WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: L3R	C	ity/County: Clearwater	<u>r</u>	Sampling Date: 2016-06-20		
Applicant/Owner: Enbridge			State: Minnesota	Samplir	ng Point: <u>w-149n37w33-aa1</u>	
Investigator(s): DPT, ZCW		Section, Townshi	p, Range: <u>S33, T149N, R</u>	R37W		
Landform (hillslope, terrace, etc.): Depre	ession		Local Relief (concave, c	convex, none): CC	Slope (%): 0-2%	
Subregion (LRR or MLRA):		Latitude: 47	7.6876884745 Lo	ngitude: -95.38814443	Datum: NAD83	
Soil Map Unit Name: 1699A				NWI Cla	ssification: N/A	
Are climatic/hydrologic conditions on th	e site typic	cal for this time of year	? (if no, explain in Rema	- ırks):	Yes	
Are Vegetation No_, Soil No_, or Hydrology No_ significantly disturbed? Are "Normal Circumstances" present? Yes_						
Are Vegetation No_, Soil No_, or Hydrology No_ naturally problematic? (If needed, explain any answers in Remarks)						
SUMMARY OF FINDINGS - Attach site	e map shov	wing sampling point lo	cations, transects, impo	ortant features, etc.		
Hydrophytic Vegetation Present?		Yes	Is the Sampled Area			
Hydric Soil Present?		Yes	within a Wetland?		Yes	
Wetland Hydrology Present? Remarks: (Explain alternative procedure)		Yes	If yes, optional Wetlan	d Site ID:	w-149n37w33-aa	
HYDROLOGY						
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is r	equired; ch	neck all that apply)		Surface So	il Cracks (B6)	
yes Surface Water (A1)	es Surface Water (A1) Water-Stained Leav		(B9) Drainage Patterns (B10)			
High Water Table (A2)			Moss Trim Lines (B16)			
Saturation (A3)	Saturation (A3) Marl Deposits (B15)			Dry-Season Water Table (C2)		
Water Marks (B1)	Water Marks (B1) Hydrogen Sulfide Od		or (C1)	C1)Crayfish Burrows (C8)		
Sediment Deposits (B2) Oxidized Rhizosphe		es on Living Roots (C3)	Saturation \	visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Drift Deposits (B3) Presence of Reduce		Iron (C4)Stunted		essed Plants (D1)	
Algal Mat or Crust (B4) Recent Iron Reduction		n in Tilled Soils (C6) <u>Yes</u> Geomorp		: Position (D2)		
Iron Deposits (B5)	Iron Deposits (B5) Thin Muck Surface (0		· · · · · · · · · · · · · · · · · · ·		ıitard (D3)	
Inundation Visible on Aerial Imagery (B7	') _	Other (Explain in Ren	narks)		raphic Relief (D4)	
Sparsely Vegetated Concave Surface (B8	5)			<u>yes</u> FAC-Neutra	i Test (D5)	
Field Observations:						
Surface Water Present?	<u>Yes</u>	Depth (inches)				
Water Table Present?	No	Depth (inches)				
Saturation Present?	<u>No</u>	Depth (inches)		Wetland Hydrology Pr	resent? Yes	
(includes capillary fringe)		,				
Describe Recorded Data (stream gauge,	monitoring	g well, aerial photos, pi	revious inspections), if a	available:		
Remarks:						
No digging, ditch, could not verify sat/w	vater table.	. Observed surface wat	er.			

VEGETATION - U	Jse scientific names of pla	ants.			Sampling Point: w-149n37
		Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum	(Plot Size: 30		Species?	Status	Number of Dominant Species
1.	·		· 		That Are OBL, FACW, or FAC: 2 (A)
				_	Total Number of Dominant
					Species Across All Strata: 2 (B)
					Percent of Dominant Species
				_	That Are OBL, FACW, or FAC: 100 (A/B)
_			_	_	Prevalence Index worksheet:
7			_	_	Total % Cover of: Multiply by:
		0	= Total Cover	_	OBL species 30.00 x 1 30
Sanling/Shrub Stratur	m (Plot Size: 15)	<u>-</u>			FACW species 50.00 x 2 100
•					FACU species 5.00 x 3 20
			_		UPL species 0.00 x 4 0
			_		
•					
					Prevalence Index = B/A = 1.95
					Hydrophytic Vegetation Indicators:
6					1 - Rapid Test for Hydrophytic Vegetation
7					yes 2 - Dominance Test is > 50%
		0	_ = Total Cover		<u>yes</u> 3 - Prevalence Index is $\le 3.0^1$
Herb Stratum (Plot Si	ize: <u>5</u>)				4 - Morphological Adaptations 1 (Provide
1. Phalaris arundinac	ea	50.00	Yes	FACW	supporting data in Remarks or on a separate sheet)
2. Scirpus atrovirens		30.00	Yes	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Equisetum arvense	<u> </u>	15.00	No	FAC	1, distance of hydric soil and watland hydrology must be prosent, uploss
4. Toxicodendron rad	licans	5.00	No	FACU	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5.					Definitions of Vegetation Strata:
					1
			_		Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast
			_	_	height (DBH), regardless of height.
					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than
					or equal to 3.28 ft (1 m) tall.
					-
11					Herb - All herbaeceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
12					
		100	= Total Cover		Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum	(Plot Size: <u>30</u>)				
1					_
2.					Hydrophytic
3.			_	_	Vegetation Present? Yes
4.			_	_	Fresent:
		0	=Total Cover		7
Bamarker (include n	noto numbers here or on a separat				
Kemarks: (iliciuue pi	Oto numbers here or on a separar	te sneet.)			_
ı					

Sampling Point: w-149n37... **SOIL** Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix **Redox Features** Loc² (inches) Color (moist) Color (moist) % Type¹ Texture Remarks ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soil³: Hydric Soil Indicators: Polyvalue Below Surface (S8) (LRR R, MLRA Histosol (A1) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Coast Prairie Redox (A16)(LRR K, L, R) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Dark Surface (S7) (LRR K, M) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Maganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (explain in remarks) Dark Surface (S7) (LRR R, MLRA 149B) Restrictive Layer (if observed): Hydric Soil Present? Yes Depth (inches): Remarks: No digging allowed, roadside ditch. Soils assumed hydric based on veg/hydro.

Site Photograph 1 Sampling Point: w-149n37w33-aa1



Latitude: 47.6876805117798	Cowardin Classification: PEM		
Longitude: -95.3881433420772	Circular 39: 2		
Direction: West	Eggers & Reed: Fresh (Wet) Meadow		
Remarks:			

Site Photograph 2 Sampling Point: w-149n37w33-aa1



Latitude: 47.6876782067564	Cowardin Classification: PEM			
Longitude: -95.3881462757433	Circular 39: 2			
Direction: East	Eggers & Reed: Fresh (Wet) Meadow			
Remarks:				