WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Sandpiper	City/County:	Waden	а	Sampling Date:	: 09/12	2/2014	
Applicant/Owner: Enbridge	_	State:	MN	Sampling F	oint:	WA021a3W	
Investigator(s): DPT		Sectior	n, Towns	hip, Range:			
Landform (hillslope, terrace, etc.): Depression	Lo	cal relief	(concav	e, convex, none):	Conc	ave/Concave	Э
Slope (%): 0 Lat.: Long.:		Dat	tum:				
Soil Map Unit Name			NW	/I Classification:			
Are climatic/hydrologic conditions of the site typical for this	time of the year	·?	(If r	no, explain in remark	<s)< td=""><td></td><td></td></s)<>		
Are vegetation, soil, or hydrology	significantl	y disturb	ed?	Are "normal			
Are vegetation, soil, or hydrology	naturally p	roblemat	ic?	circumstances"	' prese	ent? Yes	
(If needed, explain any answers in remarks)							

SUMMARY OF FINDINGS

Hydrophytic vegetation present? Y Hydric soil present? Y	/ /	Is the sampled area within a wetla	nd? <u>Y</u>					
Indicators of wetland hydrology present? Y	/	If yes, optional wetland site ID:	WA021a1W					
Remarks: (Explain alternative procedures here or in a separate report.)								
PEM - Type 2, sedge meadow								

HYDROLOGY				
		Secondary Indicators (minimum of two		
Primary Indicators (minimum of one is requ	required)			
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)		
X High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)		
X Saturation (A3)	Marl Deposits (B15)	Moss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living			
Drift Deposits (B3)	Roots (C3)			
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)			
Iron Deposits (B5)	Recent Iron Reduction in Tilled	Stunted or Stressed Plants (D1)		
Inundation Visible on Aerial	Soils (C6)	X Geomorphic Position (D2)		
Imagery (B7)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Sparsely Vegetated Concave	Other (Explain in Remarks)	X FAC-Neutral Test (D5)		
Surface (B8)		Microtopographic Relief (D4)		
Field Observations:				
Surface water present? Yes	No X Depth (inches):	Indicators of		
Water table present? Yes X	No Depth (inches): 10	wetland		
Saturation present? Yes X	No Depth (inches):0	hydrology		
(includes capillary fringe)		present? Y		
Describe recorded data (stream gauge, mo	nitoring well, aerial photos, previous inspe	ctions), if available:		
Remarks:				

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GETATION - Us							Sampling Point)21a3V
							50/20 Thresholds		
		00.4	`	Absolute	Dominant	Indicator		20% 5	50%
ree Stratum	Plot Size (30 ft)	% Cover	Species	Status	Tree Stratum		0
							Sapling/Shrub Stratum	0	0
							Herb Stratum	20	50
							Woody Vine Stratum	0	0
							,	-	-
							Dominance Test Workshe	et	
							Number of Dominant		
							Species that are OBL,		
							FACW, or FAC:	1	(A)
							Total Number of Dominant	· ·	_('''
				·			Species Across all Strata:	1	(B)
				0	= Total Cover			· ·	_(")
							Percent of Dominant		
					D	L. P. d.	Species that are OBL,	400.000/	(A /F
apling/Shrub	Plot Size (15 ft)	Absolute	Dominant	Indicator	FACW, or FAC:	100.00%	_(A/E
Stratum			,	% Cover	Species	Status			
							Prevalence Index Workshe	et	
							Total % Cover of:		
							OBL species 100 x 1	= 100	
							FACW species 0 x 2		-
							FAC species 0 x 3		
							FACU species 0 x 4		
							UPL species 0 x 5		-
							Column totals 100 (A)	_ <u>0</u> 100	- (B)
							Prevalence Index = $B/A =$	1.00	_(D)
							Frevalence index = B/A =	1.00	-
					= Total Cover				
				0			I hadrow hat is Monototion In		
					D	L. P. d.	Hydrophytic Vegetation In		
Herb Stratum	Plot Size (5 ft)	Absolute	Dominant	Indicator	Rapid test for hydrophyt		n
	· ·		,	% Cover	Species	Status	X Dominance test is >50%		
Carex lacustris				100	Y	OBL	X Prevalence index is ≤ 3.0		
							Morphogical adaptations		
							supporting data in Rema	irks or on a	ł
							separate sheet)		
							Problematic hydrophytic	vegetation'	*
							(explain)		
							*Indicators of hydric soil and wetla	nd hydrology r	must b
							present, unless disturbed or proble	matic	
							Definitions of Vegetation S	strata:	
							Tree - Woody plants 3 in. (7.6 cm)	or moro in di	iamoto
							breast height (DBH), regardless of		amete
							broadt height (BBH), regardiede ei	noight.	
							Sapling/shrub - Woody plants les	s than 3 in. DI	BH and
							greater than 3.28 ft (1 m) tall.		
				100	= Total Cover		1		
							Herb - All herbaceous (non-woody		ırdless
Woody Vine	D I 1 D I 1			Absolute	Dominant	Indicator	size, and woody plants less than 3	.28 ft tall.	
Stratum	Plot Size ()	% Cover	Species	Status	Woody vines - All woody vines gr	optor than 2.2	29. ft in
							height.	sater than 5.2	.0 11 11
							hoight		
							Hydrophytic		
							vegetation		
				0	= Total Cover		present? Y		
	to numbers he	re or on a	conara	to choot)			·	-	
narks: (Include pho			SEDaia						
narks: (Include pho			Separa	ile sheel)					
narks: (Include pho			Separa	ile Sheel)					

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SOIL Sampling Point: WA021a3W											
Profile Des	cription: (Descril	be to th	e depth needed	to docu	ment the	indicato	or or confirm the absence	e of indicators.)			
Depth	Depth Matrix			lox Feat	ures		Texture	Remarks			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**					
0-16	10YR 2/1	100	Muck								
16-20	Gley 1 3/N	100					Sand				
				ed Matrix	x, CS=C	overed c	r Coated Sand Grains				
	PL=Pore Lining, I Indicators:	ivi=iviat	TIX				Indicators for Prob	olematic Hydric Soils:			
,								,			
	tisol (A1)			•	Below Su			D) (LRR K, L, MLRA 149B			
	tic Epipedon (A2 ck Histic (A3))			R, MLR Surface (edox (A16) (LRR K, L, R) at or Peat (S3) (LRR K, L, R)			
	drogen Sulfide (A	4)			LRA 149		Dark Surface (S				
	atified Layers (At	,	`		cky Mine			v Surface (S8) (LRR K, L)			
	pleted Below Dar			(R K , L)		. ,		ce (S9) (LRR K, L)			
	ck Dark Surface				yed Matr			Masses (F12) (LRR K, L, R)			
	ndy Mucky Miner ndy Gleyed Matri				latrix (F3 k Surface			plain Soils (F19) (MLRA 149B) 7A6) (MLRA 144A, 145, 149B)			
	ndy Redox (S5)	× (04)			ark Surf						
	pped Matrix (S6))			ressions	. ,		ark Surface (TF12)			
	k Surface (S7) (LRR R,	MLRA				Other (Explain in	n Remarks)			
149							•				
indicators		egetatio	n and weitand n	yarology	/ must be	e presen	t, unless disturbed or pr	opiematic			
Destriction		-1) -									
Type:	Layer (if observe	ed):					Hydric soil preser	nt? Y			
Depth (inch	es):				-			<u> </u>			
					-						
Remarks:											