

**WETLAND DETERMINATION DATA FORM - North Central and Northeast Region**

Project/Site: SPP City/County: Carlton Sampling Date: 2016-07-18

Applicant/Owner: Enbridge State: Minnesota Sampling Point: u-47n18w2-ac1

Investigator(s): ZCW Section, Township, Range: S 2, T 47N, R 18W

Landform (hillslope, terrace, etc.): Side Slope Local Relief (concave, convex, none): VL Slope (%): 8-15%

Subregion (LRR or MLRA): \_\_\_\_\_ Latitude: 46.5870759822... Longitude: -92.57800460... Datum: NAD83

Soil Map Unit Name: 188E NWI Classification: N/A

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

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes

Are Vegetation No, Soil \_\_\_\_\_, 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>No</u>	<b>Is the Sampled Area</b>
Hydric Soil Present?	<u>No</u>	<b>within a Wetland?</b> <span style="float:right;"><u>No</u></span>
Wetland Hydrology Present?	<u>No</u>	If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)		

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>	<u>Secondary Indicators (minimum of two required)</u>
<u>Primary Indicators (minimum of one is required; check all that apply)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted/Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

<b>Field Observations:</b>	
Surface Water Present? <u>No</u> Depth (inches) _____	<b>Wetland Hydrology Present?</b> <u>No</u>
Water Table Present? <u>No</u> Depth (inches) _____	
Saturation Present? <u>No</u> Depth (inches) _____ (includes capillary fringe)	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION - Use scientific names of plants.**

Sampling Point: u-47n18w...

	Absolute % Cover	Dominant Species?	Indicator Status		
<b>Tree Stratum</b> (Plot Size: <u>30</u> )					
1. <u>Quercus rubra</u>	<u>60.00</u>	<u>Yes</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)	
2. <u>Acer saccharum</u>	<u>15.00</u>	<u>No</u>	<u>UPL</u>		
3. <u>Portulaca grandiflora</u>	<u>5.00</u>	<u>No</u>	<u>UPL</u>		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
<u>80</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: <span style="float:right">Multiply by:</span> OBL species <u>0.00</u> x 1 <u>0</u> FACW species <u>0.00</u> x 2 <u>0</u> FACU species <u>100.00</u> x 3 <u>400</u> UPL species <u>75.00</u> x 4 <u>375</u> Column Totals <u>185</u> (A) <u>805</u> (B) Prevalence Index = B/A = <u>4.3513513...</u>	
<b>Sapling/Shrub Stratum</b> (Plot Size: <u>15</u> )					
1. <u>Acer saccharum</u>	<u>10.00</u>	<u>Yes</u>	<u>UPL</u>		
2. <u>Corylus cornuta</u>	<u>5.00</u>	<u>Yes</u>	<u>UPL</u>		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
<u>15</u> = Total Cover					
<b>Herb Stratum</b> (Plot Size: <u>5</u> )					
1. <u>Carex woodii</u>	<u>40.00</u>	<u>Yes</u>		<b>Hydrophytic Vegetation Indicators:</b> _____ 1 - Rapid Test for Hydrophytic Vegetation <u>no</u> 2 - Dominance Test is > 50% <u>no</u> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup> _____ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Eurybia macrophylla</u>	<u>15.00</u>	<u>No</u>	<u>FACU</u>		
3. <u>Pteridium aquilinum</u>	<u>10.00</u>	<u>No</u>	<u>FACU</u>		
4. <u>Clintonia borealis</u>	<u>10.00</u>	<u>No</u>	<u>FAC</u>		
5. <u>Maianthemum canadense</u>	<u>5.00</u>	<u>No</u>	<u>FACU</u>		
6. <u>Aralia nudicaulis</u>	<u>5.00</u>	<u>No</u>	<u>FACU</u>		
7. <u>Vaccinium angustifolium</u>	<u>5.00</u>	<u>No</u>	<u>FACU</u>		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
12. _____	_____	_____	_____		
<u>90</u> = Total Cover					
<b>Woody Vine Stratum</b> (Plot Size: <u>30</u> )					
1. _____	_____	_____	_____	<b>Definitions of Vegetation Strata:</b> <b>Tree</b> - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height. <b>Sapling/Shrub</b> - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. <b>Herb</b> - All herbaecous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. <b>Woody vines</b> - All woody vines greater than 3.28 ft in height.	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
<u>0</u> = Total Cover				<b>Hydrophytic Vegetation Present?</b> <span style="float:right"><u>No</u></span>	
<b>Remarks:</b> (include photo numbers here or on a separate sheet.)					



Site Photograph 1

Sampling Point: u-47n18w2-ac1



Latitude: 46.5871469350966

Cowardin Classification: \_\_\_\_\_

Longitude: -92.577957082626

Circular 39: \_\_\_\_\_

Direction: West

Eggers & Reed: \_\_\_\_\_

Remarks:

Site Photograph 2

Sampling Point: u-47n18w2-ac1



Latitude: 46.5871465579109

Cowardin Classification: \_\_\_\_\_

Longitude: -92.577956998807

Circular 39: \_\_\_\_\_

Direction: North

Eggers & Reed: \_\_\_\_\_

Remarks: