WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: I3_mainline	c	City/County: Clearwater		Sampling Date: 2	Sampling Date: 2017-06-15	
Applicant/Owner: Enbridge			State: Minnesota	Sampling Point:	v-146 n36w26-a2	
Investigator(s): SMR, DPT		Section, Township,	Range: S26, T146N, R36W	1		
Landform (hillelana tarraga eta), Danr	rossion		Local Police (company)		Slope (%): 0-2%	
Landform (hillslope, terrace, etc.): Depr	6331011	Latherta A	Local Relief (concave, cor			
Subregion (LRR or MLRA):		Latitude: 4	7.4303161027 Lor	ngitude: <u>-95.22373532</u> Datun		
Soil Map Unit Name: 737				NWI Classification:		
Are climatic/hydrologic conditions on the	he site typica	l for this time of year? (i	f no, explain in Remarks):		Yes	
Are Vegetation No_, Soil No_, or H	ydrology No	significantly disturbed	1? Are "Normal Circumsta	nces" present? Yes		
Are Vegetation No, Soil No, or Hyd	Irology No	naturally problematic?	(If needed, explain any ar	nswers in Remarks)		
SUMMARY OF FINDINGS - Attach si	te map show	ing sampling point loca	tions, transects, importan	t 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 Wetland S	Site ID: <u>w-146</u>	n36w26-a	
Remarks: (Explain alternative procedu	res here or in	a separate report.)				
HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indicators (minir	num of two required)	
Primary Indicators (minimum of one is	required; che	eck all that apply)		Surface Soil Cracks (B	6)	
Surface Water (A1)	_	Water-Stained Leaves	(B9)	Drainage Patterns (B10)		
yes High Water Table (A2)	_	Aquatic Fauna (B13)		Moss Trim Lines (B16)		
yes Saturation (A3)				Dry-Season Water Tal	Dry-Season Water Table (C2)	
Water Marks (B1)			r (C1)	Crayfish Burrows (C8)	Crayfish Burrows (C8)	
Sediment Deposits (B2)	_	Oxidized Rhizosphere	s on Living Roots (C3)	Saturation Visible on A	Aerial Imagery (C9)	
Drift Deposits (B3)		Presence of Reduced	Iron (C4)	Stunted/Stressed Plants (D1)		
Algal Mat or Crust (B4)		Recent Iron Reduction	in Tilled Soils (C6)	<u>yes</u> Geomorphic Position (D2)		
Iron Deposits (B5)		Thin Muck Surface (C	7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B	7)	Other (Explain in Rem	arks)	Microto pographic Rel	ef (D4)	
Sparsely Vegetated Concave Surface (B	8)			<u>yes</u> FAC-Neutral Test (D5)		
Field Observations:						
Surface Water Present?	No	Depth (inches)				
Water Table Present?	Yes	Depth (inches)	0			
Saturation Present?	Yes	Depth (inches)	0	Wetland Hydrology Present?	<u>Yes</u>	
(includes capillary fringe)						
Describe Recorded Data (stream gauge	, monitoring	well, aerial photos, prev	vious inspections), if availa	ble:		
Remarks:						
iverial ks.						

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot Size: 30)	% Cover	Species?	Status	Num ber of Do minant Species
1. Larix laricina	40.00	Yes	FACW	That Are OBL, FACW, or FAC: 6 (A)
2				Total Number of Dominant
3				Species Across All Strata: 6 (B)
4.		_		Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 100 (A/B)
	-	_		Prevalence Index worksheet:
7		- · 		Total % Cover of: Multiply by:
	40	= Total Cover		OBL species 140.00 x 1 140
Sapling/Shrub Stratum (Plot Size: 15	-10	_ = 10tal covel		FACW species 70.00 x 2 140
1. Ledum grodnlandicum	30.00	Yes		FACU species 0.00 x 3 0
2. Chamaedaphne calyculata	20.00	Yes	OBL	
3. Betula pumila	20.00	Yes	OBL	
	20.00	_ 1es	OBL	Column Totals <u>210</u> (A) <u>280</u> (B)
4		_		Prevalence Index = B/A = <u>1.33333333</u>
5		_		Hydrophytic Vegetation Indicators:
6		-	. ———	1 - Rapid Test for Hydrophytic Vegetation
7				yes 2 - Dominance Test is > 50%
	70	_ = Total Cover		yes 3 - Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot Size: 5				4 - Morphological Adaptations (Provide
1. Carex lacustris	70.00	Yes	OBL	supporting data in Remarks or on a separate sheet)
2. Phalaris arundinacea	30.00	Yes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
3				Indicators of hydrics oil and wetland hydrology must be present, unless disturbed
4				or problematic.
5				Definitions of Vegetation Strata:
6				
7				Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast
8			_	height (DB H), regardless of height.
9				Sapling/Shrub - Woody plants less than 3 in. DBH and greater than or
40				equal to 3.28 ft (1 m) tall.
10	-		-	Herb - All herbaeceous (non-woody) plants, regardless of size, and
11.				woody plants less than 3.28 ft tall.
12	100		-	
20	100	_ = Total Cover		Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot Size: 30)				
1			-	
2			_	Hydrophytic Vegetation
3				Present? Yes
4				
	0	_=Total Cover		
Remarks: (include photo numbers here or on a separate sheet.)			

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OIL						Sampling Point: w-146n36w26-a		
rofile Description: (Describe to the d	epth needed to d			confirm th	e absence of indic	cators.)		
epth Matrix nches) Color (moist) 1-24 10YR 2 2	% Colo	Redox Feator (moist)		pe ¹ Loc ²	Texture MP	Remarks		
Гуре: C=Concentration, D=Depletion, RM=R6	educed Matrix, MS=f	Masked Sand Grains				² Location: PL=Pore Lining, M=Mat		
lydric Soil Indicators: ├──	⊢ P.	olyvalue Below Surfa	face (S8) (LF	R R, MLRA		roblematic Hydric Soil ³ :		
Histosol (A1) Histic Epipedon (A2) Black Histic (A3)	□ т	.49B) hin Dark Surface (S9 oamy Mucky Minera			Coast Prair	k (A10) (LRR K, L, MLRA 149B) rie Redox (A16)(LRR K, L, R) ky Peat or Peat (S3) (LRR K, L, R)		
Hydrogen Sulfide (A4) Stratified Layers (A5)	□ Lo	oamy Gleyed Matrix Depleted Matrix (F3)	x (F2)	(, L)	Dark Surfac	ice (S7) (LRR K, M) Below Surface (S8) (LRR K, L)		
Depleted Below Dark Surface (A11)		Redox Dark Surface (F			Thin Dark Surface (S9) (LRR K, L)			
Thick Dark Surface (A11)	\vdash	Depleted Dark Surface (F			Iron-Maganese Masses (F12) (LRR K, L, R)			
Sandy Mucky Mineral (S1)	\vdash	Redox Depressions (F			⊢	Floodplain Soils (F19) (MLRA 149B)		
Sandy Gleyed Matrix (S4)	_	Suon Depi cesis	5,		—	dic (TA6) (MLRA 144A, 145, 149B)		
Sandy Red ox (S5)					<u> </u>	t Material (F21)		
Stripped Matrix (S6)					—	ow Dark Surface (TF12)		
Dark Surface (S7) (LRR R, MLRA 149B)					Other (exp	plain in remarks)		
Restrictive Layer (if observed):					Hydric Soil Present?	Yes		
Depth (in ches):				+				

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