

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_200j1U
Investigator(s): KAT/BEH Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Side Slope Local Relief (concave, convex, none): LV Slope (%): 10
Subregion (LRR or MLRA): LRR K Latitude: 47.67065366 Longitude: -95.396881500 Datum: Minnesota State ...
Soil Map Unit Name: 718C NWI Classification: PFO1C

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.) Upland sample point located on the edge of a forest and adjacent to a forested wetland.		

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>Populus tremuloides</u>	<u>15.00</u>	<u>Yes</u>	<u>FACU</u>	Number of Dominant Species
2. <u>Fraxinus pennsylvanica</u>	<u>5.00</u>	<u>Yes</u>	<u>FACW</u>	That Are OBL, FACW, or FAC: <u>1</u> (A)
3. _____	_____	_____	_____	Total Number of Dominant
4. _____	_____	_____	_____	<u>5</u>
5. _____	_____	_____	_____	Species Across All Strata: _____ (B)
6. _____	_____	_____	_____	Percent of Dominant Species
7. _____	_____	_____	_____	<u>20</u>
	<u>20</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>5.00</u> x 2 <u>10</u>
4. _____	_____	_____	_____	FACU species <u>0.00</u> x 3 <u>460</u>
5. _____	_____	_____	_____	UPL species <u>0.00</u> x 4 <u>0</u>
6. _____	_____	_____	_____	Column Totals <u>120</u> (A) <u>470</u> (B)
7. _____	_____	_____	_____	Prevalence Index = B/A = <u>3.9166666...</u>
	<u>0</u>	<u>= Total Cover</u>		Hydrophytic Vegetation Indicators:
				_____ 1 - Rapid Test for Hydrophytic Vegetation
				<u>no</u> 2 - Dominance Test is > 50%
				<u>no</u> 3 - Prevalence Index is ≤ 3.0 ¹
				_____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>Herb Stratum</u> (Plot Size: <u>5'</u>)				Definitions of Vegetation Strata:
1. <u>Poa pratensis</u>	<u>45.00</u>	<u>Yes</u>	<u>FACU</u>	Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.
2. <u>Phleum pratense</u>	<u>20.00</u>	<u>Yes</u>	<u>FACU</u>	Sapling/Shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
3. <u>Elymus repens</u>	<u>20.00</u>	<u>Yes</u>	<u>FACU</u>	Herb - All herbaeceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
4. <u>Dactylis glomerata</u>	<u>10.00</u>	<u>No</u>	<u>FACU</u>	Woody vines - All woody vines greater than 3.28 ft in height.
5. <u>Arctium minus</u>	<u>5.00</u>	<u>No</u>	<u>FACU</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
	<u>100</u>	<u>= Total Cover</u>		
<u>Woody Vine Stratum</u> (Plot Size: _____)				Hydrophytic Vegetation Present? _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u>	<u>=Total Cover</u>		
Remarks: (include photo numbers here or on a separate sheet.)				
Sparse tree cover consists of green ash and quaking aspen. Ground cover is dominated by Kentucky bluegrass, timothy, and quackgrass.				

SOIL

Sampling Point: CLC5004_...

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	10YR 2 1	100					FSL	
7-24	10YR 5 4	100					LFS	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

☐ Histosol (A1)

☐ Histic Epipedon (A2)

☐ Black Histic (A3)

☐ Hydrogen Sulfide (A4)

☐ Stratified Layers (A5)

☐ Depleted Below Dark Surface (A11)

☐ Thick Dark Surface (A12)

☐ Sandy Mucky Mineral (S1)

☐ Sandy Gleyed Matrix (S4)

☐ Sandy Redox (S5)

☐ Stripped Matrix (S6)

☐ Dark Surface (S7) (LRR R, MLRA 149B)

☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)

☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)

☐ Loamy Mucky Mineral (F1) (LRR K, L)

☐ Loamy Gleyed Matrix (F2)

☐ Depleted Matrix (F3)

☐ Redox Dark Surface (F6)

☐ Depleted Dark Surface (F7)

☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soil³:

☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)

☐ Coast Prairie Redox (A16)(LRR K, L, R)

☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)

☐ Dark Surface (S7) (LRR K, M)

☐ Polyvalue Below Surface (S8) (LRR K, L)

☐ Thin Dark Surface (S9) (LRR K, L)

☐ Iron-Maganese Masses (F12) (LRR K, L, R)

☐ Piedmont Floodplain Soils (F19) (MLRA 149B)

☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)

☐ Red Parent Material (F21)

☐ Very Shallow Dark Surface (TF12)

☐ Other (explain in remarks)

Restrictive Layer (if observed):

☐

Type: _____

Depth (inches): _____

Hydric Soil Present? No _____

Remarks:

Soil is dark fine sandy loam underlain by brown loamy fine sand; the profile does not meet any hydric soil indicators.