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VEGETATION - Use scientific names of plants

Sampling Po	oint: WC	03-PFO	
sholds	100	A CALLER	
	20%	50%	

	1949 A.	1.1.2		50/20 Thresholds
Tree Stratum Plot Size (30 ft.)	Absolute	Dominant	Indicator	20% 50%
	% Cover	Species	Status	Tree Stratum 19 48
1 Acer negundo	80	Y	FAC	Sapling/Shrub Stratum 0 0
2 Populus deltoides	15	N	FAC	Herb Stratum 9 23
3		and the second	「「大学生」」	Woody Vine Stratum 0 0
4				
5				Dominance Test Worksheet
6				Number of Dominant
7	ALL SUPPOSE		1	Species that are OBL,
8				FACW, or FAC: <u>3</u> (A)
10				Total Number of Dominant
	95	= Total Cover		Species Across all Strata: 3 (B)
				Percent of Dominant
	States 1			Species that are OBL,
Sapling/Shrub Plot Size (15 ft.)	Absolute	Dominant	Indicator	FACW, or FAC: 100.00% (A/B)
Stratum	% Cover	Species	Status	
1	10-112		DEAL STORE	Prevalence Index Worksheet
2		が空気を見てい		Total % Cover of:
3		A DITAL LA		OBL species 0 x 1 = 0
4	State and the	1 La Contrate		FACW species 45 x 2 = 90
5	A STATE OF STATE		and the state	FAC species 95 x 3 = 285
6	a state of the	The second	C. C. Standing	FACU species 0 x 4 = 0
7		(在147)出来于内心	Sec. Sec.	UPL species 0 x 5 = 0
8	1	THE PARTY OF	S. H. L. Dester	Column totals 140 (A) 375 (B)
9	1.2775.241		CONTRACTOR OF	Prevalence Index = B/A = 2.68
10	2 21 21 21 21 21	A CARLENCE AND	1.000	
	0	= Total Cover		
	A STATE OF			Hydrophytic Vegetation Indicators:
Herb Stratum Plot Size (5 ft.)	Absolute	Dominant	Indicator	Rapid test for hydrophytic vegetation
	% Cover	Species	Status	X Dominance test is >50%
1 Lysimachia nummularia	25	Y	FACW	X Prevalence index is ≤3.0*
2 Mentha spicata	20	Y	FACW	Morphological adaptations* (provide
3	1. C. P. D. S.	State -		supporting data in Remarks or on a
4	CONTRACTOR OF		THE ADDRESS	separate sheet)
5		10000000000		Problematic hydrophytic vegetation*
6		199120 300	正一位的人名	(explain)
7	See Belle	No. Forth		*indicators of hydric soil and wetland hydrology must be
8		A THE A	A CONTRACTOR NO	present, unless disturbed or problematic
9	and the start			
10				Definitions of Vegetation Strata:
			- 19 - 19 - 19 - 19 - 19 - 19 - 19 - 19	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
12				breast height (DBH), regardless of height.
13	A Loss Southers			
14	1.	1 <u>45 38.231015</u> 63		Sapling/shrub - Woody plants less than 3 in. DBH and
15		Tetal Origina		greater than 3.28 ft (1 m) tail.
	45	= Total Cover		Herb - All herbaceous (non-woody) plants, regardless of
Manda Man	Abaaluda	Deminant	Indiana	size, and woody plants less than 3.28 ft tall.
Woody Vine Plot Size (30 ft.)	Absolute	Dominant	Indicator	
Stratum	% Cover	Species	Status	Woody vines - All woody vines greater than 3.28 ft in
1				height.
3				
3		·		
		All Distances		Hydrophytic
5			「日本の構成」という	vegetation
	0 :	= Total Cover		present? Y
		CO RECEIVE S		· 计算符目的分子中的公司 中医二乙基甲基基苯基基甲基基
Remarks: (Include photo numbers here or on a sep	arate sheet)	网络潜兵 的复数		

Depth (Inches)	Matrix	88 S. C. No.		ox Feat		11111	r or confirm the absence of	
	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-18	10YR 4/2	95	10YR 5/4	5	С	PL/M	silt loam	
1.17.17.1		联邦 图 7.				19633		
				No.				
				-				
					1			
				Michigan ()	A CONTRACTOR			
Trat recently in the	and the state of the state					101 202		
		(1997) (1997) (1997)			A. 19 4 700			
		1. States			1.17			
र हिल्लास्तु ह	a dia anti-				a same	1.1.1.1.1.1.1	CERTISON AND AND AND AND AND AND AND AND AND AN	
	and the second	開設 業	A State of the second		MONTH A			
				d Matrix	x, CS=C	overed o	r Coated Sand Grains	
*Location: Pl	L=Pore Lining,	M=Mat	rix	a tribular				
lydric Soil II	ndicators:						Indicators for Pr	oblematic Hydric Solls:
Histisol (A	41)		Dark Su Polyvalu			(58)	2 cm Muck (A	(10) (MLRA 147)
	ipedon (A2)		(MLRA			æ (30)		Redox (A16) (MLRA 147, 148
Black His			Thin Da	100 C	and the second se			odplain Soils (F19)
	Sulfide (A4)		(MLRA			1.00	(MLRA 136, '	
	Layers (A5)		Loamy C			=2)		Dark Surface (TF12)
and the second se	k (A10) (LRR Below Dark Si		X Depleter A11) Redox D		Statement of the Provide Statement	6)	Other (Explain	n in Remarks)
and the second second second second second	rk Surface (A1)		Deplete		A THE CONTRACTOR	the second second second		
the second se	ucky Mineral (S		Redox D					
CONTRACTOR AND	MLRA 147, 14						(LRR N, MLRA 136)	
	eyed Matrix (S	4)				MLRA 1		
Sandy Re	edox (S5) Matrix (S6)						(MLRA 148) RA 127, 147)	
Supped i	Matrix (50)			ent wa	iterial (i z		(* 1£1, 141)	
Indicators of	hydrophytic ve	egetation	n and wetland hy	drology	y must be	e presen	t, unless disturbed or prot	plematic
Postrictivo I o	iyer (if observe	·//				Marghe !!		
rype:	iyer (il observe	a).				ALC: UNK	Hydric soil present	7 Y
Depth (inches	s):	Section 1						
		12 A.Z.	AND	Shie a	1. N. 12.	THE STATES		
Remarks:						DISC L.L. E.		

Starting and a start start start

Project/Site: Walton-Big Bone Natur	al Gas Pipeline	City/County:	Boone	Sampling	Date: 3/29/16			
Applicant/Owner: Duke Energy		State:	Kentucky	Sampling	Point U003			
Investigator(s): Sarah Miloski, Julie Fre		The second se		Range: No PLSS				
Landform (hillslope, terrace, etc.): bot				x, none): none	Slope (%): 0			
Subregion (LRR or MLRA): LRR N	Lat.:	38.88766		9.: -84.742109	Datum: WGS 84			
Soil Map Unit Name No-Nolin silt loam,	0 to 2 percent slope	es, occasionally	looded	NWI Classification	n: <u>N/A</u>			
Are climatic/hydrologic conditions of the	site typical for this	time of the year	? Yes X	No(If	no, explain in remarks)			
Are vegetation, soil	, or hydrology		y disturbed?	Are "normal	Yes			
Are vegetation, soil	, or hydrology	naturally p	roblematic?	circumstances				
				(If needed, exp	plain any answers in remark			
SUMMARY OF FINDINGS								
Hydrophytic vegetation present?	No							
	No	is the sam	pled area wi	thin a wetland?	No			
	No		Upland f	for W003				
Remarks:								
Upland pit for wetland W003 loc	ated in Rig Bone	Lick State Pa	rk					
opiand pit for wetland wood loc	ated in Dig Done	LICK Oldle Fe	u K		AND ASSAULT OF MAL			
					and the state of the state			
HYDROLOGY Wetland Hydrology Indicators:			Sec	ondany Indicators	(minimum of two required)			
	equired: check all th	at apply)						
Primary Indicators (minimum of one is r				Surface Soil Cracks				
Surface Water (A1)		tic Plants (B14)			d Concave Surface (B8)			
High Water Table (A2)		Sulfide Odor (C1)		Drainage Patterns				
Saturation (A3)		hizospheres on L		Moss Trim Lines (B16) Dry-Season Water Table (C2)				
Water Marks (B1)	Roots (C3)			Dry-Season Water Table (C2) Crayfish Burrows (C8)				
Sediment Deposits (B2) Drift Deposits (B3)	the second s	of Reduced Iron (Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Soils (C6)	n Reduction in Til	and the second s	Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)				
Iron Deposits (B5)		Surface (C7)	Contraction of the second	Geomorphic Position (D2)				
	A REAL PROPERTY OF THE REAL PR	lain in Remarks)		Shallow Aquitard (D				
Inundation Visible on Aerial				Microtopographic R				
Imagery (B7) Water-Stained Leaves (B9)			And a second	FAC-Neutral Test (
Aquatic Fauna (B13)			111 A	NO-Neural rest (
Field Observations: Surface water present? Yes	No X	Depth (inches)	: NA	Wetland				
Water table present? Yes	No X	Depth (inches)		hydrology				
Saturation present? Yes	No X	Depth (inches)		present?	N			
(includes capillary fringe)				procenti				
				14 1 1 1 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1				
Describe recorded data (stream gauge,	monitoring well, ae	rial photos, previ	ious inspectio	ns), if available:	at an state of the second			
· · · · · · · · · · · · · · · · · · ·								
Remarks:								
nenalks.								
					11日 日本 気をついた			
		State Lands	Max 17 P. S.					
				and the second sec				

VEGETATION - Use scientific names of plants

EGETATION - US	e scienunc i	ames or	Jiants			Sampling Point	t: U003	
Tree Stratum 1 2 3 3	Plot Size (30 ft.) Absolute % Cover	Dominant Species	Indicator Status	50/20 Thresholds Tree Stratum Sapling/Shrub Stratum Herb Stratum Woody Vine Stratum	20% 0 20 0	50% 0 0 50 0
4 5 6 7 8 9 0 5 8 9 0 5 5 8 1 9 5 5 8 1 9 5 1 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Plot Size (15 ft.) Absolute % Cover	Total Cover Dominant Species	Indicator Status	Dominance Test Workshee Number of Dominant Species that are OBL, FACW, or FAC: Total Number of Dominant Species Across all Strata: Percent of Dominant Species that are OBL, FACW, or FAC:	0 4 0.00%	_(A) _(B) _(A/B)
12 33 45 6 6 7 8 9 9 0						Prevalence Index Worksher Total % Cover of: OBL species 0 x 1 = FACW species 0 x 2 = FAC species 10 x 3 = FACU species 85 x 4 = UPL species 0 x 5 = Column totals 95 (A) Prevalence Index = B/A =	0 0 30 340 0	 (B)
Herb Stratum Poa pratensis Festuca arundin Dipsacus fullonu Setaria faberi Allium cernuum Rumex crispus Solidago sp. 8		5 ft.) Absolute % Cover 30 15 15 15 10 10 5	Total Cover Dominant Species Y Y Y Y N N N N	Indicator Status FACU FACU FACU FACU FACU FAC	Hydrophytic Vegetation Ind Rapid test for hydrophyti Dominance test is >50% Prevalence index is <3.0 Morphological adaptation supporting data in Rema separate sheet) Problematic hydrophytic (explain) *Indicators of hydric soil and wetlam present, unless disturbed or problem	c vegeta * ns* (prov rks or or vegetation d hydrology	nide n a on*
0 2 3 4 5				Total Cover		Definitions of Vegetation S Tree - Woody plants 3 in. (7.6 cm) of breast height (DBH), regardless of th Sapling/shrub - Woody plants less greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) size, and woody plants less than 3.2	or more in a neight. than 3 in. I plants, reg	DBH and
Woody Vine Stratum 2	Plot Size (30 ft.) Absolute % Cover	Dominant Species	Indicator Status	Woody vines - All woody vines great height.		.28 ft in
			<u></u>			Hydrophytic vegetation		

Profile Des	cription: (Descri	be to th				Indicato	r or confirm the absence	of indicators.)	
Depth	Matrix	~	and the set of the second s	ox Fea			Texture	Remarks	
(Inches) 0-18	Color (moist) 10YR 5/4	% 100	Color (moist)	%	Type*	Loc**	silt loam		
0-10									
and the second	Concentration, D= PL=Pore Lining,	The second s		d Matri	x, CS=C	overed o	r Coated Sand Grains		
Histisol Histic E Black H Hydrog Stratifie 2 cm M Deplete Thick D Sandy (LRR N Sandy Sandy Sandy	Epipedon (A2) distic (A3) en Sulfide (A4) ed Layers (A5) luck (A10) (LRR ed Below Dark Si Dark Surface (A1) Mucky Mineral (S I, MLRA 147, 14 Gleyed Matrix (S Redox (S5) d Matrix (S6)	urface (<i>.</i> 2) 51) 8) (4)	(MLRA Thin Dan (MLRA Loamy C Depleted A11) Redox D Depleted Redox D Iron-Mar Umbric S Piedmor Red Par	the Belo 147, 14 rk Surf 147, 14 Gleyed d Matri Dark Su d Dark Depress Surfac ht Floo ent Ma	w Surfac 18) ace (S9) 148) Matrix (F x (F3) urface (Fr Surface sions (F8 se Masse e (F13) (I dplain Sc aterial (F2)	F2) 6) (F7) 9) 95 (F12) (MLRA 1: 9) 9) 15 (F19) 21) (MLR	2 cm Muck (/ Coast Prairie Piedmont Flo (MLRA 136, Very Shallow Other (Explai	Dark Surface (TF12) in in Remarks)	
Restrictive Type: Depth (inch	Layer (if observe nes):	ed):					Hydric soll present	? <u>N</u>	
Remarks:									

$$\label{eq:states} \begin{split} & 1 = 1 + \left[\frac{1}{2} \left[1 + \frac{1}{2} \left[\frac{1}{2} \left[1 + \frac{1}{2} \left[\frac$$

Project/Site: Walton-Big Bone N	atural Gas Pipeline	City/County:	Boone	Sampling Date:	3/30/16			
Applicant/Owner: Duke Energy	和化化学研究中心的意思。	State:	Kentucky	Sampling Point	W004			
Investigator(s): Sarah Miloski, Julie				ange: No PLSS in Area				
Landform (hillslope, terrace, etc.):				none): <u>concave</u>	Slope (%): 0			
Subregion (LRR or MLRA): LRR N		38.885723		-84.727106	Datum: WGS 84			
Soil Map Unit Name EdE2-Eden silt	y clay loam, 20 to 35	percent slopes, ero		WI Classification: N/A				
Are climatic/hydrologic conditions of	the site typical for thi	s time of the year?	Yes X	_No(If no, ex	xplain in remarks)			
Are vegetation, soil	, or hydrology	significantly		Are "normal	Yes			
Are vegetation, soil	, or hydrology	naturally pro	oblematic?	circumstances" pres				
				(If needed, explain a	iny answers in remarl			
SUMMARY OF FINDINGS		and the state of t	18 Ca24					
Hydrophytic vegetation present?	Yes			Contraction of the				
Hydric soil present?	Yes	is the sam	pled area with	in a wetland? Ye	IS			
Wetland hydrology present?	Yes			WO				
	receiver an all the							
Remarks:								
REM watland along road RO	NA/							
PEM wetland along road RO	vv							
				COMPANY STATE	FRANKLING R			
HYDROLOGY								
Wetland Hydrology Indicators:			Secor	idary Indicators (minim	num of two required)			
Primary Indicators (minimum of one	is required; check all	that apply)	Si	urface Soil Cracks (B6)				
X Surface Water (A1)	True Aqu	atic Plants (B14)	S	barsely Vegetated Conc	ated Concave Surface (B8)			
X High Water Table (A2)	Hydroger	Sulfide Odor (C1)	X Di	ainage Patterns (B10)				
X Saturation (A3)	Oxidized	Rhizospheres on Liv	ving M	Moss Trim Lines (B16)				
Water Marks (B1)	X Roots (C:			Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Presence	of Reduced Iron (C	(4) <u> </u>	Crayfish Burrows (C8)				
Drift Deposits (B3)	Recent In	on Reduction in Tille	ed Sa	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Soils (C6)	St	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)	Thin Muc	k Surface (C7)	G	eomorphic Position (D2))			
Inundation Visible on Aerial	Other (Ex	plain in Remarks)	SI	nallow Aquitard (D3)				
Imagery (B7)			M	crotopographic Relief (I	D4)			
Water-Stained Leaves (B9)			X F/	AC-Neutral Test (D5)				
Aquatic Fauna (B13)								
Field Observations:		and a state	Station 1					
Surface water present? Yes	X No	Depth (inches):	1	Wetland				
Water table present? Yes	X No	Depth (inches):		hydrology				
Saturation present? Yes	X No	Depth (inches):	0	present?	Y			
(includes capillary fringe)		Sal a mark show the						
Describe recorded data (stream gau	ige, monitoring well, a	erial photos, previo	ous inspections	s), if available:				
Remarks:		The second fill						
		The A Distance	Martine - Land					

VEGETATION - Use scientific names of plants

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Tree Stratum 1 2 3	Plot Size (30 ft.)	Absolute % Cover	Dominant Species	Indicator Status	50/20 Thresholds Tree Stratum Sapling/Shrub Stratum Herb Stratum Woody Vine Stratum	20% 0 0 16 0	50% 0 0 40 0
						Dominance Test Worksh Number of Dominant Species that are OBL, FACW, or FAC: Total Number of Dominant Species Across all Strata:	2	(A) (B)
Sapling/Shrub Stratum	Plot Size (15 ft.)	0 Absolute % Cover	 Total Cover Dominant Species 	Indicator Status	Percent of Dominant Species that are OBL, FACW, or FAC:	100.00	<u>1%</u> (A/B)
						Prevalence Index Works Total % Cover of: OBL species 0 x1 FACW species 60 x2 FAC species 15 x3 FACU species 5 x4 UPL species 0 x5 Column totals 80 (A) Prevalence Index = B/A = 10	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	20 5 0) 35 (B)
Herb Stratum Cyperus escu Lysimachia nu Vemonia giga Phalaris arun	ummularia Intea	5 ft.)	0 Absolute % Cover 30 20 15 10 5 	Total Cover Dominant Species Y N N N N	Indicator Status FACW FAC FAC FACW FACU	Hydrophytic Vegetation Rapid test for hydroph X Dominance test is >50 X Prevalence index is <3	ytic veget)% 3.0* ions* (pro narks or c tic vegeta iand hydrolo	tation ovide on a tion*
						Definitions of Vegetation Tree - Woody plants 3 in. (7.6 cm breast height (DBH), regardless Sapling/shrub - Woody plants le greater than 3.28 ft (1 m) tall.	n) or more ir of height.	
Woody Vine Stratum	Plot Size (30 ft.)	80 Absolute % Cover	Total Cover Dominant Species	Indicator Status	Herb - All herbaceous (non-wood size, and woody plants less than Woody vines - All woody vines of height.	3.28 ft tall.	
4 5				Total Cover		Hydrophytic vegetation present? Y		

用我们的中心。他们的一些

Eastern Mountains and Piedmont Region

SOIL		12421					Sam	pling Point: W004
Profile Des	cription: (Descri	be to th	e depth needed t	o docu	ment the	e indicato	or or confirm the absence	of indicators.)
Depth	Matrix			ox Feat			Texture	Remarks
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-18	10YR 4/2	90	10YR 5/6	10	С	PL/M	silty clay loam	
19-19-16								
						1.00		
						De Orig		
				d Matri	L x, CS=C	overed o	r Coated Sand Grains	
	PL=Pore Lining, I Indicators:	M=Ma					Indicators for Pr	roblematic Hydric Soils:
			Dark Su	TTON MANDONIA				
Histiso			Polyvalu			ce (S8)		A10) (MLRA 147)
	Epipedon (A2)		(MLRA Thin Da		the second second second second			Redox (A16) (MLRA 147, 148) odplain Soils (F19)
	listic (A3) en Sulfide (A4)		(MLRA		Allow the state of the state		(MLRA 136, 1	
	ed Layers (A5)		Loamy			F2)		Dark Surface (TF12)
	luck (A10) (LRR	N)	X Deplete			-,		n in Remarks)
	d Below Dark Su					6)		,
	ark Surface (A1:		Deplete					
Sandy	Mucky Mineral (S	51)	Redox D	Depress	sions (F8	3)		
(LRR N	I, MLRA 147, 14	8)		and the second se		West of the second s	(LRR N, MLRA 136)	
	Gleyed Matrix (S	4)				MLRA 1		
	Redox (S5)						(MLRA 148)	
Strippe	d Matrix (S6)		Red Par	ent Ma	iterial (F	21) (MLF	RA 127, 147)	
*Indicators	of hydrophytic ve	egetatio	n and wetland hy	drology	y must b	e presen	t, unless disturbed or prot	olematic
Restrictive	Layer (if observe	ed):						
Туре:	No. Constant State	1.200			Charles and a	150 11	Hydric soil present	? Y
Depth (inch	es):					in the		
Remarks:			A STATE OF A	1.000				

$$\label{eq:entropy} \begin{split} &= -e^{H_{\rm ent}} e^{-e_{\rm ent}} \\ &= e^{H_{\rm ent}} e^{-e_{\rm ent}} e^{-e_{\rm ent}} \\ &= e^{H_{\rm ent}} e^{-e_{\rm ent}} e^{-e_{\rm ent}} e^{-e_{\rm ent}} \\ &= e^{H_{\rm ent}} e^{-e_{\rm ent}} e^{-e_{\rm ent}} e^{-e_{\rm ent}} \\ &= e^{H_{\rm ent}} e^{-e_{\rm ent}} e^{-e_{\rm$$

Project/Site: Walton-Big Bone Natural Gas Pip			Sampling Date: 3/30/16								
Applicant/Owner: Duke Energy			Sampling Point W005								
Investigator(s): Sarah Miloski, Julie Freer		, Township, Range: N									
Landform (hillslope, terrace, etc.): depression Subregion (LRR or MLRA): LRR N	Local relief (con Lat.: 38.885817	icave, convex, none): Long.: -84.7									
Soil Map Unit Name EdE2-Eden silty clay loam, 20			ssification: N/A								
A SHE TO MARK THE ASSAULT AND A DALE AND A SHE	AND A DESCRIPTION OF A	The second s									
Are climatic/hydrologic conditions of the site typica			(If no, explain in remarks)								
Are vegetation, soil, or hydrol			normal Yes								
Are vegetation, soil, or hydrol	logy naturally pro		mstances" present?								
		(If ne	eded, explain any answers in remark								
SUMMARY OF FINDINGS											
Hydrophytic vegetation present? Yes											
Hydric soil present? Yes	is the samp	oled area within a we	stland? Yes								
Wetland hydrology present? Yes		W005									
Remarks:											
PEM wetland along road ROW. Drains ir	nto stream S014										
HYDROLOGY											
Wetland Hydrology Indicators:		Secondary In	dicators (minimum of two required)								
Primary Indicators (minimum of one is required; ch	eck all that apply)		Soil Cracks (B6)								
	ue Aquatic Plants (B14)		ely Vegetated Concave Surface (B8)								
	vdrogen Sulfide Odor (C1)	Contraction of the local division of the loc	age Patterns (B10)								
	xidized Rhizospheres on Liv	· · · · · · · · · · · · · · · · · · ·	n Lines (B16)								
	oots (C3)		Dry-Season Water Table (C2)								
	resence of Reduced Iron (C		Crayfish Burrows (C8)								
	ecent Iron Reduction in Tille		Saturation Visible on Aerial Imagery (C9)								
	oils (C6)	Stunted o	Stunted or Stressed Plants (D1)								
Iron Deposits (B5)	nin Muck Surface (C7)	Geomorp	hic Position (D2)								
Inundation Visible on Aerial	ther (Explain in Remarks)	Shallow A	quitard (D3)								
Imagery (B7)		Microtopo	graphic Relief (D4)								
Water-Stained Leaves (B9)		X FAC-Neu	tral Test (D5)								
Aquatic Fauna (B13)			14.9.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1								
Field Observations:	작품을 지 않는 것이는 것을										
Surface water present? Yes X No	Depth (inches):		Vetland								
Water table present? Yes X No	Depth (inches):		ydrology								
Saturation present? Yes X No (includes capillary fringe)	Depth (inches):	p	present? <u>Y</u>								
Describe recorded data (stream gauge, monitoring	well, aerial photos, previo	bus inspections), if av	ailable:								
Remarks:											
Itemants.											
the second se		the second s									

VEGETATION - Use scientific names of plants Sampling Point: W005 50/20 Thresholds Absolute Dominant Indicator 20% 50% Tree Stratum Plot Size (30 ft.) % Cover **Species** Status **Tree Stratum** 0 0 Sapling/Shrub Stratum 0 0 2 Herb Stratum 20 50 3 Woody Vine Stratum 0 0 4 **Dominance Test Worksheet** 5 6 Number of Dominant 7 Species that are OBL. FACW, or FAC: 8 3 (A) 9 **Total Number of Dominant** Species Across all Strata: 10 3 (B) 0 **Total Cover** Percent of Dominant Species that are OBL, Sapling/Shrub Dominant Indicator FACW, or FAC: 100.00% (A/B) Absolute Plot Size (15 ft.) Stratum Status % Cover Species **Prevalence Index Worksheet** 2 Total % Cover of: 3 **OBL** species n x1= 0 FACW species 70 x 2 = 140 5 **FAC species** 30 x 3 = 90 FACU species 6 0 x4= 0 x 5 = 7 UPL species 0 0 8 **Column totals** 100 230 (A) (B) 2.30 g Prevalence Index = B/A = 10 0 = Total Cover Hydrophytic Vegetation Indicators: Absolute Dominant Indicator Rapid test for hydrophytic vegetation Herb Stratum Plot Size (5 ft.) Species X Dominance test is >50% % Cover Status Cyperus esculentus 40 Y FACW X Prevalence index is ≤3.0* Carex grayi 30 FACW Morphological adaptations* (provide 2 V Juncus tenuis 30 FAC supporting data in Remarks or on a 3 Y separate sheet) Problematic hydrophytic vegetation* 5 6 (explain) 7 *Indicators of hydric soil and wetland hydrology must be 8 present, unless disturbed or problematic 9 10 **Definitions of Vegetation Strata:** 11 Tree - Woody plants 3 in. (7.6 cm) or more in diameter at 12 breast height (DBH), regardless of height. 13 14 Sapling/shrub - Woody plants less than 3 in. DBH and 15 greater than 3.28 ft (1 m) tall. 100 = Total Cover Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tail. Woody Vine Absolute Dominant Indicator Plot Size (30 ft.) Stratum % Cover Species Status Woody vines - All woody vines greater than 3.28 ft in height. 2 3 4 Hydrophytic 5 vegetation 0 = Total Cover present? Y Remarks: (Include photo numbers here or on a separate sheet)

US Army Corps of Engineers

SOIL					-		Sam	pling Point: W005
Profile Des	cription: (Descril	be to th	e depth needed t	o docu	ment the	e indicato	r or confirm the absence o	of indicators.)
Depth	Matrix		and the second	ox Feat			Texture	Remarks
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-18	10YR 5/2	70	10YR 5/6	30	C	PL/M	silty clay loam	
		RVD(E)		13.200	N4. 2. 3			
			24 C	12424				
				Dia 223				
	Berne Barn			1				
1.14 1.14		North March			1111			
			后,1995,24世纪 1					
		1. 1. 1.		William .		1. 18 3.		
				- And State				
*Type: C=C	Concentration, D=	Deplet	ion, RM=Reduce	d Matrix	k, CS=C	overed o	r Coated Sand Grains	
**Location:	PL=Pore Lining,	M=Ma	trix					
Hydric Soi	I Indicators:		Dud O				Indicators for Pro	oblematic Hydric Soils:
Histisol	(A1)		Dark Su Polyvalu			ce (S8)	2 cm Muck (A	(10) (MLRA 147)
	Epipedon (A2)		(MLRA					Redox (A16) (MLRA 147, 148)
	listic (A3)		Thin Da	rk Surfa	ace (S9)		Piedmont Floo	odplain Soils (F19)
	en Sulfide (A4)		(MLRA				(MLRA 136, 1	
	ed Layers (A5)		Loamy			F2)		Dark Surface (TF12)
	luck (A10) (LRR		X Deplete			0)	Other (Explain	1 In Remarks)
and the second se	ed Below Dark Su Dark Surface (A12				Surface			
the second se	Mucky Mineral (S	and the second se	Redox [
A CONTRACTOR OF A CONTRACTOR O	, MLRA 147, 14	100 million (100 m					(LRR N, MLRA 136)	
	Gleyed Matrix (S		Umbric	Surface	e (F13) (MLRA 1	36, 122)	
	Redox (S5)						(MLRA 148)	
Strippe	d Matrix (S6)		Red Pai	rent Ma	terial (F:	21) (MLF	RA 127, 147)	
*Indicators	of hydrophytic ve	getatio	n and wetland hy	drology	must b	e presen	t, unless disturbed or prob	plematic
			to and the					
Restrictive Type:	Layer (if observe	d):					Hydric soil present?	2 Y
Depth (inch	ies):							
Remarks:								
Kernarka.								

f Engineers and a second se

Project/Site: Walton-Big	Bone N	atural G	as Pipeline	City/County:	Boone	1997年	Sa	mpling Dat	e: 3/3	0/16			
Applicant/Owner: Duke E		en Alt	No ADARCO	the second se	Kentuc	1		mpling Poi		006			
Investigator(s): Sarah Milo			The ballet year					PLSS in A	rea				
Landform (hillslope, terrace				Local relief (co	ncave, c					Slope (%): 0			
Subregion (LRR or MLRA):			Lat.		odod	Long.:		2932 sification: N	//	Datum: WGS 8			
Soil Map Unit Name EdE2-I	in the second	The later	de l'aconte des	a segure sector a presentation			/ Class		US area				
Are climatic/hydrologic cond	ditions of	the site	typical for the	nis time of the year	? Yes	<u>X</u>	No	(If no,	expl	ain in remarks)			
Are vegetation, so			hydrology	significant			Are "n	ormal		Yes			
Are vegetation, so	oil	, or	hydrology	naturally p	roblemat	ic?		stances" p					
							(If nee	ded, explai	n any	answers in rem			
SUMMARY OF FINDIN	GS												
Hydrophytic vegetation pres	ent?	Yes		时代在19 20年1月1日		A. P.			1 Start	1. 0. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.			
Hydric soil present?	,onti	Yes		is the san	is the sampled area within a wetland? Yes								
Wetland hydrology present?	,	Yes						the second s	VOOE				
vvetiand nyurology presents		165						eve the a	1000				
PEM wetland along ro	ad RO	W. Dra	ains into st	ream located ou	tside of	study a	area						
HYDROLOGY						15月1日	J. S.						
Wetland Hydrology Indic						Second	lary Ind	icators (min	nimur	n of two required			
Primary Indicators (minimur	n of one	is requi	red; check a	II that apply)		Sur	face So	il Cracks (B	6)				
X Surface Water (A1)			True Aq	uatic Plants (B14)	tic Plants (B14) Sparsely Vegetated Concave Surfac								
X High Water Table (A2)			Hydroge	en Sulfide Odor (C1)	Sulfide Odor (C1) Drainage Patterns (B10)								
X Saturation (A3)			Oxidized	d Rhizospheres on L	iving	Moss Trim Lines (B16)							
Water Marks (B1)			X Roots (0) Dry-Season V					Water Table (C2)			
Sediment Deposits (B2)			Presence	e of Reduced Iron (urrows (C8)								
Drift Deposits (B3)										aturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)			Soils (C				Stunted or Stressed Plants (D1)						
Iron Deposits (B5)		1.150		ck Surface (C7)				c Position (D2)				
Inundation Visible on Ae	rial		Other (E	Explain in Remarks)				uitard (D3)					
Imagery (B7)							-	raphic Relie		11年1月1日			
Water-Stained Leaves (I	39)					X FAC	S-Neutr	al Test (D5)					
Aquatic Fauna (B13)			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		Same Carl								
Field Observations:				D									
Surface water present?	Yes	<u>X</u>	No	Depth (inches)				etland					
Water table present? Saturation present?	Yes	X	No	Depth (inches)				drology		~			
Saturation present?	Yes	_ <u>x</u>	No	Depth (inches)	:0		pr	esent?		<u>Y</u>			
(includes capillary fringe)					1. 1. 1. 1	22 11 21		37121+	A				
	eam gau	ge, mon	itoring well,	aerial photos, prev	ous insp	ections)	, if avai	lable:					
Describe recorded data (str	eam gau	ge, mon	itoring well,	aerial photos, prev	ous insp	ections)	, if avai	lable:					
Describe recorded data (str	eam gau	ge, mon	itoring well,	aerial photos, prev	ous insp	ections)	, if avai	lable:					
(includes capillary fringe) Describe recorded data (str Remarks:	eam gau	ge, mon	itoring well,	aerial photos, prev	ous insp	ections)	, if avai	lable:					

VEGETATION - Use scientific names of plants

EGETATION - L	Jse scientific i	names of	plants			Sampling Point: W006
Tree Stratum 1 2 3 4	Plot Size (30 ft.) Absolute % Cover	Dominant Species	Indicator Status	50/20 Thresholds20%50%Tree Stratum0Sapling/Shrub Stratum0Herb Stratum2153Woody Vine Stratum00
5 5 7 8 9 9 0				= Total Cover		Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: 3 Total Number of Dominant Species Across all Strata: 3 Percent of Dominant
Sapling/Shrub Stratum	Plot Size (15 ft.) Absolute) % Cover	Dominant Species	Indicator Status	Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
1 2 3 4 5 6 7 8 9 9 0						Prevalence Index WorksheetTotal % Cover of:OBL species $30 \times 1 =$ OBL species $75 \times 2 =$ FACW species $0 \times 3 =$ FACU species $0 \times 4 =$ UPL species $0 \times 5 =$ Column totals 105 (A)Prevalence Index = B/A = 1.71
Herb Stratum 1 Cyperus escu 2 Carex Iupulinu 3 Juncus effusu 4 Phalaris arunu 5 6 7 8	9 /S	5 ft.) Absolute % Cover 35 30 30 10		Indicator Status FACW OBL FACW FACW	Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation X Dominance test is >50% X Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
9 D 1 2						Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter : breast height (DBH), regardless of height.
3 4 5				= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Woody Vine Stratum 12	Plot Size (30 ft.) Absolute % Cover	Dominant Species	Indicator Status	Herb - All herbaceous (non-woody) plants, regardless o size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.
3				= Total Cover		Hydrophytic vegetation present? Y

Depth	the second se	be to th			the second s	indicato	r or confirm the absence of	or indicators.)	
	Matrix	%	No. A Contraction of the second se	ox Feat %		Loc**	Texture	Remarks	
(Inches) 0-18	Color (moist) 10YR 5/2	95	Color (moist) 10YR 5/8	5	Type*	PL/M	silty clay loam		
010	101110/2		io in circ			1 0 111	only only roun		
and the second		16:10-10				The Test			
					SULTRANSING STATE	2.61	and the state of the state of the		
1.17	Rest University	WR H	元书师王在 原		200398				
100									
10363		Tring al			mill			里、湖南南部市10月1日1月	
5. AR	List with the	1. 67.1				1212			
가지과격	用的问题是我们。				和於當	Sentine -			
	19 49 19 19 19 19 19 19 19 19 19 19 19 19 19								
		in the				1252 14			
		Denlet	DM-Daduas	d B.S.a.tais			Control Dand Oraina		
	PL=Pore Lining,			a matrix	(, CS=C	overea o	r Coated Sand Grains		
here a second second	I Indicators:			ha igi .			Indicators for Pr	oblematic Hydric Solls:	
, and out	i maicatoro.		Dark Su	rface (S	S7)			obiennado riyano cons.	
Histiso	(A1)		Polyvalu			æ (S8)	2 cm Muck (A	10) (MLRA 147)	
	Epipedon (A2)		(MLRA		the state of the s			Redox (A16) (MLRA 147, 14	
and the second se	Histic (A3)		Thin Da					odplain Soils (F19)	
	en Sulfide (A4) ed Layers (A5)		(MLRA ' Loamy (2)	(MLRA 136, 1 Very Shallow	Dark Surface (TF12)	
	luck (A10) (LRR	N)	X Depleter			-,		n in Remarks)	
-	ed Below Dark Su		the second second second second second			6)			
A COMPANY OF THE OWNER OF THE	Dark Surface (A12	and the second se	Depleted						
	Mucky Mineral (S		Redox D				00 N NI DA 496		
	I, MLRA 147, 148 Gleyed Matrix (Se					MLRA 1	(LRR N, MLRA 136)		
	Cleased Inigrity (O.	-,					(MLRA 148)		
Sandy							A 127, 147)		
Sandy Sandy	Redox (S5) d Matrix (S6)								
Sandy Sandy Strippe	Redox (S5) d Matrix (S6)								
Sandy Sandy Strippe	Redox (S5) d Matrix (S6)	getatio		drology	must b	e presen	t, unless disturbed or prot	plematic	
Sandy Sandy Strippe	Redox (S5) d Matrix (S6) of hydrophytic ve			drology	must b	e presen	t, unless disturbed or prot	olematic	
Sandy Sandy Strippe ndicators estrictive	Redox (S5) d Matrix (S6)			drology	r must be	e presen			
Sandy Sandy Strippe ndicators estrictive ype:	Redox (S5) d Matrix (S6) of hydrophytic ve Layer (if observe			drology	v must bo	e presen	t, unless disturbed or prot Hydric soll present		
Sandy Sandy Strippe ndicators estrictive	Redox (S5) d Matrix (S6) of hydrophytic ve Layer (if observe			drology	r must be	e presen			
Sandy Sandy Strippe ndicators estrictive ype:	Redox (S5) d Matrix (S6) of hydrophytic ve Layer (if observe			drology	r must be	e presen			
Sandy Sandy Strippe ndicators estrictive pe: epth (inch	Redox (S5) d Matrix (S6) of hydrophytic ve Layer (if observe			drology	r must be	e presen			
Sandy Sandy Strippe ndicators estrictive pe: epth (inch	Redox (S5) d Matrix (S6) of hydrophytic ve Layer (if observe			drology	- -	e presen			
Sandy Sandy Strippe ndicators estrictive rpe: epth (inch	Redox (S5) d Matrix (S6) of hydrophytic ve Layer (if observe			drology	r must br	e presen			
Sandy Sandy Strippe ndicators estrictive ype: epth (inch	Redox (S5) d Matrix (S6) of hydrophytic ve Layer (if observe			drology	- -	e presen			
Sandy Sandy Strippe ndicators estrictive ype: epth (inch	Redox (S5) d Matrix (S6) of hydrophytic ve Layer (if observe			drology	r must br	e presen			
Sandy Sandy Strippe ndicators estrictive rpe: epth (inch	Redox (S5) d Matrix (S6) of hydrophytic ve Layer (if observe			drology	r must br	e presen			
Sandy Sandy Strippe ndicators estrictive rpe: epth (inch	Redox (S5) d Matrix (S6) of hydrophytic ve Layer (if observe			drology	r must br	e presen			
Sandy Sandy Strippe dicators estrictive pe: epth (inch	Redox (S5) d Matrix (S6) of hydrophytic ve Layer (if observe			drology	-	e presen			

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Walton-Big Bone Natur	al Gas Pipeline	City/County:	Boone	Sampli	ng Date: 3/	30/16	
Applicant/Owner: Duke Energy		State:	Kentucky	Sampli	ng Point U	004-6	
Investigator(s): Sarah Miloski, Julie Fre	er	Sectio	n, Township,	Range: No PLS	S in Area		
Landform (hillslope, terrace, etc.): hills	slope			ex, none): nor		Slope (%): 20	
Subregion (LRR or MLRA): LRR N	Lat.:	38.885673		ng.: <u>-84.727121</u>		Datum: WGS 84	
Soil Map Unit Name EdE2-Eden silty cla	iy loam, 20 to 35 pe	ercent slopes, er	oded	NWI Classificat	tion: N/A		
Are climatic/hydrologic conditions of the				X_No	A STATES	lain in remarks)	
Are vegetation, soil	, or hydrology		y disturbed?	Are "norma		Yes	
Are vegetation, soil	, or hydrology	naturany p	roblematic?	circumstan	the second s		
				(ii needed,	explain an	y answers in remark	
SUMMARY OF FINDINGS							
Hydrophytic vegetation present?	10						
	lo	Is the sampled area within a wetland? <u>No</u>					
	lo		Upland	for W004-6			
Remarks:							
		10014					
Upland pit for wetlands W004-00	06 located along	road ROW					
HYDROLOGY							
Wetland Hydrology Indicators:	TO DISCOUT OF		Sec	condary Indicato	rs (minimu	m of two required)	
Primary Indicators (minimum of one is re	equired; check all th	nat apply)		Surface Soil Cra			
Surface Water (A1)		tic Plants (B14)		Sparsely Vegeta		ve Surface (B8)	
High Water Table (A2)	and the second second second	Sulfide Odor (C1)	North Control of the	Drainage Patter		(D0)	
Saturation (A3)				Moss Trim Lines	THE REAL OF STREET		
		hizospheres on L				201	
Water Marks (B1) Sediment Deposits (B2)	Roots (C3)	of Reduced Iron (Dry-Season Wa Crayfish Burrow	Stream and a stream of the	<i>(</i> , <i>)</i>	
Drift Deposits (B3)		n Reduction in Til		Saturation Visib	and the second se	Imageny (CQ)	
Algal Mat or Crust (B4)	Soils (C6)		ieu	Stunted or Stres			
Iron Deposits (B5)	Contraction and the second	Surface (C7)	Contraction in the	Geomorphic Pos		(21)	
Inundation Visible on Aerial	Other (Exp	lain in Remarks)	64 (S.)	Shallow Aquitan			
Imagery (B7)			119	Microtopographi	and the second of the second	+)	
Water-Stained Leaves (B9)				FAC-Neutral Te	st (D5)		
Aquatic Fauna (B13)			e digensiering of K				
Field Observations:		A started and			6-10-R		
Surface water present? Yes	No X	_ Depth (inches)		Wetlan			
Water table present? Yes	<u>No X</u>	Depth (inches)		hydrol			
Saturation present? Yes	<u>No X</u>	Depth (inches)	: <u>NA</u>	presen	t?	N	
(includes capillary fringe)				10 10 1 1 10			
Departing reported data (strange server	monitoring well as	rial photos					
Describe recorded data (stream gauge,	monitoring well, ae	nai priotos, prev	ious inspectio	ons), ir avaliable	Contractor		
Remarks:		and a second	C. 198 281 241				
	The second second	A CALL STREET					
The surface of the second light the second	and the second	and difference on the second sec	The second se	- De-mint + particular			

1111日前11日1日1日1日

Absolute

% Cover

0

Absolute

% Cover

0 Absolute

% Cover 30

30

15

15

10

100

Absolute

% Cover

0

KyPSC Case No. 2016-00168 Exhibit 2(c) PUBLIC Page 136 of 429

VEGETATION - Use scientific names of plants

Plot Size (

Plot Size (

Plot Size (

Plot Size (

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

30 ft.

15 ft.

5 ft.

30 ft.

)

)

)

)

Tree Stratum

Sapling/Shrub

Stratum

Herb Stratum

Woody Vine

Stratum

Poa pratensis Taraxacum officinale

Trifolium repens Festuca arundinacea

Plantago major

1

2

3

45

14	the second second	Sampling Po	int: UOC	4-0
State of the	1.2.	50/20 Thresholds		
Dominant	Indicator		20%	50%
Species	Status	Tree Stratum	0	0
Vie net dans d		Sapling/Shrub Stratum	0	0
		Herb Stratum	20	50
	-	Woody Vine Stratum	0	0
Contraction of the second		woody vine Stratum	U	U
	1.	Dominance Test Worksh	eet	1
	Section and	Number of Dominant	1.10	
Holes and the	THE REAL PROPERTY OF	Species that are OBL,		
		FACW, or FAC:	0	(A)
		Total Number of Dominant	Provide Statements	_(^)
1		Species Across all Strata:	2	(8)
Total Cover	Carlon Lange			(B)
		Percent of Dominant		
		Species that are OBL,		
Dominant	Indicator	FACW, or FAC:	0.009	6 (A/B)
Species	Status		7 1 2 2	1.1516.45
	and me so and	Prevalence Index Works	heet	
		Total % Cover of:		
	do Fatalio	OBL species 0 x 1	= ()
THE REPORT	avisand at 1	FACW species 0 x 2	2 = ()
ET LENGT	When the settle to	FAC species 0 x 3	_)
A CONTRACTOR		FACU species 100 x 4	-	and the second se
		UPL species 0 x 5	_	and the second se
				1000
COLUMN STREET		Column totals 100 (A)	Second Se	
	A STATE OF THE OWNER	Prevalence Index = B/A =	4.00	Ser The State
Total Cover				
otal Cover		Hydrophytic Vegetation	Indicator	
Dominant	Indicator	Rapid test for hydroph		
	Status	Dominance test is >50	-	lation
Species				
Y	FACU	Prevalence index is ≤	a contract of the	
Y	FACU	Morphological adaptat	Contraction of the Association	
<u>N</u>	FACU	supporting data in Rer	narks or	ona
<u>. N</u>	FACU	separate sheet)		
N	FACU	Problematic hydrophy	tic vegeta	tion*
Sou allowing		(explain)		
		*Indicators of hydric soil and wet	and hydrold	ogy must be
		present, unless disturbed or prot	lematic	No. 14
Mass - altern		Definitions of Vegetation	Strata:	1.204
-	the	Tree - Woody plants 3 in. (7.6 cm	n) or more i	n diameter i
		breast height (DBH), regardless	of height.	
THE REAL		Sapling/shrub - Woody plants le	ess than 3 in	DBH and
		greater than 3.28 ft (1 m) tail.		
Total Cover	and the second second	Horb All borbonous (non-	to planta -	annelless -
		Herb - All herbaceous (non-wood size, and woody plants less than		ogaruless 0
Dominant	Indicator	and, and troody plants rood than	ente n tall.	
Species	Status	Woody vines - All woody vines	preater than	3.28 ft in
		height.		
Sector and	- MI			
A DAMAN S		Hydrophytic		
Sec. In Sec.	1.000	vegetation		
the state of the strength of the	Contra La Contra	present? N		
Total Cover				

page di sellenti di meterno processi

1.

Profile Des	cription: (Descri	he to th	e denth needed t	o docu	ment the	indicato	r or confirm the abser	ace of indicators)
Depth	Matrix			ox Fea			Texture	Remarks
(Inches)	Color (moist)	.%	Color (moist)	%	Type*	Loc**	3-1-1-101-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	
0-18	10YR 5/3	100		-			silty clay loam	rocky, road wash
Turner ()=(Depleti	an BM-Baduas	d Matei			- Control Sand Crains	
	PL=Pore Lining,			a Matri	x, US=U	overed o	r Coated Sand Grains	
Histisol Histic E Black H Hydrog Stratifie 2 cm M Deplete Thick D Sandy (LRR N Sandy Sandy Sandy Sandy	Epipedon (A2) distic (A3) en Sulfide (A4) ed Layers (A5) buck (A10) (LRR ed Below Dark Su Dark Surface (A1) Mucky Mineral (S I, MLRA 147, 14 Gleyed Matrix (S Redox (S5) d Matrix (S6)	urface (2) 51) 8) (4)	(MLRA Thin Da (MLRA Loamy C Depleted Redox D Iron-Mai Umbric Piedmor Red Par	the Belo 147, 14 rk Surf 147, 14 Gleyed d Matri Dark Su d Dark Depressing aness Surface the Floo rent Matri	w Surfac 48) face (S9) 48) Matrix (F x (F3) Jurface (Ff Surface sions (F8 se Masse e (F13) (I dplain So aterial (F2	F2) (F7) 3) 95 (F12) (MLRA 1 ; 5)ils (F19) 21) (MLF	2 cm Muc Coast Pra Piedmont (MLRA 1: Very Sha Other (Ex	llow Dark Surface (TF12) plain in Remarks)
Restrictive Type: Depth (inch	Layer (if observe les):	ed):			-		Hydric soil pres	sent? <u>N</u>
Remarks:								

Project/Site: Walton-Big Bone Natural	Gas Pipeline City/County:	Boone	Sampling Date: 3/30/16
Applicant/Owner: Duke Energy	State:	Kentucky	Sampling Point: W007
Investigator(s): Sarah Miloski, Julie Freer		n, Township, Range:	
Landform (hillslope, terrace, etc.): depres		ncave, convex, none)	
Subregion (LRR or MLRA): LRR N	Lat.: 38.878916	Long.: -84.	
Soil Map Unit Name FdD3-Faywood silty c	ay, 12 to 20 percent slopes, sev	erely eroded NVVI Cla	
Are climatic/hydrologic conditions of the sit	e typical for this time of the year	? Yes X No	(If no, explain in remarks)
	or hydrologysignificant	y disturbed? Are	"normal Yes
Are vegetation, soil, o	or hydrology naturally p	roblematic? circi	umstances" present?
		(If n	eeded, explain any answers in remark
SUMMARY OF FINDINGS			
Hydrophytic vegetation present? Yes			·····································
Hydric soil present? Yes	ls the san	pled area within a w	vetland? Yes
Wetland hydrology present? Yes			W007
Remarks:			
DEM wetland along road DOW D	raine into stream \$025		
PEM wetland along road ROW. D	rains into stream 3025		
		The second second second	
HYDROLOGY		· · · · · · · · · · · · · · · · · · ·	
Wetland Hydrology Indicators:			ndicators (minimum of two required)
Primary Indicators (minimum of one is requ		and the store	Soil Cracks (B6)
X Surface Water (A1)	True Aquatic Plants (B14)		Vegetated Concave Surface (B8)
X High Water Table (A2)	Hydrogen Sulfide Odor (C1)	and the second se	e Patterns (B10)
X Saturation (A3)	Oxidized Rhizospheres on L		im Lines (B16)
Water Marks (B1)	X Roots (C3)		son Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iron (Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction in Ti		on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Algal Mat or Crust (B4)	Soils (C6)		
Iron Deposits (B5)	Thin Muck Surface (C7) Other (Explain in Remarks)	and the second se	phic Position (D2)
Inundation Visible on Aerial	Other (Explain in Remarks)		Aquitard (D3)
Imagery (B7) Water-Stained Leaves (B9)		and the second se	ographic Relief (D4) utral Test (D5)
Aquatic Fauna (B13)			
Field Observations: Surface water present? Yes X	No Depth (inches		Wetland
Surface water present? Yes X Water table present? Yes X	No Depth (inches		hydrology
Saturation present? Yes X	No Depth (inches		present? Y
(includes capillary fringe)		· <u> </u>	
Describe recorded data (stream gauge, mo	nitoring well, aerial photos, prev	ious inspections), if a	vailable:
Remarks:			Manufacture and the second

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50%

0

0

50

0

(A)

(B)

20%

0

0

20

0

3

3

100.00% (A/B)

30

100

60

0

0

190 (B)

1.90

VEGETATION - Use scientific names of plants Sampling Point: W007 50/20 Thresholds Absolute Dominant Indicator **Tree Stratum** Plot Size (30 ft.) % Cover **Species** Status **Tree Stratum** Sapling/Shrub Stratum Herb Stratum 2 3 Woody Vine Stratum 4 **Dominance Test Worksheet** 5 6 Number of Dominant Species that are OBL, 7 FACW, or FAC: 8 9 **Total Number of Dominant** Species Across all Strata: 10 0 **Total Cover** Percent of Dominant Species that are OBL, Dominant Indicator FACW, or FAC: Sapling/Shrub Absolute Plot Size (15 ft.) Stratum Status % Cover Species **Prevalence Index Worksheet** Total % Cover of: 2 30 x 1 = **OBL** species 3 FACW species 50 x 2 = 4 FAC species 20 x 3 = 5 6 **FACU** species 0 x4= 7 UPL species 0 x 5 = 8 Column totals 100 (A) Prevalence Index = B/A = 9 10 0 = Total Cover Hydrophytic Vegetation Indicators: Absolute Dominant Indicator Rapid test for hydrophytic vegetation Herb Stratum Plot Size (5 ft.) X Dominance test is >50% % Cover Species Status 30 Y OBL X Prevalence index is ≤3.0* Carex lupulina 1 Phalaris arundinacea 30 FACW Morphological adaptations* (provide 2 Y 20 Ŷ FAC supporting data in Remarks or on a Juncus tenuis 3 Juncus effusus 10 N FACW separate sheet) 4 5 Epilobium coloratum 10 N FACW Problematic hydrophytic vegetation* (explain) 6 7 Indicators of hydric soil and wetland hydrology must be 8 present, unless disturbed or problematic 9 **Definitions of Vegetation Strata:** 10 11 Tree - Woody plants 3 in. (7.6 cm) or more in diameter at 12 breast height (DBH), regardless of height. 13 14 Sapling/shrub - Woody plants less than 3 in. DBH and 15 greater than 3.28 ft (1 m) tall. 100 = Total Cover Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine Dominant Indicator Absolute Plot Size (30 ft.) Stratum % Cover Species Status Woody vines - All woody vines greater than 3.28 ft in height. 2 3 4 Hydrophytic 5 vegetation 0 = Total Cover present? Y

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

US Army Corps of Engineers

· 注册,由《公司》 如此的"日子"。

0-18 10	DYR 5/1	% Color (mois 70 10YR 5/8	tedox Feat % 30		Loc** PL/M	Texture silty clay loam	Remarks
0-18 10	DYR 5/1	the second s				silty clay loam	
Fype: C=Conce							
			1111	STATE AND			
			AND INTERACTION OF	THOLESSEN CHURCH		Notes The California	
		这些是你们的 会不能	COLD RELIES AND	AN THE A	-chite		State of the state of the
			e Made	11082	Day and		
			No Charles	W. Sugar		1993年4月1日日日前三部6月1	书记 经经济财产的复数形式
ocation: DI -D	ntration, D=De	pletion, RM=Redu	ced Matrix	, CS=Co	overed o	r Coated Sand Grains	
Location. PL-P	ore Lining, M=	=Matrix		2010	2		and the second second
dric Soil India	cators:					Indicators for P	roblematic Hydric Soils:
			Surface (S				
Histisol (A1)			alue Belov		e (S8)		A10) (MLRA 147)
Histic Epiped			RA 147, 14				Redox (A16) (MLRA 147, 14
Black Histic (Hydrogen Su	A REAL PROPERTY OF A REAL PROPER		Dark Surfa RA 147, 14	and the second se		(MLRA 136,	odplain Soils (F19)
Stratified Lay			ny Gleyed I		2)		Dark Surface (TF12)
	A10) (LRR N)		eted Matrix		-,		in in Remarks)
	ow Dark Surfa	A CARL PROPERTY AND A CARL	x Dark Su	and the second se	5)		
Thick Dark S			eted Dark	Surface ((F7)		
the second se	Mineral (S1)		x Depress				
(LRR N, MLF	The second se					(LRR N, MLRA 136)	
	d Matrix (S4)		ric Surface			(MLRA 148)	
Sandy Redox Stripped Mat						RA 127, 147)	
_Outpped Mat	11x (00)					U (E () (4 /)	
ndicators of hyd	drophytic vege	tation and wetland	hydrology	must be	present	t, unless disturbed or prol	blematic
行。但我自己提供		and the state of the				化自动运行 网络马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马马	
	201 12324	The second second second		No. al al	232.07	。····································	
estrictive Layer	(if observed):						
ype: epth (inches):	<u> Nel al Circle Al Service</u>		State State			Hydric soil present	? <u> </u>
eptri (inches).							
emarks:		Star Den onthe s	TO THE OWNER	10.00			

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Walton-Big Bone Natural Ga	as Pipeline City/County:	Boone	Sampling Date: 3/30/16
Applicant/Owner: Duke Energy	State:	Kentucky	Sampling Point: U007
Investigator(s): Sarah Miloski, Julie Freer	and the second se	n, Township, Range:	
Landform (hillslope, terrace, etc.): hillslope		ncave, convex, none)	
Subregion (LRR or MLRA): LRR N	Lat.: 38.878928	Long.: -84.6	
Soil Map Unit Name FdD3-Faywood silty clay	y, 12 to 20 percent slopes, sev	erely eroded NVVI Cla	Issification: N/A
Are climatic/hydrologic conditions of the site	typical for this time of the year	Yes X No	(If no, explain in remarks)
		the set as a second where a second seco	"normal Yes
Are vegetation, soil, or	hydrology naturally p		umstances" present?
		(If ne	eeded, explain any answers in remarks
SUMMARY OF FINDINGS			
Hydrophytic vegetation present? No			
Hydric soil present? No	Is the san	pled area within a w	retland? <u>No</u>
Wetland hydrology present? No		Upland for W007	7
Remarks:			
Upland pit for wetland W007			
	a dimension diet bestenden		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary I	ndicators (minimum of two required)
Primary Indicators (minimum of one is require	ed; check all that apply)		Soil Cracks (B6)
Surface Water (A1)	True Aquatic Plants (B14)		Vegetated Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)		Pattems (B10)
Saturation (A3)		State of the state	m Lines (B16)
Water Marks (B1)	Oxidized Rhizospheres on L Roots (C3)		son Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iron (The second se	Burrows (C8)
Drift Deposits (B3)	Recent Iron Reduction in Til		on Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Soils (C6)		or Stressed Plants (D1)
Iron Deposits (B5)	Thin Muck Surface (C7)		phic Position (D2)
Inundation Visible on Aerial	Other (Explain in Remarks)		Aquitard (D3)
Imagery (B7)			ographic Relief (D4)
Water-Stained Leaves (B9)		and the second se	utral Test (D5)
Aquatic Fauna (B13)			
Field Observations:			
Surface water present? Yes	No X Depth (inches)	: NA 1	Wetland
Water table present? Yes	No X Depth (inches)		hydrology
Saturation present? Yes	No X Depth (inches)		present? N
(includes capillary fringe)		Shallan State	
		A TORENA DE LOR	
Describe recorded data (stream gauge, moni	toring well, aerial photos, prev	ous inspections), if av	/ailable:
Remarks:			

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GETATION - Use scient	inc name	s or plar	113			Sampling Poin	141 000	
	N TIL	A	and the second second	Sales and	- 11- 11- T	50/20 Thresholds	109.01.5	Teller C
Tree Stratum Plot Siz	e (30	ft.)	Absolute	Dominant	Indicator		20%	50%
		,	% Cover	Species	Status	Tree Stratum	0	0
				and the second		Sapling/Shrub Stratum	0	0
and the second second second				A COLORESID D	CONTRACTOR OF STREET,	Herb Stratum	20	50
	M. Sandara			<u></u> _		Woody Vine Stratum	0	0
			10000			Dominance Test Workshe	et	
The second second	CONTRACTOR	(-6)17 J.	A DAM BU		March 1991	Number of Dominant		
			And Alexand		SUBBRID	Species that are OBL,		
VIEW STREET IN STREET	THE SE COM		AL BURE			FACW, or FAC:	0	(A)
	語の時代		Constant States		The second second	Total Number of Dominant	Cene!	
	101 2 3		STRATE ZALL	Pierce Address		Species Across all Strata:	3	(B)
			0	= Total Cover		Percent of Dominant		
						Species that are OBL,		
apling/Shrub Plot Siz Stratum	e(15	ft.)	Absolute % Cover	Dominant Species	Indicator Status	FACW, or FAC:	0.00%	6(A/B
						Prevalence Index Worksh	eet	142.900
			- ALL STREET		1	Total % Cover of:		
and has able does not	ADDE TENON	a los pidrostas	MEN SCHOOL	A STORE AND STORE	THE PART OF	OBL species 0 x 1	= 0	
	Max and		A THE REAL PROPERTY.	1.22/10/10/00	The second se	FACW species 0 x 2	= 0	
	assichation.	140-31-21		A THE REAL PROPERTY OF	THE PARTY	FAC species 0 x 3		
NAN BERSTER STREET	101-14-14	LINE ST		The state of the	The Print Print of	FACU species 100 x 4	= 40	0
	1942	MAXINE 2	2159 (1991 P			UPL species 0 x 5	= 0	10
	to- Select		Statistics.	the second second	The second second	Column totals 100 (A)	40	0 (B)
	- SUMMER	1.111	and the second	- 市民的主教制度主任	STORE STORE	Prevalence Index = B/A =	4.00	
		Sec. 35	They and they				14.1 34	The second
	Children and		0	Total Cover		网络国际网络中国市		
						Hydrophytic Vegetation In		
Herb Stratum Plot Siz	e(5 f	t.)	Absolute	Dominant	Indicator	Rapid test for hydrophy	and the second sec	ation
			% Cover	Species	Status	Dominance test is >509		
Poa pratensis			30	Y	FACU	Prevalence index is ≤3.		
Trifolium repens			30	<u>Y</u>	FACU	Morphological adaptation		
Plantago major			20	Y	FACU	supporting data in Rem	arks or c	on a
Taraxacum officinale			15	<u>N</u>	FACU	separate sheet)		
Plantago lanceolata			5	<u> </u>	FACU	Problematic hydrophytic	c vegeta	tion*
						(explain)		
						*Indicators of hydric soil and wetta		gy must b
						present, unless disturbed or proble	emauc	
						Definitions of Vegetation	Strata:	
		10 10				Tree - Woody plants 3 in. (7.6 cm) breast height (DBH), regardless of		1 diameter
an an tao an tao an tsai						Sapling/shrub - Woody plants les	s than 3 in	. DBH and
			100	Total Cover		greater than 3.28 ft (1 m) tall.		
Mandu Mine			Abashda	Deminut	Indiantes	Herb - All herbaceous (non-woody size, and woody plants less than 3		gardless
Woody Vine Plot Siz Stratum Plot Siz	e(30	ft.)	Absolute % Cover	Dominant Species	Indicator Status	Mandu Jaco Maria I		
Suatum			78 COVEI			Woody vines - All woody vines gr height.	eater than	3.28 ft in
	en anten antena	No. TRANS	The second by	E G TO MAN	Salaria Providencia	Hydrophytic		
2. 法带的法法保护的 提供分词		41 7 E S P				vegetation		
	AFT AFT		0	Total Cover		present? N		
			S. Services M.		10 A	The second second second second		1912
				and the second se			de la contra de la	
marks: (Include photo numb	ers here or	on a sepa	arate sheet)	Section 1983	18. 18 19. 2		Sale -	CONCELLENCE IN

Eastern Mountains and Piedmont Region

Color (moist) % Color (moist) % Type* Loc** 0-18 10YR 5/4 100 - - silty clay loam rocky, road wash	n needed to document the indicator or confirm the absence of indicators.)				be to the	cription: (Descri	Profile Desc
0-18 10YR 5/4 100 - - silty clay loam rocky, road wash 0-18 10YR 5/4 100 - - silty clay loam rocky, road wash 0-18 10YR 5/4 100 - - silty clay loam rocky, road wash 0 1 1 1 1 1 1 1 1 0 1 <	Lexilize Remarks			the second se			A CONTRACTOR OF
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains "Location: PL=Pore Lining, M=Matrix Hydric Soll Indicators: Indicators for Problematic Hydric Polyvalue Below Surface (S7) Histis (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Dark Surface (F7) Stratified Layers (A5) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Matrix (F3) Stardiface (S5) Trinc Dark Surface (A11) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Sandy Gleyed Matrix (S4) Stratified Layers (S5) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147)		Type* Loc**	1	Color (moist)			
**Location: PL=Pore Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Histisol (A1) Dark Surface (S7) Histic Epipedon (A2) (MLRA 147, 148) Black Histic (A3) Thin Dark Surface (S9) Hydrogen Sulfide (A4) (MLRA 147, 148) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 147, 147)	Silty clay loam rocky, road wash				100	10YR 5/4	0-18
*Location: PL=Pore Lining, M=Matrix tydric Soil Indicators: Indicators for Problematic Hydric Histisol (A1) Dark Surface (S7) Histic Epipedon (A2) (MLRA 147, 148) Black Histic (A3) Thin Dark Surface (S9) Hydrogen Sulfide (A4) (MLRA 147, 148) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147)							
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Histisol (A1)Polyvalue Below Surface (S8)2 cm Muck (A10) (MLRA 147)Histic Epipedon (A2)(MLRA 147, 148)Coast Prairie Redox (A16) (MLRBlack Histic (A3)Thin Dark Surface (S9)Piedmont Floodplain Soils (F19)Hydrogen Sulfide (A4)(MLRA 147, 148)(MLRA 136, 147)Stratified Layers (A5)Loamy Gleyed Matrix (F2)Very Shallow Dark Surface (TF12 cm Muck (A10) (LRR N)Depleted Matrix (F3)Other (Explain in Remarks)Depleted Below Dark Surface (A11)Redox Dark Surface (F6)Other (Explain in Remarks)Thick Dark Surface (A12)Depleted Dark Surface (F7)Sandy Mucky Mineral (S1)Sandy Gleyed Matrix (S4)Umbric Surface (F13) (MLRA 136, 122)Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 148)Stripped Matrix (S6)Red Parent Material (F21) (MLRA 127, 147)	Indicators for Problematic Hydric Soils:	7)	rface (S				
Histic Epipedon (A2)(MLRA 147, 148)Coast Prairie Redox (A16) (MLRBlack Histic (A3)Thin Dark Surface (S9)Piedmont Floodplain Soils (F19)Hydrogen Sulfide (A4)(MLRA 147, 148)(MLRA 136, 147)Stratified Layers (A5)Loamy Gleyed Matrix (F2)Very Shallow Dark Surface (TF12 cm Muck (A10) (LRR N)Depleted Matrix (F3)Other (Explain in Remarks)Depleted Below Dark Surface (A11)Redox Dark Surface (F6)Other (Explain in Remarks)Thick Dark Surface (A12)Depleted Dark Surface (F7)Sandy Mucky Mineral (S1)(LRR N, MLRA 147, 148)Iron-Manganese Masses (F12) (LRR N, MLRA 136)Sandy Gleyed Matrix (S4)Umbric Surface (F13) (MLRA 136, 122)Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 148)Stripped Matrix (S6)Red Parent Material (F21) (MLRA 127, 147)						(A1)	Histisol
Hydrogen Sulfide (A4) (MLRA 147, 148) (MLRA 136, 147) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Very Shallow Dark Surface (TF1 2 cm Muck (A10) (LRR N) Depleted Matrix (F3) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Other (Explain in Remarks) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147)				and the second			
Stratified Layers (A5) Loamy Gleyed Matrix (F2) Very Shallow Dark Surface (TF1 2 cm Muck (A10) (LRR N) Depleted Matrix (F3) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Other (Explain in Remarks) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147)	Thin Dark Surface (S9) Piedmont Floodplain Soils (F19)	æ (S9)	rk Surfa	Thin Da		listic (A3)	Black H
2 cm Muck (A10) (LRR N) Depleted Matrix (F3) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Other (Explain in Remarks) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147)		and the second se	and the second s	and a second sec			
Thick Dark Surface (A12)Depleted Dark Surface (F7)Sandy Mucky Mineral (S1)Redox Depressions (F8)(LRR N, MLRA 147, 148)Iron-Manganese Masses (F12) (LRR N, MLRA 136)Sandy Gleyed Matrix (S4)Umbric Surface (F13) (MLRA 136, 122)Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 148)Stripped Matrix (S6)Red Parent Material (F21) (MLRA 127, 147)	Depleted Matrix (F3) Other (Explain in Remarks)	(F3)	d Matrix	Deplete	N)		
Sandy Mucky Mineral (S1)Redox Depressions (F8)(LRR N, MLRA 147, 148)Iron-Manganese Masses (F12) (LRR N, MLRA 136)Sandy Gleyed Matrix (S4)Umbric Surface (F13) (MLRA 136, 122)Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 148)Stripped Matrix (S6)Red Parent Material (F21) (MLRA 127, 147)		and the second			Contract of the second second		
(LRR N, MLRA 147, 148)Iron-Manganese Masses (F12) (LRR N, MLRA 136)Sandy Gleyed Matrix (S4)Umbric Surface (F13) (MLRA 136, 122)Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 148)Stripped Matrix (S6)Red Parent Material (F21) (MLRA 127, 147)							and the second se
Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147)					Contraction of the		Contraction in the second s
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147)							
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147)					,	and the second se	
indicators of hydrophytic vegetation and wettand hydrology must be present, unless disturbed of problematic	— wetland hydrology must be present, unless disturbed or problematic	must be prese	drology	n and wetland hy	egetatio	of hydrophytic ve	Indicators
Restrictive Layer (if observed):					ed):	Layer (if observe	Restrictive I
Type: Hydric soil present? N	Hydric soil present? <u>N</u>		-211,741				
Depth (inches):						les):	
Remarks:							Remarks:

Project/Site: Walton-Big I	3one Natur	ral Gas Pipeline	City/County:	Boone	Sampling Date: 3	3/30/16	
Applicant/Owner: Duke En	iergy		State:	Kentucky	Sampling Point	W008	
Investigator(s): Sarah Milosl	ki, Julie Fra	er			ange: No PLSS in Area		
Landform (hillslope, terrace,		pression	and the second		none): <u>concave</u>	Slope (%): 0	
Subregion (LRR or MLRA):		Lat.:	38.87925		: -84.698896	Datum: WGS 84	
Soil Map Unit Name FcD-Fay	wood silty	clay loam, 12 to 2	percent slopes	N	WI Classification: N/A		
Are climatic/hydrologic condition	tions of the	site typical for this	s time of the year	Yes X	_No(If no, ex	plain in remarks)	
Are vegetation, soi		, or hydrology	significantl	y disturbed?	Are "normal	Yes	
Are vegetation, soi		, or hydrology	naturally p	roblematic?	circumstances" pres	ent?	
					(If needed, explain a	ny answers in remar	
SUMMARY OF FINDING	s						
Hydrophytic vegetation prese	nt? Y	'es	an and a date				
Hydric soil present?		'es	is the sam	pled area with	nin a wetland? Ye	S	
Wetland hydrology present?	Y	es			WO	08 ·	
Remarks:		Sector Million (1996)			and the second second	and the loss of the	
PEM wetland in stream	valley						
HYDROLOGY							
Wetland Hydrology Indica	itors:			Seco	ndary Indicators (minim	num of two required)	
Primary Indicators (minimum	of one is r	equired; check all	that apply)	s	urface Soil Cracks (B6)		
X Surface Water (A1)		True Aqu	atic Plants (B14)	S	parsely Vegetated Conc	ave Surface (B8)	
X High Water Table (A2)		Hydrogen	Sulfide Odor (C1)	<u>X</u> D	rainage Patterns (B10)		
X Saturation (A3)		Oxidized	Rhizospheres on L	ivingM	loss Trim Lines (B16)		
Water Marks (B1)		X Roots (C3))	D	ry-Season Water Table	(C2)	
Sediment Deposits (B2)			of Reduced Iron (and the second se	rayfish Burrows (C8)		
Drift Deposits (B3)			on Reduction in Til	the second se	aturation Visible on Aeri	the second s	
Algal Mat or Crust (B4)		Soils (C6)			tunted or Stressed Plant		
X Iron Deposits (B5)		and the second se	surface (C7)		eomorphic Position (D2)		
Inundation Visible on Aeri	al	Other (Ex	plain in Remarks)	AND STREET	hallow Aquitard (D3)	All and the store	
Imagery (B7)					licrotopographic Relief (I)4)	
Water-Stained Leaves (B	3)			<u> </u>	AC-Neutral Test (D5)		
Aquatic Fauna (B13)						Dr. A. State Parts	
Field Observations:	Ves	V N-	Denth (inches)		Wetland		
Surface water present? Water table present?		X No X No	Depth (inches) Depth (inches)		Wetland hydrology		
Saturation present?		X No	Depth (inches)		present?	Y	
(includes capillary fringe)		<u>× </u>					
	am gauge,	monitoring well, a	erial photos, previ	ious inspection	s), if available:		
Describe recorded data (strea							
Remarks:							

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Sampling Point: W008

VEGETATION - Use scientific names of plants

				50/20 Thresholds
Tree Stratum Plot Size (30 ft.)	Absolute	Dominant	Indicator	20% 50%
	% Cover	Species	Status	Tree Stratum 2 5
1 Acer saccharinum	10	<u> </u>	FACW	Sapling/Shrub Stratum 0 0
2	1			Herb Stratum 19 48 Woody Vine Stratum 0 0
3				Woody Vine Stratum 0 0
5				Dominance Test Worksheet
6		T GUY SULS		Number of Dominant
7			Siles a starting the	Species that are OBL,
8	Sec. Philode	Same Product	THE REAL PROPERTY.	FACW, or FAC: 2 (A)
9	NAME OF TRA		Million Start Start	Total Number of Dominant
10			a side size de	Species Across all Strata: 2 (B)
	10	= Total Cover	A THE REAL PROPERTY OF	Percent of Dominant
				Species that are OBL,
Sapling/Shrub Plot Size (15 ft.) Stratum	Absolute % Cover	Dominant Species	Indicator Status	FACW, or FAC:(A/B)
			chi 19-5 (che	Prevalence Index Worksheet
2	A STATEMENT STATE	1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A	an Alexader	Total % Cover of:
3		NUMER CARDON TO BE		OBL species <u>10</u> x 1 = <u>10</u>
4	Real Providence and the	all states of		FACW species 85 x 2 = 170
5		A A A A A A A A A A A A A A A A A A A		FAC species $10 \times 3 = 30$
6	No. Cast Plat	his course of the		FACU species 0 x 4 = 0
			1	UPL species $0 \times 5 = 0$
8	9 <u>.11.601112-015-91</u>		1912 5	Column totals 105 (A) 210 (B)
9			1 - 72	Prevalence Index = B/A = 2.00
10	0	= Total Cover		
		- TOTAL COVEL		Hydrophytic Vegetation Indicators:
	Absolute	Dominant	Indicator	X Rapid test for hydrophytic vegetation
Herb Stratum Plot Size (5 ft.)	% Cover	Species	Status	X Dominance test is >50%
1 Phalaris arundinacea	50	Y	FACW	X Prevalence index is ≤3.0*
2 Cyperus strigosus	15	N	FACW	Morphological adaptations* (provide
3 Juncus effusus	10	N	FACW	supporting data in Remarks or on a
4 Eleocharis flavescens	10	N	OBL	separate sheet)
5 Rumex crispus	10	<u>N</u>	FAC	Problematic hydrophytic vegetation*
6	And the second second	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	A State William	(explain)
7	Contraction of the	-		Indicators of hydric soil and wetland hydrology must be
8				present, unless disturbed or problematic
10 11	A CONTRACTOR			Definitions of Vegetation Strata:
12 13				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
14				Sapling/shrub - Woody plants less than 3 in. DBH and
15	95	= Total Cover		greater than 3.28 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless of
Woody Vine Dist Size (20 B)	Absolute	Dominant	Indicator	size, and woody plants less than 3.28 ft tall.
Stratum Plot Size (30 ft.)	% Cover	Species	Status	Woody vines - All woody vines greater than 3.28 ft in
1	S. Artes			height.
2			the first states	
3				
		A MEGERING &	00013	Hydrophytic
5	112 H 1 1	212 10 10 10 10		vegetation
	0	= Total Cover		present? Y
	A A A			
Remarks: (Include photo numbers here or on a separate	arate sheet)			

SOIL							Sam	pling Point: W008
Profile Des	cription: (Descri	he to th	e deoth needed t	o docu	ment the	indicato	or or confirm the absence of	of indicators)
Depth	Matrix			ox Feat			Texture	Remarks
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**		Remarks
0-18	10YR 4/2	70	10YR 5/6	30	С	PL/M	silty clay loam	
			#- Pauki I					
	the American		Second Contractor		134	AC Post		
		a de la com		1000	Searchine Searchine			
					Nine -	2012 89		
	新山 、竹田 (11)		The second second	200				
			在1971年前6日第		S. Salaria			
公司建立任			NS AN TAXA		16 3	1028		
						and a set		
*Type: C=C	Concentration, D=	Deplet	ion, RM=Reduce	d Matri	x. CS=C	overed o	r Coated Sand Grains	
	PL=Pore Lining,				A. 10 S.			
Hydric Soi	I Indicators:						Indicators for Pr	roblematic Hydric Soils:
Histiso	(A1)		Dark Su Polyvali		S7) w Surfac	e (S8)	2 cm Muck (A	A10) (MLRA 147)
The second s	Epipedon (A2)		(MLRA			20 (00)		Redox (A16) (MLRA 147, 148)
and the second se	listic (A3)				ace (S9)		Piedmont Flo	odplain Soils (F19)
	en Sulfide (A4)		(MLRA			1	(MLRA 136, 1	
	ed Layers (A5)	ND.			Matrix (F2)		Dark Surface (TF12)
and the second s	luck (A10) (LRR ed Below Dark Si		X Deplete		x (F3) Irface (Fi	6)	Other (Explain	n in Remarks)
	Dark Surface (A1)		The second se		Surface			
	Mucky Mineral (S	and the second se			sions (F8			
A REPAIR OF A REPAIR	I, MLRA 147, 14						(LRR N, MLRA 136)	
	Gleyed Matrix (S	4)				MLRA 1	36, 122)) (MLRA 148)	
	Redox (S5) d Matrix (S6)						RA 127, 147)	
			and the second second					
*Indicators	of hydrophytic ve	egetatio	on and wetland hy	drology	y must b	e presen	t, unless disturbed or prot	blematic
Postrictive	Layer (if observe							1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
Type:	Layer (il observe	ч).					Hydric soil present	? Y
Depth (inch	nes):							
Remarks:				IN REAL				
								#467.4 18 (42 S)
			此是他们建立是是					

Project/Site: Walton-Big Bone Nat	ural Gas Pipeline	City/County:	Boone	Sampling	Date: 3/30/16				
Applicant/Owner: Duke Energy	超4月1日1月2	State:	Kentucky	Sampling	Point U008				
Investigator(s): Sarah Miloski, Julie F		Sectio	n, Township,	Range: No PLSS					
Landform (hillslope, terrace, etc.): h	and the second se			ex, none): none	Slope (%): 20				
Subregion (LRR or MLRA): LRR N	Lat.:	38.879312	Lor	ig.: -84.698793	Datum: WGS 84				
Soil Map Unit Name FcD-Faywood sill	y clay loam, 12 to 20	percent slopes		NWI Classification	n: <u>N/A</u>				
Are climatic/hydrologic conditions of the	ne site typical for this	time of the year	? Yes	KNo(I	f no, explain in remarks)				
Are vegetation, soil	, or hydrology	significant	y disturbed?	Are "normal	Yes				
Are vegetation, soil	, or hydrology	naturally p	roblematic?	circumstance					
				(If needed, ex	plain any answers in remark				
SUMMARY OF FINDINGS									
Hydrophytic vegetation present?	No								
Hydric soil present?	No	is the san	npled area w	d area within a wetland? No					
Wetland hydrology present?	No	Upland for W008							
			opiana		A State State 1 (12)				
Remarks:									
					Will Hall Share Int. Day				
Upland pit for wetland W008									
Opiand pit for wetland woos					S. S. S. S. S. S. S. S.				
		Stores States	The second	and the second second					
HYDROLOGY		and the second	Sale 2 Sec						
Wetland Hydrology Indicators:			Sec		(minimum of two required)				
Primary Indicators (minimum of one is		PERCENTER OF STREET, P.	The R.	Surface Soil Crack	is (B6)				
Surface Water (A1)	and the second	tic Plants (B14)	<u> </u>	Sparsely Vegetate	d Concave Surface (B8)				
High Water Table (A2)	Hydrogen	Sulfide Odor (C1)							
Saturation (A3)	Oxidized F	Rhizospheres on L	iving	Moss Trim Lines (B16)					
Water Marks (B1)	Roots (C3	and the second se			ason Water Table (C2)				
Sediment Deposits (B2)	Contraction of the second s	of Reduced Iron (Crayfish Burrows (C8)					
Drift Deposits (B3)		on Reduction in Til	led		ation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Soils (C6)		A CARACTER DATE	Stunted or Stressed Plants (D1)					
Iron Deposits (B5)		Surface (C7)		Geomorphic Positi					
Inundation Visible on Aerial	Other (Exp	plain in Remarks)	18 - 1 - 1 - 	Shallow Aquitard (I					
Imagery (B7)			1993 - <u>1993</u>	Microtopographic F	Service and the service of the servi				
Water-Stained Leaves (B9)				FAC-Neutral Test ((D5)				
Aquatic Fauna (B13)	nga sing kanalar di								
Field Observations:									
Surface water present? Yes	<u>No X</u>	_ Depth (inches)		Wetland					
Water table present? Yes	No X	Depth (inches)		hydrolog					
Saturation present? Yes	<u>No X</u>	_ Depth (inches)	: NA	present?	<u> </u>				
(includes capillary fringe)									
Describe recorded data (stream gauge	monitoring well as	arial photos prev	ious inspectio	ns) if available					
Describe recorded data (stream gauge	, monitoring wen, ac		ious mapeou	ns), il available.					
Remarks:	A States		10 B						

VEGETATION - Use scientific names of plants

Absolute % Cover	Dominant Species	Indicator Status	50/20 Thresholds20%50%Tree Stratum0Sapling/Shrub Stratum0Herb Stratum2050Woody Vine Stratum00
% Cover	Species	Status	Sapling/Shrub Stratum00Herb Stratum2050Woody Vine Stratum00
			Herb Stratum 20 50 Woody Vine Stratum 0 0
			Woody Vine Stratum 0 0
			the second s
		ALC: NOT A	Dominance Test Worksheet
		A DESCRIPTION OF LODGE	Number of Dominant
	NUMBER OF BRIDE STOP	The second states	Species that are OBL,
		112,800	FACW, or FAC:1 (A)
		MARKEN FROM	Total Number of Dominant
	Tetal Course	ECCSEGE.	Species Across all Strata:3 (B)
=	Total Cover		Percent of Dominant
			Species that are OBL,
	Species	Indicator Status	FACW, or FAC: <u>33.33%</u> (A/B)
We have a			Prevalence Index Worksheet
2 (P21) bit b	201.600 (1785) in		Total % Cover of:
	A STATISTICS	A Contraction of the	OBL species $0 \times 1 = 0$
CONTRACTION OF A	Saren a sea	HU- 1039 (1213)	FACW species 20 x 2 = . 40
	Strange Strange	mining and	FAC species 10 x 3 = 30
at hand the	「自然なは無いたい	ELECTRON DE MUSICE	FACU species 70 x 4 = 280
Station and a			UPL species $0 \times 5 = 0$
S Mail	TALKED STATE		Column totals 100 (A) 350 (B)
			Prevalence Index = B/A = 3.50
0 =	Total Cover		
	rotar cover		Hydrophytic Vegetation Indicators:
Absolute	Dominant	Indicator	Rapid test for hydrophytic vegetation
% Cover	Species	Status	Dominance test is >50%
30	Y	FACU	Prevalence index is ≤3.0*
25	Y	FACU	Morphological adaptations* (provide
20	Y	FACW	supporting data in Remarks or on a
15	N		separate sheet)
10	N	distant and the second s	Problematic hydrophytic vegetation*
Transfer T	Contraction of the		(explain)
the source			
			*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
			Definitions of Vegetation Strata:
		<u>-11-</u> 11	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
	Entra Contraction		breast height (DBH), regardless of height.
			Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
100 =	Total Cover		Herb - All herbaceous (non-woody) plants, regardless of
	Dominant	Indicator	size, and woody plants less than 3.28 ft tall.
% Cover	Species	Status	Woody vines - All woody vines greater than 3.28 ft in
		N. S. S. LES.	height.
	Comparing the		
	The second se		Hydrophytic
	T.1.1.0		vegetation
=	I otal Cover		present? <u>N</u>
	Absolute % Cover 30 25 20 15 10 10 100 =	% Cover Species	% Cover Species Status

Drafile Dea	mintions (Depend		a danéh nandadé			indicate	r er eenfinn the ebeen	o of indicators)
Depth (Inches)	Matrix Color (moist)	%		o docu ox Feat %		Loc**	r or confirm the absend Texture	Remarks
0-18	10YR 5/3	100	-	-	Type	LUC	silt loam	
		Billion I				1.1		
				10.30	Sec. 1			
						We + St		
- Ball of Alter		25.32	States and the	1813	74 S.M.	1 /Sawe	而且在这时代的时代。	見、町内になって、「「「「「」」
				N 144			Charles the second strike	
				P1 45				
	Contra an							
without the state					CT_PIE			
Type: C=C	oncentration, D	-Deplet	on, RM=Reduce	d Matri	x, CS=C	overed o	r Coated Sand Grains	
*Location:	PL=Pore Lining,	M=Mat	rix	No. Ch		-09		
lydric Sol	Indicators:				chr-bhi		Indicators for	Problematic Hydric Soils:
Listiaal	(A1)		Dark Su			- (69)	2 cm Muck	: (A10) (MLRA 147)
Histisol (A1) Polyvalue Below Surf Histic Epipedon (A2) (MLRA 147, 148)						e (30)		rie Redox (A16) (MLRA 147, 148
	listic (A3)		and the second se	and the second second	ace (S9)			Floodplain Soils (F19)
	en Sulfide (A4)		(MLRA				(MLRA 13	6, 147)
	d Layers (A5)				Matrix (F	-2)		ow Dark Surface (TF12)
	uck (A10) (LRR d Below Dark Si		Deplete A11) Redox (x (F3) Irface (F6	3)	Other (Exp	lain in Remarks)
	ark Surface (A1)				Surface			
and the second sec	Mucky Mineral (S	· · · · · · · · · · · · · · · · · · ·			sions (F8			
	, MLRA 147, 14						(LRR N, MLRA 136)	
	Gleyed Matrix (S	4)			e (F13) (I		36, 122) (MLRA 148)	
	Redox (S5) d Matrix (S6)						A 127, 147)	
						.,		
Indicators	of hydrophytic ve	egetatio	n and wetland hy	drolog	/ must be	e presen	t, unless disturbed or p	roblematic
Restrictive	Layer (if observe	d):						
Туре:				10 set			Hydric soil prese	ent? N
Depth (inch	es):	1.500 C						
Remarks:		122.55						
Cindiks.								

h na radion - t

Project/Site: Walton-Big Bone Natural G	as Pipeline City/County:	Boone Sampling Date: 4/1/16						
Applicant/Owner: Duke Energy	State:	Kentucky Sampling Point W009						
Investigator(s): Sarah Miloski, Julie Freer		n, Township, Range: No PLSS in Area						
Landform (hillslope, terrace, etc.): depres		ncave, convex, none): concave Slope (%): 0						
Subregion (LRR or MLRA): LRR N	Lat.: <u>38.889871</u>	Long.: -84.639984 Datum: WGS 84						
Soil Map Unit Name No-Nolin silt loam, 0 to	2 percent slopes, occasionally f	looded NWI Classification: N/A						
Are climatic/hydrologic conditions of the site	typical for this time of the year?	Yes X No (If no, explain in remarks)						
Are vegetation , soil , or	hydrology significantly	y disturbed? Are "normal Yes						
Are vegetation, soil, or	hydrology naturally pr	oblematic? circumstances" present?						
		(If needed, explain any answers in remar						
SUMMARY OF FINDINGS								
Hydrophytic vegetation present? Yes								
Hydric soil present? Yes	- Is the sam	pled area within a wetland? Yes						
Wetland hydrology present? Yes		<u>W009</u>						
Remarks:								
DCC wetland lageted between neet	una and stores							
PSS wetland located between past	ures and stream.							
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is requi	red; check all that apply)	Surface Soil Cracks (B6)						
X Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)						
X High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)						
X Saturation (A3)	Oxidized Rhizospheres on Li	Rhizospheres on Living Moss Trim Lines (B16)						
Water Marks (B1)	X Roots (C3)	Dry-Season Water Table (C2)						
Sediment Deposits (B2)	Presence of Reduced Iron (C	C4) X Crayfish Burrows (C8)						
Drift Deposits (B3)	Recent Iron Reduction in Till							
Aigal Mat or Crust (B4)	Soils (C6)	Stunted or Stressed Plants (D1)						
Iron Deposits (B5)	Thin Muck Surface (C7)	Geomorphic Position (D2)						
Inundation Visible on Aerial	Other (Explain in Remarks)	Shallow Aquitard (D3)						
Imagery (B7)		Microtopographic Relief (D4)						
Water-Stained Leaves (B9)		FAC-Neutral Test (D5)						
Aquatic Fauna (B13)								
Field Observations:								
Surface water present? Yes X	No Depth (inches):	1 Wetland						
Water table present? Yes X	No Depth (inches):	5 hydrology						
Saturation present? Yes X	No Depth (inches):	0 present? Y						
(includes capillary fringe)								
Describe recorded data (stream gauge, mor	nitoring well, aerial photos, previo	ous inspections), if available:						
Remarks:								

Tree Stratum Plot S Sapling/Shrub Stratum Plot S Acer negundo Salix nigra)	Absolute % Cover	Dominant Species	Indicator Status	50/20 Thresholds Tree Stratum Sapling/Shrub Stratum Herb Stratum Woody Vine Stratum Dominance Test Workshe Number of Dominant	20% 50% 0 0 14 35 13 33 0 0
Sapling/Shrub Stratum Acer negundo Salix nigra)				Sapling/Shrub Stratum Herb Stratum Woody Vine Stratum Dominance Test Workshe Number of Dominant	0 0 14 35 13 33 0 0
Sapling/Shrub Plot S Stratum Plot S Acer negundo Selix nigra						Sapling/Shrub Stratum Herb Stratum Woody Vine Stratum Dominance Test Workshe Number of Dominant	14 35 13 33 0 0
Stratum Plot S Acer negundo						Herb Stratum Woody Vine Stratum Dominance Test Workshe Number of Dominant	13 33 0 0
Stratum Plot S Acer negundo						Woody Vine Stratum Dominance Test Workshe Number of Dominant	0 0
Stratum Plot S Acer negundo						Dominance Test Workshe Number of Dominant	net
Stratum Plot S Acer negundo						Number of Dominant	et
Stratum Plot S Acer negundo							
Stratum Plot S Acer negundo						Species that are OBL,	
Stratum Plot S Acer negundo							E (A)
Stratum Plot S Acer negundo						FACW, or FAC:	5_(A)
Stratum Plot S Acer negundo			and donates the			Total Number of Dominant Species Across all Strata:	5 (B)
Stratum Plot S Acer negundo			0	= Total Cover		Percent of Dominant	(2)
Stratum Plot S Acer negundo						Species that are OBL,	
Stratum Plot S Acer negundo			Absolute	Dominant	Indicator	FACW, or FAC:	100.00% (A/B)
	ze (15 ft.)	% Cover	Species	Status	Thom, of the.	100.00 /8 (AB)
			60	Y	FAC	Prevalence Index Worksh	eet
	1990年11月		10	Y	OBL	Total % Cover of:	
	CONTRACTOR OF	ALC: NOT ONLY				OBL species 25 x 1	= 25
		17	-			FACW species 45 x 2	
		-				FAC species 60 x 3	
					Contraction of the second	FACU species 5 x 4	
						UPL species 0 x 5	Procession of the local division of the loca
			1.2				
						Column totals 135 (A)	
						Prevalence Index = B/A =	2.33
			70	= Total Cover			
				- TOTAL COVEL		Hydrophytic Vegetation Ir	ndicatore:
			Absolute	Dominant	Indicator	Rapid test for hydrophy	
Herb Stratum Plot S	ize (5ft.)	% Cover			X Dominance test is >50%	Sector Street and Street Stree
E-Habitan and and				Species	Status		
Epilobium coloratum			30	Y	FACW	X Prevalence index is ≤3.	
Typha latifolia	to substantial and	- Borney -	15	<u>Y</u>	OBL	Morphological adaptation	
Phalaris arundinacea		1100	15	Y	FACW	supporting data in Rem	arks or on a
Lamium purpureum		W. Lella	5	<u>N</u> .	FACU	separate sheet)	
		Contraction of the				Problematic hydrophytic	c vegetation*
	121 748.3			Martine T	THE REAL PROPERTY.	(explain)	
	a at stand	-Fishe	LATENCE,	2 15 20 TO		*Indicators of hydric soil and wetla	and hydrology must be
		A LEAD			ANTE ATTACK	present, unless disturbed or proble	
CAN SHE CAN AND AND	同時の支援	0.2310		New Years			
	INCOMENTS	1.20	(maximum an	The of States		Definitions of Vegetation	Strata:
and the second second	-alter Stephenson	1.1.1		She and the second	ALC REAL PROPERTY.	and the second second	
A STREET STREET STREET			1			Tree - Woody plants 3 in. (7.6 cm)	
A DU AL MARCH			and the second			breast height (DBH), regardless of	f height.
				A CONTRACTOR		Sapling/shrub - Woody plants les	s than 3 in. DBH and
	and the state		State State		-instantin in the	greater than 3.28 ft (1 m) tall.	
	NEW MARK	3794.16	65	= Total Cover	A STATE OF THE STATE OF	Mark All background (see used	A slasts associates a
			Rel Trib			Herb - All herbaceous (non-wood) size, and woody plants less than 3	
Woody Vine Diet S	ze (30 ft.		Absolute	Dominant	Indicator	size, and woody plants less than a	5.20 TT TEIN.
Stratum Plot S	28 (30 11.)	% Cover	Species	Status	Woody vines - All woody vines gr	reater than 3.28 ft in
						height.	
					and some	Constant Constant State	
the state of the second		Section 1					
			191 - 191			Hydrophytic	
	4-0-010		10 10 10		and the second second	vegetation	
			0 :	= Total Cover		present? Y	
	TEN LANDAL	Contraction of the	Section 1		and the second		
	pers here or on	a sena	Manda abaath	and the second se			
narks: (Include photo num			ate sneet)	Sal barta			
narks: (Include photo num		- copu	ale sneet)				
narks: (Include photo num		a copu	iale sneet)				
marks: (Include photo num		opu	iale sneel)				

SOIL							Sa	mpling Point: W009
Profile Des Depth (Inches)	cription: (Descri Matrix Color (moist)	be to the %		o docu ox Feat %		indicato	r or confirm the absence Texture	e of indicators.) Remarks
0-18	10YR 4/2	⁷⁰ 90	10YR 5/8	10	TC	PL/M	silt loam	
	concentration, D= PL=Pore Lining,			d Matri	x, CS=C	overed o	r Coated Sand Grains	
Black H Hydrog Stratifie 2 cm M Deplete Thick D Sandy I (LRR N Sandy I Sandy I Sandy I	pipedon (A2) listic (A3) en Sulfide (A4) ed Layers (A5) uck (A10) (LRR ed Below Dark St Park Surface (A12 Mucky Mineral (S Mucky Mineral (S)) (Mucky Mineral (S Mucky Mineral (S)) (Mucky Minera	urface (/ 2) 51) 8) 4)	(MLRA Thin Da (MLRA Loamy () X Deplete Redox D Iron-Ma Umbric Piedmoi Red Par	e Belo 147, 14 rk Surf 147, 14 Gleyed d Matri Dark Su d Dark Depress nganes Surface nt Floor ent Ma	w Surfac I8) ace (S9) I8) Matrix (F x (F3) urface (Ff Surface Surface (Fa sions (F8 se Masse e (F13) (f dplain So uterial (F2)	F2) 6) (F7) 8) 95 (F12) (MLRA 1: 0ils (F19) 21) (MLR	Coast Prairi Piedmont Fl (MLRA 136, Very Shallov Other (Expla	w Dark Surface (TF12) ain in Remarks)
Restrictive Type: Depth (inch	Layer (if observe es):	d):					Hydric soil presen	nt? <u>Y</u>
Remarks:								

Project/Site: Walton-Big Bone M	atural Gas Pipeline	City/County: B	Boone	Sampling Date:	4/1/16			
Applicant/Owner: Duke Energy		State: K	Kentucky	Sampling Point:	U009			
Investigator(s): Sarah Miloski, Juli		Section,	Township, Ra	Inship, Range: No PLSS in Area				
Landform (hillslope, terrace, etc.):	6	Local relief (conc			Slope (%): 5			
Subregion (LRR or MLRA): LRR N		38.88972		-84.639974	Datum: WGS 84			
Soil Map Unit Name No-Nolin silt lo	am, 0 to 2 percent slop	es, occasionally floo	oded NV	VI Classification: N/A				
Are climatic/hydrologic conditions o	f the site typical for this	time of the year?	Yes X	No (If no, e	xplain in remarks)			
Are vegetation, soil	, or hydrology	significantly of		Are "normal	Yes			
Are vegetation, soil	, or hydrology	naturally prot	plematic?	circumstances" pres				
				(if needed, explain a	any answers in remark			
SUMMARY OF FINDINGS				制造于主义的条则				
Hydrophytic vegetation present?	No							
Hydric soil present?	No	is the sample	ed area with	in a wetland? N	0			
Wetland hydrology present?	No	Upland for W009						
Remarks:								
Upland pit for wetland W009								
HYDROLOGY			(2) 新华州市	A. F. Statistics				
Wetland Hydrology Indicators:			Secon	dary Indicators (minin	num of two required)			
Primary Indicators (minimum of one	is required: check all t	hat apply)		uface Soil Cracks (B6)	ium or the required)			
Surface Water (A1)		tic Plants (B14)	and the state of the	arsely Vegetated Cond	ave Surface (B8)			
High Water Table (A2)		Sulfide Odor (C1)	ave oundee (DO)					
Saturation (A3)								
Water Marks (B1)	Roots (C3)	Rhizospheres on Livir	.9	Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8)				
Sediment Deposits (B2)	and the second se	of Reduced Iron (C4)	and the second					
Drift Deposits (B3)		n Reduction in Tilled		turation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Soils (C6)			Stunted or Stressed Plants (D1)				
Iron Deposits (B5)	Thin Muck	Surface (C7)	Ge	Geomorphic Position (D2)				
Inundation Visible on Aerial	Other (Exp	lain in Remarks)	Sh	Shallow Aquitard (D3)				
Imagery (B7)				Microtopographic Relief (D4)				
Water-Stained Leaves (B9)				C-Neutral Test (D5)				
Aquatic Fauna (B13)								
Field Observations:								
Surface water present? Yes	<u>No X</u>	_ Depth (inches):	NA	Wetland				
Water table present? Yes	No X	Depth (inches):	NA	hydrology				
Saturation present? Yes	<u>No X</u>	_ Depth (inches):	NA	present?	<u>N</u>			
(includes capillary fringe)				「「「「「「「「」」				
Describe recorded data (stream gau		rial photos previou	s inspections) if available:				
	ige, monitoring wen, ac	inal priotos, previou		, ii availabie.				
Remarks:								

KyPSC Case No. 2016-00168 Exhibit 2(c) PUBLIC Page 154 of 429

50%

0

0

50

0

(A)

(B)

0

3

0

0

0

400

0

400

(B)

VEGETATION - Use scientific names of plants Sampling Point: U009 50/20 Thresholds Indicator 20% Absolute Dominant Tree Stratum Plot Size (30 ft.) % Cover Species Status Tree Stratum 0 Sapling/Shrub Stratum 0 Herb Stratum 20 2 Woody Vine Stratum 3 0 4 **Dominance Test Worksheet** 5 Number of Dominant 6 Species that are OBL, 7 FACW, or FAC: 8 **Total Number of Dominant** 9 Species Across all Strata: 10 0 = Total Cover Percent of Dominant Species that are OBL, Sapling/Shrub Dominant Indicator FACW, or FAC: Absolute 0.00% (A/B) Plot Size (15 ft.) Stratum % Cover Species Status **Prevalence Index Worksheet** Total % Cover of: 2 3 **OBL** species 0 x 1 = FACW species 0 x 2 = 4 FAC species 0 x 3 = 5 FACU species 100 x 4 = 6 x 5 = UPL species 0 7 Column totals 100 8 (A) 4.00 9 Prevalence Index = B/A = 10 0 = Total Cover Hydrophytic Vegetation Indicators: Absolute Dominant Indicator Rapid test for hydrophytic vegetation Herb Stratum Plot Size (5 ft.) % Cover Species Status Dominance test is >50% FACU Taraxacum officinale 30 Y Prevalence index is <3.0* FACU 2 Trifolium repens 25 Y Morphological adaptations* (provide 3 Poa pratensis 20 Y FACU supporting data in Remarks or on a 10 N FACU Plantago major separate sheet) 4 5 Lamium purpureum 10 N FACU Problematic hydrophytic vegetation* FACU 6 Allium canadense 5 N (explain) 7 *Indicators of hydric soil and wetland hydrology must be 8 present, unless disturbed or problematic 9 **Definitions of Vegetation Strata:** 10 11 Tree - Woody plants 3 in. (7.6 cm) or more in diameter at 12 breast height (DBH), regardless of height. 13 Sapling/shrub - Woody plants less than 3 in. DBH and 14 greater than 3.28 ft (1 m) tail. 15 100 = Total Cover Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Indicator Woody Vine Absolute Dominant Plot Size (30 ft.) % Cover Status Stratum Species Woody vines - All woody vines greater than 3.28 ft in height. 2 3 Hydrophytic 5 vegetation = Total Cover present? 0 N Remarks: (Include photo numbers here or on a separate sheet)

教师 和出现我们已经在

SOIL							Sam	pling Point: U009
Profile Des Depth	cription: (Descri Matrix	be to th		o docu ox Fea		indicato	r or confirm the absence	of indicators.) Remarks
(Inches)	·Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-18	10YR 4/3 100 Silt Ioam							
	Concentration, D= PL=Pore Lining,			d Matri	x, CS=C	overed o	r Coated Sand Grains	
Hydric Soll Indicators:						2) 6) (F7)) s (F12) (MLRA 1: iils (F19) 21) (MLR	2 cm Muck (A Coast Prairie Piedmont Flo (MLRA 136, - Very Shallow Other (Explai (KLRR N, MLRA 136) 36, 122) (MLRA 148) (A 127, 147)	Dark Surface (TF12) n in Remarks)
Restrictive Type: Depth (inch	Layer (if observe	ed):					Hydric soll present	? <u>N</u>
Remarks:								

Project/Site: Walton-Big Bone Natu	Iral Gas Pipeline	City/County:	Boone	3	ampling Date:	4/1/10		
Applicant/Owner: Duke Energy	2019年1日1月2月1日	State:	Kentucky	and the second se	ampling Point			
Investigator(s): Sarah Miloski, Julie Fi	reer				lo PLSS in Are			
Landform (hillslope, terrace, etc.): de		Local relief (co	ncave, con	vex, none):	concave	Slope (%): 0		
Subregion (LRR or MLRA): LRR N	Lat.:	38.87925		ong.: -84.6	98896	Datum: WGS 84		
Soil Map Unit Name No-Nolin silt loam,	0 to 2 percent slope	es, occasionally f	looded	NWI Clas	sification: N/A			
Are climatic/hydrologic conditions of th	The set of Supercontent of	all care for a state with	Yes _	X No	(If no, e	xplain in remarks)		
	_, or hydrology , or hydrology	significantl naturally p	The second secon	circur	normal mstances" pre: eded, explain a	<u>Yes</u> sent? any answers in remark		
Hydrophytic vegetation present?	Yes	is the sam	pled area	within a we	otland? Ye	es		
	Yes			W010				
Remarks:								
HYDROLOGY Wetland Hydrology Indicators:			S	econdary In	dicators (minir	num of two required)		
Primary Indicators (minimum of one is	required; check all th	nat apply)		Surface Soil Cracks (B6)				
X Surface Water (A1)		ic Plants (B14)		Sparsely Vegetated Concave Surface (B8)				
X High Water Table (A2)		Sulfide Odor (C1)		X Drainage Patterns (B10)				
X Saturation (A3)			1990 - C	Moss Trim Lines (B16)				
Water Marks (B1)	X Roots (C3)	hizospheres on L	iving	Dry-Season Water Table (C2)				
Sediment Deposits (B2)		of Reduced Iron (0	Burrows (C8)	(02)				
Drift Deposits (B3)		Reduction in Till			Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Soils (C6)			Stunted or Stressed Plants (D1)				
Iron Deposits (B5)	Thin Muck	Surface (C7)	Contractory of	Geomorph	hic Position (D2	2)		
Inundation Visible on Aerial		lain in Remarks)		Shallow Aquitard (D3)				
Imagery (B7)			1. A. A.	Contraction of the second second	graphic Relief ((D4)		
Water-Stained Leaves (B9)			7		tral Test (D5)			
Aquatic Fauna (B13)								
Field Observations:			Second Second					
Surface water present? Yes	X No	Depth (inches)	3	V	Vetland			
Water table present? Yes	X No	Depth (inches)		and the second sec	ydrology			
Saturation present? Yes	X No	Depth (inches)	0		resent?	Y		
(includes capillary fringe)			Strand a	No.		We have the second second		
Describe recorded data (stream gauge	, monitoring well, ae	rial photos, previ	ous inspec	tions), if ava	ailable:			
			400 - 20 M	inter the set				
Remarks:								
						中美 的 这种 计		
The second second second second second second								

Jse scientific i	idanie or p	lanco			Sampling Po		-
Plot Size (30 ft.) Absolute % Cover	Dominant Species	Indicator Status	50/20 Thresholds Tree Stratum Sapling/Shrub Stratum	0 0	50% 0 0
					Herb Stratum Woody Vine Stratum	20 0	50 0
					Dominance Test Worksho Number of Dominant	eet	
					The second s	2	(A)
					Total Number of Dominant		(B)
1821 (1234) 1824 -		0	Total Cover		Percent of Dominant		_())
Plot Size (15 ft.) Absolute % Cover	Dominant Species	Indicator Status	Species that are OBL, FACW, or FAC:	66.67%	_(A/B)
					Total % Cover of: OBL species 0 x 1 FACW species 60 x 2 FAC species 10 x 3 FACU species 30 x 4 UPL species 0 x 5	= 0 = 120 = 30 = 120 = 0	
			Total Cover			344	
osus	5 ft.) Absolute % Cover 30 30 30 10	Dominant Species Y Y Y N	Indicator Status FACW FACW FACU FAC	Rapid test for hydrophy X Dominance test is >50 X Prevalence index is ≤3 Morphological adaptati supporting data in Ren separate sheet)	ytic vegeta % .0* ons* (prov narks or on	ride n a
		-					/ must be
					Tree - Woody plants 3 in. (7.6 cm breast height (DBH), regardless o Sapling/shrub - Woody plants le:	n) or more in a of height.	
	the second		Total Cover	The state			
Plot Size (30 ft.) Absolute % Cover	Dominant Species	Indicator Status	size, and woody plants less than	3.28 ft tall.	
	and the second					24.0	
					Hydrophytic		
	Plot Size (Plot Size (dinacea s	Plot Size (15 ft.	Plot Size (30 ft.) % Cover	Plot Size (30 ft.) % Cover Species	Plot Size (30 ft.) % Cover Species Status	Plot Size (30 ft. % Cover Species Status Image: Species in the stratum Species in the stratum Species in the stratum Image: Species in the stratum Image: Species in the stratum Species in the stratum Image: Species in the stratum Image: Species in the stratum Species in the stratum Image: Species in the stratum Image: Species in the stratum Species in the stratum Image: Species in the stratum Image: Species in the stratum Species in the stratum Image: Species in the stratum Image: Species in the stratum Species in the stratum Image: Species in the stratum Species in the stratum Species in the stratum Image: Species in the stratum Species in the stratum Species in the stratum Image: Species in the stratum Species in the stratum Species in the stratum Image: Species in the stratum Species in the stratum Species in the stratum Image: Species in the stratum Species in the stratum Species in the stratum Image: Species in the stratum Species in the stratum Species in the stratum Image: Species in the stratum Image: Species in the stratum Species in the stratum Image: Species in	Plot Size (30 ft. 9 & Cover Species Status Sapiling/Shrub Stratum 0 Image: Stratum Image: Stratum Image: Stratum 0 Sapiling/Shrub Stratum 0 Image: Stratum Image: Stratum Image: Stratum 0 Sapiling/Shrub Stratum 0 Image: Stratum Image: Stratum Image: Stratum 0 Sapiling/Shrub Stratum 0 Image: Stratum Image: Stratum Image: Stratum Image: Stratum 0 Sapiling/Shrub Stratum 0 Image: Stratum Image: Stratum Image: Stratum Image: Stratum 0 Sapiling/Shrub Stratum 0 Image: Stratum Image: Stratum Image: Stratum Image: Stratum 0 Stratum 1 Image: Stratum Image: Stratum Image: Stratum Image: Stratum 1 <

SOIL							Sa	mpling Point: W010			
Drofile Dee	ariation. (Descri		e denth needed (. deau	mant tha	indicate		e efindiaetem)			
Depth	Matrix			ox Feat		Indicato	r or confirm the absenc				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks			
0-18	10YR 4/2	80	10YR 4/6	20	С	PL/M	silt loam				
A DATASA SA		1.02			No. See	地管理					
		1.43	12-18-18-2013		可以自我的	影响的					
Carl Start				CINCLUMAE	人口的基	BURRY	是是如此同时最后来的	「生き」で、「生き」の目的なない。			
SUN ANT	要任何による	"生命"。	A deale Colored Laws			S. A. S.					
一节 三个性学 计	给用学校上的任何	家長期	和中国民主任	14.0		增加。					
11.146部)	· 》· 思·西· 如此主动				2.11.18	7-21-23	化基制运动器 到此人	「「「「「「」」」、「「」」、「」」、「」」、「」」、「」」、「」」、「」」、			
92 (N.H. 9)			A She She She		四次 青年	No. al		的是当时在各国委员会的公司的			
	時間には高齢人	Net y	的目的。自己的意思	新建作品		2443		1.1.1.104百年時,並且與正法整理合同。			
		2012	他们的原因		4/345	7.1	但是我们已经了自己的				
			现在发发的成品的	初時小师	21	长高刻					
	祖王 在这一时间	See.	War and Taxie			的理论	。唐朝國後進出 马哈尔				
				d Matrix	x, CS=C	overed o	r Coated Sand Grains				
	PL=Pore Lining,	M=Ma				S. Carlos					
Hydric Sol	I indicators:		D. 4.0				Indicators for	Problematic Hydric Soils:			
Histisol	(41)		Dark Su	and the second second second	S7) w Surfac	~ (69)	2 cm Muck	(A10) (MLRA 147)			
	Epipedon (A2)		(MLRA			æ (30)		ie Redox (A16) (MLRA 147, 148)			
and the second se	listic (A3)			(14) I I I I I I I I I I I I I I I I I I I	ace (S9)						
	en Sulfide (A4)		(MLRA				(MLRA 136				
	ed Layers (A5)				Matrix (F	-2)		w Dark Surface (TF12)			
	luck (A10) (LRR		X Deplete				Other (Expl	ain in Remarks)			
	ed Below Dark Su				Inface (Fi						
	oark Surface (A12 Mucky Mineral (S				Surface sions (F8						
	I, MLRA 147, 14						(LRR N, MLRA 136)				
	Gleyed Matrix (S					MLRA 1					
	Redox (S5)						(MLRA 148)				
Strippe	d Matrix (S6)		Red Par	rent Ma	terial (F2	21) (MLF	A 127, 147)				
+11'	- 6 h										
"Indicators	or nyaropnytic ve	egetatio	n and wetland hy	arology	must di	e presen	t, unless disturbed or pr	obiematic			
IF TO SAL		11.1		113420	1949 - M		STATES STATES				
	Layer (if observe	d):			Ale and	121-22					
Type:	the state of the s						Hydric soil prese	nt? <u>Y</u>			
Depth (inch	ies):	6-19-112 			•	Sec. 1 area					
Remarks:							State and the state				
								We have the standard and a standard			

Eastern Mountains and Piedmont Region

Project/Site: Walton-Big Bo	one Natural Gas Pipeline	City/County: I	Boone	Sampling Date: 4	ampling Date: 4/1/16	
Applicant/Owner: Duke Energy		State:	Kentucky	ntucky Sampling Point U010		
Investigator(s): Sarah Miloski		Section,	Township, Range:			
Landform (hillslope, terrace, et		Local relief (con	ave, convex, none): none	Slope (%): 10	
Subregion (LRR or MLRA): LI		and the second se	Long.: -84.		Datum: WGS 84	
Soil Map Unit Name No-Nolin	silt loam, 0 to 2 percent s	lopes, occasionally flo	oded NWI Cla	assification: N/A		
Are climatic/hydrologic conditio			and the second se	and the second se	plain in remarks)	
Are vegetation, soil	, or hydrology	significantly		"normal	Yes	
Are vegetation, soil	, or hydrology	naturally pro		umstances" pres		
			(ii ii)	ieeueu, explain a	ny answers in remark	
SUMMARY OF FINDING	S					
Hydrophytic vegetation presen	t? No					
Hydric soil present?	No	is the samp	led area within a v	rea within a wetland? No		
Wetland hydrology present?	No		Upland for W01			
		近日の時間になった。	「「一日」の「「「「」」」」			
Remarks:						
	104.0					
Upland pit for wetland W	1010					
HYDROLOGY						
Wetland Hydrology Indicate	ors:		Secondary	Indicators (minim	um of two required)	
Primary Indicators (minimum o		all that apply)		Soil Cracks (B6)	,	
Surface Water (A1)		quatic Plants (B14)	CLARENCE CONTRACTOR	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Odor (C1)		Drainage Patterns (B10)		
Saturation (A3)				Moss Trim Lines (B16)		
Water Marks (B1)		Oxidized Rhizospheres on Living Roots (C3)		Dry-Season Water Table (C2)		
Sediment Deposits (B2)		Presence of Reduced Iron (C4)		Crayfish Burrows (C8)		
Drift Deposits (B3)		Recent Iron Reduction in Tilled		Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Soils (C	A CONTRACTOR OF		Stunted or Stressed Plants (D1)		
Iron Deposits (B5)		uck Surface (C7)		Geomorphic Position (D2)		
		Other (Explain in Remarks)		Shallow Aquitard (D3)		
Inundation Visible on Aerial	Other (Microtopographic Relief (D4)		
Imagery (B7) Water-Stained Leaves (B9)			Commence -	FAC-Neutral Test (D5)		
Aquatic Fauna (B13)						
Field Observations:	Van Na		NA	Matland		
		X Depth (inches):		Wetland		
		X Depth (inches):	NA	hydrology		
(includes capillary fringe)	Yes No	X Depth (inches):	NA	present? _	<u>N</u>	
(includes capillary ininge)						
Describe recorded data (strear	n gauge monitoring well	aerial photos previor	is inspections) if a	vailable [.]		
	n gaage, mennering nen,	dental priotoc, provio	io mopeonono), n a	fundbio.		
Remarks:	A STATE PARTY AND IN STATE		S. C. Barren States	A PARTY AND	Para Managara	

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VEGETATION - Use scientific names of plants

GETATION - Use scientific names of plan	Sampling Point: U010				
Tree Stratum Plot Size(30 ft.) <i>Pyrus calleryana</i>	Absolute % Cover 30	Dominant Species Y	Indicator Status UPL	50/20 Thresholds Tree Stratum Sapling/Shrub Stratum Herb Stratum Woody Vine Stratum	20% 50% 6 15 3 8 20 50 0 0
	 	Total Cover		Dominance Test Workshe Number of Dominant Species that are OBL, FACW, or FAC: Total Number of Dominant Species Across all Strata: Percent of Dominant Species that are OBL,	issi sa sa
apling/Shrub Plot Size(15 ft.) Stratum	Absolute % Cover	Dominant Species	Indicator Status	FACW, or FAC:	<u>0.00%</u> (A
Lonicera maacki		Y	UPL	Prevalence Index Worksh Total % Cover of: OBL species 0 x1 FACW species 0 x2 FAC species 0 x3 FACU species 100 x4 VPL species 45 x5 Column totals 145 (A) Prevalence Index = B/A =	= 0 $= 0$ $= 0$ $= 400$
lerb Stratum Plot Size (5 ft.) Taraxacum officinale Trifolium repens Poa pratensis Plantago major Lamium purpureum Allium canadense	15 = Absolute % Cover 30 25 20 10 10 5	Total Cover Dominant Species Y Y Y N N N N N	Indicator Status FACU FACU FACU FACU FACU FACU	Hydrophytic Vegetation In Rapid test for hydrophy Dominance test is >509 Prevalence index is ≤3. Morphological adaptation supporting data in Rem separate sheet) Problematic hydrophyti (explain) "Indicators of hydric soil and wetta present, unless disturbed or problematic	rtic vegetation % .0* ons* (provide arks or on a c vegetation* and hydrology must ematic
				Definitions of Vegetation Tree - Woody plants 3 in. (7.6 cm breast height (DBH), regardless o) or more in diame f height.
Voody Vine Plot Size(30 ft.) Stratum	= Absolute % Cover	Total Cover Dominant Species	Indicator Status	Sapling/shrub - Woody plants les greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-wood size, and woody plants less than 3 Woody vines - All woody vines gr height.	y) plants, regardles 3.28 ft tall.
		Total Cover		Hydrophytic vegetation present? <u>N</u>	

Eastern Mountains and Piedmont Region