WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Sandpiper	City/County:	Wadena	Sampling Date): <u>09/13/2014</u>	
Applicant/Owner: Enbridge		State: M	N Sampling I	Point: WA017b2W	
Investigator(s): DPT		Section, T	ownship, Range:		
Landform (hillslope, terrace, etc.): Depression	Lo		oncave, convex, none):	Concave/Linear	
Slope (%): 0 Lat.: Lo	ng.:	Datum	n:		
Soil Map Unit Name			NWI Classification:		
Are climatic/hydrologic conditions of the site typical for	this time of the yea	r?	(If no, explain in remar	ks)	
Are vegetation , soil , or hydrology		ly disturbed	? Are "normal	,	
Are vegetation , soil , or hydrology		roblematic?		" present? Yes	
(If needed, explain any answers in remarks)				•	
OUMMARY OF FINISHED					
SUMMARY OF FINDINGS	Ī				
Hydrophytic vegetation present?	Is the sample	d area with	nin a wetland?	Υ	
Hydric soil present?					
Indicators of wetland hydrology present?	If yes, optiona	I wetland sit	te ID: WA017b	1W	
indicators of welland hydrology present:	ii yoo, opiiona	i wottana oit			
Remarks: (Explain alternative procedures here or in a separate report.)					
PEM - Type 3, shallow marsh					
1 EW Type o, challew maren					
HYDROLOGY					
			Secondary Indicators (minimum of two	
Primary Indicators (minimum of one is required; check	all that apply)		required)		
X Surface Water (A1) Water-Stained Leaves (B9)			Surface Soil Cracks (B6)		
	Aquatic Fauna (B13)		Drainage Patterns (B10)		
	Marl Deposits (B15)		Moss Trim Lines (B16)		
	Hydrogen Sulfide Odor (C1)		Dry-Season Water Table (C2)		
	Oxidized Rhizospheres on Living		Crayfish Burrows (C8)		
	Roots (C3)		Saturation Visible on Aerial Imagery		
	Presence of Reduced Iron (C4)		(C9)	Ů,	
	Recent Iron Reduction in Tilled		Stunted or Stressed Plants (D1)		
Inundation Visible on Aerial Soils (C	Soils (C6)		X Geomorphic Position	X Geomorphic Position (D2)	
Imagery (B7) Thin Muck Surface (C7)			Shallow Aquitard (D	03)	
Sparsely Vegetated Concave Other (Explain in Remarks)			X FAC-Neutral Test (I) (25)	
Surface (B8)	,		Microtopographic R	elief (D4)	
<u> </u>				, ,	
Field Observations:					
Surface water present? Yes X No	Depth (inches)		Indicators of		
Water table present? Yes X No	Depth (inches)):	wetland		
Saturation present? Yes X No	Depth (inches)):	hydrology		
(includes capillary fringe)			present?	Υ	
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Demonto					
Remarks:					

SOIL WA017b2W **Sampling Point:** Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Texture Remarks (Inches) Color (moist) % Loc** Color (moist) Type* 0-30 10YR 2/1 100 Muck *Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains *Location: PL=Pore Lining, M=Matrix **Hydric Soil Indicators: Indicators for Problematic Hydric Soils:** 2 cm Muck (A10) (LRR K, L, MLRA 149B X Histisol (A1) Polyvalue Below Surface Histic Epipedon (A2) (S8) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L Hydrogen Sulfide (A4) (LRR R, MLRA 149B Polyvalue Below Surface (S8) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) Depleted Below Dark Suface (A11) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Loamy Gleyed Matrix (F2) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Redox Dark Surface (F6) Red Parent Material (F21) Sandy Redox (S5) Depleted Dark Surface (F7) Stripped Matrix (S6) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA Other (Explain in Remarks) 149B) *Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic Restrictive Layer (if observed): Type: Hydric soil present? Y Depth (inches): Remarks: