## WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: 13_mainline	City/County: Hubbard		Sampling [	Date: 2017-06-09		
Applicant/Owner: Enbridge		State: Minnesota	Sampling P	oint: w-141n35w20-a1		
Investigator(s): SMR, TDT	Section, Township,	Range: S20, T141N, R3	5W			
Landform (hillslope, terrace, etc.): Depression		Local Relief (concave,		Slope (%): 3-7%		
Subregion (LRR or MLRA):			Longitude: -95.14997013			
	Latitude. 4	7.0144303340				
Soil Map Unit Name: 1943	16 11: 11: 15 2.1			ication: PSS1C		
Are climatic/hydrologic conditions on the site typic	cal for this time of year? (	if no, explain in Remark	(S):	Yes		
Are Vegetation $\underline{\text{No}}$ , Soil $\underline{\text{No}}$ , or Hydrology $\underline{\text{N}}$	o significantly disturbe	d? Are "Normal Circum	stances" present? Yes			
Are Vegetation No , Soil No , or Hydrology No	_ naturally problematic?	(If needed, explain any	y answers in Remarks)			
SUMMARY OF FINDINGS - Attach site map show	wing sampling point loca	tions, transects, impor	tant features, etc.			
Hydrophytic Vegetation Present?	Yes	Is the Sampled Area				
Hydric Soil Present?	Yes	within a Wetland?		Yes		
Wetland Hydrology Present?	Yes	If yes, optional Wetlar	nd Site ID:	w-141n35w20-a		
Remarks: (Explain alternative procedures here or	in a separate report.)					
No digging allowed due to potential utilities pres	ent.					
HYDROLOGY				,		
Wetland Hydrology Indicators:			Secondary Indicators	(minimum of two required)		
Primary Indicators (minimum of one is required; cl	neck all that apply)		Surface Soil	Cracks (B6)		
Surface Water (A1)	Water-Stained Leave	s (B9)	Drainage Pat	terns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)		<del></del>	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)		Dry-Season V	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)		Crayfish Burro	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)		Saturation Vis	sible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)		Stunted/Stres	Stunted/Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)		<u>yes</u> Geomorphic F	<u>yes</u> Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C	Thin Muck Surface (C7)		Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Ren	Other (Explain in Remarks) Microtopographic R		phic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)			<u>yes</u> FAC-Neutral T	est (D5)		
Field Observations:		,				
Surface Water Present?	Depth (inches)					
Water Table Present?	Depth (inches)					
Saturation Present?	Depth (inches)		Wetland Hydrology Pre	sent? Yes		
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, pre	vious inspections), if av	ailable:			
		,				
Remarks:						
No digging permitted due to potential utilies being	g present. Water table ar	nd saturation could not	be verified.			
	<i>.</i> .					
<u>L</u>						

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot Size: 30 )	% Cover	Species?	Status	Num ber of Do minant Species
1. Populus tremuloides	10.00	Yes	FAC	That Are OBL, FACW, or FAC: 5 (A)
2. Pinus resinosa	5.00	Yes	FACU	Total Number of Dominant
3				Species Across All Strata: 6 (B)
4.				Percent of Do minant Species
5.				That Are OBL, FACW, or FAC: 83.3333333333 (A/B)
6.				Prevalence Index worksheet:
7.				Total % Cover of: Multiply by:
	15	= Total Cover		OBL species 80.00 x 1 80
				FACW species 50.00 x 2 100
1. Salix petiolaris	40.00	Yes	OBL	FACU species 5.00 x 3 20
2. Populus tremuloides	10.00	No	FAC	UPL species 0.00 x 4 0
3. Salix beb biana	10.00	No	FACW	Column Totals 175 (A) 320 (B)
4.	10.00		1710 17	Prevalence Index = B/A = 1.8285714
		· <del></del>		
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				yes 2 - Dominance Test is > 50%
_	60	= Total Cover		yes 3 - Prevalence Index is ≤ 3.0 <sup>1</sup>
Herb Stratum (Plot Size: 5	40.00		0.01	4 - Morph ological Adaptations (Provide supporting data in Remarks or on a separate sheet)
1. Carex stricta	40.00	Yes	OBL	
2. Osmundastrum cinnamomeum	20.00	Yes		Problematic Hy drophytic Vegetation <sup>1</sup> (Explain)
3. Athyrium cyclosorum	20.00	Yes	FAC	1 Indicators of hydrics oil and wetland hydrology must be present, unless disturbed
4. Equisetum hyemale	10.00	No	FACW	or problematic.
5. Phalaris arundinacea	10.00	No	FACW	Definitions of Vegetation Strata:
6				
7				Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.
8			-	
9				Sapling/Shrub - Woody plants less than 3 in. DBH and greater than or
10				equal to 3.28 ft (1 m) tall.
11.				Herb - All herbaeceous (non-woody) plants, regardless of size, and
12.				woody plants less than 3.28 ft tall.
	100	= Total Cover		Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot Size: 30				
1.				
	-		-	Hydrop hytic
2			-	Vege tation Vec
3		-		Present? res
4				
	0	_=Total Cover	:	
Remarks: (include photo numbers here or on a separate sheet.	)			

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IL ofile Description: (Describe to the d	lanth naada	d to document the	in dicat	or or cor	firm the	absonse of indi	Sampling Point: w-141n35w20-
oth Matrix	eptn neede		Features		iirm the	absence of indic	cators.)
ches) Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	·						
	·						
pe: C=Concentration, D=Depletion, RM=Re	educed Matrix	, MS=Masked Sand Gr	ains.				<sup>2</sup> Location: PL=Pore Lining, M=M
ric Soil Indicators:						Indicators for Pr	roblematic Hydric Soil <sup>3</sup> :
Histosol (A1)	!	Polyvalue Below 9  149B)	Surface (S	8) <b>(LRR R,</b>	MLRA	2 cm Muck	(A10) (LRR K, L, MLRA 149B)
Histic Epipedon (A2)	!	Thin Dark Surface	: (S9) <b>( LRR</b>	R, MLRA	149B)	Coast Prair	rie Redox (A16)(LRR K, L, R)
Black Histic (A3)	!	Loamy Mucky Mi	neral (F1)	(LRR K, L)		5 cm Muck	xy Peat or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4)	!	Loamy Gleyed Ma	atrix (F2)			Dark Surfa	ce (S7) (LRR K, M)
Stratified Layers (A5)		Depleted Matrix (	(F3)			Polyvalue F	Below Surface (S8) (LRRK, L)
Depleted Below Dark Surface (A11)	!	Redox Dark Surfa	ce (F6)			Thin Dark S	Surface (S9) (LRR K, L)
Thick Dark Surface (A12)		Depleted Dark Su	ırface (F7)	ļ		Iron-Maga	nese Masses (F12) (LRR K, L, R)
Sandy Mucky Mineral (S1)		Redox Depression	ns (F8)			Piedmont F	Floodplain Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4)						Mesic Spoo	dic (TA6) <b>(MLRA 144A, 145, 149B)</b>
Sandy Redox (S5)						Red Parent	t Material (F21)
Stripped Matrix (S6)						☐ Very Shallo	ow Dark Surface (TF12)
Dark Surface (S7) (LRR R, MLRA 149B)						Other (exp	olain in remarks)
strictive Layer (if observed):							
Туре:					Hv	vdric Soil Present?	Yes
Depth (inches):					,	une som resent.	

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