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

Project/Site: 13_mainline	City/County	City/County: Clearwater			Sampling Date: <u>2017-06-10</u>		
Applicant/Owner: Enbridge		State: Minnesota			Sampling Point: w-145n36w14-d1		
Investigator(s): SMR, DPT	Section	n, Township, I	Range: S14, T145N, R36W				
Landform (hillslope, terrace, etc.): Depression			Local Relief (concave, con		Slope 3-7%	(%):	
	<u> </u>	•					
Subregion (LRR or MLRA):		Latitude: 4	7.3772812867 Lon	ngitude: -95.22046697		33	
Soil Map Unit Name: 672				NWI Class	ification: N/A		
Are climatic/hydrologic conditions on the site	typical for this tir	me of year? (i	f no, explain in Remarks):		Yes		
Are Vegetation No , Soil No , or Hydrolo	gy <u>No</u> significar	ntly disturbed	? Are "Normal Circumsta	nces" present? Yes			
Are Vegetation No , Soil No , or Hydrology	No naturally p	oroblematic?	(If needed, explain any ar	nswers in Remarks)			
SUMMARY OF FINDINGS - Attach site map	showing sampli	ng point locat	tions, transects, importan	t features, etc.			
Hydrophytic Vegetation Present?	Yes		Is the Sampled Area				
Hydric Soil Present?	Yes		within a Wetland?		<u>Yes</u>		
Wetland Hydrology Present?	<u>Yes</u>		If yes, optional Wetland S	Site ID:	<u>w-145 n36w14-d</u>		
Remarks: (Explain alternative procedures he	re or in a separate	e report.)					
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indicato	rs (minimum of	two required)	
Primary Indicators (minimum of one is requir	ed · check all that	annly)		Surface Soi	l Cracks (B6)		
Surface Water (A1)			(RQ)	<del></del>	atterns (B10)		
yes High Water Table (A2)	<u> </u>	Water-Stained Leaves (B9)		<del></del>	Moss Trim Lines (B16)		
yes Saturation (A3)		Aquatic Fauna (B13)		<del></del>	Dry-Season Water Table (C2)		
Water Marks (B1)		Marl Deposits (B15)			Crayfish Burrows (C8)		
Sediment Deposits (B2)		Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Living Roots (C3)		<del></del> ·	Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)		Presence of Reduced Iron (C4)		Stunted/Stressed Plants (D1)			
Algal Mat or Crust (B4)	<u> </u>	Recent Iron Reduction in Tilled So		yes Geomorphic			
Iron Deposits (B5)	Thin Muck Surface (C7		• •	<del></del>	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	·				Microto pograp hic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)			,		S FAC-Neutral Test (D5)		
Field Observations:							
	No De	epth (inches)					
-		epth (inches)					
		· · · · <del> </del>		Wetland Hydrology Pr	esent?	Yes	
(includes capillary fringe)		eptii (iiiciies)		Treatana ny aronogy n	coent.		
Describe Recorded Data (stream gauge, mon	toring well serial	Inhotos prev	ious inspections) if availa	hle:			
Describe Recorded Data (stream gauge, mon	tornig wen, aeriai	i priotos, pi ev	ious irispections), ir avaira	bie.			
Remarks:							

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot Size: 30	% Cover	Species?	Status	Num ber of Do minant Species
1. Fraxinus nigra	55.00	Yes	FACW	That Are OBL, FACW, or FAC: 3(A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4.				Percent of Do minant Species
5.				That Are OBL, FACW, or FAC: 100 (A/B)
				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
7		- Tatal Cavar		
Could a Charle Charles (Dist Charles 15	55	= Total Cover		<u> </u>
Sapling/Shrub Stratum (Plot Size: 15				FACW species 145.00 x 2 290
1				FACU species <u>0.00</u> x 3 <u>0</u>
2				UPL species <u>0.00</u> x 4 <u>0</u>
3				Column Totals 155 (A) 300 (B)
4				Prevalence Index = B/A = <u>1.9354838</u>
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				yes 2 - Dominance Test is > 50%
	0	= Total Cover		yes 3 - Prevalence Index is ≤ 3.0 <sup>1</sup>
Herb Stratum (Plot Size: 5				4 - Morphological Adaptations (Provide
1. Phalaris arundinacea	65.00	Yes	FACW	supporting data in Remarks or on a separate sheet)
2. Impatiens cape nsis	25.00	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3. Carex intumescens	10.00	No	OBL	
4.				Indicators of hydrics oil and wetland hydrology must be present, unless disturbed or problematic.
				Definitions of Vegetation Strata:
5 6.				Deminuons of Vegetauon Suata.
				Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast
7				height (DB H), regardless of height.
8	-			
9				Sapling/Shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10			<u></u>	
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 Ves
3		-	-	Present? res
4		-		
	0	_=Total Cover		
<b>Remarks:</b> (include photo numbers here or on a separate sheet.	)			

OIL							Sampling Point: w-145n36w14-d1		
Profile Description: (Describe to the	depth nee				nfirm th	ne absence of indica	ators.)		
Depth Matrix		Redox	(Features		2				
inches) Color (moist) 0-6 10YR 2 1	% 	Color (moist)	% 	Type <sup>1</sup>	Loc <sup>2</sup>	Texture MM	Remarks		
6-24 10YR 5 2	_ 70 _	10YR 4 6	30	С	M	cl			
	- —  - - —  .					· — — — —			
	 ,		- — - —						
	·								
	·		 			· — — — —			
						- — —			
Type: C=Concentration, D=Depletion, RM=F	 Reduced Ma	etrix MS=Masked Sand G	 				<sup>2</sup> Location: PL=Pore Lining, M=Matrix		
Hydric Soil Indicators:	100000	Thy Wo Williams				Indicators for Pro	blematic Hydric Soil <sup>3</sup> :		
Histosol (A1)		Polyvalue Below 149B)	Surface (5	38) (LRR R,	, MLRA	<b>—</b>	A10) ( <b>LRR K, L, MLRA 149B</b> )		
Histic Epipedon (A2)		Thin Dark Surfac	ne (S9) <b>(LR</b> 1	R R, MLR#	4 149B)		e Redox (A16)(LRR K, L, R)		
Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR K, L)		Н	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)				
Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)		$\vdash$	Dark Surface (S7) (LRR K, M)				
Stratified Layers (A5)		Depleted Matrix (F3)		Polyvalue Be	Polyvalue Below Surface (S8) (LRR K, L)				
Depleted Below Dark Surface (A11)		Redox Dark Surface (F6)				Thin Dark Sur	Thin Dark Surface (S9) (LRR K, L)		
Thick Dark Surface (A12)		Depleted Dark S		)		$\vdash$	Iron-Maganese Masses (F12) (LRR K, L, R)		
Sandy Mucky Mineral (S1)		Redox Depressions (F8)				Piedmont Flo	Piedmont Floodplain Soils (F19) (MLRA 149B)		
Sandy Gleyed Matrix (S4)						Mesic Spo dic	c (TA6) <b>(MLRA 144A, 145, 149B)</b>		
Sandy Red ox (S5)						Red Parent N	Material (F21)		
Stripped Matrix (S6)						☐ Very Shallow	v Dark Surface (TF12)		
Dark Surface (S7) (LRR R, MLRA 149B)	<u></u>	<u>.</u>				Other (explai	in in remarks)		
Restrictive Layer (if observed):	L	]							
_						Hydric Soil Present? Ye	es		
Type: Depth (inches):									

<