

WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: SPP City/County: Aitkin Sampling Date: 2015-07-31

Applicant/Owner: Enbridge State: Minnesota Sampling Point: AIC5319k2W_R

Investigator(s): DGL/KDD Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Depression Local Relief (concave, convex, none): CC Slope (%): 0-5%

Subregion (LRR or MLRA): LRR K Latitude: 46.5833537048... Longitude: -93.09434099... Datum: Minnesota State ...

Soil Map Unit Name: 546 NWI Classification: PFO1B

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>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.)
The wetland consists of a small pocket of fresh wet meadow located along an overgrown trail surrounded by a mixed hardwood forest community.

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>Yes</u>
Water Table Present? <u>No</u> Depth (inches) _____	
Saturation Present? <u>No</u> Depth (inches) _____ (includes capillary fringe)	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
The wetland is located in a depression within the landscape. Surface water is present in other areas of the wetland, but not at the sample point.

VEGETATION - Use scientific names of plants.

 Sampling Point: AIC5319k2...

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot Size: <u>30 ft</u>)				Dominance Test worksheet:
1. <u>Populus tremuloides</u>	<u>5.00</u>	<u>Yes</u>	<u>FACU</u>	Number of Dominant Species
2. _____	_____	_____	_____	That Are OBL, FACW, or FAC: <u>4</u> (A)
3. _____	_____	_____	_____	Total Number of Dominant
4. _____	_____	_____	_____	<u>4</u>
5. _____	_____	_____	_____	Species Across All Strata: _____ (B)
6. _____	_____	_____	_____	Percent of Dominant Species
7. _____	_____	_____	_____	That Are OBL, FACW, or FAC: <u>100</u> (A/B)
	<u>5</u> = Total Cover			Prevalence Index worksheet:
<u>Sapling/Shrub Stratum</u> (Plot Size: <u>15 ft</u>)				Total % Cover of: _____ Multiply by: _____
1. <u>Alnus incana</u>	<u>5.00</u>	<u>Yes</u>	<u>FACW</u>	OBL species <u>80.00</u> x 1 <u>80</u>
2. _____	_____	_____	_____	FACW species <u>25.00</u> x 2 <u>50</u>
3. _____	_____	_____	_____	FACU species <u>5.00</u> x 3 <u>0</u>
4. _____	_____	_____	_____	UPL species <u>0.00</u> x 4 <u>0</u>
5. _____	_____	_____	_____	Column Totals <u>110</u> (A) <u>145</u> (B)
6. _____	_____	_____	_____	Prevalence Index = B/A = <u>1.3181818...</u>
7. _____	<u>5</u> = Total Cover			Hydrophytic Vegetation Indicators:
				_____ 1 - Rapid Test for Hydrophytic Vegetation
				<u>yes</u> 2 - Dominance Test is > 50%
				<u>yes</u> 3 - Prevalence Index is ≤ 3.0 ¹
				_____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
<u>Herb Stratum</u> (Plot Size: <u>5 ft</u>)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Carex lacustris</u>	<u>40.00</u>	<u>Yes</u>	<u>OBL</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Calamagrostis canadensis</u>	<u>40.00</u>	<u>Yes</u>	<u>OBL</u>	
3. <u>Solidago gigantea</u>	<u>15.00</u>	<u>No</u>	<u>FACW</u>	
4. <u>Impatiens capensis</u>	<u>5.00</u>	<u>No</u>	<u>FACW</u>	
5. _____	_____	_____	_____	Definitions of Vegetation Strata:
6. _____	_____	_____	_____	Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.
7. _____	_____	_____	_____	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. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	<u>100</u> = Total Cover			
<u>Woody Vine Stratum</u> (Plot Size: <u>30 ft</u>)				Hydrophytic Vegetation Present? _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	<u>0</u> = Total Cover			
Remarks: (include photo numbers here or on a separate sheet.)				
The vegetation is dominated by lake sedge and bluejoint.				

SOIL

Sampling Point: AIC5319k...

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	
Remarks:		
The soils could not be sampled due to the location on an overgrown trail. The soils are assumed to be hydric based on the landscape position and dominant vegetation.		