

WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: SPP City/County: Clearwater Sampling Date: 2015-07-09
Applicant/Owner: Enbridge State: Minnesota Sampling Point: CLC5004_200c1W
Investigator(s): BEH/KAT Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Depression Local Relief (concave, convex, none): CC Slope (%): 0-2
Subregion (LRR or MLRA): LRR K Latitude: 47.67312996 Longitude: -95.38903383 Datum: Minnesota State ...
Soil Map Unit Name: 544 NWI Classification: PEM/SS1C

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

YesAre Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? YesAre 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? If yes, optional Wetland Site ID: _____
Hydric Soil Present?	<u>Yes</u>	
Wetland Hydrology Present?	<u>Yes</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Shrub-Carr sample point dominated by willows and sedges in a wetland complex also containing emergent wetland areas.		

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:		Wetland Hydrology Present? <u>Yes</u>
Surface Water Present? <u>Yes</u>	Depth (inches) <u>1</u>	
Water Table Present? <u>Yes</u>	Depth (inches) <u>0</u>	
Saturation Present? <u>Yes</u> (includes capillary fringe)	Depth (inches) <u>0</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: One inch of standing water was observed at the sample point.		

Sampling Point: CLC5004_...

Northcentral and Northeast Region – Version 2.0

SOIL

Sampling Point: CLC5004_...

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soil ³ :
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16)(LRR K, L, R)
☐ Black Histic (A3)	☒ Loamy Mucky Mineral (F1) (LRR K, L)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Dark Surface (S7) (LRR K, M)
☐ Stratified Layers (A5)	☐ Depleted Matrix (F3)	☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Depleted Below Dark Surface (A11)	☒ Redox Dark Surface (F6)	☐ Thin Dark Surface (S9) (LRR K, L)
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)	☐ Iron-Manganese Masses (F12) (LRR K, L, R)
☐ Sandy Mucky Mineral (S1)	☐ Redox Depressions (F8)	☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
☐ Sandy Gleyed Matrix (S4)		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
☐ Sandy Redox (S5)		☐ Red Parent Material (F21)
☐ Stripped Matrix (S6)		☐ Very Shallow Dark Surface (TF12)
☐ Dark Surface (S7) (LRR R, MLRA 149B)		☐ Other (explain in remarks)
Restrictive Layer (if observed): ☐	Hydric Soil Present? Yes ☐	
Type: _____		
Depth (inches): _____		
Remarks:		
Soil is a thin layer of black muck over a layer of loamy mucky mineral, which is underlain by black clay with minimal redox; profile meets hydric soil indicators F1-Loamy Mucky Mineral and F6- Redox Dark Surface.		