

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SPP City/County: Carlton Sampling Date: 5/20/2014
 Applicant/Owner: Enbridge State: MN Sampling Point: CRC5043_310a1U
 Investigator(s): BJC/DGL Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Rise Local relief (concave, convex, none): CL
 Slope (%): 0 - 2% Lat.: 46.53514 Long.: -92.891437 Datum: _____
 Soil Map Unit Name: 980 NWI Classification: PSSB
 Are climatic/hydrologic conditions of the site typical for this time of the year? ☒ (If no, explain in remarks)
 Are vegetation ☐, soil ☐, or hydrology ☐ significantly disturbed? Are "normal
 Are vegetation ☐, soil ☐, or hydrology ☐ naturally problematic? circumstances" present? ☒
 (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS

Hydrophytic vegetation present? <u>N</u> Hydric soil present? <u>N</u> Indicators of wetland hydrology present? <u>N</u>	Is the sampled area within a wetland? <u>N</u> If yes, optional wetland site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) The upland sample point is located slightly upslope from the wetland in a grazed pasture.	

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1) ☐ High Water Table (A2) ☐ Saturation (A3) ☐ Water Marks (B1) ☐ Sediment Deposits (B2) ☐ Drift Deposits (B3) ☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Sparsely Vegetated Concave Surface (B8)	☐ Water-Stained Leaves (B9) ☐ Aquatic Fauna (B13) ☐ Marl Deposits (B15) ☐ Hydrogen Sulfide Odor (C1) ☐ Oxidized Rhizospheres on Living Roots (C3) ☐ Presence of Reduced Iron (C4) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Thin Muck Surface (C7) ☐ Other (Explain in Remarks)	☐ Surface Soil Cracks (B6) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ Microtopographic Relief (D4) ☐ FAC-Neutral Test (D5)	
Field Observations: Surface water present? Yes ☐ Water table present? Yes ☒ Saturation present? Yes ☒ (includes capillary fringe)		Depth (inches): _____ Depth (inches): <u>14</u> Depth (inches): <u>16</u>	
Indicators of wetland hydrology present? <u>N</u>			
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Recent heavy rainfall is likely the reason for the water observed in the soil pit.			

VEGETATION - Use scientific names of plants

Sampling Point: CRC5043_310a1U

Tree Stratum					Plot Size (30 ft)		Absolute % Cover	Dominant Species	Indicator Status
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
						0	= Total Cover		

Sapling/Shrub Stratum					Plot Size (15 ft)		Absolute % Cover	Dominant Species	Indicator Status
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
						0	= Total Cover		

Herb Stratum					Plot Size (5 ft)		Absolute % Cover	Dominant Species	Indicator Status
1	<i>Poa pratensis</i>					40	Y	FACU	
2	<i>Trifolium pratense</i>					30	Y	FACU	
3	<i>Taraxacum officinale</i>					10	N	FACU	
4	<i>Juncus tenuis</i>					5	N	FAC	
5	<i>Ranunculus hispidus</i>					5	N	FAC	
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
						90	= Total Cover		

Woody Vine Stratum					Plot Size (30)		Absolute % Cover	Dominant Species	Indicator Status
1									
2									
3									
4									
5									
						0	= Total Cover		

50/20 Thresholds

	20%	50%
Tree Stratum	0	0
Sapling/Shrub Stratum	0	0
Herb Stratum	18	45
Woody Vine Stratum	0	0

Dominance Test Worksheet
 Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across all Strata: 2 (B)
 Percent of Dominant Species that are OBL, FACW, or FAC: 0.00% (A/B)

Prevalence Index Worksheet
 Total % Cover of:
 OBL species 0 x 1 = 0
 FACW species 0 x 2 = 0
 FAC species 10 x 3 = 30
 FACU species 80 x 4 = 320
 UPL species 0 x 5 = 0
 Column totals 90 (A) 350 (B)
 Prevalence Index = B/A = 3.89

Hydrophytic Vegetation Indicators:
☐ Rapid test for hydrophytic vegetation
☐ Dominance test is >50%
☐ Prevalence index is ≤3.0*
☐ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet)
☐ Problematic hydrophytic vegetation* (explain)
*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:
Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb - All herbaceous (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? N

Remarks: (Include photo numbers here or on a separate sheet)
 The vegetation is highly grazed in this area due to cattle.

SOIL

Sampling Point: CRC5043_310a1U

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth (In.)	Matrix			Redox Features					Texture	Remarks
	Color (moist)		%	Color (moist)		%	Type*	Loc**		
0-8	Hue_10YR	2/2	90	Hue_7.5YR	3/3	10	C	M	SCL	
8-18	Hue_10YR	5/3	90	Hue_7.5YR	4/6	10	C	M	LVFS	

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains
**Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

☐ Histic Sol (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)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐

Indicators for Problematic Hydric Soils:

☐ 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, L**)
☐ 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)

*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric soil present? <u>N</u>
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Remarks:
Although faint redox features were observed, soils do not meet any hydric indicators.