WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: RSA 22	City/County: Aitkin	Sampling Date: 07-Sep-17
Applicant/Owner: Enbridge	State: MN	Sampling Point: u-51n22w20-a1
Investigator(s): PJK	Section, Township, Range: S.	20 T. 51N R. 22W
Landform (hillslope, terrace, etc.): Mound	Local relief (concave, convex, nor	
Subregion (LRR or MLRA): LRR K	Lat.: 46 53.0772 Long.:	-93 9.7743 Datum: NAD 83
Soil Map Unit Name: 292		NWI classification: N/A
Are climatic/hydrologic conditions on the site typi	cal for this time of year? Yes No (1)	if no, explain in Remarks.)
Are Vegetation , Soil , or Hydrolog		rcumstances" present? Yes • No ·
Are Vegetation , Soil , or Hydrolog		plain any answers in Remarks.)
, _ , .	map showing sampling point locations,	
<u> </u>	No •	, ,
	Is the Sampled Area	Yes ○ No ●
-	within a Wetland?	103 0 110 0
Remarks: (Explain alternative procedures here of		
Hydrology Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; cl	_	econdary Indicators (minimum of 2 required) Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	Shallow Adultard (D3) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	Uther (Explain in Remarks)	FAC-neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No •	Depth (inches): 0	
Water Table Present? Yes No •	Depth (inches): 0	
Saturation Present? (includes capillary fringe) Yes No •	Depth (inches): 0	ogy Present? Yes O No 💿
	ing well, aerial photos, previous inspections), if availab	ole:
Remarks:		

VEGETATION - Use scientific names of plants

VEGETATION - Ose scientific fiames of plants				Sampling Point: u-51n22w20-a1		
(9)	Absolute		Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Dominant Species		
1	0			That are OBL, FACW, or FAC: (A)		
2	0			Total Number of Dominant		
3	0			Species Across All Strata:1(B)		
4	0					
5	0			Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)		
6				That are OBL, FACW, OF FAC:		
7	0			Prevalence Index worksheet:		
Continue (Charles Charles (Plot size: 15	0 =	= Total Cover		Total % Cover of: Multiply by:		
Sapling/Shrub Stratum (Plot size: 15)		_		0BL speci es0 x 1 =0		
1				FACW species5 x 2 =10		
2				FAC speciles x 3 =		
3				FACU speciles 70 x 4 = 280		
4				UPL species $\frac{15}{2}$ x 5 = $\frac{75}{2}$		
5				'		
6				Column Totals: <u>90</u> (A) <u>365</u> (B)		
7	0			Prevalence Index = B/A = <u>4.056</u>		
Herb Stratum (Plot size: 5	0 =	= Total Cover		Hydrophytic Vegetation Indicators:		
				Rapid Test for Hydrophytic Vegetation		
1. Poa pratensis		✓	FACU	☐ Dominance Test is > 50%		
2. Trifolium repens			FACU	Prevalence Index is ≤3.0 ¹		
3. Asclepias syriaca			UPL	Morphological Adaptations ¹ (Provide supporting		
4. Spiraea alba			FACW	data in Remarks or on a separate sheet)		
5	0			Problematic Hydrophytic Vegetation ¹ (Explain)		
6				4		
7	0			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
8	0					
9	0			Definitions of Vegetation Strata:		
10	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter		
11	0			at breast height (DBH), regardless of height.		
12	0			 Sapling/shrub - Woody plants less than 3 in. DBH and		
(Plot size: 20	90 =	= Total Cover		greater than 3.28 ft (1m) tall		
Woody Vine Stratum (Plot size: 30)	_					
1				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
2				oizo, and woody planto loos than oizo tetain.		
3				Woody vine - All woody vines greater than 3.28 ft in		
4				height.		
		= Total Cover				
				Hadaankada		
				Hydrophytic Vegetation		
				Present? Yes No •		
Remarks: (Include photo numbers here or on a separate sh	eet.)					

^{*}Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: u-51n22w20-a1

(inches)		atrix		Redox Features		
	Color (mo	oist)	%	Color (moist) % Type 1 Loc	² Texture	Remarks
0-4	10YR	2/1	100		Silt Loam	
4-10	10YR	3/2	100		Silt Loam	
10-20		4/3	100		Silt Loam	
			-		-	
Type: C=Con	ncentration. D=D	epletion	n. RM=Redu	ced Matrix, CS=Covered or Coated Sand Grains 2L	ocation: PL=Pore Lining. M=Ma	atrix
Hydric Soil						matic Hydric Soils: 3
Histosol (Polyvalue Below Surface (S8) (LRR R,		
Histic Epi	ipedon (A2)			MLRA 149B)		LRR K, L, MLRA 149B)
Black His				☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)		((A16) (LRR K, L, R)
Hydroger	n Sulfide (A4)			Loamy Mucky Mineral (F1) LRR K, L)		r Peat (S3) (LRR K, L, R)
Stratified	Layers (A5)			Loamy Gleyed Matrix (F2)	Dark Surface (S7)	
Depleted	Below Dark Sur	face (A1	11)	Depleted Matrix (F3)	Thin Dark Surface	urface (S8) (LRR K, L)
Thick Dar	rk Surface (A12)			Redox Dark Surface (F6)		asses (F12) (LRR K, L, R)
Sandy Mu	uck Mineral (S1)			Depleted Dark Surface (F7)		n Soils (F19) (MLRA 149B)
	eyed Matrix (S4)			Redox Depressions (F8)		(MLRA 144A, 145, 149B)
Sandy Re	edox (S5)				Red Parent Materia	
Stripped	Matrix (S6)				Very Shallow Dark	• •
☐ Dark Surf	face (S7) (LRR R	, MLRA	149B)		Other (Explain in R	
		natation	and wetlar	nd hydrology must be present, unless disturbed or pr	· ·	cmarks)
	f hydronhytic ve	getation	Tana wetiai	ia hydrology must be present, diffess disturbed of pr	objetnatic.	
³ Indicators o						
³ Indicators o	f hydrophytic ve	ved):				
³ Indicators o	ayer (if observ	ved):			Hvdric Soil Present?	Vos O No 🗨
³ Indicators o	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No •
³ Indicators o	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No •
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No •
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●
³ Indicators o Restrictive L Type: Depth (inc	ayer (if observ	ved):			Hydric Soil Present?	Yes ○ No ●