WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: L3R City/County: Pennington Sampling Date: 2015-07-08

Applicant/Owner: Enbridge State: Minnesota Sampling Point: u-153n44w11-f1

Investigator(s): BCS/BJC Section, Township, Range:

Landform (hillslope, terrace, etc.): Talf Local Relief (concave, convex, none): Linear ... Slope (%): 0-2%

Subregion (LRR or MLRA): LRR F Latitude: 48.0916136457... Longitude: -96.27189986...

Datum: Minnesota State Plane North, NAD 83 (2011) U.S. feet

Soil Map Unit Name: Poppleton fine sand I47A 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?	Yes	**Is the Sampled Area**	
Hydric Soil Present?	No	**within a Wetland?**	No
Wetland Hydrology Present?	No	If yes, optional Wetland Site ID:	

Remarks: (Explain alternative procedures here or in a separate report.)

The upland sample area is located near a gravel farm road upslope from the associated ditch wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot Size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus tremuloides	20.00	Yes	FAC
2. Picea pungens	10.00	Yes	FAC
3. Quercus macrocarpa	5.00	No	FACU
4.			
	35	= Total Cover	
Sapling/Shrub Stratum (Plot Size: 15 ft)			
1. Prunus virginiana	15.00	Yes	FACU
2. Populus balsamifera	5.00	No	FACW
3. Corylus americana	5.00	No	UPL
4. Populus tremuloides	5.00	No	FAC
5.			
	30	= Total Cover	
Herb Stratum (Plot Size: 5 ft)			
1. Agrostis gigantea	40.00	Yes	FACW
2. Medicago lupulina	20.00	Yes	FACU
3. Toxicodendron rydbergii	10.00	No	FACU
4. Trifolium repens	5.00	No	FACU
5. Taraxacum officinale	2.00	No	FACU
6. Melilotus officinalis	2.00	No	FACU
7.			
8.			
9.			
10.			
	79	= Total Cover	
Woody Vine Stratum (Plot Size:)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0.00	x 1	0
FACW species	45.00	x 2	90
FACU species	35.00	x 3	236
UPL species	5.00	x 4	25
Column Totals	144 (A)		456 (B)

Prevalence Index = B/A = 3.1666666...

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- yes 2 - Dominance Test is > 50%
- no 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.

Hydrophytic Vegetation Present?

Remarks:

The sample area is dominated by quaking aspen and blue spruce in the tree stratum, chokecherry in the shrub stratum, and redtop and a variety of forbs in the herb stratum. Althoug...

SOIL

Sampling Point: u-153n44...

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	2.5Y 3 2	100					LFS	
8-24	2.5Y 5 3	90	10YR 3 6	10	C	M	FS	

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

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 1cm Muck (A9) (**LRR F, G, H**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 2.5cm Mucky Peat or Peat (S2)(**LRR G, H**)
- ☐ 5cm Mucky Peat or Peat (S3) (**LRR F**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ 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)
- ☐ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soil[3]:

- ☐ 1cm Muck (A9) (**LRR I, J**)
- ☐ Coast Prairie Redox (A16)(**LRR K, L, R**)
- ☐ Dark Surface (S7) (**LRR G**)
- ☐ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (explain in remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): ☐

Type: _____

Depth (inches): _____

Hydric Soil Present? No

Remarks:

The observed profile consists of a dark loamy fine sand underlain by a lighter fine sand with 10% redox concentrations; the soil does not meet any hydric indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Water-Stained Leaves (B9)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Salt Crust (B11)
- ____ Aquatic Invertebrates (B13)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Dry-Season Water Table (C2)
- ____ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ____ Presence of Reduced Iron (C4)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Sparsely Vegetated Concave Surface (B8)
- ____ Drainage Patterns (B10)
- ____ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Geomorphic Position (D2)
- ____ FAC-Neutral Test (D5)
- ____ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? No Depth (inches) _____

Water Table Present? No Depth (inches) _____

Saturation Present? No Depth (inches) _____

(includes capillary fringe)

Wetland Hydrology Present? No

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

Remarks:

No primary or secondary wetland hydrology indicators were observed.

Site Photograph 1

Sampling Point: u-153n44w11-f1