Appendix B DATA FORMS

B.1 WETLAND DETERMINATION FORMS





Project/Site:	NCL -alterr						Stantec Project #:	193707055		Date:	02/20/20	
Applicant:	Columbia (Gas of Ohio								County:	Delaware	
Investigator #1:	Angela Sjo	llema		Invest	igator #2:	Charlie	Allen			State:	Ohio	
Soil Unit:	Blount silt I	oam, ground morai	ne, 2-4%	slopes	-	N	WI/WWI Classification:	PFO1C		Wetland ID:	N/A	
Landform:	Terrace	, 0	•		al Relief:	None				Sample Point:	SP01	
Slope (%):	0	Latitude	40.221205		ongitude		59	Datum:	WGS 1984	Community ID:		
	-	ditions on the site ty						Yes	No	Section:	N/A	
Are Vegetation		•	nificantly			(11 110, 04p10	Are normal circumsta				N/A	
•		, ,, ,		•			Yes	No	f	Township:		NI ΝΙ/Λ
Are Vegetation		or Hydrology na	turally pr	obiemai	IC?		res	INO		Range:	N/A L	Dir: N/A
SUMMARY OF												
Hydrophytic Ve	getation Pre	sent?		Yes	s No)		Hydric Soils				∕es No
Wetland Hydrol	logy Present	?		Yes	s No)		Is This Samp	oling Point	Within A Wetla	and? Y	res No
Remarks:	NWI point,	not a wetlands										
HYDROLOGY												
Wetland Hydr	ology Indic	ators (Check here	if indicate	ors are r	not prese	nt):						
Primary:	-								Secondary:			
	A1 - Surface					er-Stained				B6 - Surface Sc		
	A2 - High Wa					uatic Fauna				B10 - Drainage		
	A3 - Saturation					e Aquatic I				C2 - Dry-Seaso		ie
	B1 - Water M					ogen Sulfic				C8 - Crayfish B		
	B2 - Sedimer						spheres on Living Roots			C9 - Saturation		
	B3 - Drift De						educed Iron			D1 - Stunted or		ints
	B4 - Algal Ma						duction in Tilled Soils			D2 - Geomorph D5 - FAC-Neutr		
	B5 - Iron Dep					Muck Surf				D5 - FAC-Neutr	ai rest	
		on Visible on Aerial Im Vegetated Concave				ge or Well plain in Re						
	bo - Sparser	vegetated Concave	Suriace		Other (E)	piairi iri Ne	marks)					
Field Observat	tions:											
Surface Water	Present?	Yes ✓ No	Depth:		(in.)			Wetland Hy	drology Br	ocont?	Yes 🔽	do
Water Table Pr	esent?	Yes No	Depth:		(in.)			welland ny	urology Fi	esenti	resi	10
Saturation Pres	sent?	Yes No	Depth:		(in.)							
			· · ·				e \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		N1/A			
	ied Data (str	eam gauge, monitor	ing weii, a	ieriai pno	otos, previ	ous inspe	ctions), if available:		N/A			
Remarks:												
SOILS												
Map Unit Name	j.	Blount silt loam, gr	ound mo	raine. 2	-4% slope	es.						
							tion, D=Depletion, RM=Reduced Matrix, CS=	Counted/Control Cond Co	ning: Lagation: DL - D	oro Lining M. Metriy)		
		are depart needed to document the in	idicator or contin			pe. C=Concentra			airis, Location. FL=F	ore ciriling, ivi=iviatrix)	То	xture
Тор	Bottom		L .	Matrix				ox Features	_		1	
Depth	Depth	Horizon		(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay,	sand, loam)
0	7		10YR	3/3	94	5YR	3/4	6	С	M	silty cl	lay loam
7	10		10YR	4/3	95	7.5YR	4/4	5	С	M	- 216	
10	17		+					5		IVI	SIIT	y clay
			10YR	4/3			· · · · · · · · · · · · · · · · · · ·					y clay v clav
			10YR	4/3	91	7.5YR	4/6	6	С	M	silty	y clay
					91	7.5YR 7.5YR	4/6 6/8	6 3	C C	M M	silty silty	y clay y clay
 17			 10YR	 4/4	91 55	7.5YR	4/6	6	С	M	silty silty	y clay
					91	7.5YR 7.5YR	4/6 6/8	6 3	C C	M M	silty silty	y clay y clay
17	 20		 10YR	 4/4	91 55	7.5YR 7.5YR 7.5YR	4/6 6/8 5/8	6 3 15	C C	M M M	silty silty silty silty	y clay y clay y clay
17	 20 		 10YR 10YR	 4/4 4/2	91 55 30	7.5YR 7.5YR 7.5YR 	4/6 6/8 5/8	6 3 15 	C C C	M M M	silty silty silty	y clay y clay y clay y clay
17 	 20 		 10YR 10YR 	 4/4 4/2 	91 55 30 	7.5YR 7.5YR 7.5YR 	4/6 6/8 5/8 	6 3 15 	C C C	M M 	silty silty silty	y clay y clay y clay y clay y clay
17 	 20 Soil Field In		 10YR 10YR 	 4/4 4/2 	91 55 30 	7.5YR 7.5YR 7.5YR esent ✓	4/6 6/8 5/8):	6 3 15 	C C 	M M M 	silty silty silty	y clay y clay y clay y clay y clay
17 	20 Soil Field In	 ndicators (check h	 10YR 10YR 	 4/4 4/2 	91 55 30 are not pr S4 - Sano	7.5YR 7.5YR 7.5YR esent dy Gleyed I	4/6 6/8 5/8):	6 3 15 	C C for Problen	M M M natic Soils ¹ Prairie Redox	silty silty silty	y clay y clay y clay y clay y clay
17 	20 Soil Field In A1- Histosol A2 - Histic E	 ndicators (check h	 10YR 10YR 	 4/4 4/2 	91 55 30 are not pr \$4 - Sand \$5 - Sand	7.5YR 7.5YR 7.5YR esent dy Gleyed I dy Redox	4/6 6/8 5/8):	6 3 15 	C C C for Problen A16 - Coast S7 - Dark Si	M M M M M M M M M M M M M M M M M M M	silty silty	y clay y clay y clay y clay y clay
17 	20 Soil Field Ir A1- Histosol A2 - Histic Ep A3 - Black Hi	 ndicators (check h	 10YR 10YR 	 4/4 4/2 	91 55 30 are not pr \$4 - Sand \$5 - Sand \$6 - Strip	7.5YR 7.5YR 7.5YR esent dy Gleyed I dy Redox ped Matrix	4/6 6/8 5/8): Matrix	6 3 15 Indicators	C C C for Problem A16 - Coast S7 - Dark Sf F12 - Iron-N	M M M M M M M M M M M M M M M M M M M	sity sity sity sity	y clay y clay y clay y clay y clay
17 	20 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black H A4 - Hydroge	ndicators (check hoppedon sticen Sulfide	 10YR 10YR 	 4/4 4/2 	91 55 30 are not pr \$4 - Sand \$5 - Sand \$6 - Strip F1 - Loar	7.5YR 7.5YR 7.5YR 7.5YR esent dy Gleyed I dy Redox ped Matrix ny Muck M	4/6 6/8 5/8): Matrix	6 3 15 Indicators	C C C	M M M matic Soils Prairie Redox urface anganese Mass Shallow Dark Soils Shallow Dark Shall	sity sity sity sity	y clay y clay y clay y clay y clay
17 	20 Soil Field Ir A1- Histosol A2 - Histic Er A3 - Black H A4 - Hydroge A5 - Stratifier	ndicators (check h bipedon stic en Sulfide d Layers	 10YR 10YR 	 4/4 4/2 	91 	7.5YR 7.5YR 7.5YR 7.5YR esent dy Gleyed I dy Redox ped Matrix ny Muck M ny Gleyed	4/6 6/8 5/8): Matrix ineral Matrix	6 3 15 Indicators	C C C	M M M M M M M M M M M M M M M M M M M	sity sity sity sity	y clay y clay y clay y clay y clay
17 	20 Soil Field Ir A1- Histosol A2 - Histic E ₁ A3 - Black H 44 - Hydroge A5 - Stratified A10 - 2 cm M	ndicators (check h pipedon stic stic ns Sulfide d Layers	10YR 10YR 10YR ere if ind	 4/4 4/2 	91 55 30 are not pr \$4 - Sanc \$6 - Strip F1 - Loar F2 - Loar F3 - Depl	7.5YR 7.5YR 7.5YR esent	4/6 6/8 5/8): Matrix ineral Matrix	6 3 15 Indicators	C C C	M M M matic Soils Prairie Redox urface anganese Mass Shallow Dark Soils Shallow Dark Shall	sity sity sity sity	y clay y clay y clay y clay y clay
17 	20 20 30il Field Ir A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm N A11 - Deplete		10YR 10YR 10YR ere if ind	 4/4 4/2 	91 55 30 37	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.6YR	4/6 6/8 5/8): Matrix Matrix fface	6 3 15 Indicators	C C C	M M M matic Soils Prairie Redox urface anganese Mass Shallow Dark Soils Shallow Dark Shall	sity sity sity sity	y clay y clay y clay y clay y clay
17 	20 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydrogg A5 - Stratifier A10 - 2 cm N A11 - Deplete A12 - Thick I		10YR 10YR 10YR ere if ind	 4/4 4/2 	91 55 30 34 - Sant S6 - Strip F1 - Loar F2 - Loar F3 - Depl F6 - Redc F7 - Depl	7.5YR 7.5YR 7.5YR 7.5YR	4/6 6/8 5/8): Matrix ineral Matrix crface Surface	6 3 15 Indicators	C C C	M M M matic Soils Prairie Redox urface anganese Mass Shallow Dark Soils Shallow Dark Shall	sity sity sity sity	y clay y clay y clay y clay y clay
17 	20 20 Soil Field In A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A12 - Thick I S1 - Sandy M		10YR 10YR 10YR ere if ind	 4/4 4/2 	91 55 30 37 30 55 Sanc \$6 - Strip F1 - Loar F2 - Loar F3 - Depl F6 - Redc F7 - Depl	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.6YR	4/6 6/8 5/8): Matrix ineral Matrix crface Surface	6 3 15 Indicators	C C C for Problem A16 - Coast S7 - Dark S7 F12 - Iron-M TF12 - Very Other (Expla	M M M	silty silty silty silty	y clay y clay y clay y clay y clay
17 NRCS Hydric	20 20 Soil Field In A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A12 - Thick I S1 - Sandy M		10YR 10YR 10YR ere if ind	 4/4 4/2 	91 55 30 37 30 55 Sanc \$6 - Strip F1 - Loar F2 - Loar F3 - Depl F6 - Redc F7 - Depl	7.5YR 7.5YR 7.5YR 7.5YR	4/6 6/8 5/8): Matrix ineral Matrix crface Surface	6 3 15 Indicators	C C C for Problem A16 - Coast S7 - Dark S7 F12 - Iron-M TF12 - Very Other (Expla	M M M matic Soils Prairie Redox urface anganese Mass Shallow Dark Soils Shallow Dark Shall	silty silty silty silty	y clay y clay y clay y clay y clay
17 NRCS Hydric	20 20 Soil Field In A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A12 - Thick I S1 - Sandy M	andicators (check hoppedon stic en Sulfide en Sulfide ed Below Dark Surface duck Mineral ucky Peat or Peat	10YR 10YR 10YR ere if ind	 4/4 4/2 	91 55 30 37 30 55 Sanc \$6 - Strip F1 - Loar F2 - Loar F3 - Depl F6 - Redc F7 - Depl	7.5YR 7.5YR 7.5YR 7.5YR	4/6 6/8 5/8): Matrix ineral Matrix crface Surface	6 3 15 Indicators	C C C C	M M M	silty silty silty silty es	y clay y clay y clay y clay y clay
17 NRCS Hydric Restrictive Layer (If Observed)		andicators (check hoppedon stic en Sulfide en Sulfide ed Below Dark Surface duck Mineral ucky Peat or Peat	10YR 10YR 10YR ere if ind	 4/4 4/2 icators a	91 55 30 37 38 - Strip F1 - Loar F2 - Loar F3 - Depl F6 - Redo F7 - Depl F8 - Redo	7.5YR 7.5YR 7.5YR 7.5YR	4/6 6/8 5/8): Matrix ineral Matrix crface Surface	6 3 15 Indicators	C C C C	M M M	silty silty silty silty es	y clay y clay y clay y clay y clay
17 NRCS Hydric		andicators (check hoppedon stic en Sulfide en Sulfide ed Below Dark Surface duck Mineral ucky Peat or Peat	10YR 10YR 10YR ere if ind	 4/4 4/2 icators a	91 55 30 37 38 - Strip F1 - Loar F2 - Loar F3 - Depl F6 - Redo F7 - Depl F8 - Redo	7.5YR 7.5YR 7.5YR 7.5YR	4/6 6/8 5/8): Matrix ineral Matrix crface Surface	6 3 15 Indicators	C C C C	M M M	silty silty silty silty es	y clay y clay y clay y clay y clay
17 NRCS Hydric Restrictive Layer (If Observed)		andicators (check hoppedon stic en Sulfide en Sulfide ed Below Dark Surface duck Mineral ucky Peat or Peat	10YR 10YR 10YR ere if ind	 4/4 4/2 icators a	91 55 30 37 38 - Strip F1 - Loar F2 - Loar F3 - Depl F6 - Redo F7 - Depl F8 - Redo	7.5YR 7.5YR 7.5YR 7.5YR	4/6 6/8 5/8): Matrix ineral Matrix crface Surface	6 3 15 Indicators	C C C	M M M	silty silty silty silty es	y clay y clay y clay y clay y clay
17 NRCS Hydric Restrictive Layer (If Observed)		andicators (check hoppedon stic en Sulfide en Sulfide ed Below Dark Surface duck Mineral ucky Peat or Peat	10YR 10YR 10YR ere if ind	 4/4 4/2 icators a	91 55 30 37 38 - Strip F1 - Loar F2 - Loar F3 - Depl F6 - Redo F7 - Depl F8 - Redo	7.5YR 7.5YR 7.5YR 7.5YR	4/6 6/8 5/8): Matrix ineral Matrix crface Surface	6 3 15 Indicators	C C C	M M M	silty silty silty silty es	y clay y clay y clay y clay y clay
17 NRCS Hydric Restrictive Layer (If Observed)		andicators (check hoppedon stic en Sulfide en Sulfide ed Below Dark Surface duck Mineral ucky Peat or Peat	10YR 10YR 10YR ere if ind	 4/4 4/2 icators a	91 55 30 37 38 - Strip F1 - Loar F2 - Loar F3 - Depl F6 - Redo F7 - Depl F8 - Redo	7.5YR 7.5YR 7.5YR 7.5YR	4/6 6/8 5/8): Matrix ineral Matrix crface Surface	6 3 15 Indicators	C C C	M M M	silty silty silty silty es	y clay y clay y clay y clay y clay sturbed or problematic.



Project/Site: NCL - alternate route Wetland ID: N/A Sample Point: SP01 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Quercus palustris 75 **FACW FACW** Number of Dominant Species that are OBL, FACW, or FAC: ____1 (A) 2. 5 Carya laciniosa Ν 3. Fagus grandifolia 2 Ν **FACU** 4. Total Number of Dominant Species Across All Strata: 5 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 20% (A/B) 6. 7. 8 Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 82 FACW spp. 77 x 2 = FAC spp. 0 x 3 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 74 Fagus grandifolia UPL spp. x 5 = 2 FACW 2 Quercus palustris Ν 3. Fraxinus americana 5 Υ FACU 151 _(A) 450 Total 4. 5. Prevalence Index = B/A = 2.980 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation Yes ✓ No 10. Yes ✓ No Dominance Test is > 50% Total Cover = 12 Yes No Prevalence Index is ≤ 3.0 * Morphological Adaptations (Explain) * Yes No Herb Stratum (Plot size: 5 ft radius) Problem Hydrophytic Vegetation (Explain) * Yes No 1. Rosa multiflora 30 Υ **FACU** * Indicators of hydric soil and wetland hydrology must be **FACU** 2 Fagus grandifolia 2 Ν present, unless disturbed or problematic. 3. 25 **FACU** Fraxinus americana 4. **Definitions of Vegetation Strata:** 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 57 Woody Vine Stratum (Plot size: 30 ft radius) 1. Hydrophytic Vegetation Present ■ Yes No 3. 4. 5. Total Cover = 0 Remarks: 43% open ground

Additional Remar	ks:					



										T _		
Project/Site:	NCL - alter						Stantec Project #:	193707055		Date:	02/20/20	
Applicant:	Columbia (Gas of Ohio								County:	Delaware	
Investigator #1:	Angela Sio	llema		Invest	igator #2:	Charlie .	Allen			State:	Ohio	
Soil Unit:	Blount silt I	oam, ground morai	ne. 0-2%				IWI/WWI Classification:	PEM1C		Wetland ID:	N/A	
Landform:	Terrace	, g	,/-		al Relief:	None				Sample Point:		
Slope (%):	0	l atitudo	40.2213		ongitude:		77	Dotum:	WGS 1984	Community ID:		
		ditions on the site ty						Yes		1 '		
						(II no, expia			No	Section:	N/A	
Are Vegetation			gnificantly				Are normal circumsta	•	,	Township:	N/A	
Are Vegetation		or Hydrology na	turally pr	oblemat	ic?		Yes	No		Range:	N/A Dir:	N/A
SUMMARY OF	FINDINGS											
Hydrophytic Ve	getation Pre	sent?		Yes	No			Hydric Soils	Present?		Yes	s No
Wetland Hydro				Yes						Within A Wetl		
Remarks:	0,	eld ag land. NWI po	vint not o					io mio camp	Jillig i Oli it	***************************************	ana. Io	3 110
Remarks.	Tilleu all tie	ay lanu. MWI pu	JIIII, HOLA	welland	ı							
HYDROLOGY												
Wetland Hydr	ology Indic	ators (Check here	if indicate	ore are r	not nreser	nt):						
_		ators (Crieck riere	II IIIulcall	ois aic i	ioi presei	ıı).			0			
<u>Primary:</u>	•	147.1			DO 14/	0			Secondary:	DO 0 (0		
	A1 - Surface					er-Stained				B6 - Surface So		
	A2 - High Wa					uatic Fauna				B10 - Drainage		
	A3 - Saturation					e Aquatic				C2 - Dry-Seaso		
	B1 - Water M					ogen Sulfi				C8 - Crayfish B		
	B2 - Sedimer						spheres on Living Roots			C9 - Saturation		0 ,
	B3 - Drift De						educed Iron			D1 - Stunted or		S
	B4 - Algal Ma						duction in Tilled Soils			D2 - Geomorph		
	B5 - Iron Dep					Muck Surf				D5 - FAC-Neuti	ral Test	
		on Visible on Aerial Im-				ge or Well						
	B8 - Sparsely	/ Vegetated Concave S	Surface		Other (Ex	plain in Re	marks)					
Field Observat	tions:											
		Take No	D	0.5	/: \							
Surface Water		✓Yes No	Depth:		(in.)			Wetland Hyd	drology Pr	resent?	Yes No	
Water Table Pr	esent?	Yes No	Depth:		(in.)							
Saturation Pres	sent?	Yes No	Depth:		(in.)							
Dogoribo Bosoro	lad Data (atr	oom gougo monitori	ing wall o	orial ph	otoo provi	oue inene	ctions) if available:		N/A			
Describe Record	ieu Dala (Sil	eam gauge, monitori	ina wen. a									
_					nos, previ	ous mspe	ctions), ii available.		IN/A			
Remarks:	Surface wa	ter could be from re			nos, previ	ous mspe	ctions), ii available.		IN/A			
Remarks:	Surface wa	ter could be from re			nos, previ	ous mspe	clions), ii avaliable.		IN/A			
	Surface wa	ter could be from re			nos, previ	ous mspe	clions), ii avaliable.		N/A			
SOILS			ecent sno	ow melt			ctions), ii avaliable.		IV/A			
SOILS Map Unit Name	e:	Blount silt loam, gr	ecent sno	raine, 0	-2% slope	es						
SOILS Map Unit Name Profile Descrip	e: otion (Describe to	Blount silt loam, gr	ecent sno	raine, 0	-2% slope of indicators.) (Ty	es	; idion, D=Depletion, RM=Reduced Matrix, CS=	=Covered/Coated Sand Gra		Pore Lining, M=Matrix)		
SOILS Map Unit Name	e:	Blount silt loam, gr	ecent sno	raine, 0	-2% slope of indicators.) (Ty	es	; idion, D=Depletion, RM=Reduced Matrix, CS=			Pore Lining, M=Matrix)	Textu	-
SOILS Map Unit Name Profile Descrip	e: otion (Describe to	Blount silt loam, gr	round mo	raine, 0	-2% slope of indicators.) (Ty	es	; idion, D=Depletion, RM=Reduced Matrix, CS=	=Covered/Coated Sand Gra		Pore Lining, M=Matrix) Location	Textu (e.g. clay, sa	-
SOILS Map Unit Name Profile Descrip Top Depth	e: otion (Describe to Bottom Depth	Blount silt loam, gr	round mo	raine, 0- m the absence of Matrix (Moist)	2% slope of indicators.) (Ty	es	tion, D=Depletion, RM=Reduced Matrix, CS= RedC	-Covered/Coated Sand Gra	nins; Location: PL=P		(e.g. clay, sa	and, loam)
SOILS Map Unit Name Profile Descrip Top Depth 0	e: Bottom Depth 14	Blount silt loam, gr the depth needed to document the in Horizon	ound mo ndicator or confirm Color 10YR	raine, 0- m the absence Matrix (Moist) 4/3	2% slope of indicators.) (Ty	es C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist)	-Covered/Coated Sand Gra DX Features %	Type	Location	(e.g. clay, sa	and, loam) oam
SOILS Map Unit Name Profile Descrip Top Depth 0 14	e: btion (Describe to Bottom Depth 14 16	Blount silt loam, gr the depth needed to document the in Horizon 	ound mo dicator or confirm Color 10YR 10YR	raine, 0- m the absence Matrix (Moist) 4/3 4/3	2% slope of indicators.) (Ty % 100 97	es pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix. CS= Redo Color (Moist) 5/8	o-Covered/Coated Sand Grap Export Seatures % 3	Type C	Location M	(e.g. clay, sa clay lo	and, loam) pam pam
SOILS Map Unit Name Profile Descrip Top Depth 0	e: Bottom Depth 14	Blount silt loam, gr the depth needed to document the in Horizon	ound mo ndicator or confirm Color 10YR	raine, 0- m the absence Matrix (Moist) 4/3	2% slope of indicators.) (Ty	es C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist)	-Covered/Coated Sand Gra DX Features %	Type	Location	(e.g. clay, sa	and, loam) pam pam
SOILS Map Unit Name Profile Descrip Top Depth 0 14	e: btion (Describe to Bottom Depth 14 16	Blount silt loam, gr the depth needed to document the in Horizon 	ound mo dicator or confirm Color 10YR 10YR	raine, 0- m the absence Matrix (Moist) 4/3 4/3	2% slope of indicators.) (Ty % 100 97	es pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix. CS= Redo Color (Moist) 5/8	o-Covered/Coated Sand Grap Export Seatures % 3	Type C	Location M	(e.g. clay, sa clay lo	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 20	Blount silt loam, gr the depth needed to document the in Horizon 	cound mo adicator or confirm Color 10YR 10YR 10YR	raine, 0- matheabsence Matrix (Moist) 4/3 4/3 5/2	2% slope of indicators.) (Ty % 100 97 58	pe: C=Concentra 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8	-Covered/Coated Sand Grac Export Seatures % 3 15	Type C C	Location M M	(e.g. clay, sa clay lo clay lo cla	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20	Blount silt loam, gr the depth needed to document the in Horizon	ound mo ound mo dicator or confirm Color 10YR 10YR 10YR	raine, 0- mathe absence Matrix (Moist) 4/3 4/3 5/2	2% slope % 100 97 58	7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix. CS= Redo Color (Moist) 5/8 5/8	occovered/Coated Sand Graphs Cox Features % 3 15	Type C C	Location M M	(e.g. clay, sa clay lo clay lo cla 	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20	Blount silt loam, gr the depth needed to document the in Horizon	ound mo adicator or confirm Color 10YR 10YR 10YR	raine, 0- m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope findicators.) (Ty % 100 97 58	7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8	-Covered/Coated Sand Grac Export Seatures % 3 15	Type C C	Location M M	(e.g. clay, sa clay lc clay lc clay lc clay lc cla	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20	Blount silt loam, gr the depth needed to document the in Horizon	ound mo ound mo dicator or confirm Color 10YR 10YR 10YR	raine, 0- mathe absence Matrix (Moist) 4/3 4/3 5/2	2% slope % 100 97 58	7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix. CS= Redo Color (Moist) 5/8 5/8	occovered/Coated Sand Graphs Cox Features % 3 15	Type C C	Location M M	(e.g. clay, sa clay lo clay lo cla 	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20	Blount silt loam, gr the depth needed to document the in Horizon	ound mo adicator or confirm Color 10YR 10YR 10YR	raine, 0- m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope findicators.) (Ty % 100 97 58	7.5YR	tion, D=Depletion, RM=Reduced Matrix. CS= Redo Color (Moist) 5/8 5/8	occovered/Coated Sand Graphs Cox Features % 3 15	Type C C	Location M M	(e.g. clay, sa clay lc clay lc clay lc clay lc cla	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20	Blount silt loam, gr the depth needed to document the in Horizon	cound mo adicator or confirm Color 10YR 10YR 10YR	raine, 00m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope of indicators.) (Ty % 100 97 58	7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8	S-Covered/Coated Sand Grac OX Features % 3 15	Type C C	Location M M	(e.g. clay, sa clay lc clay lc clay lc clay lc clar	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20 Soil Field In	Blount silt loam, gr the depth needed to document the in Horizon	cound mo adicator or confirm Color 10YR 10YR 10YR	raine, 00m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope of indicators.) (Ty % 100 97 58 ure not pre-	7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8	-Covered/Coated Sand Gra DX Features % 3 15 Indicators	Type C C for Problem	Location M M natic Soils 1	(e.g. clay, sa clay lc clay lc clay lc clay lc clar	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20 Soil Field Ir	Blount silt loam, gr the depth needed to document the in Horizon	cound mo adicator or confirm Color 10YR 10YR 10YR	raine, 00m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope of indicators.) (Ty % 100 97 58 S4 - Sanc S	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8	-Covered/Coated Sand Gra DX Features % 3 15 Indicators	Type C C for Problen A16 - Coast	Location M M	(e.g. clay, sa clay lc clay lc clay lc clay lc clar	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20 Soil Field Ir A1- Histosol A2 - Histic E	Blount silt loam, gr the depth needed to document the ir Horizon	cound mo adicator or confirm Color 10YR 10YR 10YR	raine, 00m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope 2% slope 100 97 58 are not pre \$4 - Sanc \$5 - Sanc \$5 - Sanc	7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Watrix	-Covered/Coated Sand Gra DX Features % 3 15 Indicators	Type C C for Problen A16 - Coast S7 - Dark Si	Location M M	(e.g. clay, sacceler, sacc	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20 Soil Field In A1- Histosol A3 - Black Hi	Blount silt loam, gr the depth needed to document the in Horizon	cound mo adicator or confirm Color 10YR 10YR 10YR	raine, 00m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope f indicators.) (Ty % 100 97 58 are not pre \$4 - Sanc \$6 - Strip \$6 - Strip	7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix	-Covered/Coated Sand Gra DX Features % 3 15 Indicators	Type C C for Problen A16 - Coasts F12 - Iron-N	Location M M	(e.g. clay, sa clay lo	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20 Soil Field It A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge	Blount silt loam, gr the depth needed to document the in Horizon	cound mo adicator or confirm Color 10YR 10YR 10YR	raine, 00m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope // 100 // 100 // 58 / / / / / / / / / /-	7.5YR 7.5YR 7.5YR seent dy Gleyed I dy Redox ped Matrix ny Muck M	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix	-Covered/Coated Sand Gra DX Features % 3 15 Indicators	Type C C for Problen A16 - Coast S7 - Dark S6 F12 - Iron-M TF12 - Very	Location M M	(e.g. clay, sa clay lo	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20 Soil Field Ir A1- Histosol A2 - Histic E1 A3 - Black H A4 - Hydroge A5 - Stratifier	Blount silt loam, gr the depth needed to document the int Horizon	cound mo adicator or confirm Color 10YR 10YR 10YR	raine, 00m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope of indicators.) (Ty % 100 97 58 sre not pre \$4 - Sanc \$5 - Sanc \$5 - Strip F1 - Loan F2 - Loan	7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix Matrix	-Covered/Coated Sand Gra DX Features % 3 15 Indicators	Type C C for Problen A16 - Coast S7 - Dark S6 F12 - Iron-M TF12 - Very	Location M M	(e.g. clay, sa clay lo	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20 Soil Field In A1- Histosol A2 - Histic E; A3 - Black H 44 - Hydroge A5 - Stratifier A10 - 2 cm M	Blount silt loam, gr the depth needed to document the in Horizon	Cound mondicator or confirmation of the confir	raine, 00m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope of indicators.) (Ty % 100 97 58 are not pre \$4 - Sanc \$5 - Sanc \$6 - Strip F1 - Loan F2 - Loan F3 - Deple	7.5YR	filion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix Ineral Matrix	-Covered/Coated Sand Gra DX Features % 3 15 Indicators	Type C C for Problen A16 - Coast S7 - Dark S6 F12 - Iron-M TF12 - Very	Location M M	(e.g. clay, sa clay lo	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black H A4 - Hydroge A5 - Stratifiee A11 - Deplete	Blount silt loam, gr the depth needed to document the in Horizon	Cound mondicator or confirmation of the confir	raine, 00m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope 9% 100 97 58 ure not pre \$4 - Sanc \$5 - Sanc \$6 - Strip F1 - Loan F2 - Loan F3 - Deple	7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix inneral Matrix crface	-Covered/Coated Sand Gra DX Features % 3 15 Indicators	Type C C for Problen A16 - Coast S7 - Dark S6 F12 - Iron-M TF12 - Very	Location M M	(e.g. clay, sa clay lo	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20 Soil Field Ir A1- Histosol A2 - Histic E, A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A12 - Thick I	Blount silt loam, gr the depth needed to document the int Horizon	Cound mondicator or confirmation of the confir	raine, 00m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope 100 97 58 tre not pre S4 - Sanc S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix ineral Matrix of face Surface Surface	-Covered/Coated Sand Gra DX Features % 3 15 Indicators	Type C C for Problen A16 - Coast S7 - Dark S6 F12 - Iron-M TF12 - Very	Location M M	(e.g. clay, sa clay lo	oam oam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20 Soil Field Ir A1- Histosol A2 - Histic E A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A12 - Thick I S1 - Sandy M	Blount silt loam, gr the depth needed to document the int Horizon	Cound mondicator or confirmation of the confir	raine, 00m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope 100 97 58 tre not pre S4 - Sanc S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix ineral Matrix of face Surface Surface	Covered/Coated Sand Grac X Features % 3 15 Indicators	Type C C for Problen A16 - Coast S7 - Dark S6 F12 - Iron-M TF12 - Very Other (Explain	Location M M	(e.g. clay, sa clay lc clay lc clay lc clay lc clay lc clay lc cla	and, Ioam) Dam Dam Dam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20 Soil Field Ir A1- Histosol A2 - Histic E A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A12 - Thick I S1 - Sandy M	Blount silt loam, gr the depth needed to document the int Horizon	Cound mondicator or confirmation of the confir	raine, 00m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope 100 97 58 tre not pre S4 - Sanc S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix ineral Matrix of face Surface Surface	Covered/Coated Sand Grac X Features % 3 15 Indicators	Type C C for Problen A16 - Coast S7 - Dark S6 F12 - Iron-M TF12 - Very Other (Explain	Location M M	(e.g. clay, sa clay lc clay lc clay lc clay lc clay lc clay lc cla	and, Ioam) Dam Dam Dam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16	Bottom Depth 14 16 20 Soil Field In A1- Histosol A2 - Histic E, A3 - Black Hi A4 - Hydroge A5 - Stratifiee A10 - 2 cm N A11 - Deplet A12 - Thick I S1 - Sandy N S3 - 5 cm Mi	Blount silt loam, gr the depth needed to document the interpretation	Cound mo Addicator or confirm Color 10YR 10YR 10YR	raine, 0- m the absence Matrix (Moist) 4/3 4/3 5/2 icators a	2% slope 9% 100 97 58 S4 - Sanc S6 - Strip F1 - Loan F2 - Loan F2 - Loan F3 - Depli F6 - Redc F7 - Depli F8 - Redc	7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix ineral Matrix of face Surface Surface	Covered/Coated Sand Grac OX Features % 3 15 Indicators of hydrophyte	Type C C for Problem A16 - Coasts S7 - Dark St F12 - Iron-N TF12 - Very Other (Expla	Location M M	(e.g. clay, sa clay lo	and, Ioam) Dam Dam Dam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16 NRCS Hydric	Bottom Depth 14 16 20 Soil Field Ir A1- Histosol A2 - Histic E A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplet A12 - Thick I S1 - Sandy M	Blount silt loam, gr the depth needed to document the interpretation	Cound mo Addicator or confirm Color 10YR 10YR 10YR	raine, 00m the absence Matrix (Moist) 4/3 4/3 5/2	2% slope 100 97 58 tre not pre S4 - Sanc S6 - Strip F1 - Loan F2 - Loan F3 - Deple F6 - Redc F7 - Deple	7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix ineral Matrix of face Surface Surface	Covered/Coated Sand Grac X Features % 3 15 Indicators	Type C C for Problem A16 - Coasts S7 - Dark St F12 - Iron-N TF12 - Very Other (Expla	Location M M	(e.g. clay, sa clay lc clay lc clay lc clay lc clay lc clay lc cla	and, Ioam) Dam Dam Dam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16 NRCS Hydric	Bottom Depth 14 16 20 Soil Field In A1- Histosol A2 - Histic E, A3 - Black Hi A4 - Hydroge A5 - Stratifiee A10 - 2 cm N A11 - Deplet A12 - Thick I S1 - Sandy N S3 - 5 cm Mi	Blount silt loam, gr the depth needed to document the interpretation	Cound mo Addicator or confirm Color 10YR 10YR 10YR	raine, 0- m the absence Matrix (Moist) 4/3 4/3 5/2 icators a	2% slope 9% 100 97 58 S4 - Sanc S6 - Strip F1 - Loan F2 - Loan F2 - Loan F3 - Depli F6 - Redc F7 - Depli F8 - Redc	7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix ineral Matrix of face Surface Surface	Covered/Coated Sand Grac OX Features % 3 15 Indicators of hydrophyte	Type C C for Problem A16 - Coasts S7 - Dark St F12 - Iron-N TF12 - Very Other (Expla	Location M M	(e.g. clay, sa clay lo	and, Ioam) Dam Dam Dam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16 NRCS Hydric	Bottom Depth 14 16 20 Soil Field In A1- Histosol A2 - Histic E, A3 - Black Hi A4 - Hydroge A5 - Stratifiee A10 - 2 cm N A11 - Deplet A12 - Thick I S1 - Sandy N S3 - 5 cm Mi	Blount silt loam, gr the depth needed to document the interpretation	Cound mo Addicator or confirm Color 10YR 10YR 10YR	raine, 0- m the absence Matrix (Moist) 4/3 4/3 5/2 icators a	2% slope 9% 100 97 58 S4 - Sanc S6 - Strip F1 - Loan F2 - Loan F2 - Loan F3 - Depli F6 - Redc F7 - Depli F8 - Redc	7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix ineral Matrix of face Surface Surface	Covered/Coated Sand Grac OX Features % 3 15 Indicators of hydrophyte	Type C C for Problem A16 - Coasts S7 - Dark St F12 - Iron-N TF12 - Very Other (Expla	Location M M	(e.g. clay, sa clay lo	and, Ioam) Dam Dam Dam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16 NRCS Hydric	Bottom Depth 14 16 20 Soil Field In A1- Histosol A2 - Histic E, A3 - Black Hi A4 - Hydroge A5 - Stratifiee A10 - 2 cm N A11 - Deplet A12 - Thick I S1 - Sandy N S3 - 5 cm Mi	Blount silt loam, gr the depth needed to document the interpretation	Cound mo Addicator or confirm Color 10YR 10YR 10YR	raine, 0- m the absence Matrix (Moist) 4/3 4/3 5/2 icators a	2% slope 9% 100 97 58 S4 - Sanc S6 - Strip F1 - Loan F2 - Loan F2 - Loan F3 - Depli F6 - Redc F7 - Depli F8 - Redc	7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix ineral Matrix of face Surface Surface	Covered/Coated Sand Grac OX Features % 3 15 Indicators of hydrophyte	Type C C for Problem A16 - Coasts S7 - Dark St F12 - Iron-N TF12 - Very Other (Expla	Location M M	(e.g. clay, sa clay lo	and, Ioam) Dam Dam Dam y
SOILS Map Unit Name Profile Descrip Top Depth 0 14 16 NRCS Hydric	Bottom Depth 14 16 20 Soil Field In A1- Histosol A2 - Histic E, A3 - Black Hi A4 - Hydroge A5 - Stratifiee A10 - 2 cm N A11 - Deplet A12 - Thick I S1 - Sandy N S3 - 5 cm Mi	Blount silt loam, gr the depth needed to document the interpretation	Cound mo Addicator or confirm Color 10YR 10YR 10YR	raine, 0- m the absence Matrix (Moist) 4/3 4/3 5/2 icators a	2% slope 9% 100 97 58 S4 - Sanc S6 - Strip F1 - Loan F2 - Loan F2 - Loan F3 - Depli F6 - Redc F7 - Depli F8 - Redc	7.5YR 7.5YR 7.5YR	tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 5/8 5/8): Matrix ineral Matrix of face Surface Surface	Covered/Coated Sand Grac OX Features % 3 15 Indicators of hydrophyte	Type C C for Problem A16 - Coasts S7 - Dark St F12 - Iron-N TF12 - Very Other (Expla	Location M M	(e.g. clay, sa clay lo	and, Ioam) Dam Dam Dam y



Project/Site: NCL - alternate route Wetland ID: N/A Sample Point: SP02

VEGETATION	(Species identified in all upp	percase are non-na	ative spe	cies.)		
	Plot size: 30 ft radius)			,		
,	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC:1 (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: 33% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 x 1 = 0
		Total Cover =	0			FACW spp. 20 X 2 = 40
						FAC spp. $0 X 3 = 0$
	tratum (Plot size: 15 ft radius)					FACU spp. 35 X 4 = 140
1.						UPL spp. 45 $x = 225$
2.						
3.						Total 100 (A) 405 (B)
4.						
5.						Prevalence Index = B/A = 4.050
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						Yes No Rapid Test for Hydrophytic Vegetation
10.						Yes No Dominance Test is > 50%
		Total Cover =	0			Yes ✓ No Prevalence Index is ≤ 3.0 *
						Yes No Morphological Adaptations (Explain) *
	lot size: 5 ft radius)					Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Echinochloa crus-galli		20	Y	FACW	* Indicators of hydric soil and wetland hydrology must be
2.	Setaria faberi		35	Y	FACU	present, unless disturbed or problematic.
3.	Setaria glauca		45	Y	UPL	
4.						Definitions of Vegetation Strata:
5.						_
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						O H Washington to the O's DOU and an attached 0.00
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						
11.						LL L All hasheaseur (non used) a lente regardless of size
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.						
14.						March March All weeks vince greater then 2.00 ft in height
15.		-				Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	100			
M	(District					
	atum (Plot size: 30 ft radius)					
1.						
2.						Understand Vanctotics Brown V
3.						Hydrophytic Vegetation Present Pyes No
4.						
5.		Total Cover =	0			
Remarks:		i Ulai CUVEI =	U			
iveillatiks.						

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/20/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: PFO1C Blount silt loam, ground moraine, 0-2% slopes Wetland ID: Wetland 1 Soil Unit: Landform: Terrace Local Relief: None Sample Point: SP03 Longitude: -83.105855 Slope (%): Latitude: 40.22117 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Yes • No Hydric Soils Present? □ Yes ■ No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Upland point for Wetland 1

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data

Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants

D2 - Geomorphic Position D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? (in.) Yes ■ No Depth: Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

N/A

Wetland Hydrology Present? • Yes • No

Remarks:

SOILS Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom			Matrix			Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	12		10YR	3/2	100						silty clay
12	20		10YR	4/2	84	5YR	3/4	2	С	M	silty clay
						10YR	5/4	10	С	M	silty clay
					-	10YR	5/8	4	С	M	silty clay
				-	1		-				
					-		-				
NRCS Hydric	Soil Field In	ndicators (check he	ere if ind	icators a	re not pre	esent •):	Indicators	for Problen	natic Soils 1	

NRCS Hydric Soil Field Indicators (check here if indicators are not present.):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface

S7 - Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**



Project/Site: NCL - alternate route Wetland ID: Wetland 1 Sample Point: SP03

VEGETATION	(Species identified in all uppercase are non-n	ative spe	cies.)		
Tree Stratum (F	Plot size: 30 ft radius)				
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	Acer rubrum	40	Υ	FAC	
2.	Quercus palustris	50	Υ	FACW	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% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 x 1 = 0$
	Total Cover =	90			FACW spp. $0 x 2 = 0$
					FAC spp. $0 x 3 = 0$
Sapling/Shrub S	tratum (Plot size: 15 ft radius)				FACU spp. $0 x 4 = 0$
1.	Lindera benzoin	70	Υ	FACW	UPL spp. $0 x 5 = 0$
2.	Fagus grandifolia	2	N	FACU	
3.					Total (A) (B)
4.					
5.					Prevalence Index = B/A = NA
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					 Yes No Rapid Test for Hydrophytic Vegetation
10.					■ Yes ■ No Dominance Test is > 50%
	Total Cover =	72			Yes ■ No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (P	Plot size: 5 ft radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.					
2.					* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.					present, unless disturbed of problematic.
4.					Definitions of Vegetation Strata:
5.					-
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
10.	Total Cover =	0			
	Total Gover =	O			
Woody Vine Str	atum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present = Yes = No
4.					Trydrophytic vegetation Fresent = 165 2 140
5.					
J.	Total Cover =				
Remarks:	Total Cover =				
rtomanto.					

No herb layer	



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/20/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: PFO1C Blount silt loam, ground moraine, 0-2% slopes Wetland ID: Wetland 1 Soil Unit: Landform: Terrace Local Relief: Concave Sample Point: SP04 Longitude: -83.106451 Slope (%): Latitude: 40.2212 Datum: WGS 1984 Community ID: PFO Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Yes • No Hydric Soils Present? YesNo Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland?

Remarks: Wet point for wetland 1

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present?
Yes
No

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? ■ Yes □ No Depth: Surface (in.) Saturation Present? ■ Yes ■ No Depth: 1 (in.)

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

Remarks:

SOILS

Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

					(.)		,				
Тор	Bottom			Matrix			Redo	Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	2		10YR	3/2	100						silty clay loam
2	9		10YR	3/1	97	7.5YR	5/6	3	С	M	silty clay loam
9	20		10YR	3/1	90	7.5YR	6/8	10	С	M	silty clay loam
							-				
							-				
							-				
							-				

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**



Project/Site: NCL - alternate route Wetland ID: Wetland 1 Sample Point: SP04 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Quercus palustris **FACW** Number of Dominant Species that are OBL, FACW, or FAC: _____5 ___(A) **FACW** 2. 10 Υ Carya laciniosa 3. Acer rubrum 15 FAC 4. Total Number of Dominant Species Across All Strata: 5 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 6. 7. 8 Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 40 0 FACW spp. x 2 = FAC spp. 0 x 3 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 0 Lindera benzoin **FACW** UPL spp. x 5 = Acer negundo 3 FAC 2 Ν 3. Carya laciniosa 3 Ν **FACW** 0 __(A) Total 4. 5. Prevalence Index = B/A = NA 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation Yes No 10. ■ No Yes Dominance Test is > 50% Total Cover = 31 Yes ■ No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) □ No Problem Hydrophytic Vegetation (Explain) * Yes 1. Carex grayi 20 Υ **FACW** * Indicators of hydric soil and wetland hydrology must be 2 present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 --5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 20 Woody Vine Stratum (Plot size: 30 ft radius) 1.

Hydrophytic Vegetation Present = Yes - No

Additional Remarks:

Total Cover =

0

sparse herb stratum

3. 4. 5.



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/20/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen Ohio NWI/WWI Classification: PFO1C PWA -Pewamo silty clay loam, 0-1% slopes Wetland ID: Soil Unit: N/A Landform: Terrace Local Relief: Concave Sample Point: SP05 Longitude: -83.107322 Slope (%): Latitude: 40.22137 Ω Datum: WGS 1984 Community ID: PFO Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? YesNo Hydric Soils Present? □ Yes ■ No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Drain present in concave, NWI Point

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust

B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves B13 - Aquatic Fauna B14 - True Aquatic Plants

C1 - Hydrogen Sulfide Odor C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

Field Observations:

Surface Water Present? Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Remarks: Drain present within concave

SOILS

Map Unit Name: PWA -Pewamo silty clay loam, 0-1% slopes Profile Description

Frome Descrip	JUIOII (Describe to	the depth needed to document the in-	dicator or confir	m the absence o	rindicators.) (Ty	pe: C=Concentra	ation, D=Depletion, RM=Reduced Matrix, CS=				
Тор	Bottom			Matrix			Redo	Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	18		10YR	2/2	100						silty clay loam
18	20		10YR	2/2	15	10YR	6/6	5	С	M	silty clay loam
			10YR	3/2	75	10YR	5/6	5	С	M	silty clay loam

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**

Remarks: Shards of clay throughout



Project/Site: NCL - alternate route Wetland ID: N/A Sample Point: SP05 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Ulmus americana 20 **FACW FACU** Number of Dominant Species that are OBL, FACW, or FAC: ____3 ___(A) 2. 15 Υ Carya ovata 3. Acer rubrum 10 FAC 4. Total Number of Dominant Species Across All Strata: 4 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B) 6. 7. 8 Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 45 0 FACW spp. x 2 = FAC spp. 0 x 3 = x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 0 Lindera benzoin **FACW** UPL spp. x 5 = FACW 2 Ulmus americana 10 Ν 3. 0 __(A) Total 4. 5. Prevalence Index = B/A = NA 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation Yes No 10. Yes No Dominance Test is > 50% Total Cover = 60 Yes ■ No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) □ No Problem Hydrophytic Vegetation (Explain) * Yes 1. * Indicators of hydric soil and wetland hydrology must be 2 -present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 --5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 0 Woody Vine Stratum (Plot size: 30 ft radius)

Hydrophytic Vegetation Present = Yes - No

Additional Remarks:

Total Cover =

0

No herb stratum

1.

3. 4. 5.



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/20/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen Ohio NWI/WWI Classification: PFO1C N/A Blount silt loam, ground moraine, 0-2% slopes Wetland ID: Soil Unit: Landform: Terrace Local Relief: Concave Sample Point: SP06 Slope (%): Latitude: 40.22169 Longitude: -83.111582 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Yes • No Hydric Soils Present? YesNo Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: NWI point, no wetland

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits B4 - Algal Mat or Crust

B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves B13 - Aquatic Fauna B14 - True Aquatic Plants

C1 - Hydrogen Sulfide Odor C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Remarks:

SOILS

Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

	(Becombe te	and depart needed to decament and in	alocator or commi	iii aiio abbonioo o	i indidditoro.) (19	o. o-outdottation, b-boptotion, rem-reduced mann, o-o-overed ocaled outdotten, because it be not bring, m-manny						
Тор	Bottom			Matrix			Redo	Texture				
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)	
0	3		10YR	4/3	98	7.5YR	5/6	2	С	M	clay loam	
3	8		10YR	4/3	60	7.5YR	5/6	5	С	M	clay loam	
			10YR	5/1	35		-		1		clay loam	
8	12		10YR	5/1	60	7.5YR	5/6	7	C	M	clay loam	
			10YR	4/3	3		-		-		clay loam	
12	20		10YR	5/1	85	7.5YR	5/6	15	C	M	clay loam	

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat Type: N/A

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

Depth:

N/A

Indicators for Problematic Soils 1

A16 - Coast Prairie Redox

S7 - Dark Surface

Hydric Soil Present?

F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface

Other (Explain in Remarks)

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

" Yes " No

(If Observed) Remarks:

Restrictive Layer



Project/Site: NCL - alternate route Wetland ID: N/A Sample Point: SP06 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Quercus palustris **FACW** 5 FAC Number of Dominant Species that are OBL, FACW, or FAC: ____4 ___(A) 2. Ulmus rubra Ν 3. Carya laciniosa 35 FACW 4. Total Number of Dominant Species Across All Strata: 5 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 80% (A/B) 6. 7. 8 Prevalence Index Worksheet --9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 70 0 FACW spp. x 2 = FAC spp. 0 x 3 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 0 Robinia pseudoacacia 15 **FACU** UPL spp. x 5 = 2. 3. Total 4. 5. Prevalence Index = B/A = NA 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation Yes No 10. Yes No Dominance Test is > 50% Total Cover = 15 Yes ■ No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) □ No Problem Hydrophytic Vegetation (Explain) * Yes 1. Toxicodendron radicans 2 Ν FAC * Indicators of hydric soil and wetland hydrology must be Υ FACW 2 Carex grayi 15 present, unless disturbed or problematic. 3. **FACW** Phalaris arundinacea 10 **Definitions of Vegetation Strata:** 4. --5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 27 Woody Vine Stratum (Plot size: 30 ft radius) 1. Hydrophytic Vegetation Present = Yes - No 3. 4. 5.

Additional Remarks:		

Total Cover =

Remarks:

0



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/20/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen Ohio NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 2 Soil Unit: Landform: Terrace Local Relief: None Sample Point: SP07 Latitude: 40.2217 Slope (%): Community ID: Uplands Longitude: -83.114533 Datum: WGS 1984 Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? YesNo Hydric Soils Present? □ Yes ■ No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Used to be agriculture filed, now old field. Upland point for wetland 2.

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

A1 - Surface Water B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B14 - True Aquatic Plants A3 - Saturation . B1 - Water Marks C1 - Hydrogen Sulfide Odor

B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots B3 - Drift Deposits C4 - Presence of Reduced Iron B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils

B5 - Iron Deposits C7 - Thin Muck Surface B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants

D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Field Observations:

Surface Water Present? (in.) Yes ■ No Depth: Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Depth:

N/A

Remarks:

SOILS

Map Unit Name: Pewamo silty clay loam, 0-1% slopes Profile Description (De

T TOTHE BOOKING	1 1 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 2 2										
Тор	Bottom		Matrix				Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	20		10YR	4/4	100						silty clay loam

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide

A5 - Stratified Layers A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat Type: N/A

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

(If Observed) Remarks:

Restrictive Layer

Hydric Soil Present?

" Yes " No



Project/Site: NCL - alternate route Wetland ID: Wetland 2 Sample Point: SP07

VEGETATION	(Species identified in all uppercase are non-na	ative spec	cies.)		
Tree Stratum (Plo	ot size: 30 ft radius)				
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 0 (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: 0% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 X 1 = 0$
	Total Cover =	0			FACW spp. $0 X 2 = 0$
					FAC spp. $0 X 3 = 0$
Sapling/Shrub Stra	atum (Plot size: 15 ft radius)				FACU spp. 60 X 4 = 240
1.					UPL spp. 40 X 5 = 200
2.					
3.					Total (A) 440 (B)
4.					
5.					Prevalence Index = B/A = 4.400
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.					■ Yes ■ No Dominance Test is > 50%
	Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (Plo	t size: 5 ft radius)				■ Yes ■ No Problem Hydrophytic Vegetation (Explain) *
1.	Symphyotrichum ericoides	25	Υ	FACU	*I. Park of Al. 12 and a standard balance of the
2.	Solidago canadensis	35	Υ	FACU	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.	Setaria glauca	40	Υ	UPL	present, unless distribed of problematic.
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
Woody Vine Strate	um (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present = Yes = No
4.					
5.					
	Total Cover =	0			
Remarks:					

Additional	Romarks.



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/20/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 2 Soil Unit: Landform: Terrace Local Relief: Concave Sample Point: SP08 Latitude: 40.22172 Slope (%): Longitude: -83.114641 Datum: WGS 1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes ФИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? Yes □ No YesNo Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland? Remarks: Large hole dug or collapsed on south side of wetland, water flowing. Wetland point for Wetland 2

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table

A3 - Saturation . B1 - Water Marks

B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves B13 - Aquatic Fauna

B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present?
Yes
No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

Field Observations:

Surface Water Present? (in.) YesNo Depth: 0.5 Water Table Present? Yes No Depth: (in.) 4 Saturation Present? □ Yes ■ No (in.) Depth:

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

Ice. Large hole dug on south side of wetland, water flowing into it

SOILS

Remarks:

Map Unit Name: Pewamo silty clay loam, 0-1% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Costed Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom		Matrix				Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	15		10YR	4/2	94	5YR	4/4	6	С	M	silty clay loam
15	20		10YR	3/3	100						
				-							
				-							
				-							

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 2 Sample Point: SP08

VEGETATION	Species identified in all upp	percase are non-na	ative spe	cies.)		
Tree Stratum (F	Plot size: 30 ft radius)					
	Species Name		% Cover	Dominant	Ind.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% (A/B)
7.						(
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 x 1 = 0
10.		Total Cover =	0			FACW spp. 0
			Ŭ			FAC spp. $\begin{array}{cccc} & & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$
Sapling/Shrub S	tratum (Plot size: 15 ft radius)					FACU spp. 0 x 4 = 0
1.						UPL spp. 0 x 5 = 0
2.						0. 2 opp
3.						Total 0 (A) 0 (B)
4.						10tal <u> </u>
5.						Prevalence Index = B/A = NA
6.						Trevalence mack = B/A =
7.						
8.						Hydrophytic Vegetation Indicators:
9.						■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.						■ Yes ■ No Dominance Test is > 50%
10.		Total Cover =	0			■ Yes ■ No Prevalence Index is ≤ 3.0 *
		Total Cover =	U			
Llash Charter /D	det einer E ft medice)					
1.	lot size: 5 ft radius)		30	Y	OBL	□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
2.	Typha angustifolia Echinochloa crus-galli			Y	FACW	* Indicators of hydric soil and wetland hydrology must be
3.	Juncus effusus		65 5	N T	OBL	present, unless disturbed or problematic.
						Definitions of Vegetation Strate.
4. 5.						Definitions of Vegetation Strata:
						Torr
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.						breast neight (שמה), regardless of neight.
8.						O II (OI I Washington loss than 0 in DDI and an atomic of 0.00
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.						, p
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	100			
Woody Vine Stra	atum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present • Yes • No
4.						
5.						
		Total Cover =	0			
Remarks:						

Additional	Romarke:



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/18/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: N/A Bloundt silt loam, ground moraine, 0-2% slopes Wetland ID: Wetland 3 Soil Unit: Landform: Terrace Local Relief: None Sample Point: SP09 Longitude: -83.116589 Slope (%): Latitude: 40.22164 0-1Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? YesNo Hydric Soils Present? □ Yes ■ No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Upland point for wetland 3

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves B13 - Aquatic Fauna

B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data

Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface

Field Observations:

Surface Water Present? Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Remarks:

SOILS

Map Unit Name: Bloundt silt loam, ground moraine, 0-2% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Texture Top Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location silty clay 10YR 5/3 100 0 3 20 10YR 5YR 4/6 4 С М 3 5/3 96 silty clay ----------------------------

NRCS Hydric Soil Field Indicators (check here if indicators are not present

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface F7 - Depleted Dark Surface

F8 - Redox Depressions

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

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**



Project/Site: NCL - alternate route Wetland ID: Wetland 3 Sample Point: SP09

VEGETATIO	N (Species identified in all uppercase are non-na	ative spe	cies.)		
Tree Stratum (Plot size: 30 ft radius)		· · ·		
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(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: 0% (A/B)
7.					
8.					Prevalence Index Worksheet
9.				-	Total % Cover of: Multiply by:
10.					OBL spp 0
	Total Cover =	0			FACW spp 0
					FAC spp. $1 X 3 = $
Sapling/Shrub	Stratum (Plot size: 15 ft radius)				FACU spp. $\underline{\qquad}$ $\underline{\qquad}$ $\underline{\qquad}$ $\underline{\qquad}$ $\underline{\qquad}$ 16
1.					UPL spp. 95 $x = 5$ 475
2.					
3.					Total 100 (A) 494 (B)
4.					
5.					Prevalence Index = B/A = 4.940
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.					■ Yes ■ No Dominance Test is > 50%
	Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
	Plot size: 5 ft radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Setaria glauca	25	Υ	UPL	* Indicators of hydric soil and wetland hydrology must be
2.	Setaria viridis	70	Υ	UPL	present, unless disturbed or problematic.
3.	Symphyotrichum ericoides	4	N	FACU	•
4.	Xanthium strumarium	1	N	FAC	Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					··· ·····
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
Woody Vine St	ratum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present - Yes - No
4.					
5.					
	Total Cover =	0			
Remarks:					
I					



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/18/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: N/A Blount silt loam, ground moraine, 0-2% slopes Wetland ID: Wetland 3 Soil Unit: Landform: Terrace Local Relief: Concave Sample Point: SP10 Longitude: -83.116653 Slope (%): Latitude: 40.22145 0-1Datum: WGS 1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? YesNo Hydric Soils Present? YesNo Wetland Hydrology Present? Yes • No Is This Sampling Point Within A Wetland? Remarks: Residential house development construction/grading. Wetland point for wetland 3 Wetland Hydrology Indicators (Check here if indicators are not present.): Primary: Secondary: A1 - Surface Water B9 - Water-Stained Leaves B6 - Surface Soil Cracks A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows B2 - Sediment Deposits ✓ C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface ✓ D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? ■ Yes □ No Depth: (in.) Wetland Hydrology Present?
Yes
No Water Table Present? ■ Yes □ Depth: 12 (in.) No Depth: Saturation Present? □ Yes ■ No 0 (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top **Bottom** Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 5YR ΡI silty clay loam **10YR** 90 8 0 6 4/2 4/6 5Y 4/6 2 С М silty clay loam __ __ 10 10YR 7.5YR 4 PL 6 5/2 94 5/8 С silty clay 7.5YR 5/8 2 С М silty clay 10 16 10YR 5/2 95 7.5YR 5/8 5 С M silty clay 16 20 10YR 6/1 85 7.5YR 5/8 15 С M silty clay ----NRCS Hydric Soil Field Indicators (check here if indicators are not present Indicators for Problematic Soils 1 A1- Histosol S4 - Sandy Gleyed Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface F12 - Iron-Manganese Masses A3 - Black Histic S6 - Stripped Matrix TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A5 - Stratified Lavers A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions S3 - 5 cm Mucky Peat or Peat 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** Remarks:



Project/Site: NCL - alternate route Wetland ID: Wetland 3 Sample Point: SP10

VEGETATION	(Species identified in all uppercase are non-	native spe	cies.)		
Tree Stratum (Pl	ot size: 30 ft radius)				
	Species Name	% Cover	Dominant	Ind.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% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0
	Total Cover :	= 0			FACW spp. 0
					FAC spp. $0 X 3 = 0$
Sapling/Shrub Str	atum (Plot size: 15 ft radius)				FACU spp. $0 x 4 = 0$
1.					UPL spp 0
2.					
3.					Total (A) (B)
4.					
5.					Prevalence Index = B/A = NA
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes □ No Rapid Test for Hydrophytic Vegetation
10.					■ Yes □ No Dominance Test is > 50%
	Total Cover :	= 0			Yes ■ No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (Pla	ot size: 5 ft radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Epilobium coloratum	10	N	OBL	1 35 1.05 1.105 1.11 1.10 1.10 1.10 1.10 1.
2.	Juncus tenuis	35	Y	FAC	* Indicators of hydric soil and wetland hydrology must be
3.	Carex vulpinoidea	60	Y	FACW	present, unless disturbed or problematic.
4.	Typha angustifolia	15	N .	OBL	Definitions of Vegetation Strata:
5.	Agrimonia parviflora	5	N	FACW	Definitions of Vegetation offata.
6	Phalaris arundinacea	10	N	FACW	Tree - was disclosed Size (7.0 cm) assessing discussions
7.					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
10.	 				
					Herb - All herbaceous (non-woody) plants, regardless of size,
12.					and woody plants less than 3.28 ft. tall.
13.					
14.					March 1971 - All week wines greater they 2.00 ft. in height
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover :	= 135			
	um (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present • Yes • No
4.					
5.					
	Total Cover :	= 0			
Remarks:					

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/18/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: N/A Blount silt loam, ground moraine, 2-4% slopes Wetland ID: Wetland 4 Soil Unit: Landform: Terrace Local Relief: None Sample Point: SP11 Longitude: -83.119804 Slope (%): Latitude: 40.22146 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? □ Yes ■ No Hydric Soils Present? □ Yes ■ No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Recent snow melt. Upland point for wetland 4 <u>HYDROL</u>OGY Wetland Hydrology Indicators (Check here if indicators are not present:): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? □ Yes ■ No Depth: (in.) Wetland Hydrology Present? • Yes • No Water Table Present? □ Yes ■ Depth: (in.) No Saturation Present? □ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Blount silt loam, ground moraine, 2-4% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Redox Features Texture Top **Bottom** Matrix (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location silty clay loam 10YR 100 0 20 4/3 __ ----------------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present Indicators for Problematic Soils 1 S4 - Sandy Gleved Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface A3 - Black Histic S6 - Stripped Matrix F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A5 - Stratified Lavers A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions S3 - 5 cm Mucky Peat or Peat 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed) Remarks:



Project/Site: NCL - alternate route Wetland ID: Wetland 4 Sample Point: SP11

VEGETATION (Species identified in all uppercase are non-native species)

VEGETATION	(Species identified in all uppercase are non-na	ative spe	cies.)		
Tree Stratum (F	Plot size: 30 ft radius)				
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:0 (A)
3.					
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 X 1 = 0$
	Total Cover =	0			FACW spp. $0 x 2 = 0$
					FAC spp. $\frac{15}{15}$ $x 3 = \frac{45}{15}$
Sapling/Shrub S	tratum (Plot size: 15 ft radius)				FACU spp. 75 x 4 = 300
1.					UPL spp. $10 X 5 = 50$
2.					
3.					Total 100 (A) 395 (B)
4.					
5.					Prevalence Index = B/A = 3.950
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.					■ Yes ■ No Dominance Test is > 50%
	Total Cover =	0			■ Yes ■ No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (F	Plot size: 5 ft radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Symphyotrichum pilosum	60	Υ	FACU	
2.	Juncus tenuis	15	N	FAC	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.	Daucus carota	10	N	UPL	present, unless disturbed of problematic.
4.	Solidago canadensis	15	N	FACU	Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
	. otal oovo.				
Woody Vine Str	atum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present - Yes - No
4.					,
5.					
	Total Cover =				
Remarks:					
1					

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/18/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: N/A Blount silt loam, ground moraine, 2-4% slopes Wetland ID: Wetland 4 Soil Unit: Landform: Terrace Local Relief: Concave Sample Point: SP12 Longitude: -83.119801 Slope (%): Latitude: 40.22152 Datum: WGS 1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? YesNo Hydric Soils Present? YesNo Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland?

Remarks: PEM sample point of wetland 4

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants

D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present?
Yes
No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Field Observations:

Surface Water Present? ■ Yes □ No Depth: (in.) Water Table Present? ■ Yes □ No Depth: Surface (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Remarks:

SOILS

Map Unit Name: Blount silt loam, ground moraine, 2-4% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

	Section of the departmental of declaration in the maneral of the m										
Тор	Bottom			Matrix			Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	3		10YR	5/2	96	7.5YR	4/6	4	С	PL	silty clay loam
3	7	-	10YR	4/2	96	7.5YR	4/6	2	С	PL	silty clay loam
						7.5YR	6/4	2	С	M	silty clay loam
7	20	-	10YR	4/3	47	5YR	3/4	2	С	M	silty clay loam
-		-	10YR	4/2	50	10YR	6/6	1	С	PL	silty clay loam
-		-					-				
-											

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 4 Sample Point: SP12

VEGETATIO	N (Species identified in all uppercase are non-na	ative spec	cies.)		
Tree Stratum	(Plot size: 30 ft radius)				
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.				-	
4.					Total Number of Dominant Species Across All Strata:(B)
5.				-	
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0
	Total Cover =	0			FACW spp. $0 x 2 = 0$
					FAC spp. $0 x 3 = 0$
	Stratum (Plot size: 15 ft radius)				FACU spp. $0 x 4 = 0$
1.					UPL spp. $0 x 5 = 0$
2.					
3.					Total <u> </u>
4.					
5.					Prevalence Index = B/A = NA
6.					
7.					Hadranhadis Vanatatian Indiantana
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.	Total Cover =	0			■ Yes ■ No Dominance Test is > 50%
	Total Cover =	U			■ Yes ■ No Prevalence Index is ≤ 3.0 *
Llank Ctuatura /	(District of the adition)				□ Yes □ No Morphological Adaptations (Explain) *
	Plot size: 5 ft radius)	55	Y	FAC	Yes No Problem Hydrophytic Vegetation (Explain) *
1. 2.	Poa pratensis Symphyotrichum ericoides	5	N	FACU	* Indicators of hydric soil and wetland hydrology must be
3.	Scirpus atrovirens	35	Y	OBL	present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					Deminions of Vegetation Strata.
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	95			•
Woody Vine St	ratum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present = Yes = No
4.					
5.					
	Total Cover =	0			
Remarks:					
1					



WETLAND DETERMINATION DATA FORM

Midwest Region Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/18/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: PFO1A Blount silt loam, ground moraine, 2-4% slopes Wetland ID: Wetland 4 Soil Unit: Landform: Terrace Local Relief: Concave Sample Point: SP13 Longitude: -83.120259 Slope (%): Latitude: 40.22157 Datum: WGS 1984 Community ID: PFO Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? ■ Yes □ No Hydric Soils Present? YesNo Wetland Hydrology Present? ■ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Wetland point PFO community for Wetland 4 Wetland Hydrology Indicators (Check here if indicators are not present): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations:

Surface Water Present? (in.) ■ Yes □ No Depth: 0.5 Water Table Present? ■ Yes □ Depth: 10 (in.) No Depth: Saturation Present? □ Yes ■ No (in.)

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

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

Remarks:

SOILS

Man Unit Name:	Blount silt loam	ground moraine	2-4% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Texture Top Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location silty clay loam 10YR 100 0 6 4/2 10 10YR 4/2 95 7.5YR 4/6 5 С М silty clay loam 6 10 10YR 4/1 10YR 20 94 6/4 2 С M silty clay loam 5YR 4/4 4 С М silty clay loam --------------------------------

NRCS Hydric Soil Field Indicators (check here if indicators are not present -

- A2 Histic Epipedon A3 - Black Histic
- A4 Hydrogen Sulfide
- A5 Stratified Lavers
- A10 2 cm Muck
- A11 Depleted Below Dark Surface A12 - Thick Dark Surface
- S1 Sandy Muck Mineral
- S3 5 cm Mucky Peat or Peat

- S4 Sandy Gleved Matrix
- S5 Sandy Redox
- S6 Stripped Matrix
- F1 Loamy Muck Mineral F2 - Loamy Gleyed Matrix
- F3 Depleted Matrix
- F6 Redox Dark Surface F7 - Depleted Dark Surface
- F8 Redox Depressions

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

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 4 Sample Point: SP13

VEGETATION	(Species identified in all uppercase are non-na	ative spe	cies.)		
Tree Stratum (F	Plot size: 30 ft radius)				
	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.	Quercus palustris	40	Υ	FACW	
2.					Number of Dominant Species that are OBL, FACW, or FAC:1(A)
3.					
4.					Total Number of Dominant Species Across All Strata:(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 x 1 = 0$
	Total Cover =	40			FACW spp. $0 x 2 = 0$
					FAC spp. $0 X 3 = 0$
	Stratum (Plot size: 15 ft radius)				FACU spp. $0 x 4 = 0$
1.					UPL spp. $0 x 5 = 0$
2.					
3.					Total <u> </u>
4.					
5.					Prevalence Index = B/A = NA
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes □ No Rapid Test for Hydrophytic Vegetation
10.					■ Yes □ No Dominance Test is > 50%
	Total Cover =	0			Yes ■ No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (F	Plot size: 5 ft radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.					* Indicators of hydric soil and wetland hydrology must be
2.					present, unless disturbed or problematic.
3.					
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					it. taii.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					and woody plants less than 3.26 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	0			
Woody Vine Str	atum (Plot size: 30 ft radius)				
1.				-	
2.					
3.					Hydrophytic Vegetation Present • Yes • No
4.					
5.					
	Total Cover =	0			
Remarks:	No shrubs/saplings, herb are rooted in	not bloc	ming yet		

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/18/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: PFO1A Blount silt loam, ground moraine, 2-4% slopes Wetland ID: Wetland 4 Soil Unit: Landform: Terrace Local Relief: None Sample Point: SP14 Longitude: -83.12029 Slope (%): Latitude: 40.22167 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Yes □ No Hydric Soils Present? YesNo Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

HYDROLOGY

Remarks:

Wetland Hydrology Indicators (Check here if indicators are not present:):

Upland point for Wetland 4 PFO community

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data

Other (Explain in Remarks)

Secondary:

N/A

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

Field Observations:

Surface Water Present? (in.) Yes ■ No Depth: Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Remarks:

SOILS

Map Unit Name: Blount silt loam, ground moraine, 2-4% slopes Profile Description (De

1 Torne Descrip	TOTALE DESCRIPTION (Describe to the depth needed to document the indicator or continuing absence or indicators, (Type: C=concentration, b=bepretted), KM=Reduced waters, C3=Covered Coated Santa Grains, Eccation. PL=Pole Entiting, M=waters,										
Тор	Bottom			Matrix			Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	11		10YR	4/2	100						loam
11	14	-	10YR	5/1	97	10YR	5/6	3	С	M	silty clay loam
14	20		10YR	6/1	90	10YR	5/8	10	С	M	silty clay loam
		-					-		-		
		-		-			-		-		
		-					-		-		
							-		-		

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

TF12 - Very Shallow Dark Surface

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**



5.

Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: NCL - alternate route Wetland ID: Wetland 4 Sample Point: SP14 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Ulmus rubra 15 FAC Υ **FACW** Number of Dominant Species that are OBL, FACW, or FAC: ____4 ___(A) 2. 40 Quercus palustris 3. Celtis occidentalis Ν FAC 4. Acer rubrum 18 FAC Total Number of Dominant Species Across All Strata: 5 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 80% (A/B) 6. 7. 8 Prevalence Index Worksheet --9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 80 FACW spp. x 2 = FAC spp. 0 x 3 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 0 Lonicera morrowii 10 **FACU** UPL spp. x 5 = Υ FAC 2 Ulmus rubra 5 3. 0 __(A) Total 4. 5. Prevalence Index = B/A = NA 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation Yes No 10. Yes No Dominance Test is > 50% Total Cover = 15 Yes ■ No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes □ No Herb Stratum (Plot size: 5 ft radius) Problem Hydrophytic Vegetation (Explain) * Yes 1. Rosa multiflora 2 Ν **FACU** * Indicators of hydric soil and wetland hydrology must be 2 Toxicodendron radicans 5 Υ FAC present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. ----6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 7 Woody Vine Stratum (Plot size: 30 ft radius) 1. Hydrophytic Vegetation Present = Yes - No 3. 4.

Additional Remarks:			

Total Cover =

0



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/18/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen Ohio NWI/WWI Classification: PFO1A Wetland ID: Soil Unit: Glynwood sit loam, ground moraine, 2-6% slopes N/A Landform: Terrace Local Relief: Concave Sample Point: SP15 Longitude: -83.120762 Slope (%): Latitude: 40.22192 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? YesNo Hydric Soils Present? Yes No Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland? Remarks: Stream flows through, NWI area HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water A2 - High Water Table

A3 - Saturation . B1 - Water Marks

B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B13 - Aquatic Fauna B14 - True Aquatic Plants

C1 - Hydrogen Sulfide Odor C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

B9 - Water-Stained Leaves

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

N/A

Wetland Hydrology Present? • Yes • No

Remarks:

<u>ی</u>	OIL	3						

Map Unit Name: Blount silt loam, ground moraine, 2-4% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom			Matrix			Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	3		10YR	3/2	97	7.5YR	4/6	3	С	PL	silty clay loam
3	20		10YR	4/3	100		-				silty clay loam
		-					-				
		-					-				
		-					-				
		-					-				

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat F2 - Loamy Gleyed Matrix F3 - Depleted Matrix

F6 - Redox Dark Surface F7 - Depleted Dark Surface

S4 - Sandy Gleyed Matrix

F1 - Loamy Muck Mineral

S5 - Sandy Redox

S6 - Stripped Matrix

F8 - Redox Depressions

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

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Type: N/A Depth: N/A **Hydric Soil Present?** " Yes " No (If Observed)

Remarks:

Restrictive Layer



Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: NCL - alternate route Wetland ID: N/A Sample Point: SP15 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Ulmus rubra 20 FAC **FACW** 2. 10 Υ Number of Dominant Species that are OBL, FACW, or FAC: ____3___(A) Quercus palustris 3. Aesculus flava 5 Ν **FACU** 4. Acer rubrum 5 Ν FAC Total Number of Dominant Species Across All Strata: 4 (B) 5 --Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B) 6. 7. 8 Prevalence Index Worksheet --9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 40 0 FACW spp. x 2 = FAC spp. 0 x 3 = x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 0 UPL spp. x 5 = 2. 3. 0 __(A) Total 4. 5. Prevalence Index = B/A = NA 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation Yes No 10. Yes No Dominance Test is > 50% Total Cover = 0 Yes ■ No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) □ No Problem Hydrophytic Vegetation (Explain) * Yes 1. Phalaris arundinacea 10 Υ **FACW** * Indicators of hydric soil and wetland hydrology must be 2 ---present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 --5. 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 10 Woody Vine Stratum (Plot size: 30 ft radius) Rosa multiflora FACU 1. 15 Hydrophytic Vegetation Present = Yes = No 3. 4. --5. Total Cover = 15

Additional Remarks:	



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/18/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: PFO1A Blount silt loam, ground moraine, 0-2% slopes Wetland ID: Wetland 5 Soil Unit: Landform: Terrace Local Relief: Convex Sample Point: SP16 Longitude: -83.121831 Slope (%): Latitude: 40.22239 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Yes • No Hydric Soils Present? □ Yes ■ No Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland? Remarks: Upland point for Wetland 5

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? (in.) Yes ■ No Depth: Water Table Present? Yes No Depth: 6 (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

N/A

Wetland Hydrology Present?
Yes
No

Remarks:

SOILS Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom		Matrix			Redox Features				Texture	
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	3		10YR	3/3	100						silt loam
3	5		10YR	5/3	100						silt loam
5	10		10YR	5/4	100						silt loam
		-									
		-		-							
		-		-							
		-									
NRCS Hydric	NRCS Hydric Soil Field Indicators (check here if indicators are not present •)): <u>Indicators for Problematic Soils ¹</u>				

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface

S7 - Dark Surface

Restrictive Layer " Yes " No Type: Roots Depth: 10" **Hydric Soil Present?**



5.

Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: NCL - alternate route Wetland ID: Wetland 5 Sample Point: SP16 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Acer rubrum 40 FAC **FACW** Number of Dominant Species that are OBL, FACW, or FAC: _____(A) 2. 5 Ulmus americana Ν 3. Quercus palustris 5 Ν **FACW** 4. Total Number of Dominant Species Across All Strata: 3 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B) 6. 7. 8 Prevalence Index Worksheet --9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 50 FACW spp. x 2 = FAC spp. 0 x 3 = x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 0 UPL spp. x 5 = 2. 3. ____(A) Total 4. 5. Prevalence Index = B/A = NA 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation Yes No 10. Yes No Dominance Test is > 50% Total Cover = 0 Yes ■ No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes □ No Herb Stratum (Plot size: 5 ft radius) Problem Hydrophytic Vegetation (Explain) * Yes 1. Toxicodendron radicans 10 Υ FAC * Indicators of hydric soil and wetland hydrology must be FACU 2 Rosa multiflora 2 Ν present, unless disturbed or problematic. 3. **FACU** Fagus grandifolia 5 **Definitions of Vegetation Strata:** 4. Acer rubrum Ν FAC 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 19 Woody Vine Stratum (Plot size: 30 ft radius) 1. Hydrophytic Vegetation Present = Yes = No 3. 4.

Additional Remarks:						

Total Cover =

0



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/18/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: PFO1A Blount silt loam, ground moraine, 0-2% slopes Wetland ID: Wetland 5 Soil Unit: Landform: Terrace Local Relief: Concave Sample Point: SP17 Longitude: -83.121987 Slope (%): Latitude: 40.22253 Datum: WGS 1984 Community ID: PFO Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Yes • No Hydric Soils Present? YesNo Wetland Hydrology Present? Yes • No Is This Sampling Point Within A Wetland? Remarks: Wet point for Wetland 5 HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data ☑ B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth: 0.5 (in.) Wetland Hydrology Present?
Yes
No Water Table Present? Yes No Depth: surface (in.) Saturation Present? □ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Texture Top Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 10YR 100 loam 0 5 4/3 18 10YR 10YR 5/6 40 С М 5 6/2 60 silty clay loam ----------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present -Indicators for Problematic Soils 1 S4 - Sandy Gleyed Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface A3 - Black Histic S6 - Stripped Matrix F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A5 - Stratified Lavers A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions S3 - 5 cm Mucky Peat or Peat 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer " Yes " No Type: Roots/Clay Depth: 18" **Hydric Soil Present?** Remarks:



Project/Site: NCL - alternate route Wetland ID: Wetland 5 Sample Point: SP17

VEGETATION (Species identified in all uppercase are non-native species.)

VEGETATION (Species identified in all uppercase are non-native species.)								
Tree Stratum (Plo	ot size: 30 ft radius)							
	<u>Species Name</u>	% Cover	Dominant	Ind.Status	Dominance Test Worksheet			
1.	Acer rubrum	40	Υ	FAC				
2.	Ulmus americana	5	N	FACW	Number of Dominant Species that are OBL, FACW, or FAC:4(A)			
3.	Quercus palustris	15	Υ	FACW				
4.					Total Number of Dominant Species Across All Strata: (B)			
5.								
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)			
7.								
8.					Prevalence Index Worksheet			
9.					Total % Cover of: Multiply by:			
10.					OBL spp. 0			
	Total Cover =	60			FACW spp. $0 x 2 = 0$			
					FAC spp. $0 X 3 = 0$			
	atum (Plot size: 15 ft radius)				FACU spp. $0 x 4 = 0$			
1.					UPL spp. $0 x 5 = 0$			
2.								
3.					Total(A)(B)			
4.								
5.					Prevalence Index = B/A = NA			
6.								
7.								
8.					Hydrophytic Vegetation Indicators:			
9.					■ Yes ■ No Rapid Test for Hydrophytic Vegetation			
10.					Yes • No Dominance Test is > 50%			
	Total Cover =	0			Yes ■ No Prevalence Index is ≤ 3.0 *			
					Yes No Morphological Adaptations (Explain) *			
Herb Stratum (Plo	ot size: 5 ft radius)				Yes Problem Hydrophytic Vegetation (Explain) *			
1.	Lonicera morrowii	2	Υ	FACU	* Indicators of hydric soil and wetland hydrology must be			
2.	Toxicodendron radicans	2	Υ	FAC	present, unless disturbed or problematic.			
3.	Carex frankii	2	Υ	OBL	•			
4.					Definitions of Vegetation Strata:			
5.								
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at			
7.					breast height (DBH), regardless of height.			
8.								
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.			
10.					it. taii.			
11.								
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.			
13.					and woddy plants less than 3.20 ft. tan.			
14.								
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.			
	Total Cover =	6						
Woody Vine Strate	um (Plot size: 30 ft radius)							
1.								
2.								
3.					Hydrophytic Vegetation Present ■ Yes ■ No			
4.								
5.								
	Total Cover =	0						
Remarks:								



Project/Site: NCL - Alternate Route Columbia Stantec Project #: 193707055 Date: 04/21/20 Applicant: Gas of Ohio County: Union Investigator #1: Michelle Kearns Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Wetland ID: Wetland 6 Soil Unit: Blount silt loam. ground moraine 0-2% slopes Landform: Local Relief: Concave Sample Point: SP18 Slope (%): Latitude:40.223632 Longitude: ~83.126386 Datum: --Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydric Soils Present? Hydrophytic Vegetation Present? Yes • No YesNo Wetland Hydrology Present? Yes • No Is This Sampling Point Within A Wetland? Remarks: Wet point for Wetland 6

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water A2 - High Water Table

A3 - Saturation . B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data

Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present?
Yes
No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface

Field Observations:

Surface Water Present? Yes No Depth: (in.) Water Table Present? ■ Yes □ No Depth: 0 (in.) 0 Saturation Present? ■ Yes ■ No Depth: (in.)

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

Remarks:

SOI	LS

Map Unit Name: Blount silt loam. ground moraine 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Bottom Texture Top Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 95 10YR clay loam 10YR 5/8 5 M 0 7 4/2 C 7 20 2.5Y 7.5YR 5/8 5 С clay loam 4/1 95 M ----------------------------------

NRCS Hydric Soil Field Indicators (check here if indicators are not present -

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Restrictive Layer " Yes " No Type: N/A Depth: **Hydric Soil Present?** (If Observed)



Project/Site: NCL - Alternate Route Wetland ID: Wetland 6 Sample Point: SP18

VEGETATION	N (Species identified in all uppercase are non-n	ative spec	cies.)		
Tree Stratum (Plot size: 30 ft radius)	•			
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	Total Cavar				OBL spp. 0
	Total Cover =	= 0			FACW spp. 0
Sanling/Shrub 9	Stratum (Plot size: 15 ft radius)				FACU spp. 0 x 4 = 0
1.					UPL spp. 0 x 5 = 0
2.					От Е ЗЭРР
3.					Total 0 (A) 0 (B)
4.					(5)
5.					Prevalence Index = B/A = NA
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes □ No Rapid Test for Hydrophytic Vegetation
10.					■ Yes □ No Dominance Test is > 50%
	Total Cover =	= 0			■ Yes ■ No Prevalence Index is ≤ 3.0 *
					□ Yes □ No Morphological Adaptations (Explain) *
	Plot size: 5 ft radius)				□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
1.	Phalaris arundinacea	60	Y	FACW	* Indicators of hydric soil and wetland hydrology must be
2.					present, unless disturbed or problematic.
3.					D. C. W. A. C. A. C. A.
4.					Definitions of Vegetation Strata:
5.					Troo
6 7.					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.					broad ringrik (2517), rogardiooc or ringrik
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	- 60			
Woody Vine Str	ratum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present = Yes = No
4.					
5.					
	Total Cover =	= 0			
Remarks:	40% open ground/water				

Additional	Remarks:
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Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: NCL - Alternate Route Stantec Project #: 193707055 Date: 04/21/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Michelle Kearns Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Wetland ID: Wetland 6 Soil Unit: Blount silt loam. ground moraine 0-2% slopes Landform: Hillslope Local Relief: Concave Sample Point: SP19 Latitude: 40.223815 Slope (%): Datum: --Longitude: -83.126398 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydric Soils Present? Hydrophytic Vegetation Present? □ Yes ■ No YesNo Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Mown powerline ROW. Upland point for Wetland 6 Wetland Hydrology Indicators (Check here if indicators are not present:): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? □ Yes ■ No Depth: (in.) Wetland Hydrology Present? • Yes • No Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Blount silt loam. ground moraine 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top **Bottom** Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location clay loam 10YR 100 0 6 4/4 14 10YR 4/4 95 7.5YR 4/6 5 С М clay loam 6 14 20 10YR 4/4 10YR 93 5/8 7 С Μ ------------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present Indicators for Problematic Soils 1 S4 - Sandy Gleved Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface F12 - Iron-Manganese Masses A3 - Black Histic S6 - Stripped Matrix TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A5 - Stratified Lavers A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions S3 - 5 cm Mucky Peat or Peat 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer " Yes " No Type: N/A Depth: **Hydric Soil Present?**



Project/Site: NCL - Alternate Route Wetland ID: Wetland 6 Sample Point: SP19

VEGETATION	(Species identified in all uppe	ercase are non-na	ative spec	cies.)		
Tree Stratum (Plot size: 30 ft radius)					
	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC:(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:(A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.		Tatal Causar				OBL spp. 0
		Total Cover =	0			FACW spp. 0 x 2 = 0
Conling/Chrub C	Stratum (Diet eizer 45 ft redice)					FAC spp. 15
5apiing/Shrub S	Stratum (Plot size: 15 ft radius)					FACU spp. $\begin{array}{cccccccccccccccccccccccccccccccccccc$
2.						UPL spp. 0 x 5 = 0
3.						Total 95 (A) 365 (B)
4.						10tal <u>93 (A)</u>
5.						Prevalence Index = B/A = 3.842
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						Yes ■ No Rapid Test for Hydrophytic Vegetation
10.						□ Yes ■ No Dominance Test is > 50%
		Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
						Yes No Morphological Adaptations (Explain) *
Herb Stratum (F	Plot size: 5 ft radius)					□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
1.	Solidago canadensis		50	Υ	FACU	
2.	Taraxacum officinale		5	N	FACU	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.	Dipsacus fullonum		5	N	FACU	present, unless disturbed of problematic.
4.	Viola sororia		15	N	FAC	Definitions of Vegetation Strata:
5.						
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						it. tail.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.						and woody plants less than 3.26 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	75			
Woody Vine Str	ratum (Plot size: 30 ft radius)					
1.	Rubus idaeus		10	Υ	FACU	
2.	Lonicera japonica		10	Y	FACU	
3.						Hydrophytic Vegetation Present - Yes - No
4.						
5.						
		Total Cover =	20			
Remarks:						

Additional	Romarke.



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/11/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: N/A Blount silt loam, ground moraine, 0-2% slopes Wetland ID: Wetland 7 Soil Unit: Landform: Terrace Local Relief: None Sample Point: SP20 Longitude: -83.127899 Slope (%): Latitude: 40.22391 Datum: WGS 1984 Community ID: PFO Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Yes • No Hydric Soils Present? YesNo Wetland Hydrology Present? Yes • No Is This Sampling Point Within A Wetland?

Remarks: Wet point for Wetland 7

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data

Other (Explain in Remarks)

Secondary:

N/A

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present?
Yes
No

Field Observations:

Surface Water Present? (in.) □ Yes ■ No Depth: Water Table Present? Yes No Depth: 2 (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Remarks:

SOILS Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom			Matrix			Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)
0	9		10YR	4/2	95	7.5YR	6/8	5	С	M	clay loam
9	20	-	10YR	4/2	85	7.5YR	6/8	15	С	M	clay loam
	-	-		-	-		-		1		
	-	-		-	-		-		1		
	-	-		-	-		-		1		
	-	-		-	-		-		1		
	-	-		-	-		-		1		
NRCS Hydric	Soil Field In	ndicators (check he	ere if ind	icators a	re not pre	esent•):	Indicators	for Problen	natic Soils 1	

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix

F6 - Redox Dark Surface F7 - Depleted Dark Surface

F8 - Redox Depressions

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

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface

S7 - Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 7 Sample Point: SP20 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Ulmus rubra 30 FAC 40 **FACW** Number of Dominant Species that are OBL, FACW, or FAC: ____3 ___(A) 2. Υ Quercus palustris 3. Aesculus flava 5 Ν **FACU** 4. Total Number of Dominant Species Across All Strata: 5 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 60% (A/B) 6. 7. 8 Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 75 FACW spp. x 2 = FAC spp. 0 x 3 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 0 Ulmus rubra 15 FAC UPL spp. x 5 = Vitis labrusca 5 FACU 2 Ν 3. 20 Υ **FACU** 0 __(A) Lonicera morrowii Total **FACU** 4. Aesculus flava 5 Ν 5. Prevalence Index = B/A = NA 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation Yes No 10. Yes No Dominance Test is > 50% Total Cover = 45 Yes ■ No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) □ No Problem Hydrophytic Vegetation (Explain) * Yes 1. Lonicera morrowii 20 Υ FACU * Indicators of hydric soil and wetland hydrology must be 2 -present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 --5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 20 Woody Vine Stratum (Plot size: 30 ft radius) 1. Hydrophytic Vegetation Present = Yes = No 3. 4. 5.

Additional Remarks:

Total Cover =

80% open ground for herb layer

Remarks:

0



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 02/18/20 Applicant: Columbia Gas of Ohio County: Delaware Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: N/A Blount silt loam, ground moraine, 0-2% slopes Wetland ID: Wetland 7 Soil Unit: Landform: Terrace Local Relief: None Sample Point: SP21 Longitude: -83.128332 Slope (%): Latitude: 40.22401 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? YesNo Hydric Soils Present? Yes No Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland?

Remarks: Upland point for Wetland 7

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B8 - Sparsely Vegetated Concave Surface

B1 - Water Marks

B7 - Inundation Visible on Aerial Imagery

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present?
Yes
No

Field Observations:

Surface Water Present? (in.) □ Yes ■ No Depth: 7 Water Table Present? ■ Yes □ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Remarks:

SOILS

Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

	(Coconic to the depart receded in depart receded in the indicator of the language of the langu												
Тор	Bottom			Matrix			Redo		Texture				
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)		
0	12		10YR	4/2	100						loam		
12	20		10YR	5/3	33	10YR	5/6	40	С	M	silty clay		
			10YR	6/2	25	7.5YR	4/6	2	С	PL	silty clay		
							-			-			
							-			-			
							-			-			

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



1.

3. 4. 5.

Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: NCL - alternate route Wetland ID: Wetland 7 Sample Point: SP21 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Ulmus rubra 10 FAC **FACW** 2. Quercus palustris 35 Υ Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 4 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B) 6. 7. 8 Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 45 FACW spp. 35 x 2 = 70 FAC spp. x 3 = 30 Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 5 20 Lonicera morrowii **FACU** UPL spp. x 5 = 2. 3. 110 _(A) 420 (B) Total 4. 5. Prevalence Index = B/A = 3.818 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation Yes No 10. ■ No Yes Dominance Test is > 50% Total Cover = 60 Yes ■ No Prevalence Index is ≤ 3.0 * □ No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) □ No Problem Hydrophytic Vegetation (Explain) * Yes 1. Lonicera japonica 5 Υ **FACU** * Indicators of hydric soil and wetland hydrology must be 2 -present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 5 Woody Vine Stratum (Plot size: 30 ft radius)

Additional Remarks:		

Total Cover =

0

Hydrophytic Vegetation Present - Yes - No



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/31/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 8 Soil Unit: Landform: Floodplain Local Relief: Concave Sample Point: SP22 Latitude: 40.20237 Slope (%): Longitude: -83.189061 Datum: WGS 1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?

Pyes No
Wetland Hydrology Present?

Yes No
Is This Sampling Point Within A Wetland?

Yes No

Remarks: Channelized stream through farm fields. Wet point for wetland 8

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface WaterA2 - High Water Table

A3 - Saturation
B1 - Water Marks
B2 - Sediment Deno

B2 - Sediment DepositsB3 - Drift Deposits

B4 - Algal Mat or CrustB5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery
B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic FaunaB14 - True Aquatic PlantsC1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled SoilsC7 - Thin Muck Surface

D9 - Gauge or Well DataOther (Explain in Remarks)

Secondary:

B6 - Surface Soil CracksB10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants
 D2 Comprehis Position

D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? • Yes • No Depth: 4 (in.)
Water Table Present? • Yes • No Depth: Surface (in.)
Saturation Present? • Yes • No Depth: 2 (in.)

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

Wetland Hydrology Present? • Yes • No

N/A

Remarks:

SOILS

Map Unit Name: Pewamo sitty clay loam, 0-1% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

	(
Тор	Bottom			Matrix			Redo		Texture				
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)		
0	6		10YR	4/2	90	7.5YR	4/6	10	С	PL	loam		
6	8		5Y	4/1	93	7.5YR	4/6	7	С	PL	loam		
8	15		5Y	5/2	100		-				loam		
							-						
							-						
							-						
							-						

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon
A3 - Black Histic

A4 - Hydrogen SulfideA5 - Stratified Layers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface
A12 - Thick Dark Surface

S1 - Sandy Muck MineralS3 - 5 cm Mucky Peat or Peat

Type: N/A

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox
S6 - Stripped Matrix
F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix
F3 - Depleted Matrix

F6 - Redox Dark Surface
F7 - Depleted Dark Surface

F8 - Redox Depressions

Depth:

N/A

Hydric Soil Present?

Indicators for Problematic Soils ¹

A16 - Coast Prairie Redox

S7 - Dark Surface

F12 - Iron-Manganese Masses
 TF12 - Very Shallow Dark Surface

Other (Explain in Remarks)

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

" Yes " No

(If Observed) Remarks:

Restrictive Layer



Project/Site: NCL - alternate route Wetland ID: Wetland 8 Sample Point: SP22

VEGETATION	(Species identified in all uppe	ercase are non-na	tive spec	cies.)		
	ot size: 30 ft radius)			,		
,	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC: (A)
3.						
4.						Total Number of Dominant Species Across All Strata: (B)
5.						
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. $0 X 1 = 0$
		Total Cover =	0			FACW spp. $0 x 2 = 0$
						FAC spp. $0 X 3 = 0$
Sapling/Shrub Str	atum (Plot size: 15 ft radius)					FACU spp. $0 X 4 = 0$
1.						UPL spp 0
2.						
3.						Total (A) (B)
4.						
5.						Prevalence Index = B/A = NA
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.						■ Yes ■ No Dominance Test is > 50%
		Total Cover =	0			Yes ■ No Prevalence Index is ≤ 3.0 *
						Yes No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)					Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Phalaris arundinacea		100	Y	FACW	* Indicators of hydric soil and wetland hydrology must be
2.						present, unless disturbed or problematic.
3.						
4.						Definitions of Vegetation Strata:
5.						
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.						
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	100			
Woody Vine Strat	um (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present ■ Yes ■ No
4.						
5.						
		Total Cover =	0			
Remarks:						

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/31/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Charlie Allen State: Ohio NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 8 Soil Unit: Landform: Talf Local Relief: None Sample Point: SP23 Latitude: 40.202341 Slope (%): Ω Longitude: -83.189069 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Hydric Soils Present? Yes
 No YesNo Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Upland point for Wetland 8

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table . A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C7 - Thin Muck Surface D9 - Gauge or Well Data Other (Explain in Remarks)

D1 - Stunted or Stressed Plants C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position D5 - FAC-Neutral Test

Secondary:

Wetland Hydrology Present? • Yes • No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

B6 - Surface Soil Cracks

B10 - Drainage Patterns

C8 - Crayfish Burrows

C2 - Dry-Season Water Table

C9 - Saturation Visible on Aerial Imagery

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: --(in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Remarks:

SOILS

Map Unit Name: Pewamo silty clay loam, 0-1% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom			Matrix			Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	20		10YR	3/2	100		-				silty clay
							-				
							-				
							-				
							-				
							-				
							-				

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix

F6 - Redox Dark Surface F7 - Depleted Dark Surface

F8 - Redox Depressions

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

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 8 Sample Point: SP23

VEGETATION	(Species identified in all uppercase are non	-native spe	cies.)		
Tree Stratum (Pl	ot size: 30 ft radius)				
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 1 (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: 33% (A/B)
7.					(70b)
8.					Prevalence Index Worksheet
9.					
10.					OBL spp. 0
	Total Cover	= 0			FACW spp. 45
					FAC spp. $0 X 3 = 0$
	atum (Plot size: 15 ft radius)				FACU spp. 30 $\times 4 = 120$
1.					UPL spp. 25
2.					
3.					Total (A) 335 (B)
4.					
5.					Prevalence Index = $B/A = 3.350$
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.					□ Yes ■ No Dominance Test is > 50%
	Total Cover	= 0			□ Yes ■ No Prevalence Index is ≤ 3.0 *
		ŭ			□ Yes □ No Morphological Adaptations (Explain) *
Harb Stratum /Dla	ot size: 5 ft radius)				Problem Hydrophytic Vegetation (Explain) *
1.	Setaria viridis	25	Υ	UPL	res - No Problem Hydrophytic Vegetation (Explain)
2.			Y	_	* Indicators of hydric soil and wetland hydrology must be
	Phalaris arundinacea	45		FACU	present, unless disturbed or problematic.
3.	Solidago canadensis	20	Y	FACU	
4.	Glechoma hederacea	10	N	FACU	Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					II. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover	= 100			,
	i otal Covel	- 100			
Moody Vino Ctt	(Plot oize, 20 ft radius)				
	um (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present = Yes = No
4.					
5.					
_	Total Cover	= 0			
Remarks:					



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/31/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Investigator #2: Charlie Allen Ohio NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 9 Soil Unit: Landform: Terrace Local Relief: Convex Sample Point: SP24 Latitude: 40.196159 Slope (%): Longitude: -83.196192 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? □ Yes ■ No Hydric Soils Present? YesNo Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Mowed vegetation. Upland point for Wetland 9

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B14 - True Aquatic Plants A3 - Saturation .

B1 - Water Marks C1 - Hydrogen Sulfide Odor B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots B3 - Drift Deposits C4 - Presence of Reduced Iron B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils

B5 - Iron Deposits C7 - Thin Muck Surface B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? (in.) Yes ■ No Depth: Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

N/A

Wetland Hydrology Present? • Yes • No

Remarks:

SOI	LS

Map Unit Name: Pewamo silty clay loam, 0-1% slopes Profile Description (De

T TOTHE DESCRIP	1 To The Describe to the depth needed to document the mulcator or commit the mulcator or commit the mulcators.) (1) yet C=Concentration, D=Depteror, Nin=Neutros mains, CS=Covered Coaled Saint Statistics, Eccation, FL=Fore Eming, M=Walnix)											
Тор	Bottom			Matrix			Redo		Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)	
0	16		10YR	4/3	100						silty clay loam	
16	20		10YR	4/3	98	10YR	5/6	2	С	M	silty clay loam	
							-					
							-					
							-					
							-					
				-	-		-					

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide

A5 - Stratified Layers A10 - 2 cm Muck

A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 9 Sample Point: SP24

VEGETATION	(Species identified in all upp	percase are non-na	ative spec	cies.)		
Tree Stratum (F	Plot size: 30 ft radius)					
	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC:1(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: 33% (A/B)
7.						· · ·
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 $\times 1 = 0$
		Total Cover =	0			FACW spp. $0 x 2 = 0$
						FAC spp. 35 X 3 = 105
Sapling/Shrub S	tratum (Plot size: 15 ft radius)					FACU spp. 30 X 4 = 120
1.						UPL spp. 25 X 5 = 125
2.						
3.						Total 90 (A) 350 (B)
4.						··
5.						Prevalence Index = B/A = 3.889
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.						□ Yes ■ No Dominance Test is > 50%
		Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
						Yes No Morphological Adaptations (Explain) *
Herb Stratum (P	lot size: 5 ft radius)					Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Setaria viridis		25	Υ	UPL	
2.	Setaria faberi		25	Y	FACU	* Indicators of hydric soil and wetland hydrology must be
3.	Poa pratensis		35	Ϋ́	FAC	present, unless disturbed or problematic.
4.	Trifolium repens		5	N	FACU	Definitions of Vegetation Strata:
5.						2 Simmons of Togetation of the
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.						ft. tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
15.		T-1-1 0				vvoody villes - 74 woody villes greater than 5.25 ft. in neight.
		Total Cover =	90			
M/	/Di					
	atum (Plot size: 30 ft radius)					
1.						
2.						Hadronbod's War of the Book St.
3.						Hydrophytic Vegetation Present □ Yes ■ No
4.						
5.		Tatal Comm				
Danis and an	400/	Total Cover =	0			
Remarks:	10% open ground					

Additional	Romarke.



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/31/20 Applicant: County: Columbia Gas of Ohio Union State: Investigator #1: Angela Sjollema Investigator #2: Charlie Allen Ohio NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 9 Soil Unit: Landform: Floodplain/ditch Local Relief: Concave Sample Point: SP25 Slope (%): Latitude: 40.196123 Longitude: -83.196216 Datum: WGS 1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A Yes No N/A N/A Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Hydric Soils Present? Yes No Yes • No Wetland Hydrology Present? Yes No Is This Sampling Point Within A Wetland?

Remarks: Wet point for wetland 9

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits B4 - Algal Mat or Crust

B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data

Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

Field Observations:

Surface Water Present? ■ Yes □ No Depth: 0.5 (in.) Water Table Present? ■ Yes □ No Depth: Surface (in.) Saturation Present? ■ Yes ■ No Depth: 6 (in.)

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

Remarks:

SOILS

Map Unit Name: Pewamo silty clay loam, 0-1% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom			Matrix			Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	6		10YR	3/2	100						silty clay loam
6	14		10YR	4/1	85	10YR	5/8	2	С	M	silty clay loam
						5YR	4/6	10	С	PL	silty clay loam
						5YR	4/6	3	С	M	silty clay loam
14	20		10YR	4/1	87	10YR	5/8	3	С	M	silty clay loam
						5YR	4/6	5	С	PL	silty clay loam
						10YR	4/6	5	С	PL	silty clay loam

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

TF12 - Very Shallow Dark Surface

Restrictive Layer Type: N/A Depth: N/A **Hydric Soil Present?** Yes No (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 9 Sample Point: SP25

VEGETATION	(Species identified in all upper	case are non na	tive spec	ies.)		
Tree Stratum (PI	ot size: 30 ft radius)					
	<u>Species Name</u>		% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC:1 (A)
3.						
4.						Total Number of Dominant Species Across All Strata:1 (B)
5.						
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. $0 x 1 = 0$
	T	otal Cover =	0			FACW spp. 0
						FAC spp. $0 \times 3 = 0$
Sapling/Shrub Str	atum (Plot size: 15 ft radius)					FACU spp. $0 x 4 = 0$
1.						UPL spp. $0 x 5 = 0$
2.						··· ····
3.						Total 0 (A) 0 (B)
4.						
5.						Prevalence Index = B/A = NA
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						Yes No Rapid Test for Hydrophytic Vegetation
10.						 Yes No Dominance Test is > 50%
	Т	otal Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
	·	otal ooro.	Ŭ			 Yes No Morphological Adaptations (Explain) *
Harb Stratum (DI	ot size: 5 ft radius)					Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Phalaris arundinacea		100	Υ	FACW	Tes - No Problem Tydrophytic Vegetation (Explain)
2.						* Indicators of hydric soil and wetland hydrology must be
3.						present, unless disturbed or problematic.
4.						Definitions of Vegetation Strata:
5.						Definitions of Vegetation Strata.
						Tree
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.						bleast reight (שבור), regardess of height.
8.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
9.						ft. tall.
10.						
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.						
14.						and the same of th
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
	Ţ	otal Cover =	100			
Woody Vine Strat	um (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present • Yes • No
4.						
5.						
	T	otal Cover =	0			
Remarks:						

Additional	Remarks:	



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/30/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Ohio Investigator #2: Julie Slater NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 10 Soil Unit: Landform: Terrace Local Relief: None Sample Point: SP26 Latitude: 40.169957 Slope (%): Ω Longitude: -83.222857 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Yes • No Hydric Soils Present? YesNo Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Mowed Vegetation, Upland point for Wetland 10

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table

A3 - Saturation . B1 - Water Marks B2 - Sediment Deposits

B3 - Drift Deposits B4 - Algal Mat or Crust

B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves B13 - Aquatic Fauna

B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data

Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Field Observations:

Surface Water Present? (in.) Yes ■ No Depth: Water Table Present? □ Yes ■ No Depth: --(in.) Saturation Present? □ Yes ■ No Depth: (in.)

Pewamo silty clay loam, 0-1% slopes

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

Remarks:

SOILS Map Unit Name:

Profile Description (De

T TOTHE DESCRIP	1 To The Describe to the depart needed to document the malicator or commit the absence of indicators.) (Type, C=Concentration, D=Depletion, Nw=Neduced mains, CS=Covered Coaled Saint Grains, Eccation, F1=F0re Eming, M=Wallis)											
Тор	Bottom			Matrix			Redo		Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)	
0	20		10YR	3/3	100						clay loam	
		-										
		-		-								
		-										
		-		-								
		-										

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix

F6 - Redox Dark Surface F7 - Depleted Dark Surface F8 - Redox Depressions

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

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 10 Sample Point: SP26

VEGETATION	(Species identified in all uppe	ercase are non-na	ative spec	cies.)		
Tree Stratum (F	Plot size: 30 ft radius)					
	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC:1 (A)
3.						
4.						Total Number of Dominant Species Across All Strata: 1 (B)
5.						
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 x 1 = 0
		Total Cover =	0			FACW spp. 0 x 2 = 0
						FAC spp. $0 x 3 = 0$
Sapling/Shrub St	tratum (Plot size: 15 ft radius)					FACU spp. 0 x 4 = 0
1.						UPL spp. 0
2.						
3.						Total <u>N/A</u> (A) <u>N/A</u> (B)
4.						
5.						Prevalence Index = B/A = N/A
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.						■ Yes ■ No Dominance Test is > 50%
		Total Cover =	0			Yes □ No Prevalence Index is ≤ 3.0 *
						Yes No Morphological Adaptations (Explain) *
	lot size: 5 ft radius)					□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
1.	Phalaris arundinacea		100	Y	FACW	* Indicators of hydric soil and wetland hydrology must be
2.						present, unless disturbed or problematic.
3.						·
4.						Definitions of Vegetation Strata:
5.						
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.						
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	100			
	atum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present ■ Yes ■ No
4.						
5.		Total Comm				
Damadia	Manual variation	Total Cover =	0			
Remarks:	Mowed vegetation					

Lenoitibb A	Romarks.



Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/30/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 10 Soil Unit: Landform: Toeslope Local Relief: Concave Sample Point: SP27 Latitude: 40.1699 Slope (%): Longitude: -83.222897 Datum: WGS 1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? YesNo Hydric Soils Present? YesNo Wetland Hydrology Present? Yes • No Is This Sampling Point Within A Wetland? Remarks: Old agriculture ditch, narrow between row crop fields. Wet point for wetland 10. Wetland Hydrology Indicators (Check here if indicators are not present): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? (in.) ■ Yes □ No Depth: Wetland Hydrology Present?
Yes
No Water Table Present? ■ Yes □ Depth: 7 (in.) No 0 Saturation Present? ■ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Pewamo silty clay loam, 0-1% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Texture Top Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location sandy loam 10YR 100 0 3 4/3 21 5Y 3/1 90 7.5YR 5/8 7 С PL sandy loam 3 7.5YR 5/8 3 С Μ sandy loam ----------------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present -Indicators for Problematic Soils 1 A1- Histosol S4 - Sandy Gleved Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface F12 - Iron-Manganese Masses A3 - Black Histic S6 - Stripped Matrix TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A5 - Stratified Lavers A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions S3 - 5 cm Mucky Peat or Peat 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 10 Sample Point: SP27

VEGETATION	(Species identified in all upp	ercase are non-na	itive spec	cies.)		
	ot size: 30 ft radius)	ordado aro non na	што орог	3.00.7		
,	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC: (A)
3.						
4.						Total Number of Dominant Species Across All Strata: (B)
5.						
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp 0
		Total Cover =	0			FACW spp. $0 X 2 = 0$
						FAC spp. $0 x 3 = 0$
	atum (Plot size: 15 ft radius)					FACU spp 0
1.						UPL spp. $0 x 5 = 0$
2.						
3.						Total <u> </u>
4.						
5.						Prevalence Index = B/A = NA
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.		T				■ Yes ■ No Dominance Test is > 50%
		Total Cover =	0			Yes ■ No Prevalence Index is ≤ 3.0 *
						□ Yes □ No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)		0.5		E4 0)4/	Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Phalaris arundinacea		95	Y	FACW	* Indicators of hydric soil and wetland hydrology must be
2. 3.	Typha latifolia		5	N 	OBL 	present, unless disturbed or problematic.
3. 4.						Definitions of Vanctation Charter
5.						Definitions of Vegetation Strata:
6						Troo
7.						Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.						broack noight (bbt 1), rogardrood or noight.
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
9. 10.						ft. tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
10.		Total Cover =	100			Troody Tilled
		Total Cover =	100			
Woody Vine Strat	um (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present • Yes • No
4.						, , , , , , , , , , , , , , , , , , , ,
5.						
		Total Cover =	0			
Remarks:						

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/30/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Wetland 11 Wetland ID: Soil Unit: Blount silt loam, end moraine, 2-4% slopes Landform: Terrace Local Relief: None Sample Point: SP28 Slope (%): Latitude: 40.1663 Longitude: -83.226676 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes ФИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Yes • No Hydric Soils Present? □ Yes ■ No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Upland point for Wetland 11

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery D1 - Stunted or Stressed Plants

D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

N/A

Wetland Hydrology Present? • Yes • No

Remarks:

SOILS

Map Unit Name: Blount silt loam, end moraine, 2-4% slopes Profile Description

1 To The Describe to the depth needed to document the indicator or confirm the absence or indicators.) (1 ype: C=Concentration, b=beptetion, km=keduced matrix, CS=Covered Coaled Saind Grains; Location: PL=Pore Lining, m=matrix)												
Тор	Bottom		Matrix				Redo		Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)	
0	16		10YR	3/2	100						silty clay	
16	20		10YR	3/2	96	10YR	5/6	3	С	M	silty clay	
16	20	-				7.5YR	4/6	1	С	M	silty clay	
		-										
		-										
		-										

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?**



Project/Site: NCL - alternate route Wetland ID: Wetland 11 Sample Point: SP28

VEGETATIO	(Species identified in all up	percase are non-na	ative spe	cies.)							
	(Plot size: 30 ft radius)			,							
	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet					
1.											
2.						Number of Dominant Species that are OBL, FACW, or FAC: 1 (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: 50% (A/B)					
7.											
8.						Prevalence Index Worksheet					
9.						Total % Cover of: Multiply by:					
10.						OBL spp. $0 X 1 = 0$					
		Total Cover =	0			FACW spp. 75					
						FAC spp. $0 x 3 = 0$					
Sapling/Shrub	Stratum (Plot size: 15 ft radius))				FACU spp. $\frac{27}{}$ $x = 4 = \frac{108}{}$					
1.						UPL spp. $0 x 5 = 0$					
2.						· · · · · · · · · · · · · · · · · · ·					
3.						Total 102 (A) 258 (B)					
4.											
5.						Prevalence Index = B/A = 2.529					
6.											
7.											
8.						Hydrophytic Vegetation Indicators:					
9.						■ Yes ■ No Rapid Test for Hydrophytic Vegetation					
10.						■ Yes ■ No Dominance Test is > 50%					
		Total Cover =	0			Yes □ No Prevalence Index is ≤ 3.0 *					
						Yes No Morphological Adaptations (Explain) *					
Herb Stratum	(Plot size: 5 ft radius)					 Yes No Problem Hydrophytic Vegetation (Explain) * 					
1.	Phalaris arundinacea		75	Υ	FACW	* Indicators of hydric soil and wetland hydrology must be					
2.	Dipsacus fullonum		5	N	FACU	present, unless disturbed or problematic.					
3.	Asclepias syriaca		2	N	FACU	process, amose distances of problemation					
4.	Solidago canadensis		20	Υ	FACU	Definitions of Vegetation Strata:					
5.											
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at					
7.						breast height (DBH), regardless of height.					
8.											
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.					
10.						it. taii.					
11.					-						
12.					-	Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.					
13.					-	and woody plants less than 5.20 ft. tall.					
14.					-						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.					
		Total Cover =	102								
Woody Vine S	tratum (Plot size: 30 ft radius)										
1.					-						
2.											
3.						Hydrophytic Vegetation Present Yes No					
4.											
5.											
		Total Cover =	0								
Remarks:											
1											



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/30/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 11 Soil Unit: Landform: Terrace Local Relief: Concave Sample Point: SP29 Latitude: 40.1661 Slope (%): Ω Longitude: -83.226637 Datum: WGS 1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? YesNo Hydric Soils Present? YesNo Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland?

Remarks: Wetland point for Wetland 11

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants

D2 - Geomorphic Position D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Field Observations:

Surface Water Present? ■ Yes □ No Depth: 1.5 (in.) Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Pewamo silty clay loam, 0-1% slopes

Remarks:

Map Unit Name:

SOI	LS

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

(Social to the depth headed to deciminate the manager of committee about to the manager of committee about to the about to											
Тор	Bottom		Matrix				Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	4		10YR	4/2	95	5YR	5/8	5	С	M	clay loam
4	21		10YR	4/1	95	5YR	5/8	5	С	M	clay loam
		-									
		-									
		-									
		-									
		-									

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface

S3 - 5 cm Mucky Peat or Peat

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



Woody Vine Stratum (Plot size: 30 ft radius)

Total Cover =

0

1.

3. 4. 5.

Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: NCL - alternate route Wetland ID: Wetland 11 Sample Point: SP29 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Number of Dominant Species that are OBL, FACW, or FAC: ____1 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 6. 7. 8. Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. x 2 = FAC spp. 0 x 3 = x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 0 UPL spp. x 5 = 2. 3. ____(A) Total 4. 5. Prevalence Index = B/A = NA 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation Yes No 10. Yes No Dominance Test is > 50% Total Cover = Yes ■ No Prevalence Index is ≤ 3.0 * No Morphological Adaptations (Explain) * Yes □ No Herb Stratum (Plot size: 5 ft radius) Problem Hydrophytic Vegetation (Explain) * Yes 1. Phalaris arundinacea 80 Υ **FACW** * Indicators of hydric soil and wetland hydrology must be OBI 2 Typha angustifolia 15 Ν present, unless disturbed or problematic. 3. Ν FAC Xanthium strumarium 5 **Definitions of Vegetation Strata:** 4. Leersia oryzoides 10 Ν OBL 5. 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 110

Additional Remarks:		

Hydrophytic Vegetation Present = Yes = No



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/30/20 Applicant: Columbia Gas of Ohio County: Union State: Investigator #1: Angela Sjollema Investigator #2: Julie Slater Ohio NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Soil Unit: Wetland 12 Landform: Terrace Local Relief: None Sample Point: SP30 Slope (%): Latitude: 40.1662 Longitude: -83.226803 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A Yes No N/A N/A Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Hydric Soils Present? Yes
No Yes No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Upland point for Wetland 12

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

B9 - Water-Stained Leaves A1 - Surface Water A2 - High Water Table B13 - Aquatic Fauna B14 - True Aquatic Plants A3 - Saturation B1 - Water Marks C1 - Hydrogen Sulfide Odor

B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots B3 - Drift Deposits C4 - Presence of Reduced Iron C6 - Recent Iron Reduction in Tilled Soils B4 - Algal Mat or Crust

B5 - Iron Deposits C7 - Thin Muck Surface B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface

A16 - Coast Prairie Redox

F12 - Iron-Manganese Masses

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Field Observations:

Surface Water Present? □ Yes ■ Depth: (in.) No Water Table Present? □ Yes ■ No Depth: __ (in.) (in.) Saturation Present? □ Yes ■ No Depth:

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

Remarks:

SOILS

Map Unit Name: Pewamo silty clay loam, 0-1% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

					, , , ,				,	,	
Тор	Bottom			Matrix			Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	11		10YR	4/3	100		-				clay loam
11	20		10YR	4/4	85	10YR	5/6	15	С	M	clay
							-				
							-				
							-				
							-				
							-				

NRCS Hydric Soil Field Indicators (check here if indicators are not present

A1- Histosol S4 - Sandy Gleyed Matrix A2 - Histic Epipedon

S3 - 5 cm Mucky Peat or Peat

S5 - Sandy Redox A3 - Black Histic S6 - Stripped Matrix A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral A5 - Stratified Layers F2 - Loamy Gleyed Matrix A10 - 2 cm Muck F3 - Depleted Matrix

A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions

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

Restrictive Layer Type: N/A Depth: N/A **Hydric Soil Present?** Yes No (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 12 Sample Point: SP30

VEGETATION	(Species identified in all upp	percase are non-na	ative spe	cies.)		
	Plot size: 30 ft radius)			,		
	Species Name		% Cover	Dominant	Ind.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:3(B)
5.						·
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)
7.						(``,
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. x 1 = 0
		Total Cover =	0			FACW spp. x 2 = 0
						FAC spp. x 3 = 0
Sapling/Shrub S	tratum (Plot size: 15 ft radius))				FACU spp. x 4 = 0
1.	Cornus amomum		60	Υ	FACW	UPL spp. x 5 = 0
2.						···
3.						Total(A)(B)
4.						···
5.						Prevalence Index = B/A = NA
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						 Yes No Rapid Test for Hydrophytic Vegetation
10.						Yes No Dominance Test is > 50%
		Total Cover =	60			Yes No Prevalence Index is ≤ 3.0 *
						Yes No Morphological Adaptations (Explain) *
Herb Stratum (F	Plot size: 5 ft radius)					Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Dipsacus fullonum		15	N	FACU	
2.	Solidago canadensis		30	Υ	FACU	* Indicators of hydric soil and wetland hydrology must be
3.	Phalaris arundinacea		55	Y	FACW	present, unless disturbed or problematic.
4.						Definitions of Vegetation Strata:
5.						
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.						ft. tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	100			
		rotal Gover =	100			
Woody Vine Str	atum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present • Yes • No
4.						inyarophysio rogetation resent - 165 - 100
5.						
<u> </u>		Total Cover =	0			
Remarks:		. 0101 00101 =				
. Comanco.						



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/30/20 Applicant: Columbis Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 12 Soil Unit: Landform: Floodplain Local Relief: Concave Sample Point: SP31 Latitude: 40.1659 Slope (%): Longitude: -83.226793 Datum: WGS1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes ФИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Yes • No Hydric Soils Present? Yes □ No Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland?

Remarks: Wetland point for Wetland 12

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water ✓ A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

D9 - Gauge or Well Data Other (Explain in Remarks)

C7 - Thin Muck Surface

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants

D2 - Geomorphic Position D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? (in.) ■ Yes ■ No Depth: Water Table Present? ■ Yes □ No Depth: 12 (in.) 0 Saturation Present? ■ Yes ■ No Depth: (in.)

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

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface

Wetland Hydrology Present?

Yes

No

Remarks:

SOLLS

Map Unit Name:	Pewamo silty clay loam, 0-1% slot	es

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Costed Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom		Matrix			Redox Features					Texture
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	6	-	10YR	4/2	94	5YR	5/8	6	С	PL	silt loam
6	10	-	10YR	4/1	90	5YR	4/6	7	С	PL	silt loam
		-	-	1		5YR	4/6	3	С	M	silt loam
10	16	-	5Y	4/1	85	5YR	4/6	10	С	PL	silty clay loam
		-	-	1		5YR	4/6	5	С	M	silty clay loam
16	20	-	5Y	4/1	95	5YR	4/6	5	С	M	silty clay loam
		-					-				
		-	-				-				

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A11 - Depleted Below Dark Surface

S3 - 5 cm Mucky Peat or Peat

A12 - Thick Dark Surface

S1 - Sandy Muck Mineral

A10 - 2 cm Muck

F3 - Depleted Matrix

F6 - Redox Dark Surface F7 - Depleted Dark Surface

S4 - Sandy Gleyed Matrix

F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix

S5 - Sandy Redox

S6 - Stripped Matrix

F8 - Redox Depressions

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

Restrictive Layer Yes No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 12 Sample Point: SP31

VEGETATION	(Species identified in all upp	percase are non-na	ative spe	cies.)		
	ot size: 30 ft radius)			,		
,	Species Name		% Cover	Dominant	Ind.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: (B)
5.						
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.		Total Cover =	0			OBL spp. $\begin{array}{cccc} & 0 & & x & 1 = & & 0 \\ & & & & x & 2 = & & 0 \end{array}$
		Total Cover =	U			FACW spp. $\begin{array}{ccc} & 0 & & x & 2 = & & 0 \\ & & & & & & & & & & & & & & & &$
Sanling/Shrub Str	ratum (Plot size: 15 ft radius)					FACU spp. $0 \times 4 = 0$
1.	atum (Flot Size: 15 it faulus)					UPL spp. 0
2.						ν ν υ = <u> </u>
3.						Total 0 (A) 0 (B)
4.						(//
5.						Prevalence Index = B/A = NA
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						 Yes No Rapid Test for Hydrophytic Vegetation
10.						YesNoDominance Test is > 50%
		Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
						 Yes No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)					 Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Phalaris arundinacea		50	Y	FACW	* Indicators of hydric soil and wetland hydrology must be
2.	Leersia oryzoides		30	Y	OBL	present, unless disturbed or problematic.
3.	Solidago gigantea		30	Y	FACW	Definitions of Vanctation Office
4.	Asclepias syriaca		5	N	FACU	Definitions of Vegetation Strata:
5.						Troo
6 7.						Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.						ft. tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	115			
Woody Vine Strat	tum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present • Yes • No
4.						
5.						
D 1		Total Cover =	0			
Remarks:						

Additional Remarks:		



Project/Site: NCL - Alternate Route Stantec Project #: 193707055 Date: 04/27/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Wetland ID: Wetland 13 Soil Unit: Blount silt loam, end moraine, 2-4% slopes Landform: Ditch Local Relief: Concave Sample Point: SP32 Latitude: 40.163687 Slope (%): Longitude: -83.228768 Ω Datum: WGS 1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? ■ Yes □ No Hydric Soils Present? YesNo Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland? Remarks: Road side ditch, wet point for Wetland 13 <u>HYDROL</u>OGY Wetland Hydrology Indicators (Check here if indicators are not present): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows C3 - Oxidized Rhizospheres on Living Roots B2 - Sediment Deposits C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? ■ Yes □ No Depth: 2 (in.) Wetland Hydrology Present? • Yes • No Water Table Present? ■ Yes □ Depth: 0 (in.) No 5 Saturation Present? ■ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Blount silt loam, end moraine, 2-4% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top **Bottom** Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 95 10YR ΡI silt loam 10YR 3/3 3/4 5 0 10 С 10 20 10YR 7.5YR 5/8 С М 4/1 80 20 silty clay ----------------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present -Indicators for Problematic Soils 1 A1- Histosol S4 - Sandy Gleyed Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface A3 - Black Histic S6 - Stripped Matrix F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A5 - Stratified Lavers A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions S3 - 5 cm Mucky Peat or Peat 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed) Remarks:



Project/Site: NCL - Alternate Route Wetland ID: Wetland 13 Sample Point: SP32

VEGETATION	(Species identified in all upp	percase are non-na	ative spe	cies.)		
Tree Stratum (F	Plot size: 30 ft radius)					
	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC:(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:(A/B)
7.						B. I. I.I. W. I.I.
8.						Prevalence Index Worksheet
9. 10.						Total % Cover of: Multiply by:
10.		Total Cover =	0			OBL spp
		Total Cover =	U			FACW spp. $\begin{array}{c} x & 2 = \\ \hline FAC spp. \\ \end{array}$ $\begin{array}{c} x & 3 = \\ \end{array}$
Sanling/Shruh S	tratum (Plot size: 15 ft radius)					FAC spp.
1.						$\begin{array}{cccccccccccccccccccccccccccccccccccc$
2.						. то <u> </u>
3.						Total(A)(B)
4.						(//
5.						Prevalence Index = B/A = NA
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						Yes No Rapid Test for Hydrophytic Vegetation
10.						■ Yes □ No Dominance Test is > 50%
		Total Cover =	0			■ Yes ■ No Prevalence Index is ≤ 3.0 *
						Yes No Morphological Adaptations (Explain) *
	lot size: 5 ft radius)					Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Phalaris arundinacea		40	Υ	FACW	* Indicators of hydric soil and wetland hydrology must be
2.	Typha latifolia		60	Υ	OBL	present, unless disturbed or problematic.
3.						
4.						Definitions of Vegetation Strata:
5.						Tree
6 7.						Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.						broast noght (bbr), rogardios of noght.
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.						ft. tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	100			,
		10101 00101 =	100			
Woody Vine Stra	atum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present = Yes = No
4.						, , , , , , , , , , , , , , , , , , , ,
5.						
		Total Cover =	0			
Remarks:						

Additional	Remarks:
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Project/Site: NCL - Alternate Route Stantec Project #: 193707055 Date: 04/27/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Wetland ID: Wetland 13 Soil Unit: Blount silt loam, end moraine, 2-4% slopes Landform: Hillslope Local Relief: None Sample Point: SP33 Slope (%): Longitude: -83.228722 Latitude: 40.163744 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Yes • No Hydric Soils Present? Yes No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Upland point for Wetland 13

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table . A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data

Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: --(in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Remarks:

SOILS

Map Unit Name: Blount silt loam, end moraine, 2-4% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

	December of the depart receded to december the indicator of continuous o										
Тор	Bottom			Matrix			Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	6		10YR	2/2	100						silty clay
6	10		10YR	3/2	80						silty clay
6	10		7.5YR	4/2	20						

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: Gravel/Rock Depth: 10" **Hydric Soil Present?** (If Observed)



Project/Site: NCL - Alternate Route Wetland ID: Wetland 13 Sample Point: SP33

VEGETATION	(Species identified in all upp	ercase are non-na	itive spe	cies.)		
	ot size: 30 ft radius)			,		
,	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC:1(A)
3.						
4.						Total Number of Dominant Species Across All Strata:(B)
5.						
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.		Total Cover =	0			OBL spp.
		Total Cover =	U			
Sanling/Shrub Str	ratum (Plot size: 15 ft radius)					FAC spp. $\begin{array}{c} x & 3 = \\ x & 4 = \\ \end{array}$
1.	atum (Flot size: 15 it radius)					$\begin{array}{cccccccccccccccccccccccccccccccccccc$
2.						Λ V =
3.						Total (A) <mark>0</mark> (B)
4.						
5.						Prevalence Index = B/A = NA
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.						■ Yes ■ No Dominance Test is > 50%
		Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
						Yes No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)					Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Poa pratensis		75	Y	FAC	* Indicators of hydric soil and wetland hydrology must be
2.	Daucus carota		8	N	UPL	present, unless disturbed or problematic.
3.	Phalaris arundinacea		15	N	FACW	Definitions of Vanctation Office
4.	Taraxacum officinale		2	N	FACU	Definitions of Vegetation Strata:
5. 6	Dipsacus fullonum		2	N 	FACU	Troo
7.						Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.						ft. tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	102			
Woody Vine Strat	tum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present ■ Yes □ No
4.						
5.		c				
D 1		Total Cover =	0			
Remarks:						

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/14/20 Applicant: Columbis Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Ohio Investigator #2: Julie Slater NWI/WWI Classification: PFO1C Wetland ID: Soil Unit: Blount silt loam, end moraine, 0-2% slopes N/A Landform: Local Relief: None Sample Point: SP34 Slope (%): Latitude: 40.1568 Longitude: -83.222658 Datum: --Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? YesNo Hydric Soils Present? Yes No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: NWI Point confirmed to be Upland

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Remarks:

SOILS

Map Unit Name: Blount silt loam, end moraine, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom			Matrix			Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	8		10YR	4/4	100						loam
8	14		10YR	5/4	93	10YR	5/8	4	С	M	silty clay
8	14	-			-	10YR	6/2	3	С	M	silty clay
14	21		10YR	3/3	30	10YR	5/8	2	С	M	silty clay
14	21	-	10YR	6/4	68		-		1		silty clay
		-			-		-		1		
							-		-		

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Restrictive Layer Type: N/A Depth: N/A **Hydric Soil Present?** " Yes " No (If Observed)



Project/Site: NCL - alternate route Wetland ID: N/A Sample Point: SP34 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Fraxinus americana **FACU FACU** 2. 15 Υ Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) Acer saccharum 3. Ulmus rubra 20 FAC 4. Celtis occidentalis 10 Ν FAC Total Number of Dominant Species Across All Strata: 5 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 40% (A/B) 6. 7. 8 Prevalence Index Worksheet --9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 53 FACW spp. 0 x 2 = 0 FAC spp. 35 x 3 =Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 60 240 Lonicera morrowii 20 **FACU** UPL spp. x 5 = Υ FACU 2 Rubus allegheniensis 12 3. 5 Ν **FACU** Carya ovata 98 _(A) 360 Total Rubus occidentalis UPL 4. 3 Ν 5. Prevalence Index = B/A = 3.673 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation Yes No 10. ■ No Yes Dominance Test is > 50% Total Cover = 40 Yes ■ No Prevalence Index is ≤ 3.0 * □ No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) □ No Problem Hydrophytic Vegetation (Explain) * Yes 1. Toxicodendron radicans 5 Υ FAC * Indicators of hydric soil and wetland hydrology must be 2 -present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15.

Additional Remarks:		

Hydrophytic Vegetation Present - Yes - No

Total Cover =

Total Cover =

Woody Vine Stratum (Plot size: 30 ft radius)

1.

3. 4. 5.

Remarks:

5

0



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/14/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Wetland ID: Wetland 14 Soil Unit: Blount silt loam, end moraine, 0-2% slopes Landform: Depression Local Relief: Concave Sample Point: SP35 Slope (%): Latitude: 40.1566 Longitude: -83.222392 Datum: --Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? YesNo Hydric Soils Present? YesNo Wetland Hydrology Present? Yes • No Is This Sampling Point Within A Wetland?

Remarks: Wetland point to Wetland 14

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water A2 - High Water Table

A3 - Saturation B1 - Water Marks

B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves B13 - Aquatic Fauna

B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data

Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks

B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants

D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Remarks:

SOILS

Buttressed trees

SOILS		
Map Unit Name:	Blount silt loam, end moraine, 0-2% slope	es

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Deptetion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Texture Top Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 7.5YR silty clay 10YR 3/2 85 5/8 15 M 0 3 C 3 17 10YR 5/1 55 10YR 5/8 45 С М clav 17 10YR 10YR 21 5/1 30 5/8 70 С Μ clay ----------------------------------

NRCS Hydric Soil Field Indicators (check here if indicators are not present -

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat Type: N/A

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix

F6 - Redox Dark Surface F7 - Depleted Dark Surface

F8 - Redox Depressions

Depth:

N/A

Indicators for Problematic Soils 1

A16 - Coast Prairie Redox

S7 - Dark Surface

Hydric Soil Present?

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface Other (Explain in Remarks)

" Yes " No

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

Remarks:

Restrictive Layer



Project/Site: NCL - alternate route Wetland ID: Wetland 14 Sample Point: SP35

VEGETATION	(Species identified in all uppercase	are non-nativ	ve spec	ies.)		
Tree Stratum (Pl	ot size: 30 ft radius)					
	Species Name	<u>%</u>	6 Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	Quercus palustris		45	Υ	FACW	
2.	Carya ovata		10	N	FACW	Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.	Ulmus americana		20	Υ	FACW	
4.						Total Number of Dominant Species Across All Strata: 2 (B)
5.						··
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 $\times 1 = 0$
	Total	Cover =	75			FACW spp. $0 X 2 = 0$
						FAC spp. $0 X 3 = 0$
Sapling/Shrub Str	ratum (Plot size: 15 ft radius)					FACU spp. $0 x 4 = 0$
1.						UPL spp. $0 X 5 = 0$
2.						···
3.						Total 0 (A) 0 (B)
4.						(-)
5.						Prevalence Index = B/A = NA
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.						■ Yes ■ No Dominance Test is > 50%
10.	Total	Cover =	0			Yes □ No Prevalence Index is ≤ 3.0 *
	rotar	00101 -	•			□ Yes □ No Morphological Adaptations (Explain) *
Horb Strotum (DI	ot size: 5 ft radius)					□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
1.	or size. Sit facius)					res - No Problem Hydrophylic Vegetation (Explain)
2.						* Indicators of hydric soil and wetland hydrology must be
3.						present, unless disturbed or problematic.
4.						Definitions of Vegetation Strata:
5.	 					Definitions of vegetation strata.
						Troo
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.						broast hoight (bbil), rogardioss of hoight.
8.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
9.						ft. tall.
10.						
11.						All book assess for a second a short a second as a fair-
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.						
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total	Cover =	0			
Woody Vine Strat	tum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present = Yes = No
4.						injuiopinjuo rogetationi i resent - 165 - 140
5.						
J.		Cover =	0			
Remarks:	rotar	00701 =	-			
omano.						

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/14/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Wetland ID: Wetland 14 Soil Unit: Blount silt loam, end moraine, 0-2% slopes Landform: Local Relief: None Sample Point: SP36 Slope (%): Latitude: 40.1566 Datum: --Ω Longitude: -83.222241 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? Yes
 No YesNo □ Yes ■ No

Wetland Hydrology Present? Is This Sampling Point Within A Wetland?

Remarks: Upland point to Wetland 14

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits B4 - Algal Mat or Crust

B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ Depth: (in.) No Saturation Present? □ Yes ■ No Depth: (in.)

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

N/A

Wetland Hydrology Present? • Yes • No

Remarks:

SUILS	
Map Unit Name:	Blount

Blount silt loam, end moraine, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

	· · · · · · · · · · · · · · · · · · ·				, , , ,					3, ,	
Тор	Bottom		Matrix			Redox Features					Texture
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam
0	5		10YR	4/3	70						clay loam
0	5		10YR	5/2	30		-				silty clay
5	18		2.5Y	6/2	50	10YR	6/6	50	С	M	silty clay
							-				
							-				
							-				

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

TF12 - Very Shallow Dark Surface

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

Restrictive Layer Type: N/A Depth: N/A **Hydric Soil Present?** " Yes " No

Remarks: Roots, not able to sample below 18-inches



Project/Site: NCL - alternate route Wetland ID: Wetland 14 Sample Point: SP36 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Quercus rubra 35 **FACU FACW** 2. 5 Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) Liriodendron tulipifera Ν 3. Acer saccharum 5 Ν **FACU** 4. Carya ovata 20 FACU Total Number of Dominant Species Across All Strata: 6 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B) 6. 7. 8 Prevalence Index Worksheet --9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 65 FACW spp. 0 x 2 = 0 FAC spp. 10 x 3 = 30 Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 140 560 Carya ovata **FACU** UPL spp. x 5 = Celtis occidentalis 5 Υ FAC 2 3. Acer saccharum 10 Υ **FACU** 150 590 Total (A) (B) 4. 5. Prevalence Index = B/A = 3.933 6 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation Yes No 10. ■ No Yes Dominance Test is > 50% Total Cover = 20 Yes ■ No Prevalence Index is ≤ 3.0 * □ No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) □ No Problem Hydrophytic Vegetation (Explain) * Yes 1. Toxicodendron radicans 10 Υ FAC * Indicators of hydric soil and wetland hydrology must be 2 present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. --6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 10

Hydrophytic Vegetation Present - Yes - No

Additional Remarks:

1.

3. 4. 5.

Remarks:

Woody Vine Stratum (Plot size: 30 ft radius)

Total Cover =

0



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/15/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Wetland ID: Wetland 15 Soil Unit: Wetzel silty clay loam Landform: Depression Local Relief: Concave Sample Point: SP37 Slope (%): Latitude: 40.1508 Longitude: -83.217491 Datum: --Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Hydric Soils Present? Yes - No YesNo Wetland Hydrology Present? YesNo Is This Sampling Point Within A Wetland?

Remarks: Stream S12 turns into Wetland 15, then drains to broken tile and goes below surface

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

- A1 Surface Water A2 - High Water Table A3 - Saturation
- . B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits
- B4 Algal Mat or Crust B5 - Iron Deposits
- B7 Inundation Visible on Aerial Imagery
- B8 Sparsely Vegetated Concave Surface
- B9 Water-Stained Leaves
- B13 Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor
 - C3 Oxidized Rhizospheres on Living Roots
 - C4 Presence of Reduced Iron
 - C6 Recent Iron Reduction in Tilled Soils
 - C7 Thin Muck Surface D9 - Gauge or Well Data
- Other (Explain in Remarks)

Secondary:

- B6 Surface Soil Cracks
- B10 Drainage Patterns
- C2 Dry-Season Water Table
- C8 Crayfish Burrows
- C9 Saturation Visible on Aerial Imagery
- D1 Stunted or Stressed Plants
- D2 Geomorphic Position
- D5 FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

Field Observations:

Surface Water Present? ■ Yes □ No Depth: (in.) Water Table Present? ■ Yes □ Depth: Surface (in.) No Depth: Surface Saturation Present? ■ Yes ■ No (in.)

Wetzel silty clay loam

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

Remarks:

SOILS Map Unit Name:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

	Committee and depart needed to declarate and indicated to the indicated to											
Top	Bottom			Matrix			Redo		Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)	
0	5		10YR	4/2	100						clay loam	
5	20		10YR	4/2	68	7.5YR	4/6	30	С	M	silty clay	
5	20					7.5YR	5/8	2	С	M	silty clay	
-							-					
-							-					
-							-					
-							-					

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

- A1- Histosol
- A2 Histic Epipedon
- A3 Black Histic
- A4 Hydrogen Sulfide A5 - Stratified Lavers
- A10 2 cm Muck
- A11 Depleted Below Dark Surface
- A12 Thick Dark Surface
- S1 Sandy Muck Mineral
- S3 5 cm Mucky Peat or Peat
- S4 Sandy Gleyed Matrix
- S5 Sandy Redox S6 - Stripped Matrix
- F1 Loamy Muck Mineral F2 - Loamy Gleyed Matrix
- F3 Depleted Matrix
- F6 Redox Dark Surface
- F7 Depleted Dark Surface
- F8 Redox Depressions
- Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

TF12 - Very Shallow Dark Surface

" Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)

Remarks:

Restrictive Layer



Project/Site: NCL - alternate route Wetland ID: Wetland 15 Sample Point: SP37

VEGETATION	(Species identified in all upp	percase are non-na	ative spe	cies.)		
	lot size: 30 ft radius)					
,	Species Name		% Cover	Dominant	Ind.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.						(2)
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						(142)
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 x 1 = 0
10.		Total Cover =	0			FACW spp. 0 X 2 = 0
		Total Cover =	U			FAC spp. 0 X 3 = 0
Sanling/Shrub St	ratum (Plot size: 15 ft radius)					FACU spp. 0 x 4 = 0
1.						UPL spp. 0
2.						OFL spp.
3.						Total 0 (A) 0 (B)
3. 4.						Total <u> </u>
5.						Provolence Index P/A A/A
6.						Prevalence Index = B/A = NA
7.						
8.	-					Hydrophytic Vegetation Indicators:
9.	-					
						■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.		T-1-1 0				■ Yes ■ No Dominance Test is > 50%
		Total Cover =	0			Yes ■ No Prevalence Index is ≤ 3.0 *
						Yes No Morphological Adaptations (Explain) *
_	ot size: 5 ft radius)				0.51	Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Typha angustifolia		20	Y	OBL	* Indicators of hydric soil and wetland hydrology must be
2.	Phalaris arundinacea		80	Υ	FACW	present, unless disturbed or problematic.
3.						
4.						Definitions of Vegetation Strata:
5.						
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						it. tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	100			
Woody Vine Stra	tum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present = Yes = No
4.						, ap,
5.						
<u> </u>		Total Cover =	0			
Remarks:						

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/15/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema State: Ohio Investigator #2: Julie Slater NWI/WWI Classification: N/A Wetland ID: Wetland 15 Soil Unit: Wetzel silty clay loam Landform: Talf Local Relief: None Sample Point: SP38 Slope (%): Ω Latitude: 40.1507 Longitude: -83.217525 Datum: --Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Hydric Soils Present? YesNo YesNo Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Upland point for wetland 15

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data

Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

Field Observations:

Surface Water Present? (in.) Yes ■ No Depth: Water Table Present? □ Yes ■ No Depth: --(in.) Saturation Present? □ Yes ■ No Depth: (in.)

Wetzel silty clay loam

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

N/A

Remarks:

Map Unit Name:

SOILS

Profile Description (De

T TOTHE DESCRIP	101116 DC3011pt1011 (Describe to the depth needed to document the indicator or committing absence of indicators.) (Type: C=concentration, D=Depteror, Kwi=Keduced wards, C3=Covered Coaled Saint Statistics, Eccation: FL=Fore Emitig, wi=wards)											
Тор	Bottom			Matrix			Redo		Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)	
0	13		10YR	4/3	100						silty clay	
13	16	-	10YR	4/2	40	7.5YR	4/6	20	С	M	silty clay	
13	16	-		3/N	40				1		silty clay	
		-							-			
									-			
		-							-			
		-							-			

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S3 - 5 cm Mucky Peat or Peat

S1 - Sandy Muck Mineral

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Indicators for Problematic Soils 1

S7 - Dark Surface

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: Clay Depth: 16" **Hydric Soil Present?** (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 15 Sample Point: SP38

VEGETATION	(Species identified in all upper	rcase are non-na	tive spec	cies.)		
Tree Stratum (Pl	ot size: 30 ft radius)					
	<u>Species Name</u>		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.						
4.						Total Number of Dominant Species Across All Strata:1 (B)
5.						
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. $0 x 1 = 0$
	-	Total Cover =	0			FACW spp. 20 X 2 = 40
						FAC spp. $0 X 3 = 0$
Sapling/Shrub Str	ratum (Plot size: 15 ft radius)					FACU spp. 85 X 4 = 340
1.						UPL spp. $0 x 5 = 0$
2.						···· ····
3.						Total 105 (A) 380 (B)
4.						(
5.						Prevalence Index = B/A = 3.619
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.						■ Yes ■ No Dominance Test is > 50%
10.		Total Cover =	0			Yes ■ No Prevalence Index is ≤ 3.0 *
		rotal Govel =	Ü			PYes No Morphological Adaptations (Explain) *
Harb Stratum (Dl	ot size: 5 ft radius)					Problem Hydrophytic Vegetation (Explain) *
1.	Dipsacus fullonum		70	Υ	FACU	Tes - No Frobletti Hydrophytic Vegetation (Explain)
2.	Phalaris arundinacea		20	N	FACW	* Indicators of hydric soil and wetland hydrology must be
3.			15	N	FACU	present, unless disturbed or problematic.
3. 4.	Solidago canadensis					Definitions of Vanctation Chartes
						Definitions of Vegetation Strata:
5.						Torre
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.						breast neight (DBH), regardless of neight.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.						and woody planto 1000 than 0.20 ft. tain
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
	-	Total Cover =	105			
Woody Vine Strat	tum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present = Yes = No
4.						, , , , , , , , , , , , , , , , , , , ,
5.						
-		Total Cover =	0			
Remarks:						

Additional Remarks:	



S1 - Sandy Muck Mineral

Type: N/A

Restrictive Layer

Remarks:

S3 - 5 cm Mucky Peat or Peat

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: NCL - Alternate Route Stantec Project #: 193707055 Date: 04/21/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Michelle Kearns Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Wetland ID: Wetland 16 Soil Unit: Blount silt loam. end moraine 2-4% slopes Landform: Toeslope Local Relief: Concave Sample Point: SP39 Slope (%): Latitude: 40.149407 Longitude: -83.216214 Datum: --Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydric Soils Present? Hydrophytic Vegetation Present? YesNo YesNo Wetland Hydrology Present? Yes • No Is This Sampling Point Within A Wetland? Remarks: Wet point for Wetland 16 HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? (in.) Yes No Depth: Wetland Hydrology Present?
Yes
No Water Table Present? ■ Yes □ No Depth: 0 (in.) 0 Saturation Present? ■ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Blount silt loam. end moraine 2-4% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top **Bottom** Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 95 5YR ΡI clay loam 10YR 4/6 5 0 7 4/2 С 7 10 5Y 95 10YR 5/8 5 С М 5/1 10 10YR 10YR 20 4/2 93 5/8 7 С Μ ----------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present -Indicators for Problematic Soils 1 S4 - Sandy Gleyed Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface F12 - Iron-Manganese Masses A3 - Black Histic S6 - Stripped Matrix TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A5 - Stratified Lavers A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface

F8 - Redox Depressions

Depth:

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

Hydric Soil Present?

" Yes " No



Project/Site: NCL - Alternate Route Wetland ID: Wetland 16 Sample Point: SP39

VEGETATION	(Species identified in all upp	percase are non-na	ative spe	cies.)		
	lot size: 30 ft radius)		·			
,	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.						· · · · · · · · · · · · · · · · · · ·
4.						Total Number of Dominant Species Across All Strata: 1 (B)
5.						,
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						(142)
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 x 1 = 0
10.		Total Cover =	0			FACW spp. 0 X 2 = 0
		Total Covo.				FAC spp. 0 X 3 = 0
Sanling/Shrub St	ratum (Plot size: 15 ft radius)					FACU spp. 0 X 4 = 0
1.	13 11 1aulus)					UPL spp. 0
2.						от Е эрр.
3.						Total 0 (A) 0 (B)
3. 4.						10tal (A) (B)
5.						Prevalence Index = B/A = NA
6.						I levaletice flues – D/A –
7.						
8.						Hydrophytic Vegetation Indicators:
9.						
						, , , ,
10.		Total Cover -				■ Yes ■ No Dominance Test is > 50%
		Total Cover =	0			■ Yes ■ No Prevalence Index is ≤ 3.0 *
						□ Yes □ No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)		25	V	ODI	□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
1.	Typha angustifolia		95	Υ	OBL	* Indicators of hydric soil and wetland hydrology must be
2.						present, unless disturbed or problematic.
3.						
4.						Definitions of Vegetation Strata:
5.						_
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						T. AGHI.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.						dilu Woody pianto 1655 utan 5.20 it. tan.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	95			
Woody Vine Stra	tum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present ■ Yes ■ No
4.						
5.						
		Total Cover =	0			
Remarks:	5% open water					
	•					

Additional Remarks:		



Project/Site: NCL - Alternate Route Stantec Project #: 193707055 Date: 04/21/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Michelle Kearns Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Wetland ID: Wetland 16 Soil Unit: Blount silt loam. end moraine 2-4% slopes Landform: Toeslope Local Relief: Concave Sample Point: SP40 Slope (%): Latitude: 40.149381 Datum: --Longitude: -83.21624 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? YesNo Hydric Soils Present? YesNo Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Upland point for Wetland 16

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits B4 - Algal Mat or Crust

B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ Depth: (in.) No Saturation Present? □ Yes ■ No Depth: (in.)

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

N/A

Wetland Hydrology Present? • Yes • No

Remarks:

SOILS

Man Unit Name:	Blount silt loam	end moraine 2-4% slones

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom			Matrix			Redo	Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	8		10YR	3/3	100						clay loam
8	18	-	10YR	3/2	95	7.5YR	5/8	5	С	M	clay loam
		-		-			-		1		
		-					-		-		
		-		-			-		1		
		-		-			-		1		
		-		-			-		1		
NRCS Hydric	Soil Field In	ndicators (check he	ere if ind	icators a	re not pre	esent•):	Indicators	for Problen	natic Soils 1	

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface

S7 - Dark Surface

Restrictive Layer " Yes " No Type: Clay Depth: 18" **Hydric Soil Present?**



Project/Site: NCL - Alternate Route Wetland ID: Wetland 16 Sample Point: SP40

VEGETATION	(Species identified in all upp	ercase are non-na	ative spec	cies)		
	Plot size: 30 ft radius)	0.0000 0.0	anvo opo	3,00.,		
,	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.						`` '
4.						Total Number of Dominant Species Across All Strata: 1 (B)
5.						(=)
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 $\times 1 = 0$
10.		Total Cover =	0			FACW spp. 0 x 2 = 0
		10101 00101 =	· ·			FAC spp. $0 \times 3 = 0$
Sanling/Shrub S	tratum (Plot size: 15 ft radius)					FACU spp. 0 x 4 = 0
1.						UPL spp. 0
2.						ОТ Е ЗРР ХО
3.						Total <mark>0</mark> (A) <mark>0</mark> (B)
4.						Total <u>0</u> (A) <u>0</u> (B)
5.						Prevalence Index = B/A = NA
6.						r revalence muex – b/A – NA
7.						
8.						Hydrophytic Vegetation Indicators:
9.						
10.						, , , , ,
10.		Total Cover =	0			■ Yes □ No Dominance Test is > 50% □ Yes □ No Prevalence Index is ≤ 3.0 *
		Total Cover =	U			
						□ Yes □ No Morphological Adaptations (Explain) *
	lot size: 5 ft radius)		00		E40	Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Poa pratensis		90	Y	FAC	* Indicators of hydric soil and wetland hydrology must be
2.	Daucus carota		5	N	UPL	present, unless disturbed or problematic.
3.	Plantago major		3	N	FAC	
4.	Taraxacum officinale		2	N	FACU	Definitions of Vegetation Strata:
5.						
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						Tt. san.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.						and woody plants less than 3.26 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	100			
1						
Woody Vine Stra	atum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present = Yes = No
4.						,,
5.						
<u> </u>		Total Cover =	0			
Remarks:						

Additional Remarks:		



Project/Site: NCL - Alternate Route Stantec Project #: 193707055 Date: 04/21/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Michelle Kearns Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Wetland ID: Wetland 17 Soil Unit: Blount silt loam. end moraine 0-2% slopes Landform: Toeslope Local Relief: Concave Sample Point: SP41 Slope (%): Latitude: 40.146787 Datum: --Longitude: -83.212871 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Hydric Soils Present? YesNo YesNo Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland?

Remarks: Wet point for Wetland 17

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants

D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? (in.) ■ Yes □ No Depth: 0.5 Water Table Present? ■ Yes □ No Depth: 0 (in.) 0 Saturation Present? ■ Yes ■ No Depth: (in.)

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

N/A

Wetland Hydrology Present?
Yes
No

Remarks:

SOILS Map Unit Name: Blount silt loam. end moraine 0-2% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom			Matrix			Redo		Texture		
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)
0	7		10YR	4/2	90	10YR	5/8	7	С	M	clay loam
						5YR	4/6	3	С	PL	clay loam
7	15		10YR	5/2	95	10YR	5/6	5	С	M	clay loam
		-			-		-		-		
		-		-	-		-		1		
		-		1	-		-		1		
		-			-		-		-		
NRCS Hydric	Soil Field In	ndicators (check he	ere if ind	icators a	re not pre	esent •):	Indicators	for Problen	natic Soils 1	

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface

S7 - Dark Surface

Restrictive Layer " Yes " No Type: Roots Depth: 15" **Hydric Soil Present?**



Project/Site: NCL - Alternate Route Wetland ID: Wetland 17 Sample Point: SP41

VEGETATION	(Species identified in all uppercase are no	n-native spe	cies.)		
	lot size: 30 ft radius)				
,	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.					
4.					Total Number of Dominant Species Across All Strata: (B)
5.					·
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					·
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 X 1 = 0$
	Total Cove	er = 0			FACW spp. 0
					FAC spp. $0 x 3 = 0$
Sapling/Shrub St	ratum (Plot size: 15 ft radius)				FACU spp. $0 X 4 = 0$
1.				-	UPL spp. $0 X 5 = 0$
2.					
3.					Total(A)(B)
4.					
5.					Prevalence Index = B/A = NA
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					YesNoRapid Test for Hydrophytic Vegetation
10.					■ Yes □ No Dominance Test is > 50%
	Total Cove	er = 0			Yes ■ No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (P	lot size: 5 ft radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Typha angustifolia	95	Υ	OBL	* Indicators of hydric soil and wetland hydrology must be
2.					present, unless disturbed or problematic.
3.				-	processing armood arounded or problemation
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					11. sum
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					and woody planto lood than 0.20 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cove	er = 95			
Woody Vine Stra	tum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ■ Yes ■ No
4.					
5.					
	Total Cove	er = 0			
Remarks:	5% open water/ground			'	

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL- Alternate Route Date: 04/21/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Michelle Kearns Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Wetland ID: Wetland 17 Soil Unit: Blount silt loam. end moraine 0-2% slopes Landform: Hillslope Local Relief: Convex Sample Point: SP42 Slope (%): Latitude: 40.146766 Datum: --Longitude: -83.212865 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydric Soils Present? Hydrophytic Vegetation Present? YesNo YesNo Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Upland point for Wetland 17

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water

A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves B13 - Aquatic Fauna

B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants

D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

N/A

Wetland Hydrology Present? • Yes • No

Remarks:

SOILS

Map Unit Name: Blount silt loam. end moraine 0-2% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top **Bottom** Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 97 10YR clay loam 10YR 3 M 0 20 4/2 5/8 C --------------------------------

NRCS Hydric Soil Field Indicators (check here if indicators are not present -

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface

S3 - 5 cm Mucky Peat or Peat

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

Type: N/A

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

Indicators for Problematic Soils 1

A16 - Coast Prairie Redox

S7 - Dark Surface

F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface

Other (Explain in Remarks)

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

Remarks:

Restrictive Layer

Depth:

Hydric Soil Present?

" Yes " No



Project/Site: NCL - Alternate Route Wetland ID: Wetland 17 Sample Point: SP42

VEGETATION	(Species identified in all uppercase are non-na	ative spe	cies.)		
Tree Stratum (Pl	ot size: 30 ft radius)				
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.					··
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.					(112)
8.					Prevalence Index Worksheet
9.					
					Total % Cover of: Multiply by:
10.	Total Course				OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. 0
					FAC spp. $0 x 3 = 0$
	atum (Plot size: 15 ft radius)				FACU spp. $0 X 4 = 0$
1.					UPL spp. $0 x 5 = 0$
2.					
3.					Total 0 (A) 0 (B)
4.					
5.					Prevalence Index = B/A = NA
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					
10.					■ Yes ■ No Dominance Test is > 50%
10.	Total Cover =				
	Total Cover =	U			
					Yes No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Poa pratensis	90	Y	FAC	* Indicators of hydric soil and wetland hydrology must be
2.	Plantago major	2	N	FAC	present, unless disturbed or problematic.
3.	Plantago lanceolata	3	N	FACU	F,
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
					Herb - All herbaceous (non-woody) plants, regardless of size,
12.					and woody plants less than 3.28 ft. tall.
13.					
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	95			
Woody Vine Strat	um (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present = Yes = No
4.					,
5.					
J.	Total Cover =				
Remarks:	5% bare ground	U			
ivelliaiks.	3 /0 Date ground				

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/15/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Blount silt loam, ground moraine, 0-2% slopes Wetland ID: Wetland 18 Soil Unit: Landform: Depression Local Relief: Concave Sample Point: SP43 Slope (%): Latitude: 40.1444 Datum: --Longitude: -83.209736 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Yes □ No Hydric Soils Present? YesNo Wetland Hydrology Present? ■ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Ditch alongside US-33, Mowed vegetation. Wetland Point for wetland 18

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants

D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Field Observations:

Surface Water Present? ■ Yes □ No Depth: 0.5 (in.) Water Table Present? ■ Yes □ No Depth: 7 (in.) Depth: Surface Saturation Present? ■ Yes ■ No (in.)

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

Remarks:

SOILS

Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

(
Тор	Bottom			Matrix			Redo	Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	4		10YR	4/3	86	5YR	4/6	10	С	M	silt loam
0	4					5YR	4/6	4	С	PL	silt loam
4	6	-	10YR	4/3	60						40% gravel
6	14		5YR	5/1	60	10YR	5/6	40	С	M	silty clay
14	18	-	5Y	5/1	30	10YR	5/6	20	С	M	silty clay
14	18			5/N	40	10YR	5/6	10	С	PL	silty clay
18	21		5Y	5/1	30	10YR	5/6	30	С	M	silty clay
18	21			5/N	40						silty clay

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface F7 - Depleted Dark Surface

F8 - Redox Depressions

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

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 18 Sample Point: SP43

VEGETATION	(Species identified in all uppercase are non-r	native spe	cies.)		
Tree Stratum (Pl	ot size: 30 ft radius)				
	Species Name		Dominant	Ind.Status	Dominance Test Worksheet
1.	Populus deltoides	20	Y	FAC	Notice (Best and Outletter OB) FAOW of FAO
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					Total Niverboard Descriptors Consider Assess All Charles (D)
4.					Total Number of Dominant Species Across All Strata: 2 (B)
5. 6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.	 				reiterit di bonninant Species That Are Obl., FACW, di FAC. (A/B)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
10.	Total Cover =				FACW spp. 0 x 2 = 0
	10.0.1 00.001 =				FAC spp. 0
Sapling/Shrub Str	atum (Plot size: 15 ft radius)				FACU spp. $0 x 4 = 0$
1.					UPL spp. $0 \times 5 = 0$
2.					···
3.					Total 0 (A) 0 (B)
4.					
5.					Prevalence Index = B/A = NA
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.					■ Yes □ No Dominance Test is > 50%
	Total Cover =	- 0			Yes ■ No Prevalence Index is ≤ 3.0 *
					■ Yes ■ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	ot size: 5 ft radius)				■ Yes ■ No Problem Hydrophytic Vegetation (Explain) *
1.	Typha angustifolia	100	Υ	OBL	* Indicators of hydric soil and wetland hydrology must be
2.					present, unless disturbed or problematic.
3.					, · · · · · · · · · · · · · · · · · · ·
4.					Definitions of Vegetation Strata:
5.					_
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					O II (O) I Washington to set they 0 in DDH and any starting 0.00
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					Liberto All berbaccous (non woods) planta regardless of size
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					
14.					Woody Vines - All woody vines greater than 3.28 ft. in height.
15.		400			WOODY VINES - All WOODY VINES greater than 3.20 ft. in height.
	Total Cover =	100			
Woody Vine Strat	um (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present = Yes = No
4.					
5.					
	Total Cover =	= 0			
Remarks:					

Additional Remarks:	



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/15/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Blount silt loam, ground moraine, 0-2% slopes Wetland ID: Wetland 18 Soil Unit: Landform: Hillslope Local Relief: None Sample Point: SP44 Slope (%): Latitude: 40.1443 Datum: --Longitude: -83.209745 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Hydric Soils Present? □ Yes ■ No YesNo Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Vegetation mowed. upland point for wetland 18

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery D1 - Stunted or Stressed Plants

D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Remarks:

SOILS

Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Texture Top Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 10YR 100 loam 0 4 4/3 4 7 10YR 55 10YR 5/6 45 С М silty clay 4/3 10YR 3/2 10YR 7 21 20 5/8 55 С Μ silty clay 21 10YR 4/2 25 silty clay ------------------------------------

NRCS Hydric Soil Field Indicators (check here if indicators are not present

A2 - Histic Epipedon

A3 - Black Histic A4 - Hydrogen Sulfide

A5 - Stratified Lavers A10 - 2 cm Muck

A11 - Depleted Below Dark Surface

S3 - 5 cm Mucky Peat or Peat

S1 - Sandy Muck Mineral

A12 - Thick Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

F6 - Redox Dark Surface

S4 - Sandy Gleved Matrix

F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

S5 - Sandy Redox

S6 - Stripped Matrix

F3 - Depleted Matrix

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

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

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/a Depth: N/A **Hydric Soil Present?**



Project/Site: NCL - alternate route Wetland ID: Wetland 18 Sample Point: SP44

VEGETATION	(Species identified in all upp	ercase are non-na	ative spe	cies.)		
	lot size: 30 ft radius)	1010000 010 11011 110	ro opo	3.00.7		
,	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC:1(A)
3.						
4.						Total Number of Dominant Species Across All Strata:(B)
5.						
6.						Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.		Total Cover =	0			OBL spp. $\begin{array}{cccc} & 0 & & x & 1 = & & 0 \\ & & & & & & & & & & & & & & & &$
		Total Cover =	U			FACW spp. 0 $x 2 = 0$ FAC spp. 50 $x 3 = 150$
Sanling/Shrub St	ratum (Plot size: 15 ft radius)					FAC spp. $\frac{50}{45}$ $\frac{150}{45}$ $\frac{150}{45}$
1.						UPL spp. $\frac{45}{5}$ $\frac{1}{25}$ $\frac{1}{25}$
2.						от в орр и о = <u></u>
3.						Total 100 (A) 355 (B)
4.						()
5.						Prevalence Index = B/A = 3.550
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.						■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.						■ Yes ■ No Dominance Test is > 50%
		Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
						Yes No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)					Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Dipsacus fullonum		30	Y	FACU	* Indicators of hydric soil and wetland hydrology must be
2.	Plantago lanceolata		15	N	FACU	present, unless disturbed or problematic.
3. 4.	Poa pratensis		50	Y	FAC UPL	Definitions of Vanatation Strate.
5.	Daucus carota		5	N 	UPL 	Definitions of Vegetation Strata:
6						Tree
7.						Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.						ft. tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	100			
Woody Vine Stra	tum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present = Yes = No
4.						,
5.						
		Total Cover =	0			
Remarks:						

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/15/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 19 Soil Unit: Landform: Depression Local Relief: Concave Sample Point: SP45 Latitude: 40.1401 Slope (%): Longitude: -83.205287 Datum: --Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? ■ Yes □ No Hydric Soils Present? YesNo Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland?

Remarks: Vegetation mowed. Wetland point for wetland 19

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? (in.) ■ Yes □ No Depth: 1 Water Table Present? □ Yes ■ Depth: (in.) No Saturation Present? □ Yes ■ No Depth: (in.)

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

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Wetland Hydrology Present? • Yes • No

Remarks:

SOILS

Map Unit Name: Pewamo silty clay loam, 0-1% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Top	Bottom			Matrix			Redo	Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	4		10YR	3/1	96	7.5YR	5/8	2	С	M	silt loam
0	4					5YR	5/8	2	С	PL	silt loam
4	18		10YR	5/1	40	10YR	5/6	60	С	M	silty clay
							-				
							-				
		-					-				
							-				

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Restrictive Layer " Yes " No Type: Clay Depth: 18 **Hydric Soil Present?** (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 19 Sample Point: SP45

VEGETATION	(Species identified in all uppercase are non-na	ative spe	cies.)		
	Plot size: 30 ft radius)		,		
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata:(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0
	Total Cover =	0			FACW spp. 0
Carlina/Ohach O	that in (Distains 45 th and in)				FAC spp. 0
Sapling/Shrub S	tratum (Plot size: 15 ft radius)				FACU spp. 0 $\times 4 = 0$ UPL spp. 0 $\times 5 = 0$
2.					UPL spp. 0
3.					Total <mark>0</mark> (A) <mark>0</mark> (B)
4.					Total <u> </u>
5.					Prevalence Index = B/A = NA
6.					Trovalonice index = 5/11 = 1/12
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.					■ Yes ■ No Dominance Test is > 50%
	Total Cover =	0			Yes No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (F	Plot size: 5 ft radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Typha angustifolia	50	Υ	OBL	
2.					* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.					present, unless disturbed of problematic.
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.				-	
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					it. taii.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					and woody plants less than 5.20 ft. tail.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	50			
Woody Vine Str	atum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present = Yes = No
4.					
5.					
Demonstra	Total Cover =	0			
Remarks:	50% open water/ dead detritus				

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/15/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 19 Soil Unit: Landform: Hillslope Local Relief: None Sample Point: SP46 Latitude: 40.1401 Slope (%): Longitude: -83.205303 Datum: --Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Yes No Hydric Soils Present? YesNo Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Vegetation mowed. upland point for wetland 19

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits B4 - Algal Mat or Crust

B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface D9 - Gauge or Well Data

Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

Field Observations:

Surface Water Present? □ Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Pewamo silty clay loam, 0-1% slopes

Remarks:

SOILS Map Unit Name:

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom			Matrix			Redo		Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)	
0	3		10YR	2/2	100						silt loam	
3	6		10YR	3/2	100						silty clay loam	
6	12		10YR	4/2	69	10YR	4/6	30	С	M	silty clay	
6	12					7.5YR	4/6	1	С	M	silty clay	
12	18		10YR	4/2	47	10YR	4/6	3	С	M	silty clay	
12	18					10YR	5/8	50	С	M	silty clay	

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: Clay Depth: 18 **Hydric Soil Present?** (If Observed)



3. 4. 5.

Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: NCL - alternate route Wetland ID: Wetland 19 Sample Point: SP46 **VEGETATION** (Species identified in all uppercase are non-native species.) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status Morus alba FAC UPL 2. 5 Υ Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) Pinus nigra 3. 4. Total Number of Dominant Species Across All Strata: 5 (B) 5 Percent of Dominant Species That Are OBL, FACW, or FAC: 40% (A/B) 6. 7. 8 Prevalence Index Worksheet 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 10 FACW spp. 10 x 2 = 20 FAC spp. 95 x 3 = 285 Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = 10 40 Acer ginnala 10 UPL UPL spp. x 5 = 2. Lonicera morrowii Υ FACU 10 3. 130 _(A) 420 (B) Total 4. 5. Prevalence Index = B/A = 3.231 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9 Rapid Test for Hydrophytic Vegetation Yes No 10. Yes ■ No Dominance Test is > 50% Total Cover = 20 Yes ■ No Prevalence Index is ≤ 3.0 * □ No Morphological Adaptations (Explain) * Yes Herb Stratum (Plot size: 5 ft radius) □ No Problem Hydrophytic Vegetation (Explain) * Yes 1. Poa pratensis 90 Υ FAC * Indicators of hydric soil and wetland hydrology must be 2 Cyperus strigosus 10 Ν **FACW** present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4 5. ----6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. and woody plants less than 3.28 ft. tall. 13. --14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) 1.

Additional Remarks:		

Total Cover =

0

Hydrophytic Vegetation Present - Yes - No



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/15/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 20 Soil Unit: Landform: Depression Local Relief: Concave Sample Point: SP47 Latitude: 40.1403 Slope (%): Datum: --Longitude: -83.204423 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?

Pyes No

Wetland Hydrology Present?

No

Hydric Soils Present?

Yes No

Is This Sampling Point Within A Wetland?

Yes No

Remarks: Wetland point for Wetland 20

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water
A2 - High Water Table
A3 - Saturation

B1 - Water Marks
B2 - Sediment Deposits
B3 - Drift Deposits

B4 - Algal Mat or CrustB5 - Iron Deposits

B7 - Inundation Visible on Aerial ImageryB8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic FaunaB14 - True Aquatic PlantsC1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck SurfaceD9 - Gauge or Well DataOther (Explain in Remarks)

B6 - Surface Soil Cracks
B10 - Drainage Patterns
C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed PlantsD2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present?
Yes No Depth: 3 (in.)
Water Table Present?
Yes No Depth: 2 (in.)
Saturation Present?
Yes No Depth: -- (in.)

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

N/A

Secondary:

Wetland Hydrology Present? • Yes • No

Remarks:

SOILS

Map Unit Name: Pewamo silty clay loam, 0-1% slopes

Profile Description (Control of the Application of the A

Profile Descrip	Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)											
Тор	Bottom			Matrix			Redo		Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)	
0	7		10YR	4/3	90	7.5YR	4/6	10	С	M	silt loam	
7	21		10YR	4/2	75	7.5YR	4/6	25	С	M	silty clay loam	
		-					-		1	-		
		-					-		-	-		
		-					-		1	-		
		-					-		1	-		
							-		-			

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon
A3 - Black Histic

A4 - Hydrogen SulfideA5 - Stratified Layers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface
 A12 - Thick Dark Surface

S1 - Sandy Muck Mineral
 S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix
 S5 - Sandy Redox

S6 - Stripped Matrix
 F1 - Loamy Muck Mineral
 F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

TF12 - Very Shallow Dark Surface

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

Restrictive Layer (If Observed)

Type: N/A

Depth: N/A

Hydric Soil Present?

" Yes " No



Project/Site: NCL - alternate route Wetland ID: Wetland 20 Sample Point: SP47

VEGETATION	(Species identified in all upper	ercase are non-na	ative spe	cies.)		
	lot size: 30 ft radius)		·	,		
,	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.						· · · · · · · · · · · · · · · · · · ·
4.						Total Number of Dominant Species Across All Strata: 1 (B)
5.						(2)
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						(142)
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 x 1 = 0
10.		Total Cover =	0			FACW spp. 0 X 2 = 0
		Total Cover =	U			FAC spp. 0 X 3 = 0
Sanling/Shrub St	ratum (Plot size: 15 ft radius)					FACU spp. 0 X 4 = 0
1.						UPL spp. 0
2.						υι Ε ορ μ.
3.						Total 0 (A) 0 (B)
3. 4.						Total <u> </u>
5.						Provolence Index P/A A/A
6.						Prevalence Index = B/A = NA
7.						
7. 8.						Hydrophytic Vegetation Indicators:
9.						■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.		T / 10				■ Yes ■ No Dominance Test is > 50%
		Total Cover =	0			Yes ■ No Prevalence Index is ≤ 3.0 *
						Yes No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)				0.51	Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Typha angustifolia		100	Y	OBL	* Indicators of hydric soil and wetland hydrology must be
2.						present, unless disturbed or problematic.
3.						
4.						Definitions of Vegetation Strata:
5.						
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						it. taii.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	100			
Woody Vine Stra	tum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present ■ Yes ■ No
4.						Tryanophysio rogotation rocont
5.						
0.		Total Cover =	0			
Remarks:		10101 00101 =				
. tomanto.						

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL - alternate route Date: 01/15/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Ohio Investigator #2: Julie Slater State: NWI/WWI Classification: N/A Pewamo silty clay loam, 0-1% slopes Wetland ID: Wetland 20 Soil Unit: Landform: Hillslope Local Relief: None Sample Point: SP48 Latitude: 40.1403 Slope (%): 4 Longitude: -83.204382 Datum: --Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? Hydric Soils Present? YesNo □ Yes ■ No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Upland point for Wetland 20

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface

B1 - Water Marks

B9 - Water-Stained Leaves B13 - Aquatic Fauna

B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? (in.) Yes ■ No Depth: Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

N/A

Wetland Hydrology Present? • Yes • No

Remarks:

SOILS

Map Unit Name: Pewamo silty clay loam, 0-1% slopes Profile Description (De

i romo Bocomp	1 Office Describe to the depth needed to document the indicator of continuous of continuous of the indicators of continuous of the indicators of the indicat												
Тор	Bottom			Matrix			Redo		Texture				
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)		
0	10		10YR	3/3	100						silty clay loam		
10	17		10YR	3/4	100						silty clay loam		
17	21	-	10YR	4/4	100						silty clay loam		
		-											
		-											

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



Project/Site: NCL - alternate route Wetland ID: Wetland 20 Sample Point: SP48

VEGETATION	(Species identified in all uppercase a	re non-native sr	ecies.)		
	lot size: 30 ft radius)	,	,		
,	<u>Species Name</u>	% Cov	er Dominant	Ind.Status	Dominance Test Worksheet
1.	Morus alba	15	Υ	FAC	
2.					Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
3.					
4.					Total Number of Dominant Species Across All Strata: 6 (B)
5.					· ——· ·
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
		Cover = 15			FACW spp. 3 X 2 = 6
	. 5.6.				FAC spp. 45
Sapling/Shrub St	ratum (Plot size: 15 ft radius)				FACU spp. 31 X 4 = 124
1.	Malus coronaria	20	Υ	UPL	UPL spp. 30 X 5 = 150
2.	Lonicera morrowii	20	Y	FACU	У С С С С С С С С С С С С С С С С С С С
3.	Acer ginnala	10	· Y	UPL	Total 109 (A) 415 (B)
4.					10tal (A) 410 (B)
5.					Prevalence Index = B/A = 3.807
6.					Trovalonce mack = D/A = 3.007
7.					
8.					Hydrophytic Vegetation Indicators:
9.					■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.					■ Yes ■ No Dominance Test is > 50%
10.		Cover = 50			■ Yes ■ No Prevalence Index is ≤ 3.0 *
	Total	20vei – 30			
Harb Stratum (D	at aiza. Eft radius)				4 · · · · · · · · · · · · · · · · · · ·
	ot size: 5 ft radius) Allium canadense	1	N	FACU	□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
1. 2.					* Indicators of hydric soil and wetland hydrology must be
	Cyperus strigosus	3	N	FACU	present, unless disturbed or problematic.
3.	Solidago canadensis	10	Y	FACU	Definitions of Variation Strate.
4.	Poa pratensis	30	Y	FAC	Definitions of Vegetation Strata:
5.					T
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.					breast reight (DBH), regardless of neight.
8.					O II Was traded to the O's DOU and available to 0.00
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					•
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total 0	Cover = 44			
Woody Vine Stra	tum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present - Yes - No
4.					
5.					
		Cover = 0			
Remarks:	56% open ground				

Additional	Romarke.



Project/Site: Stantec Project #: 193707055 NCL-alternate route Date: 01/16/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Blount silt loam, ground moraine, 2-4% slopes Wetland ID: Wetland 21 Soil Unit: Landform: Depression Local Relief: Concave Sample Point: SP49 Slope (%): Latitude: 40.1397 Longitude: -83.20018 Datum: WGS 1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? YesNo Hydric Soils Present? YesNo Wetland Hydrology Present? ■ Yes □ No Is This Sampling Point Within A Wetland? Remarks: Wetland point for Wetland 21

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present):

Primary:

A1 - Surface Water A2 - High Water Table

A3 - Saturation . B1 - Water Marks B2 - Sediment Deposits

B3 - Drift Deposits B4 - Algal Mat or Crust

B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves B13 - Aquatic Fauna

B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils C7 - Thin Muck Surface

D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? Depth: ■ Yes □ No (in.) Water Table Present? ■ Yes □ Depth: surface (in.) No Saturation Present? ■ Yes ■ No Depth: surface (in.)

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

N/A

Wetland Hydrology Present?
Yes
No

Remarks:

SOILS

Man Unit Name	Blount silt loam	ground moraine	2-4% slope

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Тор	Bottom		Matrix			Redox Features					Texture
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0	17	1	10YR	4/2	92	5YR	5/8	8	С	PL	silty clay loam
17	20	2	10YR	4/2	87	5YR	5/8	8	С	PL	silty clay
17	20	2		-		5YR	5/8	5	C	M	silty clay
	-	-		-					1	-	
	-	-		-					1	-	
	-	-		-					1	-	
		-							-		

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers

A10 - 2 cm Muck

A11 - Depleted Below Dark Surface

S3 - 5 cm Mucky Peat or Peat

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Indicators for Problematic Soils 1

S7 - Dark Surface

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses

TF12 - Very Shallow Dark Surface

Restrictive Layer " Yes " No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)



Project/Site: NCL-alternate route Wetland ID: Wetland 21 Sample Point: SP49

VEGETATION	(Species identified in all upp	ercase are non-na	ative spec	ries)		
	Plot size: 30 ft radius)	crease are non ne	ative spec	0103.)		
(Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.						
4.						Total Number of Dominant Species Across All Strata: 1 (B)
5.						(b)
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						(VD)
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						
10.	_ 	Total Cover =				
		Total Cover =	U			
Sanling/Shrub St	tratum (Plot size: 15 ft radius)					
1.						FACU spp. $\begin{array}{c} x & 4 = \\ \hline UPL spp. \\ \end{array}$ $\begin{array}{c} x & 5 = \\ \end{array}$
2.						Λ 0 = <u></u>
3.						Total (A) 0 (B)
4.						Total (A) (B)
5.						Prevalence Index = B/A = NA
6.						Prevalence index = D/A = NA
7.						
8.						Hydranbytia Vagatation Indicators
9.						Hydrophytic Vegetation Indicators:
9. 10.						■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.		Total Causer	0			■ Yes ■ No Dominance Test is > 50%
		Total Cover =	U			■ Yes ■ No Prevalence Index is ≤ 3.0 *
						□ Yes □ No Morphological Adaptations (Explain) *
,	lot size: 5 ft radius)		400		EAGNA	□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
1.	Phalaris arundinacea		100	Υ	FACW	* Indicators of hydric soil and wetland hydrology must be
2.						present, unless disturbed or problematic.
3.						
4.						Definitions of Vegetation Strata:
5.						
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						W Will
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.						and woody plants less than 5.20 ft. tail.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	100			
Woody Vine Stra	atum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present = Yes = No
4.						
5.						
		Total Cover =	0			
Remarks:						

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL-alternate route Date: 01/16/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Blount silt loam, ground moraine, 2-4% slopes Wetland ID: Wetland 21 Soil Unit: Landform: Local Relief: Linear Sample Point: SP50 Latitude: 40.1396 Slope (%): Longitude: -83.20007 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? YesNo Hydric Soils Present? □ Yes ■ No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Upland point for Wetland 21 HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present:): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? (in.) Yes ■ No Depth: Wetland Hydrology Present? • Yes • No Water Table Present? □ Yes ■ No Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Blount silt loam, ground moraine, 2-4% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top **Bottom** Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 7.5YR 2 clay 10 10YR 93 M 0 5/3 4/6 C 0 10 10YR 5/8 5 С М 1 clav 10 14 10YR 4/4 15 2 7.5YR 5/6 25 С Μ clay 10 14 2 10YR 4/2 60 --------------------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present Indicators for Problematic Soils 1 S4 - Sandy Gleved Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface F12 - Iron-Manganese Masses A3 - Black Histic S6 - Stripped Matrix TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A5 - Stratified Lavers A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface

F8 - Redox Depressions

Depth:

14"

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

Hydric Soil Present?

" Yes " No

(If Observed) Remarks:

Restrictive Layer

S1 - Sandy Muck Mineral

Type: Clay

S3 - 5 cm Mucky Peat or Peat



Project/Site: NCL-alternate route Wetland ID: Wetland 21 Sample Point: SP50

VEGETATION	(Species identified in all uppercase are non-n	ative speci	ies)		
	Plot size: 30 ft radius)	auro opoo			
,	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	Quercus rubra	40	Υ	FACU	
2.					Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
3.					`` <i>'</i>
4.					Total Number of Dominant Species Across All Strata: 5 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 40% (A/B)
7.					(12)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 $\times 1 = 0$
10.	Total Cover =				FACW spp. 20
	Total Cover =	- 40			FAC spp. $\frac{25}{25}$ \times $3 = \frac{45}{75}$
Sanling/Shruh S	tratum (Plot size: 15 ft radius)				FACU spp. 40 x 4 = 160
1.	Elaeagnus umbellata	30	Υ	UPL	UPL spp. 50 X 5 = 250
2.	Pyrus calleryana	10	Ÿ	UPL	Λ 0 = <u>250</u>
3.					Total 135 (A) 525 (B)
4.					10tal 133 (A) 323 (B)
5.					Prevalence Index = B/A = 3.889
6.					Trevalence midex = D/A = 3.003
7.					
8.					Hydrophytic Vegetation Indicators:
9.					
10.					
10.	 Total Cover =				□ Yes ■ No Dominance Test is > 50% □ Yes ■ No Prevalence Index is ≤ 3.0 *
	Total Cover =	40			
	Note: To the Control				□ Yes □ No Morphological Adaptations (Explain) *
	Plot size: 5 ft radius)	25		FAC	□ Yes □ No Problem Hydrophytic Vegetation (Explain) *
1.	Poa pratensis	25	Y	FAC	* Indicators of hydric soil and wetland hydrology must be
2.	Phalaris arundinacea	20	Y	FACW	present, unless disturbed or problematic.
3.	Pyrus calleryana	10	N	UPL	D.C. W. A.C. O. A.
4.					Definitions of Vegetation Strata:
5.					_
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					TV WIII
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					and woody plants less than 5.20 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	55			
Woody Vine Stra	atum (Plot size: 30 ft radius)				
1.	·				
2.					
3.					Hydrophytic Vegetation Present = Yes = No
4.					, , , , , , , , , , , , , , , , , , , ,
5.					
	Total Cover =				
Remarks:					

Lancitibha	Roma	rke.



Project/Site: Stantec Project #: 193707055 NCL-alternate route Date: 01/16/20 Applicant: County: Columbia Gas of Ohio Union State: Investigator #1: Angela Sjollema Investigator #2: Julie Slater Ohio NWI/WWI Classification: N/A Wetland ID: Soil Unit: Blount silt loam, ground moraine, 2-4% slopes Wetland 22 Landform: Local Relief: Linear Sample Point: SP51 Slope (%): Latitude: 40.1394 Longitude: -83.198822 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ■ Yes □ Section: N/A Are Vegetation , Soil , or Hydrology Significantly disturbed?

Are Vegetation , Soil Hydrology naturally problematic? Are normal circumstances present? Township: N/A Yes No N/A N/A Range: Dir: SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?

Hydric Soils Present? □ Yes ■ No Yes No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Vegetation mowed, upland point for Wetland 22

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

B9 - Water-Stained Leaves A1 - Surface Water A2 - High Water Table B13 - Aquatic Fauna B14 - True Aquatic Plants A3 - Saturation B1 - Water Marks C1 - Hydrogen Sulfide Odor

B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots B3 - Drift Deposits C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils B4 - Algal Mat or Crust B5 - Iron Deposits C7 - Thin Muck Surface B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

Field Observations:

Surface Water Present? Yes ■ No Depth: (in.) Water Table Present? □ Yes ■ No Depth: (in.) (in.) Saturation Present? □ Yes ■ No Depth:

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

Depth: 5"

Remarks:

SOILS

Map Unit Name: Blount silt loam, ground moraine, 2-4% slopes Profile Description (Des

Tromo Booonip	CIOII (Describe to	the depart needed to document the int	dicator or commi	II tile absence of	i iliuloators.) (1 y	pe. C=Concentin	E. C-Contentration, B-Depletion, Nivi-Neduced Wattra, CO-Covered Coated Galla Grains, Eccation, F.E. of Elling, W-Iviating					
Тор	Bottom			Matrix			Redo		Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)	
0	5	1	10YR	4/3	97	10YR	4/6	2	С	M	silty clay loam	
0	5	1				5YR	4/6	1	С	PL	silty clay loam	
		-										
		-										
		-										
		-										
		-										

NRCS Hydric Soil Field Indicators (check here if indicators are not present.):

A1- Histosol A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Layers A10 - 2 cm Muck

A11 - Depleted Below Dark Surface A12 - Thick Dark Surface

S1 - Sandy Muck Mineral S3 - 5 cm Mucky Peat or Peat Type: Rock

S4 - Sandy Gleyed Matrix S5 - Sandy Redox

S6 - Stripped Matrix F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix

F3 - Depleted Matrix F6 - Redox Dark Surface F7 - Depleted Dark Surface F8 - Redox Depressions

Hydric Soil Present?

Indicators for Problematic Soils 1

S7 - Dark Surface

A16 - Coast Prairie Redox

F12 - Iron-Manganese Masses

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

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

" Yes " No

Remarks:

Restrictive Layer



Project/Site: NCL-alternate route Wetland ID: Wetland 22 Sample Point: SP51

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

VEGETATION	(Species identified in all uppe	rcase are non-na	itive spec	ies.)		
Tree Stratum (Pl	ot size: 30 ft radius)					
	Species Name	_	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC: 1 (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: 50% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0 \times 1 = 0
		Total Cover =	0			FACW spp. $0 \times 2 = 0$
			_			FAC spp. 100 X 3 = 300
Sapling/Shrub Str	ratum (Plot size: 15 ft radius)					FACU spp. $0 x 4 = 0$
1.	Pyrus calleryana		5	Υ	UPL	UPL spp. 5
2.						0. 2 opp
3.						Total 105 (A) 325 (B)
4.						(2)
5.						Prevalence Index = B/A = 3.095
6.						Trevalence index = B/A = 3.090
7.						
8.						Hydrophytic Vegetation Indicators:
9.						
10.						 Yes No Rapid Test for Hydrophytic Vegetation Yes No Dominance Test is > 50%
10.		Total Cover =	5			
		Total Cover =	5			
						Yes No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)					Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Poa pratensis		100	Y	FAC	* Indicators of hydric soil and wetland hydrology must be
2.						present, unless disturbed or problematic.
3.						
4.						Definitions of Vegetation Strata:
5.						
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						II. läll.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	100			,
		10101 00101 =	100			
Moody Vina Ctra	turn (Diet eizer 20 ft redius)					
	tum (Plot size: 30 ft radius)					
1.						
2.						Hadranbuth Manufathan Brasset - Man - Na
3.						Hydrophytic Vegetation Present Yes No
4.						
5.		T-1-1 O				
		Total Cover =	0			
Remarks:						

Additional Rea	marks:
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Project/Site: Stantec Project #: 193707055 NCL-alternate route Date: 01/16/20 Applicant: County: Columbia Gas of Ohio Union State: Investigator #1: Angela Sjollema Investigator #2: Julie Slater Ohio NWI/WWI Classification: N/A Wetland ID: Soil Unit: Blount silt loam, ground moraine, 2-4% slopes Wetland 22 Landform: Depression Local Relief: Concave Sample Point: SP52 Latitude: 40.1393 Slope (%): Longitude: -83.198673 Datum: WGS 1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A Yes No N/A N/A Range: Dir: SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? ■ Yes ■ No Hydric Soils Present? Yes • No Wetland Hydrology Present? Yes No Is This Sampling Point Within A Wetland?

Remarks: Wetland point for Wetland 22

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation B1 - Water Marks

B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor C3 - Oxidized Rhizospheres on Living Roots

C4 - Presence of Reduced Iron C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data

Other (Explain in Remarks)

Secondary:

N/A

Indicators for Problematic Soils 1

S7 - Dark Surface F12 - Iron-Manganese Masses

A16 - Coast Prairie Redox

Other (Explain in Remarks)

TF12 - Very Shallow Dark Surface

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

Field Observations:

Surface Water Present? ■ Yes □ No Depth: (in.) Water Table Present? ■ Yes □ No Depth: surface (in.) Depth: surface Saturation Present? ■ Yes ■ No (in.)

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

Remarks:

SOILS

Map Unit Name: Blount silt loam, ground moraine, 2-4% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

	((.)	F	9,					
Тор	Bottom			Matrix			Redo		Texture			
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)	
0	7	1	10YR	4/2	99	5YR	5/8	1	С	M	silty clay loam	
7	20	2	10YR	4/2	94	5YR	5/8	6	С	PL	silty clay	
							-					
							-					
							-					
							-					
							-					

NRCS Hydric Soil Field Indicators (check here if indicators are not present •):

A1- Histosol A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers

A10 - 2 cm Muck A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

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

Restrictive Layer Type: N/A Depth: N/A **Hydric Soil Present?** Yes No



Project/Site: NCL-alternate route Wetland ID: Wetland 22 Sample Point: SP52

VEGETATION	(Species identified in all upp	ercase are non na	ative spec	rice)		
	lot size: 30 ft radius)	crease are non ne	ative spec	103.)		
(.	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.						
2.						Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.						
4.						Total Number of Dominant Species Across All Strata: 1 (B)
5.						(=)
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
7.						(VD)
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp x 1 =0
10.		Total Cover =				FACW spp. $X = 0$
		Total Cover =	U			
Sanling/Shrub St	ratum (Plot size: 15 ft radius)					* 11 *
1.	(Flot Size: 15 it faulus)					FACU spp. $\begin{array}{c} x & 4 = \\ UPL spp. \\ \end{array}$ $\begin{array}{c} x & 5 = \\ \end{array}$
2.						ν σ =
3.						Total (A) 0 (B)
4.						10tal(A)(B)
5.						Prevalence Index = B/A = NA
6.						Prevalence index = B/A = NA
7.						
8.	-					Hudranhutia Vagatatian Indicatora
9.	-					Hydrophytic Vegetation Indicators:
10.	- <u>-</u>					■ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.		Total Cover =				Yes No Dominance Test is > 50%
		Total Cover =	U			Yes No Prevalence Index is ≤ 3.0 *
						 Yes No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)		45	N.I	ODI	Yes • No Problem Hydrophytic Vegetation (Explain) *
1.	Typha angustifolia		15	N	OBL	* Indicators of hydric soil and wetland hydrology must be
2.	Scirpus atrovirens		90	Υ	OBL	present, unless disturbed or problematic.
3.						
4.						Definitions of Vegetation Strata:
5.						
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.						breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						To com.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.						and woody plants less than 5.20 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		Total Cover =	105			
Woody Vine Stra	tum (Plot size: 30 ft radius)					
1.						
2.						
3.						Hydrophytic Vegetation Present • Yes • No
4.						,,
5.						
<u> </u>		Total Cover =	0			
Remarks:						

" Yes " No

Hydric Soil Present?



WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: Stantec Project #: 193707055 NCL-alternate route Date: 01/16/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Blount silt loam, ground moraine, 0-2% slopes Wetland ID: Wetland 23 Soil Unit: Landform: Depression Local Relief: Concave Sample Point: SP53 Slope (%): Latitude: 40.1392 Longitude: -83.197933 Datum: WGS 1984 Community ID: PEM Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed? Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? YesNo Hydric Soils Present? YesNo Wetland Hydrology Present? Yes • No Is This Sampling Point Within A Wetland? Remarks: Wetland point for Wetland 23 HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present:): Primary: Secondary: A1 - Surface Water B6 - Surface Soil Cracks B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B10 - Drainage Patterns B14 - True Aquatic Plants A3 - Saturation C2 - Dry-Season Water Table . B1 - Water Marks C1 - Hydrogen Sulfide Odor C8 - Crayfish Burrows B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C9 - Saturation Visible on Aerial Imagery B3 - Drift Deposits C4 - Presence of Reduced Iron D1 - Stunted or Stressed Plants B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D2 - Geomorphic Position B5 - Iron Deposits C7 - Thin Muck Surface D5 - FAC-Neutral Test B7 - Inundation Visible on Aerial Imagery D9 - Gauge or Well Data B8 - Sparsely Vegetated Concave Surface Other (Explain in Remarks) Field Observations: Surface Water Present? □ Yes ■ No Depth: (in.) Wetland Hydrology Present?
Yes
No Water Table Present? ■ Yes □ Depth: 2 (in.) No 0 Saturation Present? ■ Yes ■ No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Texture Top Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 95 7.5YR ΡI silt loam 10YR 5 0 6 1 4/2 4/6 С 20 2 10YR 6 4/2 100 -silty clay ----------------------------NRCS Hydric Soil Field Indicators (check here if indicators are not present -Indicators for Problematic Soils 1 S4 - Sandy Gleyed Matrix A16 - Coast Prairie Redox A2 - Histic Epipedon S5 - Sandy Redox S7 - Dark Surface F12 - Iron-Manganese Masses A3 - Black Histic S6 - Stripped Matrix TF12 - Very Shallow Dark Surface A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral F2 - Loamy Gleyed Matrix Other (Explain in Remarks) A5 - Stratified Lavers A10 - 2 cm Muck F3 - Depleted Matrix A11 - Depleted Below Dark Surface F6 - Redox Dark Surface A12 - Thick Dark Surface F7 - Depleted Dark Surface S1 - Sandy Muck Mineral F8 - Redox Depressions S3 - 5 cm Mucky Peat or Peat 1 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

(If Observed) Remarks:

Restrictive Layer

Type: N/A

Depth:

N/A



Project/Site: NCL-alternate route Wetland ID: Wetland 23 Sample Point: SP53

VEGETATION	(Species identified in all uppercase are non-na	ative spe	cies.)		
	ot size: 30 ft radius)		,		
,	Species Name	% Cover	Dominant	Ind.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% (A/B)
7.					· · · ·
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. x 1 = 0
	Total Cover =	0			FACW spp. $X 2 = 0$
					FAC spp. $ x 3 = 0 $
Sapling/Shrub Str	atum (Plot size: 15 ft radius)				FACU spp. $X 4 = 0$
1.					UPL spp. $x = 5 = 0$
2.					
3.					Total(A)(B)
4.					
5.					Prevalence Index = B/A = NA
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes No Rapid Test for Hydrophytic Vegetation
10.					■ Yes ■ No Dominance Test is > 50%
	Total Cover =	0			Yes ■ No Prevalence Index is ≤ 3.0 *
					Yes No Morphological Adaptations (Explain) *
Herb Stratum (Pla	ot size: 5 ft radius)				Yes No Problem Hydrophytic Vegetation (Explain) *
1.	Typha angustifolia	30	Υ	OBL	* Indicators of hydric soil and wetland hydrology must be
2.	Phalaris arundinacea	50	Υ	FACW	present, unless disturbed or problematic.
3.	Scirpus cyperinus	15	N	OBL	
4.	Symphyotrichum lateriflorum	5	N	FACW	Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					it. taii.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					and woody plants less than 3.20 ft. tail.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
Woody Vine Strat	um (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ■ Yes □ No
4.					., 1 p, 1
5.					
	Total Cover =	0			
Remarks:					

Additional Remarks:		



Project/Site: Stantec Project #: 193707055 NCL-alternate route Date: 01/16/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: N/A Blount silt loam, ground moraine, 0-2% slopes Wetland ID: Wetland 23 Soil Unit: Landform: Terrace Local Relief: Convex Sample Point: SP54 Latitude: 40.1392 Slope (%): Longitude: -83.197934 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A Are Vegetation , Soil , or Hydrology significantly disturbed?

Are Vegetation , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Yes œИ Range: Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? □ Yes ■ No Hydric Soils Present? □ Yes ■ No Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland?

Remarks: Vegetation is mowed, upland point for Wetland 23

Wetland Hydrology Indicators (Check here if indicators are not present:):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits

B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns C2 - Dry-Season Water Table

C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Field Observations:

Surface Water Present? (in.) □ Yes ■ No Depth: Water Table Present? □ Yes ■ Depth: (in.) No Saturation Present? □ Yes ■ No Depth: (in.)

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

N/A

Wetland Hydrology Present? • Yes • No

Remarks:

SOILS

Map Unit Name: Blount silt loam, ground moraine, 0-2% slopes Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Texture Top **Bottom** Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 99 10YR silty clay 10YR 5/8 1 M 0 7 1 4/3 С 7 12 2 10YR 10YR 5/8 10 С 5/3 90 M silty clay ----------------------------

NRCS Hydric Soil Field Indicators (check here if indicators are not present

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers A10 - 2 cm Muck

A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat

Type: Clay

S4 - Sandy Gleyed Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

Depth:

12

Hydric Soil Present?

Indicators for Problematic Soils 1

A16 - Coast Prairie Redox

S7 - Dark Surface

F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface

Other (Explain in Remarks)

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

" Yes " No

Remarks: Soil is mostly fill material

Restrictive Layer



Project/Site: NCL-alternate route Wetland ID: Wetland 23 Sample Point: SP54

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

	Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	Celtis occidentalis		12	Υ	FAC	
2.						Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
3.						
4.						Total Number of Dominant Species Across All Strata: 4 (B)
5.						·
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)
7.						
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.						OBL spp. 0
	٦	Total Cover =	12			FACW spp. $0 X 2 = 0$
						FAC spp. 112 $\times 3 = 336$
	Stratum (Plot size: 15 ft radius)					FACU spp. 25 $x 4 = 100$
1.	Robinia pseudoacacia		10	Υ	FACU	UPL spp. $0 x 5 = 0$
2.	Acer saccharum		15	Υ	FACU	
3.						Total <u>137</u> (A) <u>436</u> (B)
4.						5 , , ,
5.						Prevalence Index = B/A = 3.182
6.						
7.						Undershield Verestation Indicators
8.						Hydrophytic Vegetation Indicators:
9.						□ Yes ■ No Rapid Test for Hydrophytic Vegetation
10.		Tatal Caver	25			□ Yes ■ No Dominance Test is > 50%
	'	Total Cover =	25			Yes No Prevalence Index is ≤ 3.0 *
1 0 /	District of Education					□ Yes □ No Morphological Adaptations (Explain) *
	Plot size: 5 ft radius)		100	Y	EAC	Yes No Problem Hydrophytic Vegetation (Explain) *
1. 2.	Poa pratensis		100		FAC	* Indicators of hydric soil and wetland hydrology must be
3.						present, unless disturbed or problematic.
4.						Definitions of Vegetation Strata:
5.						Deminions of Vegetation Strata.
6						Tree - W
7.						Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.						
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.						ft. tall.
11.						
12.						Herb - All herbaceous (non-woody) plants, regardless of size,
13.						and woody plants less than 3.28 ft. tall.
14.						
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
		otal Cover =	100			· · · · · · · · · · · · · · · · · · ·
	!	5.0. 55701 =	. 50			
ody Vine Str	ratum (Plot size: 30 ft radius)					
1.	(1.101.01201.00.11.100100)					
2.						
3.						Hydrophytic Vegetation Present = Yes = No
4.						Tryanophysio rogotation i rosont - 163 - 100
5.						
٠.		otal Cover =	0			

Additional Remarks:



Project/Site: Stantec Project #: 193707055 NCL-alternate route Date: 01/16/20 Applicant: Columbia Gas of Ohio County: Union Investigator #1: Angela Sjollema Investigator #2: Julie Slater State: Ohio NWI/WWI Classification: PUBGx Blount silt loam, ground moraine, 2-4% slopes Wetland ID: Soil Unit: N/A Landform: Depression Local Relief: Concave Sample Point: SP55 Latitude: 40.1403 Slope (%): Longitude: -83.192782 Datum: WGS 1984 Community ID: Upland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Yes • Section: N/A , Soil , or Hydrology significantly disturbed? , Soil , or Hydrology naturally problematic? Are normal circumstances present? Township: N/A N/A N/A Are Vegetation Yes Νø Range: Dir: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? YesNo Hydric Soils Present? YesNo Wetland Hydrology Present? □ Yes ■ No Is This Sampling Point Within A Wetland? Remarks: Water treated with herbicide, soil is fill material, site is a manmade pond that has been drained to build a deck. Under normal circumstances, this

would be a pond with no vegetation

HYDROLOGY

Wetland Hydrology Indicators (Check here if indicators are not present.):

Primary:

A1 - Surface Water A2 - High Water Table A3 - Saturation

. B1 - Water Marks B2 - Sediment Deposits B3 - Drift Deposits

B4 - Algal Mat or Crust B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery

B8 - Sparsely Vegetated Concave Surface

B9 - Water-Stained Leaves

B13 - Aquatic Fauna B14 - True Aquatic Plants C1 - Hydrogen Sulfide Odor

C3 - Oxidized Rhizospheres on Living Roots C4 - Presence of Reduced Iron

C6 - Recent Iron Reduction in Tilled Soils

C7 - Thin Muck Surface D9 - Gauge or Well Data Other (Explain in Remarks)

Secondary:

B6 - Surface Soil Cracks B10 - Drainage Patterns

C2 - Dry-Season Water Table C8 - Crayfish Burrows

C9 - Saturation Visible on Aerial Imagery

D1 - Stunted or Stressed Plants D2 - Geomorphic Position

D5 - FAC-Neutral Test

Wetland Hydrology Present? • Yes • No

N/A

Field Observations:

Surface Water Present? □ Yes ■ Depth: (in.) No Water Table Present? □ Yes ■ Depth: (in.) Saturation Present? □ Yes ■ No Depth: (in.)

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

Remarks: water was intentionally dropped to install a deck

SOILS

Map Unit Name: Blount silt loam, ground moraine, 2-4% slopes

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top **Bottom** Matrix Redox Features (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) Color (Moist) Type Location 2.5Y 5/1 60 silty clay 0 8 8 5Y 5/2 40 0 1 __ silty clay 18 10YR 8 2 4/4 70 silty clay ----------------------------

NRCS Hydric Soil Field Indicators (check here if indicators are not present

A2 - Histic Epipedon A3 - Black Histic

A4 - Hydrogen Sulfide A5 - Stratified Lavers A10 - 2 cm Muck

A11 - Depleted Below Dark Surface

A12 - Thick Dark Surface S1 - Sandy Muck Mineral

S3 - 5 cm Mucky Peat or Peat

S4 - Sandy Gleved Matrix

S5 - Sandy Redox S6 - Stripped Matrix F1 - Loamy Muck Mineral

F2 - Loamy Gleyed Matrix F3 - Depleted Matrix F6 - Redox Dark Surface

F7 - Depleted Dark Surface F8 - Redox Depressions

Indicators for Problematic Soils 1

S7 - Dark Surface

A16 - Coast Prairie Redox

Other (Explain in Remarks)

F12 - Iron-Manganese Masses TF12 - Very Shallow Dark Surface

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

Restrictive Layer Type: N/A Depth: N/A **Hydric Soil Present?** " Yes " No

Remarks: Horizon 2 was 30% channery/gravel



Project/Site: NCL-alternate route Wetland ID: N/A Sample Point: SP55

VEGETATION (Species identified in all uppercase are non-native species.)								
Tree Stratum (Plot size: 30 ft radius)								
	<u>Species Name</u>		% Cover	Dominant	Ind.Status	Dominance Test Worksheet		
1.								
2.						Number of Dominant Species that are OBL, FACW, or FAC:(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% (A/B)		
7.								
8.						Prevalence Index Worksheet		
9.						Total % Cover of: Multiply by:		
10.						OBL spp. x 1 = 0		
	To	otal Cover =	0			FACW spp. x 2 = 0		
						FAC spp. x 3 = 0		
Sapling/Shrub Str	ratum (Plot size: 15 ft radius)					FACU spp. $x 4 = 0$		
1.	Populus deltoides		5	Υ	FAC	UPL spp. $x = 5 = 0$		
2.						··· 		
3.						Total (A) 0 (B)		
4.						(,,		
5.						Prevalence Index = B/A = NA		
6.								
7.								
8.						Hydrophytic Vegetation Indicators:		
9.						□ Yes ■ No Rapid Test for Hydrophytic Vegetation		
10.						■ Yes ■ No Dominance Test is > 50%		
10.		otal Cover =	5			■ Yes ■ No Prevalence Index is ≤ 3.0 *		
		0.0.	Ŭ			□ Yes □ No Morphological Adaptations (Explain) *		
Harb Stratum (DI	ot size: 5 ft radius)					Problem Hydrophytic Vegetation (Explain) *		
1.	Typha angustifolia		40	Υ	OBL	Tes - No Problem Hydrophytic Vegetation (Explain)		
2.						* Indicators of hydric soil and wetland hydrology must be		
3.						present, unless disturbed or problematic.		
4.						Definitions of Vegetation Strata:		
5.						Definitions of vegetation strata.		
6						Troe		
7.						Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.		
						breast noight (bbil), regulatess of height.		
8.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28		
9.						ft. tall.		
10.								
11.						Herb - All herbaceous (non-woody) plants, regardless of size,		
12.						and woody plants less than 3.28 ft. tall.		
13.								
14.						Allowed with a sector than 0.00 ft. in height		
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.		
	To	otal Cover =	40					
	rum (Plot size: 30 ft radius)							
1.								
2.						Hydrophytic Vegetation Present = Yes = No		
3.								
4.								
5.								
		otal Cover =	0					
Remarks:	60% open ground							

Additional	Remarks:	

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

11/12/2020 2:03:26 PM

in

Case No(s). 20-1236-GA-BTX

Summary: Application Appendix D.2, Part 4 of 7 electronically filed by Ms. Melissa L. Thompson on behalf of Columbia Gas of Ohio, Inc.