Iron Reduction in Tilled S	Soils (C6)	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	)	Thin	Muck Surface (C7)		Geomorphic Position (D2)			
Iron Deposits (B5)		Othe	r (Explain in Remarks)		Shallow Aquitard (D3)			
Inundation Visible on A	Aerial Imagery (	(B7)			X FAC-Neutral Test (D5)			
X Water-Stained Leaves	(B9)				Sphagnum Moss (D8) (LRR T,U)			
Field Observations:								
Surface Water Present?	Yes	NoX	Depth (inches):					
Water Table Present? Yes No			Depth (inches):	-				
Saturation Present?	Yes	NoX	Depth (inches):	Wetland	nd Hydrology Present? Yes X No			
(includes capillary fringe)				-				
Describe Recorded Data (s	stream gauge, i	monitoring we	ell, aerial photos, previous i	nspections), if	available:			
Remarks:								
None								

Sampling Point: \_JC\_W\_1003\_PFO

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 )	% Cover	Species?	Status	Dominance Test worksheet:
1. Fraxinus pennsylvanica	50	Yes	FACW	Number of Dominant Species
2. Acer rubrum	20	Yes	FAC	That Are OBL, FACW, or FAC: 7 (A)
3.				Total Number of Dominant
4.				Species Across All Strata: 8 (B)
4. 5.	• • • • • • • • • • • • • • • • • • • •			
6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 87.5% (A/B)
o		Tatal Querra		
		=Total Cover		Prevalence Index worksheet:
	35 20%	of total cover:	14	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30)				OBL species X 1 = 30
1. Liquidambar styraciflua	10	Yes	FAC	FACW species 70 x 2 = 140
2. Ligustrum sinense	10	Yes	FAC	FAC species 40 x 3 = 120
3. Fraxinus pennsylvanica	10	Yes	FACW	FACU species 10 x 4 = 40
4.				UPL species $0   x 5 = 0$
5.				Column Totals: 150 (A) 330 (B)
6.				Prevalence Index = $B/A = 2.20$
· · · · · · · · · · · · · · · · · · ·	30	=Total Cover		Hydrophytic Vegetation Indicators:
500/ of total aquian			C	
	15 20%	of total cover:	6	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				X 2 - Dominance Test is >50%
1				X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				
5.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6.				present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:		of total cover:		
Herb Stratum (Plot size: 30 )	2070			<b>Tree</b> – 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).
A Observice and and the set of a set of a	05	Yes	OBL	
1. Glyceria septentrionalis	25			
<ol> <li>Glyceria septentrionalis</li> <li>Lonicera japonica</li> </ol>	25 10	Yes	FACU	Sapling – Woody plants, excluding woody vines,
		Yes No	FACU OBL	approximately 20 ft (6 m) or more in height and less
2. Lonicera japonica	10			
<ol> <li>Lonicera japonica</li> <li>Saururus cernuus</li> </ol>	10 5	No	OBL	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. <b>Shrub -</b> Woody Plants, excluding woody vines,
<ol> <li>Lonicera japonica</li> <li>Saururus cernuus</li> <li>Arundinaria gigantea</li> <li>6</li> </ol>	10 5 10	No	OBL	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
<ol> <li>Lonicera japonica</li> <li>Saururus cernuus</li> <li>Arundinaria gigantea</li> <li>6.</li> </ol>	10 5 10	No Yes	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> </ul>
2. Lonicera japonica 3. Saururus cernuus 4. Arundinaria gigantea 5. 6. 7.	10 5 10	No Yes	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including</li> </ul>
2. Lonicera japonica 3. Saururus cernuus 4. Arundinaria gigantea 5. 6. 7. 8.	10 5 10	No Yes	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> </ul>
2.       Lonicera japonica         3.       Saururus cernuus         4.       Arundinaria gigantea         5.	10 5 10	No Yes	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody</li> </ul>
2.       Lonicera japonica         3.       Saururus cernuus         4.       Arundinaria gigantea         5.	10 5 10	No Yes	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2. Lonicera japonica 3. Saururus cernuus 4. Arundinaria gigantea 5. 6. 7. 8. 9. 10	10 5 10	<u>No</u> Yes	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3</li> </ul>
2.       Lonicera japonica         3.       Saururus cernuus         4.       Arundinaria gigantea         5.	10 5 10 	No Yes	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Lonicera japonica         3.       Saururus cernuus         4.       Arundinaria gigantea         5.	10 5 10 	<u>No</u> Yes	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Lonicera japonica         3.       Saururus cernuus         4.       Arundinaria gigantea         5.	10 5 10 	No Yes	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Lonicera japonica         3.       Saururus cernuus         4.       Arundinaria gigantea         5.	<u>10</u> 5 10 <u>5</u> <u>50</u> 25 20%	No Yes 	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Lonicera japonica         3.       Saururus cernuus         4.       Arundinaria gigantea         5.	10 5 10 5 5 50 25 20%	No Yes 	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Lonicera japonica         3.       Saururus cernuus         4.       Arundinaria gigantea         5.	<u>    10    5                            </u>	No Yes 	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Lonicera japonica         3.       Saururus cernuus         4.       Arundinaria gigantea         5.		No Yes 	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Lonicera japonica         3.       Saururus cernuus         4.       Arundinaria gigantea         5.		No Yes 	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> </ul>
2.       Lonicera japonica         3.       Saururus cernuus         4.       Arundinaria gigantea         5.		No Yes	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> <li>Woody Vine - All woody vines, regardless of height.</li> <li>Hydrophytic</li> </ul>
2.       Lonicera japonica         3.       Saururus cernuus         4.       Arundinaria gigantea         5.		No Yes	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> <li>Woody Vine - All woody vines, regardless of height.</li> <li>Hydrophytic Vegetation</li> </ul>
2.       Lonicera japonica         3.       Saururus cernuus         4.       Arundinaria gigantea         5.	10 5 10 5 25 20%	No Yes	OBL FACW	<ul> <li>approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.</li> <li>Woody Vine - All woody vines, regardless of height.</li> <li>Hydrophytic</li> </ul>

Depth	Matrix	Redo	res								
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Te	exture	Remarks		
0-8	10yr 4/2	100					Loam	y/Clayey			
8-20	10yr 5/1	95	10yr 5/6	5	С	PL	Loam	y/Clayey	Prominent redox conce	ntrations	
		·				·					
Type: C=Co	oncentration, D=Dep	letion, RM=	Reduced Matrix, I	MS=Mas	sked San	d Grains.		<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.		
lydric Soil	Indicators: (Applica	able to all L	RRs, unless oth	erwise r	noted.)			Indicators	for Problematic Hydric So	ils³:	
Histosol	(A1)		Thin Dark S	urface (S	S9) <b>(LRR</b>	S, T, U)		1 cm M	uck (A9) <b>(LRR O)</b>		
Histic Ep	oipedon (A2)		Barrier Islands 1 cm Muck (S12)					2 cm Muck (A10) (LRR S)			
Black Hi	istic (A3)		(MLRA 153B, 153D)					Coast Prairie Redox (A16)			
Hydroge	Hydrogen Sulfide (A4)			Loamy Mucky Mineral (F1) (LRR O)					(outside MLRA 150A)		
Stratified	d Layers (A5)	Loamy Gleyed Matrix (F2)					Reduced Vertic (F18)				
Organic Bodies (A6) (LRR, P, T, U)			X Depleted Matrix (F3)					(outside MLRA 150A, 150B)			
5 cm Mucky Mineral (A7) (LRR P, T, U)			Redox Dark Surface (F6)					Piedmont Floodplain Soils (F19) (LRR P, 1			
Muck Presence (A8) (LRR U)			Depleted Dark Surface (F7)					Anomalous Bright Floodplain Soils (F20)			
1 cm Muck (A9) (LRR P, T)			Redox Depressions (F8)					(MLR	A 153B)		
Depleted	d Below Dark Surfac	e (A11)	Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) A) Iron-Manganese Masses (F12) (LRR O, P, T					<ul> <li>Red Parent Material (F21)</li> <li>Very Shallow Dark Surface (F22)</li> <li>O, P, T) (outside MLRA 138, 152A in FL, 154)</li> </ul>			
Thick Da	ark Surface (A12)										
Coast P	rairie Redox (A16) (N	MLRA 150A									
Sandy M	/lucky Mineral (S1) <b>(L</b>	_RR O, S)	Umbric Surface (F13) (LRR P, T, U)					Barrier Islands Low Chroma Matrix (TS7)			
Sandy G	Gleyed Matrix (S4)		Delta Ochric (F17) (MLRA 151)					(MLRA 153B, 153D)			
Sandy R	Redox (S5)		Reduced Vertic (F18) (MLRA 150A, 15					50B) Other (Explain in Remarks)			
Stripped	Matrix (S6)		Piedmont Fl	oodplair	n Soils (F	19) <b>(MLR</b>	A 149A)				
Dark Su	rface (S7) (LRR P, S	S, T, U)	Anomalous	Bright Fl	loodplain	Soils (F20	D)				
	e Below Surface (S8		(MLRA 14	-				<sup>3</sup> Indicat	ors of hydrophytic vegetatio	n and	
(LRR S, T, U)		Very Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)			-22)	wetland hydrology must be present, unless disturbed or problematic.					
	Layer (if observed):	:									
Type:							11	0 . II D			
	nches):						Hydri	c Soil Prese	ent? Yes <u>X</u> No		
Remarks:											
None											

Date: \_\_\_\_

Feature ID: <u>JC\_W\_1003\_PFO</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_

Photograph Direction West

U.S. A WETLAND DETERMINATION DAT See ERDC/EL TR-07-2	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)			
Project/Site: CVOW	City/County: Virgina Beach	State: V/A	Sampling Date: 6/3/2022	
Applicant/Owner: Dominion		State: VA	Sampling Point: <u>JC W 1004</u>	
Investigator(s): E. Foster, T. Conard	Section, Township, Range: N/a			
Landform (hillside, terrace, etc.): Hillslope	Local relief (concave, convex, none	: Concave	Slope (%): 0-5	
Subregion (LRR or MLRA): LRR T, MLRA 153D	Lat: 36.759092696 Long: -76.10	66881635	Datum: NAD83	
Soil Map Unit Name: Nawney silt loam		NWI classifica	ation: PFOd	
Are climatic / hydrologic conditions on the site typ	vical for this time of year? Yes X N	o (lf no,	explain in Remarks.)	
Are Vegetation, Soil, or Hydrology	·			
Are Vegetation, Soil, or Hydrology				
			,	
SUMMARY OF FINDINGS – Attach sit	e map showing sampling point locations,	transects, ir	nportant features, etc.	
Hydric Soil Present? Yes Wetland Hydrology Present? Yes Remarks: PEM slope wetland in existing easement.	x     No     Is the Sampled Area       x     No     within a Wetland?       x     No     within a Wetland?	Yes <u>X</u>	No	
HYDROLOGY				
Wetland Hydrology Indicators:			(minimum of two required)	
Primary Indicators (minimum of one is required; Surface Water (A1)		Surface Soil Cra Sparsoly Vogeta	. ,	
High Water Table (A2)		Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)		
Saturation (A3)		Moss Trim Lines (B16)		
		Dry-Season Water Table (C2)		
Sediment Deposits (B2)		Crayfish Burrows	· ,	
Drift Deposits (B3)		-	e on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		Geomorphic Pos		
Iron Deposits (B5)	Other (Explain in Remarks)	Shallow Aquitard	(D3)	
Inundation Visible on Aerial Imagery (B7)	X	FAC-Neutral Tes	it (D5)	

Remarks: None

Water-Stained Leaves (B9)

Yes

Yes

Yes

No X

Х

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

No

Depth (inches):

Depth (inches):

No X Depth (inches):

Field Observations: Surface Water Present?

Water Table Present?

(includes capillary fringe)

Saturation Present?

Yes X No

Sphagnum Moss (D8) (LRR T,U)

Wetland Hydrology Present?

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

Sampling Point: JC\_W\_1004

Tree Stratum (Plot size: )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1,				Number of Dominant Species
2.				That Are OBL, FACW, or FAC:3 (A)
3 4				Total Number of DominantSpecies Across All Strata:4(B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)
0.		=Total Cover		Prevalence Index worksheet:
50% of total cover:		of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				$\begin{array}{c c c c c c c c c c c c c c c c c c c $
1				FACW species 10 $x 2 = 20$
				FAC species $20 \times 3 = 60$
3				FACU species $20 \times 4 = 80$
				$\frac{1}{20}  x = 0$ UPL species 0 x 5 = 0
4 5.				Column Totals: 120 (A) 230 (B)
6.				Prevalence Index = $B/A = 1.92$
0.		=Total Cover		Hydrophytic Vegetation Indicators:
E00/ of total action				
50% of total cover:	20%	of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				X 2 - Dominance Test is >50%
1				X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6				present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
				• · · · · ·
50% of total cover:	20%	of total cover:		Tree – Woody plants, excluding woody vines,
50% of total cover: Herb Stratum (Plot size:)	20%	of total cover:		<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
	20% 25	of total cover: Yes	OBL	Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30 )				<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines,</li> </ul>
Herb Stratum (Plot size: 30 ) 1. Saururus cernuus	25	Yes	OBL	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less</li> </ul>
Herb Stratum       (Plot size: 30 )         1. Saururus cernuus         2. Carex lurida	25 20	Yes Yes	OBL OBL	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines,</li> </ul>
Herb Stratum       (Plot size: 30)         1.       Saururus cernuus         2.       Carex lurida         3.       Carex longii	25 20 10	Yes Yes No	OBL OBL OBL	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines,</li> </ul>
Herb Stratum       (Plot size: 30)         1. Saururus cernuus         2. Carex lurida         3. Carex longii         4. Microstegium vimineum	25 20 10 20	Yes Yes No Yes	OBL OBL OBL FAC	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> </ul>
Herb Stratum       (Plot size: 30)         1. Saururus cernuus         2. Carex lurida         3. Carex longii         4. Microstegium vimineum         5. Parthenocissus quinquefolia	25 20 10 20 20	Yes Yes No Yes Yes	OBL OBL FAC FACU	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> </ul>
Herb Stratum       (Plot size: 30)         1.       Saururus cernuus         2.       Carex lurida         3.       Carex longii         4.       Microstegium vimineum         5.       Parthenocissus quinquefolia         6.       Juncus effusus	25 20 10 20 20 15	Yes Yes No Yes Yes No	OBL OBL FAC FACU OBL	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody</li> </ul>
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Herb Stratum       (Plot size:30)         1. Saururus cernuus         2. Carex lurida         3. Carex longii         4. Microstegium vimineum         5. Parthenocissus quinquefolia         6. Juncus effusus         7. Impatiens capensis         8.         9.         10.         11.         50% of total cover:6	25 20 10 20 20 15 10 120	Yes No Yes Yes No No	OBL OBL FAC FACU OBL FACW	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> </ul>
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Herb Stratum       (Plot size:30)         1. Saururus cernuus         2. Carex lurida         3. Carex longii         4. Microstegium vimineum         5. Parthenocissus quinquefolia         6. Juncus effusus         7. Impatiens capensis         8.         9.         10.         11.         50% of total cover:0         1	25 20 10 20 15 10 	Yes No Yes Yes No No Total Cover of total cover:	OBL OBL FAC FACU OBL FACW	<ul> <li>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).</li> <li>Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.</li> <li>Shrub - Woody Plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.</li> <li>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.</li> <li>Woody Vine – All woody vines, regardless of height.</li> </ul>

Depth	Matrix			x Featu		. 2	_			_	
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Те	xture		Rema	arks
0-8	10yr 4/2	98	7.5yr 4/6	2	С	PL	Loam	y/Clayey	Pror	ninent redox	concentrations
8-20	10yr 5/1	95	7.5yr 4/6	5	C	PL	Loam	y/Clayey	Pror	ninent redox	concentrations
	oncentration, D=Dep					d Grains.		<sup>2</sup> Location: F			
Histosol			Thin Dark S			S. T. U)				(LRR O)	110 30115 .
	bipedon (A2)		Barrier Islan						. ,	(LRR S)	
Black Hi			(MLRA 1		``	)				edox (A16)	
_	en Sulfide (A4)		Loamy Muc			RR ()				A 150A)	
	d Layers (A5)		Loamy Gley	•	. , .			Reduce			
	Bodies (A6) (LRR, P	, <b>т</b> н)	X Depleted Ma							A 150A, 150	)B)
_	icky Mineral (A7) (LF		Redox Dark	```							-19) <b>(LRR P, T</b>
					( )						n Soils (F20)
	esence (A8) (LRR U	)	Depleted Da						-		1 30lis (F20)
	Ick (A9) (LRR P, T)	(() ( )	Redox Depr		(го)				A 153B)		
	d Below Dark Surface	e (ATT)	Marl (F10) (							erial (F21)	
	ark Surface (A12)		Depleted Oc							ark Surface (	
	rairie Redox (A16) (N						), P, T)				A in FL, 154)
_	lucky Mineral (S1) <b>(L</b>	.RR 0, S)	Umbric Surf								Matrix (TS7)
	Bleyed Matrix (S4)		Delta Ochric					•	A 153B,	,	
	edox (S5)		Reduced Ve		, <b>.</b>			Other (E	xplain ii	n Remarks)	
	Matrix (S6)		Piedmont Fl								
	rface (S7) (LRR P, S		Anomalous	-			0)	2			
	e Below Surface (S8	5)	(MLRA 14								getation and
(LRR :	S, T, U)		Very Shallov (MLRA 13						-	blogy must b bed or proble	
estrictive I	Layer (if observed):			, 1 <u>52</u> A		54)		unes	Suistait		
Type:											
-	nches):						Hydri	c Soil Prese	nt?	Yes X	No
emarks:											
lone											

Date: \_\_\_\_

Feature ID: <u>JC\_W\_1004</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number 4

Photograph Direction West

U.S. Army Corps of En WETLAND DETERMINATION DATA SHEET – Atlar See ERDC/EL TR-07-24; the proponent	ntic and Gulf Coastal Plain Region	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
Project/Site: CVOW	City/County: Virginia Beach	Sampling Date: 6/3/2022
Applicant/Owner: Dominion	State: VA	Sampling Point: JC_W_1005_PEM
Investigator(s): E. Foster, J. Cook	Section, Township, Range: N/a	
Landform (hillside, terrace, etc.): Hillslope Lo	ocal relief (concave, convex, none): None	Slope (%): 5-10
Subregion (LRR or MLRA): LRR T, MLRA 153B Lat: 36.75915607	Long: -76.1057822948333	Datum: NAD83
Soil Map Unit Name: Dragston fine sandy loam	NWI classifica	ation: PFOd
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes X No (If no,	explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantly d	isturbed? Are "Normal Circumstances" presen	it? Yes X No
Are Vegetation, Soil, or Hydrology naturally prob		Remarks.)
SUMMARY OF FINDINGS – Attach site map showing		mportant features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area	
Hydric Soil Present? Yes X No	within a Wetland? Yes X	No
Wetland Hydrology Present? Yes X No		
Remarks: PEM in existing easement,.	·	
HYDROLOGY		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply)	Secondary Indicators Surface Soil Cra	s (minimum of two required)

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is	s 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)	X Oxidized Rhizospheres on Living Roots	s (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction in Tilled Soils (C	C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C7)	X Geomorphic Position (D2)
Iron Deposits (B5)	Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imag	ery (B7)	X FAC-Neutral Test (D5)
Water-Stained Leaves (B9)		Sphagnum Moss (D8) (LRR T,U)
Field Observations:		
Surface Water Present? Yes	No X Depth (inches):	
Water Table Present? Yes	No X Depth (inches):	
Water Table Present?     Yes       Saturation Present?     Yes		Netland Hydrology Present? Yes X No
		Netland Hydrology Present? Yes X No
Saturation Present? Yes		
Saturation Present? Yes	No X Depth (inches):	
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gau	No X Depth (inches):	
Saturation Present? Yes	No X Depth (inches):	
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gau	No X Depth (inches):	
Saturation Present? Yes	No X Depth (inches):	
Saturation Present? Yes	No X Depth (inches):	
Saturation Present? Yes	No X Depth (inches):	
Saturation Present? Yes	No X Depth (inches):	
Saturation Present? Yes	No X Depth (inches):	
Saturation Present? Yes	No X Depth (inches):	
Saturation Present? Yes	No X Depth (inches):	

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

Sampling Point: JC\_W\_1005\_PEM

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
3.				Total Number of Dominant
4				Species Across All Strata:(B)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
		=Total Cover		Prevalence Index worksheet:
50% of total cover:	20%	of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species 0 x 1 = 0
1				FACW species 75 x 2 = 150
2				FAC species 10 x 3 = 30
3				FACU species0 x 4 =0
4				UPL species 0 x 5 = 0
5.				Column Totals: 85 (A) 180 (B)
6.				Prevalence Index = B/A = 2.12
		Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	20%	of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size:)				X 2 - Dominance Test is >50%
1.				X 3 - Prevalence Index is $\leq 3.0^1$
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
				1
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:		of total cover:		<b>Tree</b> – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30 )				approximately 20 ft (6 m) or more in height and 3 in.
1. Phragmites australis	50	Yes	FACW	(7.6 cm) or larger in diameter at breast height (DBH).
2. Arundinaria gigantea	10	No	FACW	Sapling – Woody plants, excluding woody vines,
3. Eutrochium purpureum	10	No	FAC	approximately 20 ft (6 m) or more in height and less
4. Impatiens capensis	15	No	FACW	than 3 in. (7.6 cm) DBH.
5. Solidago sp.	10	No		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.
11.				Woody Vine – All woody vines, regardless of height.
	95 =	Total Cover		
50% of total cover: 4	8 20%	of total cover:	19	
Woody Vine Stratum (Plot size: )				
1				
2				
3.				
1				
-				
5		-Total Cover		Hydrophytic
50% of total cover:		=Total Cover of total cover:		Vegetation Present? Yes X No
Remarks: (If observed, list morphological adaptation				·
	,			

Depth	Matrix		Redo	x Featu	res						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Те	xture		Remarks	
0-8	10yr 3/2	95	10yr 4/6	5	С	Μ	Loam	y/Clayey	Promine	nt redox conc	entrations
8-20	10yr 3/1	100									
		·		_							
						·					
71	oncentration, D=Dep					l Grains.				ing, M=Matrix	•
Histosol	Indicators: (Applica		Thin Dark S		,	ст II)			ick (A9) (LR	atic Hydric S	
	pipedon (A2)		Barrier Islan						ick (A3) <b>(L</b>		
Black Hi	,		(MLRA 15		`	(2)			rairie Redox		
	n Sulfide (A4)		Loamy Mucl		,	RR ()			de MLRA 1	. ,	
	d Layers (A5)		Loamy Gley						d Vertic (F1	,	
	Bodies (A6) (LRR, P	тш	Depleted Ma							50A, 150B)	
	icky Mineral (A7) (LR		·	• • •	,					n Soils (F19) (	
	esence (A8) (LRR U		Depleted Da		```					loodplain Soil	• • •
	ick (A9) (LRR P, T)	,	Redox Depr		( )				A 153B)		0 (1 20)
	d Below Dark Surface	e (A11)	Marl (F10) (		(10)				ent Materia	l (F21)	
	ark Surface (A12)		Depleted Oc	,	1) (MLRA	151)				Surface (F22)	
	rairie Redox (A16) (N	ILRA 150	·	`	, <b>、</b>	,	). P. T)			38, 152A in F	
	lucky Mineral (S1) (L		Umbric Surf			, <b>.</b>		•		Chroma Matr	
	Bleyed Matrix (S4)		Delta Ochric		, <b>.</b>				A 153B, 153		<b>、</b>
Sandy R	edox (S5)		Reduced Ve				50B)	Other (E	xplain in Re	emarks)	
Stripped	Matrix (S6)		Piedmont Fl	oodplair	n Soils (F	9) <b>(MLR</b>	A 149A)				
Dark Su	rface (S7) (LRR P, S	, T, U)	Anomalous	Bright Fl	loodplain	Soils (F20	0)				
Polyvalu	e Below Surface (S8	)	(MLRA 14	<b>9A</b> , 153	3C, 153D)			<sup>3</sup> Indicato	ors of hydro	ohytic vegetat	ion and
(LRR	S, T, U)		Very Shallov	v Dark S	Surface (F	22)		wetlar	nd hydrolog	y must be pre	sent,
			(MLRA 13	88, 152A	in FL, 1	54)		unles	s disturbed	or problemation	с.
Restrictive	Layer (if observed):										
	nches):						Hydri	c Soil Prese	nt? Y	′es X N	lo

Date: \_\_\_\_

Feature ID: <u>JC\_W\_1005\_PEM</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_ Photograph Direction West\_\_\_

A SHEET – Atlantic and	Gulf Coastal P	lain Region	Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)
City/	County: Virginia Bea	ach	Sampling Date: 6/3/2022
		State: VA	Sampling Point: JC_W_1005_PFO
Section,	Township, Range: N	√a	
Local relief	(concave, convex, no	one): Concave	Slope (%): 0-5
			Datum: NAD83
·	0		ation: PFOd
ysignificantly disturbed? ynaturally problematic?	(If needed, expla	No (If no, cumstances" present ain any answers in R	explain in Remarks.) t? Yes <u>X</u> No emarks.)
te map snowing samplir	ig point location	ns, transects, in	nportant features, etc.
s X No with s X No	in a Wetland?	Yes <u>X</u>	No
Aquatic Fauna (B13) Marl Deposits (B15) <b>(LRR U)</b> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Liv Presence of Reduced Iron (C4		Surface Soil Crack X Sparsely Vegetal Drainage Pattern Moss Trim Lines Dry-Season Wate Crayfish Burrows Saturation Visible Geomorphic Pos Shallow Aquitard	cks (B6) ted Concave Surface (B8) s (B10) (B16) er Table (C2) 5 (C8) e on Aerial Imagery (C9) tition (D2) (D3)
		Sphagnum Moss	(D8) <b>(LRR T,U)</b>
	A SHEET – Atlantic and 24; the proponent agency	24; the proponent agency is CECW-CO-R	TA SHEET – Atlantic and Gulf Coastal Plain Region         24; the proponent agency is CECW-CO-R

X Water-Stained Leaves	s (B9)			Sphagnum Moss (D	8) <b>(LRR I,U)</b>
Field Observations:					
Surface Water Present?	Yes	No X	Depth (inches):	_	
Water Table Present?	Yes	No X	Depth (inches):		
Saturation Present?	Yes	No X	Depth (inches):	Wetland Hydrology Present?	Yes X No
(includes capillary fringe)					
Describe Recorded Data (	stream gauge,	monitoring w	ell, aerial photos, previous i	inspections), if available:	
Remarks:					
None					

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

Sampling Point: JC\_W\_1005\_PFO

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 )	% Cover	Species?	Status	Dominance Test worksheet:
1. Fraxinus pennsylvanica	50	Yes	FACW	Number of Dominant Species
2. Acer rubrum	20	Yes	FAC	That Are OBL, FACW, or FAC: 5 (A)
3				Total Number of Dominant
4.				Species Across All Strata: 6 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 83.3% (A/B)
	70	=Total Cover		Prevalence Index worksheet:
50% of total cover: 35	20%	of total cover:	14	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: 30 )				OBL species <u>17</u> x 1 = <u>17</u>
1. Liquidambar styraciflua	10	Yes	FAC	FACW species 50 x 2 = 100
2. Ligustrum sinense	10	Yes	FAC	FAC species 40 x 3 = 120
3				FACU species 10 x 4 = 40
4				UPL species 0 x 5 = 0
5				Column Totals: <u>117</u> (A) <u>277</u> (B)
6.				Prevalence Index = $B/A = 2.37$
	20	=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover: 10	) 20%	of total cover:	4	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: )				X 2 - Dominance Test is >50%
1.				X 3 - Prevalence Index is $\leq 3.0^1$
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4.				
5.				1
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
0		=Total Cover		Definitions of Five Vegetation Strata:
E0% of total appear				
50% of total cover:	20%	of total cover:		<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: 30)	-	N		(7.6 cm) or larger in diameter at breast height (DBH).
1. Glyceria septentrionalis	5	No	OBL	
2. Lonicera japonica	10	Yes	FACU	<b>Sapling</b> – Woody plants, excluding woody vines,
3. <u>Saururus cernuus</u>	12	Yes	OBL	approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
4				
5				<b>Shrub -</b> 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
8				herbaceous vines, regardless of size, <u>and</u> woody
9				plants, except woody vines, less than approximately 3 ft (1 m) in height.
10				
11				Woody Vine – All woody vines, regardless of height.
	27	=Total Cover		
50% of total cover: 14	20%	of total cover:	6	
Woody Vine Stratum (Plot size:)				
1				
2.				
3.				
4.				
5.				I halman hadia
		=Total Cover		Hydrophytic Vegetation
50% of total cover:		of total cover:		Present? Yes X No
Remarks: (If observed, list morphological adaptation				

Depth	Matrix		Redo	x Featu	res						
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture			Rema	rks
0-6	10yr 4/2	100					Loamy/Clay	/ey			
6.20			10 m E/C						Dror	ninent redev	aanaantrations
6-20	10yr 5/1	95	10yr 5/6	5	C	PL	Loamy/Clay	/ey	PIO	nineni redox (	concentrations
								·			
								·			
ype: C=Co	ncentration, D=Dep	letion, RM=I	Reduced Matrix, I	MS=Mas	ked San	d Grains.				Lining, M=M	
-	ndicators: (Applica	able to all L								lematic Hyd	ric Soils <sup>3</sup> :
Histosol			Thin Dark S						. ,	(LRR O)	
-	ipedon (A2)		Barrier Islan			12)				D) (LRR S)	
Black His			(MLRA 1				(			edox (A16)	
	n Sulfide (A4)		Loamy Muc	-		.RR O)		•		RA 150A)	
	Layers (A5)		Loamy Gley		. ,		'	Reduced			<b>D</b> )
_	Bodies (A6) (LRR, F		X Depleted Ma					•		RA 150A, 150	
	cky Mineral (A7) <b>(LF</b>		Redox Dark		` '					plain Soils (F	, ,
	esence (A8) (LRR U	)	Depleted Da				/		-	ht Floodplain	Soils (F20)
	ck (A9) (LRR P, T)	(	Redox Depr		(F8)				A 153B)		
	Below Dark Surface	e (A11)	Marl (F10) (							erial (F21)	
	rk Surface (A12)		Depleted Oc							ark Surface (F	
	airie Redox (A16) (N									RA 138, 152A	
	ucky Mineral (S1) (L	.RR 0, 5)	Umbric Surf				t			Low Chroma I	Matrix (1S7)
-	leyed Matrix (S4)		Delta Ochric					•	A 153B,	,	
	edox (S5)		Reduced Ve		<i>,</i> .		·	Other (E	xplain i	n Remarks)	
	Matrix (S6)		Piedmont Fl			<i>,</i> .	-				
	face (S7) (LRR P, S		Anomalous	-							
	e Below Surface (S8	3)	(MLRA 14				· · · · ·			drophytic veg	
(LRR S	S, T, U)		Very Shallov (MLRA 13		`	,			-	ology must be bed or probler	
Restrictive L	ayer (if observed):	:		, -	,	- ,					
Туре:											
Depth (in	ches):						Hydric Soi	Preser	nt?	Yes X	No
Remarks:											
lone											

Date: \_\_\_\_

Feature ID: <u>JC\_W\_1005\_PFO</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_ Photograph Direction West\_\_\_

WETLAND DETERMINAT See ERDC/EL	U.S. Army Corps o ION DATA SHEET – A TR-07-24; the propon	Atlantic and G		lain Region	Requirement Conta EXEMP1 (Authority: AR paragraph 5	- 335-15,
Project/Site: CVOW		City/Co	unty: Virginia Bea	ach	Sampling Date:	6/3/2022
Applicant/Owner: Dominion				State: VA	Sampling Point:	JC_W_1005_UP
Investigator(s): E. Foster, T. Conard		Section, Tov	vnship, Range: <u>N</u>	V/a		
Landform (hillside, terrace, etc.): Hi	Islope	Local relief (co	ncave, convex, no	one): None	Slope (%):	5-10
Subregion (LRR or MLRA): LRR T, N	/ILRA 153B Lat: 36.7590	926596667	Long: -76	.1057976391667	Datum:	NAD83
Soil Map Unit Name: Dragston fine s				NWI classific		
Are climatic / hydrologic conditions or		of year?	Yes X		explain in Remark	s.)
Are Vegetation, Soil, c	r Hydrology significa	ntly disturbed?	Are "Normal Cire			
Are Vegetation, Soil, c					-	·
SUMMARY OF FINDINGS -						res, etc.
Hydrophytic Vegetation Present?	Yes No X	Is the S	ampled Area			
Hydric Soil Present?	Yes No X		Wetland?	Yes	No X	
Wetland Hydrology Present?	Yes No X					
Remarks: Upland within maintend ROW.						
HYDROLOGY				2000 dow / India-t	(minimum of two	
Wetland Hydrology Indicators:			<u>3</u>	Secondary Indicators		equirea)

Wetland Hydrology Indica	itors:		<u>-</u>	Secondary Indicators (minimum of two required)
Primary Indicators (minimur	m of one is require	ed; 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 on Living R	Roots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2	)	Presence of Reduced Iron (C4)	-	Crayfish Burrows (C8)
Drift Deposits (B3)	-	Recent Iron Reduction in Tilled So	oils (C6)	Saturation Visible on Aerial Imagery (C9)
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 A	erial Imagery (B7)	)	-	FAC-Neutral Test (D5)
Water-Stained Leaves	(B9)		-	Sphagnum Moss (D8) (LRR T,U)
Field Observations:				
Surface Water Present?	Yes	No X Depth (inches):		
Water Table Present?		No X Depth (inches):		
	Vaa	No x Depth (inches):	Wotland H	ydrology Present? Yes No X
Saturation Present?	Yes	$\mathbf{X}$ Depth (inches).	wellanu n	
Saturation Present? (includes capillary fringe)	res		Wetland II	······································
(includes capillary fringe)		hitoring well, aerial photos, previous ins		
(includes capillary fringe)				
(includes capillary fringe)				
(includes capillary fringe)				
(includes capillary fringe) Describe Recorded Data (s				
(includes capillary fringe) Describe Recorded Data (s Remarks:				
(includes capillary fringe) Describe Recorded Data (s Remarks:				
(includes capillary fringe) Describe Recorded Data (s Remarks:				
(includes capillary fringe) Describe Recorded Data (s Remarks:				
(includes capillary fringe) Describe Recorded Data (s Remarks:				
(includes capillary fringe) Describe Recorded Data (s Remarks:				
(includes capillary fringe) Describe Recorded Data (s Remarks:				

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

Sampling Point: JC\_W\_1005\_UP

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
1.       2.				Number of Dominant Species           That Are OBL, FACW, or FAC:         0         (A)
3				Total Number of Dominant Species Across All Strata: 3 (B)
4 5				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC:(A/B)
		=Total Cover		Prevalence Index worksheet:
50% of total cover:	20%	of total cover:		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)				OBL species 0 x 1 = 0
1				FACW species 15 x 2 = 30
2				FAC species 10 x 3 = 30
3				FACU species <u>65</u> x 4 = <u>260</u>
4				UPL species x 5 =10
5				Column Totals: 92 (A) 330 (B)
6.				Prevalence Index = B/A = 3.59
	:	=Total Cover		Hydrophytic Vegetation Indicators:
50% of total cover:	20%	of total cover:		1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: )				2 - Dominance Test is >50%
1				3 - Prevalence Index is ≤3.0 <sup>1</sup>
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4.				
5.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6.				present, unless disturbed or problematic.
		=Total Cover		Definitions of Five Vegetation Strata:
50% of total cover:	20%	of total cover:		Tree – Woody plants, excluding woody vines,
Herb Stratum (Plot size: 30 )				approximately 20 ft (6 m) or more in height and 3 in.
1. Holcus lanatus	20	Yes	FACU	(7.6 cm) or larger in diameter at breast height (DBH).
2. Anthoxanthum odoratum	25	Yes	FACU	Sapling – Woody plants, excluding woody vines,
3. Sisyrinchium fuscatum	2	No	UPL	approximately 20 ft (6 m) or more in height and less
4. Digitaria ciliaris	20	Yes	FACU	than 3 in. (7.6 cm) DBH.
5. Eupatorium perfoliatum	15	No	FACW	Shrub - Woody Plants, excluding woody vines,
6. Juncus tenuis	10	No	FAC	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 ft (1 m) in height.
10				( ), <sup>©</sup>
11				Woody Vine – All woody vines, regardless of height.
	92 :	=Total Cover		
50% of total cover: 4	6 20%	of total cover:	19	
Woody Vine Stratum (Plot size:)				
1				
2.				
3.				
4				
5.				Hydrophytic
	:	=Total Cover		Vegetation
50% of total cover:	20%	of total cover:		Present? Yes <u>No X</u>
Remarks: (If observed, list morphological adaptation	ns below.)			

I

SOIL

	cription: (Describe	to the dep				or or conf	irm the absence	of indic	ators.)	
Depth	Matrix	0/		x Features	1	1002	Toyture		D	marka
(inches)	Color (moist)	%	Color (moist)	%	Туре'	Loc <sup>2</sup>	Texture		Rei	marks
0-20	10yr 5/4	100					Sandy			
	oncentration, D=Dep		Doduced Metrix				<sup>2</sup> 1 apptions		o Lipipa M	Motrix
	Indicators: (Applica					Grains.			e Lining, M=	vdric Soils <sup>3</sup> :
Histosol			Thin Dark S			ат II)			) (LRR O)	yune sons .
	pipedon (A2)		Barrier Islan	. ,	•				0) (LRR S)	
Black Hi	1 ( )			3B, 153D)	•	_)			Redox (A16)	
	en Sulfide (A4)		Loamy Much			(R O)			RA 150A)	
	d Layers (A5)		Loamy Gley	•	• • •		•	ed Verti		
	Bodies (A6) (LRR, P	τ.υ)	Depleted Ma	`	)				RA 150A, 1	50B)
	icky Mineral (A7) (LR		Redox Dark	· · /	6)		•			(F19) <b>(LRR P, T</b>
	esence (A8) (LRR U		Depleted Da	`	,				•	ain Soils (F20)
	ick (A9) (LRR P, T)	·	Redox Depr		` '			RA 153E	• ·	
	d Below Dark Surface	e (A11)	Marl (F10) (I		- /				, aterial (F21)	
	ark Surface (A12)	( )	Depleted Oc	,	(MLRA	151)	Very S	hallow [	Dark Surface	e (F22)
Coast P	rairie Redox (A16) (N	ILRA 150A	) Iron-Mangar	ese Masse	、 es (F12	) (LRR O, I	P, T) (outs	side ML	RA 138, 15	2A in FL, 154)
Sandy M	lucky Mineral (S1) (L	RR O, S)	Umbric Surfa	ace (F13) <b>(</b>	LRR P	T, U)	Barrier	Islands	Low Chrom	na Matrix (TS7)
Sandy G	Gleyed Matrix (S4)		Delta Ochric				(MLF	RA 153E	8, 153D)	
Sandy R	Redox (S5)		Reduced Ve	rtic (F18) (	MLRA	150A, 150B	B) Other (	Explain	in Remarks	;)
Stripped	Matrix (S6)		Piedmont Fl	odplain S	oils (F1	9) <b>(MLRA</b> <sup>-</sup>	149A)			
Dark Su	rface (S7) (LRR P, S	, T, U)	Anomalous	Bright Floo	dplain \$	Soils (F20)				
Polyvalu	e Below Surface (S8	)	(MLRA 14	9A, 153C,	153D)		<sup>3</sup> Indica	tors of h	ydrophytic	vegetation and
(LRR	S, T, U)		Very Shallow	v Dark Sur	face (F	22)	wet	and hyd	rology must	be present,
			(MLRA 13	8, 152A in	n FL, 15	4)	unle	ss distu	rbed or prob	olematic.
Restrictive	Layer (if observed):									
Type:										
	nches):						Hydric Soil Pres		Yes	No X

Date: \_\_\_\_

Feature ID: <u>JC\_W\_1005\_UP</u>



Photograph Number \_\_\_\_1

Photograph Direction North

Comments:



Photograph Number 2 Photograph Direction East

Comments:



Photograph Number 3

Photograph Direction South

Comments:



Photograph Number \_\_\_\_4\_\_\_ Photograph Direction West\_\_\_

#### WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Dominion CVOW	City/County: Chesapeake/C	hesapeake	Sampling Date: _	5/5/2021
Applicant/Owner: Dominion		State: VA	Sampling Point:	JD_W_004
Investigator(s): J. Daugustine, B. Harris	Section, Township, Range: _			
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, conve	x, none): <u>Concave</u>	Slop	e (%): <u>1</u>
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.742982 Long:		-76.139637 Dat	um: <u>WGS84</u>
Soil Map Unit Name: 2 - Acredale-Chapanoke complex, 0 to 1 percent slopes		NWI classific	ation: PEM	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes <u> </u>	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Norm	al Circumstances" p	oresent? Yes	No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed	, explain any answe	rs 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 <u>×</u> No Yes <u>×</u> No Yes <u>×</u> No	Is the Sampled Area within a Wetland?	Yes <u>×</u> No
Remarks:			Observed Classifications:
Data point taken within existing over	erhead utility easement.		Cowardin: PEM

#### 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)
X Saturation (A3) Hydrogen Sulfide Odor (C1	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres alor	ng Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (	C4) Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Ti	led Soils (C6) Saturation Visible on Aerial Imagery (C9)
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 X Depth (inches):	
Water Table Present? Yes <u>x</u> No Depth (inches): <u>8</u>	
Saturation Present? Yes <u>×</u> No <u>Depth</u> (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previo	ous inspections), if available:

#### Remarks:

Surface water (approximately 3 inches) observed adjacent to data point location. The water table was measured at approximately 8 inches during data collection but it can be assumed that due to location of adjacent surface water, water table is more likely within 1-2 inches of the soil surface and water infiltration was slow due to high clay content.

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

Sampling Point: JD W 004

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Species?		Number of Dominant Species
1. <u>N/A</u>				That Are OBL, FACW, or FAC:5(A)
2				
				Total Number of Dominant
3				Species Across All Strata:5(B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:100.0% (A/B)
6				( /
		= Total Cov	er	Prevalence Index worksheet:
50% of total cover: <u>0</u>				Total % Cover of: Multiply by:
	20 /0 01	total cover.		OBL species X 1 = 30
Sapling Stratum (Plot size: <u>30 ft</u> )				FACW species40 x 2 =80
1. <u>N/A</u>				
2				FAC species $30 \times 3 = 90$
3				FACU species x 4 =
4				UPL species x 5 =0
				Column Totals: <u>100</u> (A) <u>200</u> (B)
5				
6				Prevalence Index = B/A =2.00
		= Total Cov		Hydrophytic Vegetation Indicators:
50% of total cover: 0	20% of	f total cover:	0	1 - Rapid Test for Hydrophytic Vegetation
<u>Shrub Stratum</u> (Plot size: <u>30 ft</u> )				X 2 - Dominance Test is >50%
1. Pinus taeda, Loblolly Pine	5	Yes	FAC	X 3 - Prevalence Index is ≤3.0
2				
				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
6				Definitions of Five Vegetation Strata:
	5	= Total Cov	er	Tree – Woody plants, excluding woody vines,
50% of total cover:2.5	20% of	total cover:	1	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )				(7.6 cm) or larger in diameter at breast height (DBH).
	25	Vac		
1. Eleocharis palustris, Common Spike-Rush				Sapling – Woody plants, excluding woody vines,
2. Arundinaria tecta, Switch Cane				approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3. Andropogon virginicus, Broom-Sedge	20	Yes	FAC	
4. Andropogon glomeratus, Bushy Bluestem	20	Yes	FACW	Shrub – Woody plants, excluding woody vines,
5. Pinus taeda, Loblolly Pine	5	No	FAC	approximately 3 to 20 ft (1 to 6 m) in height.
	-	No	OBL	Herb – All herbaceous (non-woody) plants, including
			ODL	herbaceous vines, regardless of size, and woody
7				plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9				Merchander Allerenders
10				Woody vine – All woody vines, regardless of height.
11				
· · · · ·		= Total Cov		
50% of total cover: <u>47.5</u>	20% of	total cover:	19	
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u> )				
1. <u>N/A</u>				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover: 0	20% of	f total cover:	0	Present? Yes <u>×</u> No
Remarks: (If observed, list morphological adaptations belo	w).			

#### SOIL

Depth	cription: (Describe Matrix	to the dept		lox Features				
inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	10YR 4/1	95%	7.5YR 6/6	5%	C	M	Clay loam	
5-12	10YR 5/1	95%	LOYR 5/8	5%	C	PL	Clay loam	
12-20	2.5Y 7/1						Clay loam	
2.	Concentration, D=Dep	· · · · · · · · · · · · · · · · · · ·	,			ains.		=Pore Lining, M=Matrix. Problematic Hydric Soils <sup>3</sup> :
_ Histoso				Below Surfac				k (A9) <b>(LRR O)</b>
	pipedon (A2) listic (A3)			Surface (S9) ky Mineral (				k (A10) <b>(LRR S)</b> Vertic (F18) <b>(outside MLRA 150A,E</b>
	en Sulfide (A4)			yed Matrix (F	, ,	0,		Floodplain Soils (F19) (LRR P, S, T
Stratifie	d Layers (A5)		× Depleted M					s Bright Loamy Soils (F20)
-	Bodies (A6) (LRR P			CSurface (F6	,		(MLRA	2
	ucky Mineral (A7) <b>(L</b> l resence (A8) <b>(LRR L</b>			ark Surface ressions (F8	. ,			nt Material (TF2) Iow Dark Surface (TF12)
_	uck (A9) (LRR P, T)	,	Marl (F10)		,			plain in Remarks)
	ed Below Dark Surfac	e (A11)	Depleted O	chric (F11) (	MLRA 1	51)		
_	ark Surface (A12)			nese Masse				rs of hydrophytic vegetation and
	Prairie Redox (A16) <b>(I</b> Mucky Mineral (S1) (			face (F13) <b>(I</b> c (F17) <b>(MLI</b>		, U)		d hydrology must be present, disturbed or problematic.
	Gleyed Matrix (S4)	, •, •,		ertic (F18) (I		0A, 150B)	anoss	alleration of prostormation
_	Redox (S5)			loodplain Sc				
	d Matrix (S6)		Anomalous	Bright Loam	ny Soils (	-20) (MLRA	149A, 153C, 15	i3D)
	urface (S7) (LRR P, S Layer (if observed)							
Type:	Layer (II Observed)							
	nches):						Hydric Soil Pre	esent? Yes <sup>x</sup> No
emarks:							,	



## Feature Name: JD\_W\_004



## Photograph Direction West

Comments:

Photograph Direction East

Comments:



Photograph Direction South

Comments:



## Photograph Direction North

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

City/County: Chesapeake/Chesapeake	Sampling Date: 5/5/2021
State: VA	_ Sampling Point: JD_W_004_UP &
Section, Township, Range:	EF_W_008_UP
Local relief (concave, convex, none): None	Slope (%): 0
36.742891 Long:	-76.139607 Datum: WGS84
NWI classi	fication: N/A
ear? Yes <u>×</u> No (If no, explain in	Remarks.)
y disturbed? Are "Normal Circumstances	" present? Yes No
roblematic? (If needed, explain any answ	vers in Remarks.)
	State: _VA Section, Township, Range: Local relief (concave, convex, none): <u>None</u> 36.742891 Long: NWI classi ear? Yes No (If no, explain in y disturbed? Are "Normal Circumstances

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>x</u> No <u>yes x</u> No <u>x</u> Yes <u>No x</u>	Is the Sampled Area within a Wetland? Yes	No
Remarks: Data point taken along forested ed soil indicator, however only one se therefore does not characterize th	condary hydrology indicator wa	Soil meets the depleted matrix hydric s identified, FAC-neutral test, and	Observed Classifications: Cowardin:

#### 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 Li	ving Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled	Soils (C6) Saturation Visible on Aerial Imagery (C9)
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)	_x 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 Depth (inches):	
Saturation Present? Yes <u>No x</u> Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous i	nspections), if available:
Remarks:	
Remarks:	

٦

# Sampling Point: EF\_W\_004\_UP

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

, , , , , , , , , , , , , , , , , , ,	Absolute I	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft</u> )	% Cover	Species?	Status	Number of Dominant Species
1. <u>N/A</u>				That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Dominant
3				Species Across All Strata:3 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC:100.0% (A/B)
6				
		Total Cove	er	Prevalence Index worksheet:
50% of total cover: <u>0</u>				Total % Cover of: Multiply by:
Sapling Stratum (Plot size: <u>30 ft</u> )	2070 01 0	Jul cover.		OBL species x 1 =
				FACW species 85 x 2 =170
				FAC species x 3 =90
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: <u>115</u> (A) <u>260</u> (B)
5				
6				Prevalence Index = B/A =2.26
	=	Total Cove	er	Hydrophytic Vegetation Indicators:
50% of total cover: 0	20% of to	otal cover:	0	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: <u>30 ft</u> )				$\frac{1}{2}$ × 2 - Dominance Test is >50%
1. <u>N/A</u>				$\frac{x}{x}$ 3 - Prevalence Index is $\leq 3.0^{\circ}$
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				• •
6				Definitions of Five Vegetation Strata:
		Total Cove		Tree – Woody plants, excluding woody vines,
50% of total cover:0	20% of to	otal cover:	0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )				(7.6 cm) or larger in diameter at breast height (DBH).
1. Arundinaria tecta, Switch Cane			FACW	Sapling – Woody plants, excluding woody vines,
2. Pinus taeda, Loblolly Pine	5			approximately 20 ft (6 m) or more in height and less
3. Andropogon virginicus, Broom-Sedge	5	No	FAC	than 3 in. (7.6 cm) DBH.
4. Andropogon glomeratus, Bushy Bluestem	5	No	FACW	Shrub – Woody plants, excluding woody vines,
5				approximately 3 to 20 ft (1 to 6 m) in height.
6				Herb – All herbaceous (non-woody) plants, including
7.				herbaceous vines, regardless of size, and woody
8				plants, except woody vines, less than approximately 3 ft (1 m) in height.
9				
				Woody vine - All woody vines, regardless of height.
10				
11				
		Total Cove		
50% of total cover: <u>47.5</u>	20% of to	otal cover:	19	
Woody Vine Stratum (Plot size: <u>30 ft</u> )				
1. Vitis rotundifolia, Muscadine	15	Yes	FAC	
2. Smilax rotundifolia, Horsebrier	5	Yes	FAC	
3				
4				
5				Hydrophytic
		Total Cove	er	Vegetation
				Present? Yes X No
50% of total cover: 10	20% of t	stal cover:	4	

#### SOIL

#### Sampling Point: JD W 004 UP

epth		e to the dep	th needed to docum	x Features	or commit the	absence of	indicators.	.) E	EF_W_008_l
epin nches)	Matrix Color (moist)	%	Color (moist)	<u>% Type</u>	Loc <sup>2</sup> T	exture		Remarks	
0-3	10YR 3/1	100%				Loam			
3-7	10YR 3/2	100%				Loam			
7-20	10YR 6/1	98%	10YR 6/6	2% C	 М сі	ay loam			
7 20	1011(0/1		10111 0/0						
			Reduced Matrix, MS				L=Pore Linir		
		icable to all	LRRs, unless other				r Problema	-	Soils":
Histosol				low Surface (S8) (LI			ck (A9) (LRF		
	pipedon (A2) istic (A3)			rface (S9) <b>(LRR S, "</b> y Mineral (F1) <b>(LRR</b>			ck (A10) <b>(LR</b> Wertic (E18)		ILRA 150A, B
	en Sulfide (A4)		Loamy Gleye						(LRR P, S, T)
	d Layers (A5)		× Depleted Mat				us Bright Lo		
	Bodies (A6) (LRR		Redox Dark S	· · /			153B)		
-	ucky Mineral (A7) (I			k Surface (F7)	-		ent Material (		2)
	resence (A8) <b>(LRR</b> uck (A9) <b>(LRR P, T</b>		Redox Depre Marl (F10) (L		-		Illow Dark Si xplain in Rer	1	2)
	d Below Dark Surfa			nric (F11) <b>(MLRA 15</b>	-			narks)	
	ark Surface (A12)			ese Masses (F12) (L		<sup>3</sup> Indicat	ors of hydrop	phytic veget	ation and
-	Prairie Redox (A16)	•		ce (F13) <b>(LRR P, T,</b>	U)		nd hydrology		
	Mucky Mineral (S1)	(LRR O, S)		(F17) <b>(MLRA 151)</b>		unles	s disturbed o	or problemat	tic.
	Gleyed Matrix (S4)			tic (F18) <b>(MLRA 150</b> odplain Soils (F19) (					
	Redox (S5) d Matrix (S6)			• • • •	. ,		53D)		
Strinner					20) (MI RA 14	9A 153C 1			
		S, T, U)	Anomaious B	right Loamy Soils (F	20) <b>(MLRA 14</b>	9A, 153C, 1	550)		
Dark Su	irface (S7) (LRR P, Layer (if observed			right Loamy Solis (F	20) (MLRA 14	9A, 153C, 1	550)		
Dark Su	Irface (S7) (LRR P,	i):		ngnt Loamy Soils (F	20) (MLRA 14	9A, 153C, 1			
Dark Su strictive	Irface (S7) (LRR P, Layer (if observed	i):		ngni Loamy Soiis (F		9A, 153C, 1 /dric Soil P		′es	No
Dark Su strictive	irface (S7) (LRR P, Layer (if observed	i):						′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):		right Loamy Solis (F				′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):		right Loamy Solis (F				″es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):		right Loamy Solis (F				′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):		right Loamy Soils (F				′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						″es <u>×</u>	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						″es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						'es <u>×</u>	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						′es <u>×</u>	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						/es <u>×</u>	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						′es	No
Dark Su strictive Type: Depth (in	irface (S7) (LRR P, Layer (if observed	i):						′es	No

Date: <u>5/5/21</u>



Feature Name:  ${}^{JD_W_{004_UP}}_{EF_W_{008_UP}}$ 



Photograph Direction East

Comments:

Photograph Direction West

Comments:



Photograph Direction South

Comments:



Photograph Direction North

#### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Dominion CVOW	City/County: Chesapeake/Cl	Sampling Date:	5/5/2021				
Applicant/Owner: Dominion		State: VA	Sampling Point:	JD_W_005			
Investigator(s): J. Daugustine, B. Harris	Section, Township, Range: _						
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex	, none): <u>Concave</u>	Slop	be (%): <u>1</u>			
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.744654 Long:		-76.136382 Da	tum: WGS84			
Soil Map Unit Name: 1 - Acredale silt loam, 0 to 1 percent slopes		NWI classific	ation: PEM				
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>x</u> No (If no, explain in Remarks.)							
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	present? Yes	No			
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs 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 <u>×</u> No Yes <u>×</u> No Yes <u>×</u> No	Is the Sampled Area within a Wetland?	Yes	No
Remarks:				Observed Classifications:
Data point taken within existing over	erhead utility easement.			Cowardin:

#### HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	X_ Surface Soil Cracks (B6)
Inundation Visible on Aerial Imagery (B7) x Water-Stained Leaves (B9)	<ul> <li><u>×</u> FAC-Neutral Test (D5)</li> <li>Sphagnum moss (D8) (LRR T, U)</li> </ul>
Field Observations:	
Surface Water Present?       Yes No _x Depth (inches):         Water Table Present?       Yes No _x Depth (inches):         Saturation Present?       Yes No _x Depth (inches):         (includes capillary fringe)	Wetland Hydrology Present? Yes <u>×</u> No tions), if available:

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

Sampling Point: JD W 005

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Species?		
				Number of Dominant Species         That Are OBL, FACW, or FAC:         2         (A)
1. <u>N/A</u>				
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:100.0% (A/B)
6				Prevalence Index worksheet:
	0	= Total Cove	er	
50% of total cover: 0	20% of	total cover:	0	Total % Cover of: Multiply by:
Sapling Stratum (Plot size: <u>30 ft</u> )				OBL species <u>65</u> x 1 = <u>65</u>
				FACW species X 2 =60
1. <u>N/A</u>				FAC species $0 \times 3 = 0$
2				
3				FACU species x 4 =0
				UPL species x 5 =
4				Column Totals: <u>95</u> (A) <u>125</u> (B)
5				
6				Prevalence Index = B/A =1.32
	0	= Total Cove	er	Hydrophytic Vegetation Indicators:
50% of total cover: 0	20% of	total cover:	0	<u>×</u> 1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: <u>30 ft</u> )				
				$\frac{x}{2}$ 2 - Dominance Test is >50%
1. <u>N/A</u>				X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				
6				Definitions of Five Vegetation Strata:
	0	= Total Cove	er	Tree – Woody plants, excluding woody vines,
50% of total cover: 0	20% of	total cover:	0	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )				(7.6 cm) or larger in diameter at breast height (DBH).
1. Eleocharis palustris, Common Spike-Rush	40	Yes	OBI	Continue Minadoutents such that
				Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less
2. <u>Arundinaria gigantea, Giant Cane</u>				than 3 in. (7.6 cm) DBH.
3. Juncus effusus, Lamp Rush	15	No	OBL	
4. Decodon verticillatus, Swamp-Loosestrife	5	No	OBL	Shrub – Woody plants, excluding woody vines,
5. Carex lurida, Shallow Sedge		No	OBL	approximately 3 to 20 ft (1 to 6 m) in height.
			ODL	
o				Herb – All herbaceous (non-woody) plants, including
7				herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately
8				3 ft (1 m) in height.
9.				
				Woody vine - All woody vines, regardless of height.
10				
11				
	95	= Total Cove	er	
50% of total cover:47.5	20% of	total cover:	19	
Woody Vine Stratum (Plot size: 30 ft)				
1. <u>N/A</u>				
2				
3				
4				
5				Hydrophytic
	0	= Total Cove	er	Vegetation
50% of total cover:0	20% of	total cover:	0	Present? Yes <u>×</u> No
Remarks: (If observed, list morphological adaptations belo				1
	MAZ )			
	₩).			
	₩).			
	₩).			

#### SOIL

2-17 2 17-20 2	<u>Matrix</u> Color (moist) 7.5YR 4/2 2.5Y 4/1 10YR 5/1	<u>%</u> 100% 98% 2 100%	Color (moist) 2.5Y 4/4	lox Features % 2% 2%	C	_Loc <sup>2</sup>	Texlure Clay loam Clay loam Clay loam	Remarks
2-17 2 17-20 2	2.5Y 4/1	98% 2	2.5Y 4/4	2%	C		Clay loam	
17-20			2.5Y 4/4	2%	C			
	10YR 5/1	100%					Clay loam	
/pe: C=Con								
	ncentration, D=Dep		Peduced Matrix N		Sand Gr		<sup>2</sup> Location: Pl	=Pore Lining, M=Matrix.
	dicators: (Applic	,				an1 <b>5</b> .		Problematic Hydric Soils <sup>3</sup> :
Stratified I Organic B 5 cm Mucl Muck Pres 1 cm Mucl Depleted I Thick Darl Coast Pra Sandy Mu Sandy Gle Sandy Re	Sulfide (A4) Layers (A5) Eodies (A6) (LRR P ky Mincral (A7) (LF sence (A8) (LRR U k (A9) (LRR P, T) Below Dark Surfac k Surface (A12) irie Redox (A16) (I icky Mineral (S1) (L eyed Matrix (S4) dox (S5)	R P, T, U) I) e (A11) MLRA 150A)	Depleted M     Redox Dark     Depleted Da     Redox Depl     Marl (F10) (     Depleted O     Iron-Manga     Umbric Surl     Delta Ochric     Reduced Ve     Piedmont F	yed Matrix (F atrix (F3) (Surface (F6 (Surface)) (LRR U) chric (F11) ( nese Masse face (F13) (L c (F17) (MLI ertic (F18) (N loodplain Sc	2) 6) (F7) ) mLRA 1 (F7) (F7) (F7) (F7) (F7) (F7) (F7) (F7)	51) LRR O, P, , U) 0A, 150B) (MLRA 14	Piedmont Anomalou (MLRA <sup>4</sup> Red Parer Very Shall Other (Exp T) <sup>3</sup> Indicato wetland unless	nt Material (TF2) low Dark Surface (TF12) plain in Remarks) rs of hydrophytic vegetation and d hydrology must be present, disturbed or problematic.
Dark Surfa	Matrix (S6) ace (S7) <b>(LRR P, S</b> ayer (if observed):		Anomalous	Bright Loam	iy Soils (	F20) (MLR/	A 149A, 153C, 15	(3D)
Туре:	iyer (ii observed).							
	nes):						Hydric Soil Pre	esent? Yes <u>x</u> No

Date: <u>5/5/21</u>



## Feature Name: JD\_W\_005



## Photograph Direction North

Comments:

Photograph Direction South

Comments:



## Photograph Direction East

Comments:

Photograph Direction West

- AN	AF.	
A. Bay		3

## $JD_W_{005}_{UP}$

#### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Dominion CVOW	City/County: Chesapeake/Cl	Sampling Date: _	5/5/2021					
Applicant/Owner: Dominion		State: VA	Sampling Point:	ID W05 UP				
Investigator(s): J. Daugustine, B. Harris	Section, Township, Range: _							
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex	, none): <u>None</u>	Slop	e (%): 0				
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.744621 Long:		-76.136683 Dat	um: <u>WGS84</u>				
Soil Map Unit Name: 1 - Acredale silt loam, 0 to 1 percent slopes		NWI classific	ation: <u>N/A</u>					
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>x</u> No (If no, explain in Remarks.)								
Are Vegetation, Soil, or Hydrology significantly	v disturbed? Are "Norm	al Circumstances" p	oresent? Yes	No				
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs 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 Yes Yes	No <u>×</u> No <u>×</u> No <u>×</u>	Is the Sampled Area within a Wetland?	Yes	No ×
Remarks:					<b>Observed Classifications:</b>
Data point location taken at forest	Cowardin:				

#### HYDROLOGY

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 Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       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:       Yes       No ×       Depth (inches):         Surface Water Present?       Yes       No ×       Depth (inches):
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 Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         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)       Yes No Depth (inches):
Water Marks (B1)      Oxidized Rhizospheres along Living Roots (C3)      Dry-Season Water Table (C2)        Sediment Deposits (B2)      Presence of Reduced Iron (C4)      Crayfish Burrows (C8)        Drift Deposits (B3)      Recent Iron Reduction in Tilled Soils (C6)      Saturation Visible on Aerial Imagery (C9)        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)      Sphagnum moss (D8) (LRR T, U)         Field Observations:      No Depth (inches):
Sediment Deposits (B2)      Presence of Reduced Iron (C4)      Crayfish Burrows (C8)        Drift Deposits (B3)      Recent Iron Reduction in Tilled Soils (C6)      Saturation Visible on Aerial Imagery (C9)        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)      Sphagnum moss (D8) (LRR T, U)         Field Observations:      NoXDepth (inches):
Drift Deposits (B3)   Algal Mat or Crust (B4) Thin Muck Surface (C7)   Iron Deposits (B5) Other (Explain in Remarks)   Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3)   Water-Stained Leaves (B9) FAC-Neutral Test (D5)   Surface Water Present? Yes No _x _ Depth (inches):
Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U)          Field Observations:         Surface Water Present?       Yes NoX Depth (inches):
Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)       Water-Stained Leaves (B9)     Sphagnum moss (D8) (LRR T, U)       Field Observations:     No Depth (inches):
Water-Stained Leaves (B9)        Sphagnum moss (D8) (LRR T, U)           Field Observations:
Field Observations:           Surface Water Present?         Yes NoX_ Depth (inches):
Surface Water Present? Yes No Depth (inches):
Water Table Present?         Yes No Depth (inches):
Saturation Present?         Yes No Depth (inches):         Wetland Hydrology Present?         Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Describe Recorded Data (stream gauge, monitoring weil, aenal photos, previous inspections), il available.
Desch
Remarks:

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

Sampling Point: JD W 005 UP

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )	% Cover			Number of Dominant Species
1. <u>N/A</u>				That Are OBL, FACW, or FAC: (A)
2				
				Total Number of Dominant
3				Species Across All Strata:4 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: $50.0\%$ (A/B)
6				
	0 =	Total Co	/er	Prevalence Index worksheet:
50% of total cover: 0				Total % Cover of: Multiply by:
	20% 011	otar cover		OBL species x 1 =
<u>Sapling Stratum</u> (Plot size: <u>30 ft</u> )				FACW species $40$ x 2 = $80$
1. <u>N/A</u>				
2				FAC species $20$ x 3 = $60$
3				FACU species $50 \times 4 = 200$
4				UPL species x 5 =0
				Column Totals: <u>110</u> (A) <u>340</u> (B)
5				
6				Prevalence Index = B/A =3.09
	=	Total Co	ver	Hydrophytic Vegetation Indicators:
50% of total cover: 0	20% of t	otal cover	r: <u>0</u>	1 - Rapid Test for Hydrophytic Vegetation
Shrub Stratum (Plot size: <u>30 ft</u> )				
				2 - Dominance Test is >50%
1. <u>N/A</u>				3 - Prevalence Index is ≤3.0 <sup>+</sup>
2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3				
4				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5				be present, unless disturbed or problematic.
				Definitions of Five Vegetation Strata:
6				Deminions of Five Vegetation Strata.
		Total Co		Tree – Woody plants, excluding woody vines,
50% of total cover:0	20% of t	otal cover	r: <u> </u>	approximately 20 ft (6 m) or more in height and 3 in.
Herb Stratum (Plot size: <u>30 ft</u> )				(7.6 cm) or larger in diameter at breast height (DBH).
1. Arundinaria tecta, Switch Cane	40	Yes	FACW	Sapling – Woody plants, excluding woody vines,
2. Anthoxanthum odoratum, Large Sweet Vernal Grass				approximately 20 ft (6 m) or more in height and less
3. Solidago altissima, Tall Goldenrod				than 3 in. (7.6 cm) DBH.
			FACU	
4. Microstegium vimineum, Japanese Stilt Grass			FAC	Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
5. Eupatorium capillifolium, Dog-Fennel		No	FACU	approximately 5 to 20 it (1 to 6 m) in height.
6				Herb – All herbaceous (non-woody) plants, including
7.				herbaceous vines, regardless of size, and woody
8				plants, except woody vines, less than approximately
				3 ft (1 m) in height.
9				Woody vine – All woody vines, regardless of height.
10				
11				
	85 =	Total Co	ver	
50% of total cover: 42.5	20% of t	otal cover	r: 17	
Woody Vine Stratum (Plot size: 30 ft)				
	1 5	Vee	FACU	
1. Parthenocissus quinquefolia, Virginia-Creeper		Yes	FACU	
2. Smilax rotundifolia, Horsebrier	10	Yes	FAC	
3				
4				
5				
·		T-1-1 0		Hydrophytic
		Total Co		Vegetation Present? Yes No ×
50% of total cover:12.5	2006 of t	otal cover	r: <u>5</u>	
Remarks: (If observed, list morphological adaptations below	20 % OI 1			
				1
				1

Depth	cription: (Describe Matrix			ox Features					
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Re	marks
0-14	10YR 4/2	100%					Clay loam		
14-20	10YR 4/3	95%	10YR 5/6	5%	C		Clay loam		
							;		
	- Concentration, D=Dep Indicators: (Applic					ains.		PL=Pore Lining, I or Problematic	
		able to al							-
Histoso Histic F	Epipedon (A2)		Polyvalue B Thin Dark S					uck (A9) <b>(LRR O</b> ) uck (A10) <b>(LRR S</b>	
	listic (A3)		Loamy Muc		•				utside MLRA 150A,B
	en Sulfide (A4)		Loamy Gley			,			ls (F19) <b>(LRR P, S, T</b>
Stratifie	ed Layers (A5)		Depleted M	atrix (F3)				ous Bright Loam	
Organi	c Bodies (A6) <b>(LRR F</b>	P, T, U)	Redox Dark	Surface (F6	5)		(MLR)	A 153B)	
	ucky Mineral (A7) <b>(L</b>							ent Material (TF	
	Presence (A8) (LRR L	))	Redox Depr	,	)			allow Dark Surfa	, ,
	luck (A9) <b>(LRR P, T)</b> ed Below Dark Surfac	o (A11)	Marl (F10) (			54 <b>)</b>		Explain in Remarl	KS)
	ark Surface (A12)		Depleted O Iron-Manga				T) <sup>3</sup> Indica	tors of hydrophy	tic vegetation and
	Prairie Redox (A16) (	MLRA 150						and hydrology mu	-
	Mucky Mineral (S1) (				,	, _ ,		s disturbed or pr	
	Gleyed Matrix (S4)	, ,	Reduced Ve	. , .		0A, 150B)			
Sandy	Redox (S5)		Piedmont F	oodplain So	ils (F19)	(MLRA 14	9A)		
	d Matrix (S6)		Anomalous	Bright Loam	y Soils (	F20) (MLR	A 149A, 153C,	153D)	
	urface (S7) (LRR P,								
Restrictive	Layer (if observed)	:							
Туре:									
Depth (ir	nches):						Hydric Soil F	Present? Yes	No
Remarks:							•		
Soil contai	ns redoximorphic fe	eatures bu	t the matrix is not	depleted ei	nough to	meet any	y hydric soil ind	licators.	

Date: <u>5/5/21</u>



## Feature Name: JD\_W\_005\_UP



Photograph Direction East

Comments:

Photograph Direction West

Comments:



Photograph Direction South

Comments:



## Photograph Direction North

#### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Dominion CVOW	City/County: Virginia Beach	/Virginia Beach	Sampling Date: _	5/5/2021			
Applicant/Owner: Dominion		State: VA	Sampling Point: J	D_W_006			
Investigator(s): J. Daugustine, B. Harris	Section, Township, Range: _						
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex	, none): <u>Convex</u>	Slope	e (%): <u>2</u>			
Subregion (LRR or MLRA): MLRA 153B of LRR T Lat:	36.74715 Long:		-76.132314 Dat	um: <u>WGS84</u>			
Soil Map Unit Name: 21 - Nawney silt loam NWI classification: PFO							
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>×</u> No (If no, explain in Remarks.)							
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	al Circumstances" p	oresent? Yes	No			
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answe	rs in Remarks.)				

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

	0 - Attach site i	ap showing sai			important leatures, etc.	
Hydrophytic Vegetation Preser	nt? Yes <u>x</u>	No	Is the Sampled Area			
Hydric Soil Present?	Yes <u>×</u>	No	within a Wetland?	Yes X	No	
Wetland Hydrology Present?	Yes <u>x</u>	No				
Remarks:					<b>Observed Classifications:</b>	
					Cowardin: PFO	
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 Veg	etated Concave Surface (B8)	
High Water Table (A2) Marl Deposits (B15) (LRR U)				Drainage Pat	terns (B10)	
Saturation (A3)					nes (B16)	
Water Marks (B1) Oxidized Rhizospheres along Living Roo						
Sediment Deposits (B2) Presence of Reduced Iron (C4)				Crayfish Burre	· /	
Drift Deposits (B3)		cent Iron Reduction in	. ,		sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4) Thin Muck Surface (C7)				Geomorphic I	. ,	
Iron Deposits (B5) Other (Explain in Remarks)				Shallow Aquitard (D3)		
Inundation Visible on Aeri				× FAC-Neutral	. ,	
Water-Stained Leaves (B	<del>)</del> )			Sphagnum m	oss (D8) <b>(LRR T, U)</b>	
Field Observations:						
Surface Water Present?	Yes <u>x</u> No					
Water Table Present?	sent? Yes <u>×</u> No <u>Depth</u> (inches): <u>0</u>					
Saturation Present?	Yes <u>x</u> No	_ Depth (inches): 0	Wetland	Hydrology Present	? Yes <u>×</u> No	
(includes capillary fringe) Describe Recorded Data (stread	am gauge, monitoring	well, aerial photos, pr	evious inspections), if av	ailable:		
Remarks:						
Remarks.						