

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SPP City/County: Carlton Sampling Date: 5/28/2014
 Applicant/Owner: Enbridge State: MN Sampling Point: CRC5163_200a2U
 Investigator(s): LEB/CPF Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Side slope Local relief (concave, convex, none): VC
 Slope (%): 60%+ Lat.: 46.62739 Long.: -92.489993 Datum: _____
 Soil Map Unit Name: 355E NWI Classification: _____
 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 point is located on a steep slope within an aspen forest.	

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) ☐ 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)	Secondary Indicators (minimum of two required) ☐ 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): _____ Depth (inches): _____	Indicators of wetland hydrology present? <u>N</u>
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No wetland hydrology was observed.		

VEGETATION - Use scientific names of plants
Sampling Point:

CRC5163_200a2U

Tree Stratum			Plot Size (30 ft)			Absolute % Cover	Dominant Species	Indicator Status
1	<i>Populus tremuloides</i>		60	Y	FAC			
2								
3								
4								
5								
6								
7								
8								
9								
10								
			60	= Total Cover				

Sapling/Shrub Stratum			Plot Size (15 ft)			Absolute % Cover	Dominant Species	Indicator Status
1	<i>Corylus cornuta</i>		40	Y	FACU			
2								
3								
4								
5								
6								
7								
8								
9								
10								
			40	= Total Cover				

Herb Stratum			Plot Size (5 ft)			Absolute % Cover	Dominant Species	Indicator Status
1	<i>Carex pensylvanica</i>		50	Y	NI			
2	<i>Maianthemum canadense</i>		40	Y	FACU			
3	<i>Aralia nudicaulis</i>		5	N	FACU			
4	<i>Anemone quinquefolia</i>		5	N	FACU			
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
			100	= Total Cover				

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

Remarks: (Include photo numbers here or on a separate sheet)
 The vegetation is dominated by quaking aspen.

50/20 Thresholds

	20%	50%
Tree Stratum	12	30
Sapling/Shrub Stratum	8	20
Herb Stratum	20	50
Woody Vine Stratum	0	0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 4 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 25.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	60	x 3 =	180
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column totals	150	(A)	540 (B)

Prevalence Index = B/A = 3.60

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

SOIL

Sampling Point: CRC5163_200a2U

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*		
0-6	Hue_10YR	2/1	100						LS
6-18	Hue_10YR	4/6	100						S

*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**)

☐ 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 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?

N

Remarks:

No hydric soil indicators were observed.