## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: RSA 22		City	y/County:	St. Louis		Samplin	ng Date: 15-Sep-17
Applicant/Owner: Enbridge				State: MN	I _	Sampling Point:	w-50n19w8-a1
Investigator(s): SMR			Section, To	wnship, Range:	<b>s.</b> 8	т. 50N	<b>R.</b> 19W
Landform (hillslope, terrace, etc.):	Lowland			ncave, convex, n	-	: concave	Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K		<b>Lat.:</b> 46 4	49.4553	Long	j.: -	92 47.1507	Datum: NAD 83
Soil Map Unit Name: B127B					_	NWI classification:	N/A
Are climatic/hydrologic conditions o	n the site ty	pical for this time of year?	Yes	. ● No ○	(If n	o, explain in Remarks	s.)
Are Vegetation $\Box$ , Soil $\Box$	, or Hydrold			Are "Normal	-	umstances" present?	Yes ● No ○
Are Vegetation, Soil	, or Hydrold					in any answers in Re	marke )
Summary of Findings - At				•	-	-	•
Hydrophytic Vegetation Present?	Yes •	No O					
Hydric Soil Present?	Yes	No O		Sampled Area a Wetland?	Ye	es • No O	
Wetland Hydrology Present?	Yes	No O	WICH	d Welland:	-		
Remarks: (Explain alternative prod							
Hydrology							
Wetland Hydrology Indicators:					Seco	ondary Indicators (minim	num of 2 required)
Primary Indicators (minimum of or	ie reguired;	check all that apply)			$\overline{}$	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	e (C2)
Water Marks (B1)		Hydrogen Sulfide Odor				Crayfish Burrows (C8)	
Sediment Deposits (B2)		Oxidized Rhizospheres		Roots (C3)		Saturation Visible on Ae	
☐ Drift deposits (B3) ☐ Algal Mat or Crust (B4)		Presence of Reduced In		(3.1)		Stunted or Stressed Plan Geomorphic Position (D	, ,
Iron Deposits (B5)		Recent Iron Reduction		(C6)	$\overline{}$	Shallow Aquitard (D3)	2)
☐ Inundation Visible on Aerial Imager	y (B7)	☐ Thin Muck Surface (C7) ☐ Other (Explain in Rema	•			Microtopographic Relief	(D4)
Sparsely Vegetated Concave Surface	•	Other (Explain in Rema	11 KS)		_	FAC-neutral Test (D5)	(- ')
Field Observations:							
Surface Water Present? Yes	No 🔾	Depth (inches):	15				
Water Table Present? Yes •	No O	Depth (inches):	0				
Saturation Present? (includes capillary fringe)  Yes		Depth (inches):	0	Wetland Hydr	rology	y Present? Yes	● No ○
Describe Recorded Data (stream ga	uge, monito	oring well, aerial photos, p	previous insp	pections), if avail	lable:		
Remarks:							

## **VEGETATION - Use scientific names of plants**

VEGETATION - USE Scientific flames of pla	ants			Sampling Point: w-50n19w8-a1
(0) 20	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 )	% Cover	_ species:	Status	Number of Dominant Species
1	0			That are OBL, FACW, or FAC:3 (A)
2	0			Total Number of Deminent
3	0			Total Number of Dominant Species Across All Strata: 3 (B)
4				
5				Percent of dominant Species
6		$\overline{\Box}$		That Are OBL, FACW, or FAC: 100.0% (A/B)
7				Prevalence Index worksheet:
· .		= Total Cove		
Sapling/Shrub Stratum (Plot size: 15	=	= Total Cove	Г	
1	0			
2		$\Box$		FACW species 0 x 2 = 0
3	-			FAC speci es x 3 =0
				FACU species x 4 =0
4				UPL species $0 \times 5 = 0$
5				Column Totals: 40 (A) 40 (B)
6				
7	0			Prevalence Index = B/A = 1.000
Herb Stratum (Plot size: 5	0 =	= Total Cove	r	Hydrophytic Vegetation Indicators:
nerb Stratum (Fiot Size		_		Rapid Test for Hydrophytic Vegetation
1. Carex lacustris		✓	OBL	✓ Dominance Test is > 50%
2. Scirpus cyperinus	10	<b>✓</b>	OBL	✓ Prevalence Index is ≤3.0 <sup>1</sup>
3. Typha x glauca	10	✓	OBL	
4	0			Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
6				
7				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata:
9				
0				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
1	0			at breast height (DBH), regardless of height.
2	0			Sapling/shrub - Woody plants less than 3 in. DBH and
(8)	40 =	= Total Cove	r	greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 30 )				, ,
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0 =	= Total Cove	r	
				Hydrophytic
				Vegetation
				Present? Yes V No
Remarks: (Include photo numbers here or on a separate sl	neet.)			

<sup>\*</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

Soil Sampling Point: w-50n19w8-a1

Type: C-Concentration: D-Depletion: Rid-Reduced Matrix: CS-Covered or Coaled Sand Crains   21 coalest: PI-Pore Lining; M-Matrix	Depth	Matrix			dox Features			
Hydric Soil Indicators:    Histosol (A1)	(inches)	Color (moist)	<u> </u>	olor (moist)	<u>% Type</u> 1	Loc2	Texture	Remarks
Hydric Soil Indicators:    Histosol (A1)								
Hydric Soil Indicators:    Histosol (A1)								
Hydric Soil Indicators:    Histosol (A1)							-	
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Hydric Soil Indicators:    Histosol (A1)								
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Hydric Soil Indicators:    Histosol (A1)								
Hydric Soil Indicators:    Histosol (A1)				-				
Hydric Soil Indicators:    Histosol (A1)								
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Hydric Soil Indicators:    Histosol (A1)								
Hydric Soil Indicators:    Histosol (A1)	1 Type: C=Con	centration D-Depletion	RM-Reduced M	atrix CS=Covere	ed or Coated Sand Gra	ins 21 oca	tion: PI -Pore Lining M-Ma	atriy
Histosol (A1)			. KWI—Kedacea W	latin, C3-Covere	ed of coated Sand Ora	iiis Loca		
Histic Epipedon (A2)    Histic Epipedon (A2)   Histic Epipedon (A16) (LRR K, L, R)   Coast Prairie Redox (A16) (LRR K, L, R)   Dark Surface (S7) (LRR K, L, R)   Dark Surface (A12)   Depleted Below Dark Surface (F1)   Histic Epipedon (A16) (LRR K, L, R)   Dark Surface (A12)   Depleted Below Dark Surface (S9) (LRR K, L, R)   Depleted Below Dark Surface (S9) (LRR K, L, M)   Depleted Below Dark Surface (S9) (LRR K, L, M)   Depleted Below Dark Surface (S9) (LRR K, L, R)   Depleted Below Dark Surface (S9) (LRR K, L, R)   Depleted Below Dark Surface (S9) (LRR K, L, R)   Depleted Below Dark Surface (S9) (LRR K, L, R)   Depleted Below Dark Surface (S9) (LRR K, L, R)   Depleted Below Dark Surface (S9) (LRR K, L, R)   Depleted Below Dark Surface (S9) (LRR K, L, R)   Depleted Below Dark Surface (S9) (LRR K, L, R)   Depleted Below Dark Surface (S9) (LRR K, L, R)   Depleted Below Dark Surface (S9) (LRR K, L, R)   Depleted Below Dark Surface (S9) (LRR K, L, R)   Depleted Below Dark Surface (S9) (LRR K, L, R)   Depleted Below Dark Surface (S9) (LRR K, L)   Depleted Below Dark Sur				Polyvalue Polari	w Surface (SO) (LDD D			
Black Histic (A3)		•			v surface (so) (LKK K,			•
Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1) LRR K, L)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Muck Mineral (S1)  Sandy Gleyed Matrix (F2)  Depleted Dark Surface (F6)  Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Muck Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L, M)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Allocators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  Depth (inches):  Deptated Matrix (F2)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Peldmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144B)  Red Parent Material (F21)  Very Shallow Dark Surface (TF12)  Polyvalue Below Surface (S9) (LRR K, L)  Type:  Depth (inches):  Hydric Soil Present? Yes No One of the Matrix (S3)  No One of the Matrix (S3)  Dark Surface (S7) (LRR R, MLR N, L)  Hydric Soil Preset of the Mineral (S1)  Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9)				Thin Dark Surfa	ace (S9) (LRR R, MLRA	A 149B)		
Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A12)  Thick Dark Surface (A12)  Sandy Muck Mineral (S1)  Sandy Gleyed Matrix (F2)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Redox Depressions (F8)  Redox Depressions (F8)  Depleted Dark Surface (F7)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144B)  Red Parent Material (F21)  Very Shallow Dark Surface (TF12)  Very Shallow Dark Surface (TF12)  Type:  Depth (inches):  Type:  Depth (inches):  Hydric Soil Present? Yes No				Loamy Mucky N	Mineral (F1) LRR K, L)			
Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Sandy Muck Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox Depressions (F8) Stripped Matrix (S6) Dark Surface (S7) (LRR R, L, R) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  Type: Depth (inches): Hydric Soil Present? Yes No  Remarks:	_							
Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Muck Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Very Shallow Dark Surface (TF12)  Dark Surface (S7) (LRR R, MLRA 149B)  John Carlon (Formula in Remarks)  All dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type: Depth (inches): Depth (inches):  Remarks:  Hydric Soil Present? Yes No			1)	,				
Sandy Muck Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F12) (LRR R, L, R) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 149B) Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Stripped Matrix (S6) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed): Type: Depth (inches): Depth (inches): Hydric Soil Present? Yes No			''	Redox Dark Sui	rface (F6)			
Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Very Shallow Dark Surface (TF12)  Dark Surface (S7) (LRR R, MLRA 149B)  John Control of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type: Depth (inches): Depth (inches):  Hydric Soil Present? Yes No				Depleted Dark	Surface (F7)			
Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  **Restrictive Layer (if observed):  Type: Depth (inches):  Depth (inches):  Remarks:  **Hydric Soil Present?**  Yes **No **No **  No **No **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  **Hydric Soil Present?**  **Yes **No **No **  **No **No **No **  **Remarks:**  **Present**  **Pres								
Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present?  Yes No	_							
Dark Surface (S7) (LRR R, MLRA 149B)  3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type: Depth (inches):  Depth (inches):  Remarks:								
3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present?  Yes No			140P)					
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Hydric Soil Present?  Yes • No ○								emarks)
Type:	<sup>3</sup> Indicators of	f hydrophytic vegetation	and wetland hyd	rology must be p	resent, unless disturbe	ed or proble	ematic.	
Depth (inches): Hydric Soil Present? Yes • No • N	Restrictive L	ayer (if observed):						
Remarks:	Type:							
	Depth (incl	hes):		_			Hydric Soil Present?	Yes • No 🔾
	Remarks:							
no digging of manifine, active buried dumites. Sons assumed hydric based on vegetation and hydrology.		n mainlina, activo hur	iad utilitias Sa	ile accumed by	dric based on vege	tation and	hydrology	
	ivo digging oi	i mairille, active bui	ieu utilities. 30	iis assumeu ny	unc based on vege	iation and	riyarology.	