

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_20011U
Investigator(s): BEH/KAT Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Side Slope Local Relief (concave, convex, none): LL Slope (%): 5
Subregion (LRR or MLRA): LRR K Latitude: 47.66863298 Longitude: -95.40374282 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):

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>Yes</u>	
Wetland Hydrology Present?	<u>No</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Upland sample point in a cattle pasture, adjacent to a shallow marsh. Although hydric soils are present, the area lacks wetland hydrology and hydrophy...		

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	
Tree Stratum (Plot Size: _____)				Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species
2. _____	_____	_____	_____	That Are OBL, FACW, or FAC: <u>0</u> (A)
3. _____	_____	_____	_____	Total Number of Dominant
4. _____	_____	_____	_____	<u>2</u>
5. _____	_____	_____	_____	Species Across All Strata: _____ (B)
6. _____	_____	_____	_____	Percent of Dominant Species
7. _____	_____	_____	_____	That Are OBL, FACW, or FAC: <u>0</u> (A/B)
	<u>0</u> = Total Cover			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot Size: _____)				Total % Cover of: Multiply by:
1. _____	_____	_____	_____	OBL species <u>0.00</u> x 1 <u>0</u>
2. _____	_____	_____	_____	FACW species <u>10.00</u> x 2 <u>20</u>
3. _____	_____	_____	_____	FACU species <u>0.00</u> x 3 <u>280</u>
4. _____	_____	_____	_____	UPL species <u>10.00</u> x 4 <u>50</u>
5. _____	_____	_____	_____	Column Totals <u>90</u> (A) <u>350</u> (B)
6. _____	_____	_____	_____	Prevalence Index = B/A = <u>3.888888...</u>
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:
	<u>0</u> = Total Cover			_____ 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot Size: <u>5'</u> _____)				<u>no</u> 2 - Dominance Test is > 50%
1. <u>Taraxacum officinale</u>	<u>20.00</u>	<u>Yes</u>	<u>FACU</u>	<u>no</u> 3 - Prevalence Index is ≤ 3.0 ¹
2. <u>Poa pratensis</u>	<u>20.00</u>	<u>Yes</u>	<u>FACU</u>	_____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
3. <u>Phleum pratense</u>	<u>10.00</u>	<u>No</u>	<u>FACU</u>	Problematic Hydrophytic Vegetation ¹ (Explain)
4. <u>Agrostis gigantea</u>	<u>10.00</u>	<u>No</u>	<u>FACW</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. <u>Elymus repens</u>	<u>10.00</u>	<u>No</u>	<u>FACU</u>	Definitions of Vegetation Strata:
6. <u>Bromus inermis</u>	<u>10.00</u>	<u>No</u>	<u>UPL</u>	Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.
7. <u>Dactylis glomerata</u>	<u>10.00</u>	<u>No</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.
8. _____	_____	_____	_____	Herb - All herbaeceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9. _____	_____	_____	_____	Woody vines - All woody vines greater than 3.28 ft in height.
10. _____	_____	_____	_____	Hydrophytic Vegetation Present? _____
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
	<u>90</u> = Total Cover			
Woody Vine Stratum (Plot Size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	<u>0</u> = Total Cover			
Remarks: (include photo numbers here or on a separate sheet.)				
Sample site dominated by common dandelion and 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? Yes ☐	
Type: _____ Depth (inches): _____		
Remarks:		
Soil is dark brown fine sandy loam underlain by depleted sandy clay; the profile meets hydric soil indicator A11-Depleted Below Dark Surface.		