

WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: SPP City/County: Clearwater Sampling Date: 2015-07-11
Applicant/Owner: Enbridge State: Minnesota Sampling Point: CLC5004_200m3U
Investigator(s): BEH/KAT Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Foot Slope Local Relief (concave, convex, none): LL Slope (%): 3
Subregion (LRR or MLRA): LRR K Latitude: 47.6696866 Longitude: -95.39942016 Datum: Minnesota State ...
Soil Map Unit Name: 544 NWI Classification: PEMCd

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>No</u>	Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: _____
Hydric Soil Present?	<u>No</u>	
Wetland Hydrology Present?	<u>No</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Forested upland island surrounded by marsh.		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted/Stressed Plants (D1)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)
☐ Sparsely Vegetated Concave Surface (B8)		☐ Microtopographic Relief (D4)
		☐ FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present?	<u>No</u> Depth (inches) _____	Wetland Hydrology Present? <u>No</u>
Water Table Present?	<u>No</u> Depth (inches) _____	
Saturation Present? (includes capillary fringe)	<u>No</u> Depth (inches) _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No primary or secondary wetland hydrology indicators were observed.		

VEGETATION - Use scientific names of plants.

 Sampling Point: CLC5004_...

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot Size: <u>30'</u>)				Dominance Test worksheet:
1. <u>Ulmus americana</u>	<u>35.00</u>	<u>Yes</u>	<u>FACW</u>	Number of Dominant Species
2. <u>Quercus macrocarpa</u>	<u>15.00</u>	<u>Yes</u>	<u>FACU</u>	That Are OBL, FACW, or FAC: <u>1</u> (A)
3. <u>Populus tremuloides</u>	<u>5.00</u>	<u>No</u>	<u>FACU</u>	Total Number of Dominant
4. _____	_____	_____	_____	<u>3</u>
5. _____	_____	_____	_____	Species Across All Strata: _____ (B)
6. _____	_____	_____	_____	Percent of Dominant Species
7. _____	_____	_____	_____	<u>33.3333333333...</u>
	<u>55</u>	<u>= Total Cover</u>		That Are OBL, FACW, or FAC: _____ (A/B)
<u>Sapling/Shrub Stratum</u> (Plot Size: _____)				Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species <u>0.00</u> x 1 <u>0</u>
3. _____	_____	_____	_____	FACW species <u>45.00</u> x 2 <u>90</u>
4. _____	_____	_____	_____	FACU species <u>0.00</u> x 3 <u>400</u>
5. _____	_____	_____	_____	UPL species <u>15.00</u> x 4 <u>75</u>
6. _____	_____	_____	_____	Column Totals <u>160</u> (A) <u>565</u> (B)
7. _____	_____	_____	_____	Prevalence Index = B/A = <u>3.53125</u>
	<u>0</u>	<u>= Total Cover</u>		Hydrophytic Vegetation Indicators:
<u>Herb Stratum</u> (Plot Size: <u>5'</u>)				_____ 1 - Rapid Test for Hydrophytic Vegetation
1. <u>Poa pratensis</u>	<u>30.00</u>	<u>Yes</u>	<u>FACU</u>	<u>no</u> 2 - Dominance Test is > 50%
2. <u>Taraxacum officinale</u>	<u>20.00</u>	<u>No</u>	<u>FACU</u>	<u>no</u> 3 - Prevalence Index is ≤ 3.0 ¹
3. <u>Phleum pratense</u>	<u>15.00</u>	<u>No</u>	<u>FACU</u>	_____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. <u>Bromus inermis</u>	<u>15.00</u>	<u>No</u>	<u>UPL</u>	Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u>Elymus repens</u>	<u>10.00</u>	<u>No</u>	<u>FACU</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. <u>Trifolium hybridum</u>	<u>5.00</u>	<u>No</u>	<u>FACU</u>	Definitions of Vegetation Strata:
7. <u>Phalaris arundinacea</u>	<u>5.00</u>	<u>No</u>	<u>FACW</u>	Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.
8. <u>Agrostis gigantea</u>	<u>5.00</u>	<u>No</u>	<u>FACW</u>	Sapling/Shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9. _____	_____	_____	_____	Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10. _____	_____	_____	_____	Woody vines - All woody vines greater than 3.28 ft in height.
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
	<u>105</u>	<u>= Total Cover</u>		
<u>Woody Vine Stratum</u> (Plot Size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	<u>=Total Cover</u>		
Remarks: (include photo numbers here or on a separate sheet.)				
Tree cover is dominated by American elm and bur oak. The herbaceous layer is a mixture of grasses, primarily Kentucky bluegrass.				

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? <u>No</u>	
Type: _____		
Depth (inches): _____		
Remarks:		
Soil is dark clay loam underlain by dark brown sandy clay. The bottom layer is depleted sandy clay mixed with white streaks. The profile does not meet any hydric soil indicators.		