

WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: SPP City/County: Carlton Sampling Date: 2016-09-02

Applicant/Owner: Enbridge State: Minnesota Sampling Point: CRC5161_200a2W

Investigator(s): DPT, MGH Section, Township, Range: S21, T48N, R17W

Landform (hillslope, terrace, etc.): Depression Local Relief (concave, convex, none): CC Slope (%): 0-2%

Subregion (LRR or MLRA): _____ Latitude: 46.6202248586... Longitude: -92.49135475... Datum: NAD83

Soil Map Unit Name: 549 NWI Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in Remarks): No

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 map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	<u>Yes</u>	Is the Sampled Area within a Wetland? <u>Yes</u> If yes, optional Wetland Site ID: <u>w-48n17w21-aa</u>
Hydric Soil Present?	<u>Yes</u>	
Wetland Hydrology Present?	<u>Yes</u>	
Remarks: (Explain alternative procedures here or in a separate report.) <u>No digging, existing road, potential buried utilities. Precipitation above normal based on WETS analysis.</u>		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
<u>yes</u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)	
<u>yes</u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)	
<u>yes</u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)	
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)	
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)	
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)	
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted/Stressed Plants (D1)	
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>YES</u> Geomorphic Position (D2)	
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)	
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)	
		<u>YES</u> FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	<u>Yes</u> Depth (inches) <u>4</u>	Wetland Hydrology Present? <u>Yes</u>	
Water Table Present?	<u>Yes</u> Depth (inches) <u>0</u>		
Saturation Present? (includes capillary fringe)	<u>Yes</u> Depth (inches) <u>0</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants.

 Sampling Point: CRC5161_...

Tree Stratum	(Plot Size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		<u>0</u> = Total Cover		
Sapling/Shrub Stratum	(Plot Size: <u>15</u>)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		<u>0</u> = Total Cover		
Herb Stratum	(Plot Size: <u>5</u>)			
1.	Phalaris arundinacea	95.00	Yes	FACW
2.	Eutrochium purpureum	5.00	No	FAC
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		<u>100</u> = Total Cover		
Woody Vine Stratum	(Plot Size: <u>30</u>)			
1.				
2.				
3.				
4.				
		<u>0</u> = Total Cover		

Dominance Test worksheet:
 Number of Dominant Species
 That Are OBL, FACW, or FAC: 1 (A)
 Total Number of Dominant
 Species Across All Strata: 1 (B)
 Percent of Dominant Species
 That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	0.00 x 1	<u>0</u>
FACW species	95.00 x 2	<u>190</u>
FACU species	0.00 x 3	<u>0</u>
UPL species	0.00 x 4	<u>0</u>
Column Totals	<u>100</u> (A)	<u>205</u> (B)

Prevalence Index = B/A = 2.05

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
yes 2 - Dominance Test is > 50%
yes 3 - Prevalence Index is ≤ 3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

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.

Herb - All herbaaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes

Remarks: (include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: CRC5161_...

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)

- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soil³:

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16)(LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, 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 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☒ Other (explain in remarks)

Restrictive Layer (if observed):

☐

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____

Remarks:

No digging, soils assumed hydric based on veg and hydro.

Site Photograph 1

Sampling Point: CRC5161_200a2W



Latitude: 46.6202163929554

Cowardin Classification: PEM

Longitude: -92.4913622160372

Circular 39: 2

Direction: north

Eggers & Reed: Fresh (Wet) Meadow

Remarks:



Latitude: 46.6202171892362

Cowardin Classification: PEM

Longitude: -92.4913770520058

Circular 39: 2

Direction: west

Eggers & Reed: Fresh (Wet) Meadow

Remarks: