

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: SPP City/County: Aitkin Sampling Date: 9/20/2014
 Applicant/Owner: Enbridge State: MN Sampling Point: AIC5322_500a2W
 Investigator(s): MRK/OTG Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none) LC
 Slope (%): 3 - 7% Lat.: 46.58077267 Long.: -93.0953125 Datum: _____
 Soil Map Unit Name: 540 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>Y</u> Hydric soil present? <u>Y</u> Indicators of wetland hydrology present? <u>Y</u>	Is the sampled area within a wetland? <u>Y</u> If yes, optional wetland site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) The wetland is an alder thicket with saturation at the surface and a water table one inch below the surface.	

HYDROLOGY

Primary Indicators (minimum of one is required; check all that apply) <table style="width: 100%;"> <tr> <td>☐ Surface Water (A1)</td> <td>☐ Water-Stained Leaves (B9)</td> </tr> <tr> <td>☒ High Water Table (A2)</td> <td>☐ Aquatic Fauna (B13)</td> </tr> <tr> <td>☒ Saturation (A3)</td> <td>☐ Marl Deposits (B15)</td> </tr> <tr> <td>☐ Water Marks (B1)</td> <td>☐ Hydrogen Sulfide Odor (C1)</td> </tr> <tr> <td>☐ Sediment Deposits (B2)</td> <td>☐ Oxidized Rhizospheres on Living Roots (C3)</td> </tr> <tr> <td>☐ Drift Deposits (B3)</td> <td>☐ Presence of Reduced Iron (C4)</td> </tr> <tr> <td>☐ Algal Mat or Crust (B4)</td> <td>☐ Recent Iron Reduction in Tilled Soils (C6)</td> </tr> <tr> <td>☐ Iron Deposits (B5)</td> <td>☐ Thin Muck Surface (C7)</td> </tr> <tr> <td>☐ Inundation Visible on Aerial Imagery (B7)</td> <td>☐ Other (Explain in Remarks)</td> </tr> <tr> <td>☐ Sparsely Vegetated Concave Surface (B8)</td> <td></td> </tr> </table>		☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☒ High Water Table (A2)	☐ Aquatic Fauna (B13)	☒ Saturation (A3)	☐ Marl Deposits (B15)	☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Sparsely Vegetated Concave Surface (B8)		Secondary Indicators (minimum of two required) <table style="width: 100%;"> <tr> <td>☐ Surface Soil Cracks (B6)</td> </tr> <tr> <td>☐ Drainage Patterns (B10)</td> </tr> <tr> <td>☐ Moss Trim Lines (B16)</td> </tr> <tr> <td>☐ Dry-Season Water Table (C2)</td> </tr> <tr> <td>☐ Crayfish Burrows (C8)</td> </tr> <tr> <td>☐ Saturation Visible on Aerial Imagery (C9)</td> </tr> <tr> <td>☐ Stunted or Stressed Plants (D1)</td> </tr> <tr> <td>☒ Geomorphic Position (D2)</td> </tr> <tr> <td>☐ Shallow Aquitard (D3)</td> </tr> <tr> <td>☐ Microtopographic Relief (D4)</td> </tr> <tr> <td>☒ FAC-Neutral Test (D5)</td> </tr> </table>	☐ 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)
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)																																
☒ High Water Table (A2)	☐ Aquatic Fauna (B13)																																
☒ Saturation (A3)	☐ Marl Deposits (B15)																																
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)																																
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)																																
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)																																
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)																																
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)																																
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)																																
☐ Sparsely Vegetated Concave Surface (B8)																																	
☐ 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 ☐ Depth (inches): _____ Water table present? Yes ☒ Depth (inches): <u>1</u> Saturation present? Yes ☒ Depth (inches): <u>0</u> (includes capillary fringe)	Indicators of wetland hydrology present? <u>Y</u>																																
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:																																	
Remarks: The wetland sample point is saturated at the surface.																																	