WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: RSA 22		City/County: Aitkin	Sampling Date: 02-Sep-17
Applicant/Owner: Enbridge		State: M	N Sampling Point: w-51n23w28-a1
Investigator(s): SMR		Section, Township, Range:	S. 28 T. 51N R. 23W
Landform (hillslope, terrace, etc.):	owland	Local relief (concave, convex,	
Subregion (LRR or MLRA): LRR K	Lat.:	46 52.3333 Lon	g.: -93 15.9623
Soil Map Unit Name: 204C			NWI classification: N/A
Are climatic/hydrologic conditions on	the site typical for this time of y	ear? Yes No	(If no, explain in Remarks.)
			I Circumstances" present? Yes ● No ○
			explain any answers in Remarks.)
- , - ,	, , , ,	,	ns, transects, important features, etc
Hydrophytic Vegetation Present?	Yes No		
Hydric Soil Present?	Yes ● No ○	Is the Sampled Area within a Wetland?	Yes No
Wetland Hydrology Present?	Yes ● No ○	11100000	
Hydrology			
Wetland Hydrology Indicators:			Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one	required; check all that apply)		Surface Soil Cracks (B6)
✓ Surface Water (A1)	Water-Stained Lea	ives (B9)	Drainage Patterns (B10)
✓ High Water Table (A2)	Aquatic Fauna (B1:	3)	Moss Trim Lines (B16)
✓ Saturation (A3)	Marl Deposits (B15		Dry Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide (Crayfish Burrows (C8)
Sediment Deposits (B2) Drift deposits (B3)		eres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Presence of Reduc	ced Iron (C4) ction in Tilled Soils (C6)	☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface	` ,	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (-	` '	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (Cilia Noj	FAC-neutral Test (D5)
Field Observations:			
Surface Water Present? Yes •	No O Depth (inches):	3	
Water Table Present? Yes •	No O Depth (inches):	0	
Saturation Present? (includes capillary fringe) Yes	No O Depth (inches):	Wetland Hyd	rology Present? Yes No
Describe Recorded Data (stream gauge	ge, monitoring well, aerial photo	os, previous inspections), if ava	ilable:
Remarks:			

VEGETATION - Use scientific names of plants

VEGETATION - OSE SCIENTIFIC Harries of pr	Sampling Point: w-51n23w28-a1						
(0)	Absolute	Dominant	Indicator	Dominance Test worksheet:			
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Number of Dominant Species			
1 Fraxinus nigra	60	✓	FACW	That are OBL, FACW, or FAC:4 (A)			
2Acer rubrum	20	✓	FAC	T. (1)			
3	0			Total Number of Dominant Species Across All Strata: 4 (B)			
4			-	oposios visiose viii eti atai			
5				Percent of dominant Species			
				That Are OBL, FACW, or FAC:100.0% (A/B)			
6							
7				Prevalence Index worksheet:			
Sapling/Shrub Stratum (Plot size: 15	80 = Total Cover			Total % Cover of: Multiply by: OBL species x 1 =			
1	0						
2		ī		FACW species <u>60</u> x 2 = <u>120</u>			
				FAC speci es			
3				FACU species $0 \times 4 = 0$			
4				UPL speci es $0 \times 5 = 0$			
5				1			
6	0			Column Total s: <u>180</u> (A) <u>440</u> (B)			
7	0			Prevalence Index = B/A =			
(District E	0 =	Total Cove	r	Hydrophytic Vegetation Indicators:			
Herb Stratum (Plot size: 5				Rapid Test for Hydrophytic Vegetation			
1 _ Calamagrostis canadensis	20	✓	OBL				
2. Toxicodendron radicans	80	✓	FAC				
3				✓ Prevalence Index is ≤3.0 ¹			
				Morphological Adaptations ¹ (Provide supporting			
4				data in Remarks or on a separate sheet)			
5				☐ Problematic Hydrophytic Vegetation ¹ (Explain)			
6				1			
7	0			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
8	0						
9				Definitions of Vegetation Strata:			
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter			
11				at breast height (DBH), regardless of height.			
2							
12	-			Sapling/shrub - Woody plants less than 3 in. DBH and			
Woody Vine Stratum (Plot size: 30)	100 =	= Total Cove	r	greater than 3.28 ft (1m) tall			
	0			Herb - All herbaceous (non-woody) plants, regardless of			
1				size, and woody plants less than 3.28 ft tall.			
2				Ι ., , γ			
3.				Woody vine - All woody vines greater than 3.28 ft in			
4				height.			
	0 =	Total Cove	r				
				Hydrophytic			
				Vegetation Yes • No •			
				Present: 100 - 110 -			
				I			
Remarks: (Include photo numbers here or on a separate s	heet.)						

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

Soil Sampling Point: w-51n23w28-a1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth Matrix				Redox Features				_			
(inches)	Color	(moist)	<u>%</u>	Color (ı	noist)	%_	Type	Loc2	Texture	Remarks	
0-3	10YR	2/2	100						Silt Loam		
3-20	10YR	5/1	85	10YR	5/3	15	С	M	Silt Loam		
									-		
					-						
					-						
	-	-	-				-				
-	-	-			-	-	-				
					-						
¹ Type: C=Cond	centration. [D=Depletio	n. RM=Red	uced Matrix, (S=Covere	ed or Coate	ed Sand G	rains ² Loca	ation: PL=Pore Lining. M=M	atrix	
Hydric Soil I	ndicators:		-		-		-		Indicators for Proble	ematic Hydric Soils: 3	
Histosol (A	A1)					w Surface ((S8) (LRR	R,		(LRR K, L, MLRA 149B)	
Histic Epip	pedon (A2)				(149B)			_		x (A16) (LRR K, L, R)	
☐ Black Histi	ic (A3)					ace (S9) (I				or Peat (S3) (LRR K, L, R)	
Hydrogen	Sulfide (A4))				Mineral (F1)	Dark Surface (S7)		
Stratified I	Layers (A5)					Matrix (F2))				
Depleted I	Below Dark	Surface (A	11)		eted Matri				Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)		
☐ Thick Dark	k Surface (A	12)				rface (F6)				Masses (F12) (LRR K, L, R)	
Sandy Mu	ck Mineral ((S1)				Surface (F	7)			in Soils (F19) (MLRA 149B)	
Sandy Gle	yed Matrix	(S4)		Redo	x Depress	ions (F8)) (MLRA 144A, 145, 149B)	
Sandy Red	dox (S5)								Red Parent Materi		
Stripped N	Matrix (S6)								Very Shallow Dark		
☐ Dark Surfa	ace (S7) (LR	RR R, MLRA	149B)						Other (Explain in F		
³ Indicators of	· hudronhuti		n and watle	ad budsalagu	marret be m	rocont un	loog digtur	had ar prabl		vernarks)	
			iii anu wena	na nyarology	must be p	nesent, un	iless distui	bed of proble	епанс.		
Restrictive La	ayer (if ob	served):									
Type:									Undein Cail Decamb2	v (a) v (
Depth (inch	nes):								Hydric Soil Present?	Yes ● No ○	
Remarks:											