

WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: SPP City/County: Clearwater Sampling Date: 2015-07-10
 Applicant/Owner: Enbridge State: Minnesota Sampling Point: CLC5004_200k2U
 Investigator(s): KAT/BEH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Shoulder Local Relief (concave, convex, none): VL Slope (%): 4
 Subregion (LRR or MLRA): LRR K Latitude: 47.66848433 Longitude: -95.39874366 Datum: Minnesota State ...
 Soil Map Unit Name: 718C NWI Classification: _____

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 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.) Upland sample point on the edge of a forest, upslope from an adjacent 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: Wetland hydrology indicators were not 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>Quercus macrocarpa</u>	<u>35.00</u>	<u>Yes</u>	<u>FACU</u>	Number of Dominant Species _____
2. <u>Fraxinus pennsylvanica</u>	<u>10.00</u>	<u>No</u>	<u>FACW</u>	That Are OBL, FACW, or FAC: _____ (A)
3. <u>Fraxinus nigra</u>	<u>5.00</u>	<u>No</u>	<u>FACW</u>	Total Number of Dominant _____
4. _____	<u>5.00</u>	<u>No</u>	<u>FACU</u>	Species Across All Strata: _____ (B)
5. _____				Percent of Dominant Species _____
6. <u>Populus tremuloides</u>				That Are OBL, FACW, or FAC: _____ (A/B)
7. _____				Prevalence Index worksheet:
	<u>55</u>	= Total Cover		Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 <u>0</u> FACW species _____ x 2 <u>0</u> FACU species _____ x 3 <u>0</u> UPL species _____ x 4 <u>0</u> Column Totals _____ (A) _____ (B) Prevalence Index = B/A = _____
<u>Sapling/Shrub Stratum</u> (Plot Size: <u>15'</u>)				Hydrophytic Vegetation Indicators:
1. _____				_____ 1 - Rapid Test for Hydrophytic Vegetation
2. _____				_____ 2 - Dominance Test is > 50%
3. _____				_____ 3 - Prevalence Index is ≤ 3.0 ¹
4. _____				_____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____				Problematic Hydrophytic Vegetation ¹ (Explain)
6. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____				Definitions of Vegetation Strata:
	<u>0</u>	= Total Cover		Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.
<u>Herb Stratum</u> (Plot Size: <u>5'</u>)				Sapling/Shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
1. <u>Poa pratensis</u>	<u>30.00</u>	<u>Yes</u>	<u>FACU</u>	Herb - All herbaeaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2. <u>Elymus repens</u>	<u>20.00</u>	<u>Yes</u>	<u>FACU</u>	Woody vines - All woody vines greater than 3.28 ft in height.
3. <u>Taraxacum officinale</u>	<u>15.00</u>	<u>No</u>	<u>FACU</u>	Hydrophytic Vegetation Present? _____
4. <u>Dactylis glomerata</u>	<u>10.00</u>	<u>No</u>	<u>FACU</u>	
5. <u>Phleum pratense</u>	<u>10.00</u>	<u>No</u>	<u>FACU</u>	
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	<u>85</u>	= Total Cover		
<u>Woody Vine Stratum</u> (Plot Size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				
	<u>0</u>	=Total Cover		
Remarks: (include photo numbers here or on a separate sheet.)				
The sample site is dominated by bur oak trees; ground cover is predominantly Kentucky bluegrass and quackgrass. Hydrophytic vegetation is not present.				

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 fine sandy loam underlain by brown loamy fine sand. Below is brown clay over depleted silty clay; the profile does not meet any hydric soil indicators.		