

WETLAND DETERMINATION DATA FORM
Great Plains Region

Project/Site:	L3R	Subregion (MLRA or LRR):	MLRA 56	Date:	10/02/14
Applicant:	Enbridge	NWI Classification:		County:	Red Lake
Investigators:	LEB/DGL			State:	MN
Soil Unit:	I39A			Sample Point:	u-151n42w15-p2
Landform:	Talf	Local Relief:	LL		
Slope (%):	0 - 2%	Latitude:	47.899953	Longitude:	-96.020611
		Datum:			
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks)				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> significantly disturbed?		Are normal circumstances present?		Township:	
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> naturally problematic?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Range: Dir:	

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	No	Hydic Soils Present?	No
Wetland Hydrology Present?	No	Is This Sampling Point Within A Wetland?	No

Remarks: The upland sample point is located upslope from the wetland in a large pasture.

HYDROLOGY

Wetland Hydrology Indicators (Check all that apply; Minimum of one primary or two secondary required):

Primary:

- A1 - Surface Water
- A2 - High Water Table
- A3 - Saturation
- B1 - Water Marks
- B2 - Sediment Deposits
- B3 - Drift Deposits
- B4 - Algal Mat or Crust
- B5 - Iron Deposits
- B7 - Inundation Visible on Aerial Imagery
- B9 - Water-Stained Leaves

- B11 - Salt Crust
- B13 - Aquatic Fauna
- C1 - Hydrogen Sulfide Odor
- C2 - Dry Season Water Table
- C3 - Oxidized Rhizospheres on Living Roots (not till)
- C4 - Presence of Reduced Iron
- C7 - Thin Muck Surface
- Other (Explain)

Secondary:

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

Field Observations:	Wetland Hydrology Present? <u> N </u>
Surface Water Present? Yes <input type="checkbox"/> Depth: _____ (in.)	
Water Table Present? Yes <input type="checkbox"/> Depth: _____ (in.)	
Saturation Present? Yes <input type="checkbox"/> Depth: _____ (in.)	

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

Remarks: No primary or secondary indicators of wetland hydrology were observed.

SOILS

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

(Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Depth (In.)	Matrix			Mottles				Texture	Remarks
	Color (Moist)		%	Color (Moist)	%	Type	Location		
0-6	Hue 10YR	3/1	100					SIL	
6-14	Hue 10YR	5/2	100					SC	

NRCS Hydic Soil Field Indicators (check here if indicators are not present):

- A1 - Histosol
- A2 - Histic Epipedon
- A3 - Black Histic
- A4 - Hydrogen Sulfide
- A5 - Stratified Layers (LRR F)
- A9 - 1 cm Muck (LRR FGH)
- A11 - Depleted Below Dark Surface
- A12 - Thick Dark Surface
- S1 - Sandy Mucky Mineral
- S2 - 2.5 cm Mucky Peat or Peat (LRR G, H)
- S3 - 5 cm Mucky Peat or Peat (LRR F)
- S4 - Sandy Gleyed Matrix

- S5 - Sandy Redox
- S6 - Stripped Matrix
- F1 - Loamy Mucky Mineral
- F2 - Loamy Gleyed Matrix
- F3 - Depleted Matrix
- F6 - Redox Dark Surface
- F7 - Depleted Dark Surface
- F8 - Redox Depressions
- F16 - High Plains Depressions (MLRA 72, 73 of LRR H)

Indicators for Problematic Soils¹

- A9 - 1 cm Muck (LRR I, J)
- A16 - Coast Prairie Redox (LRR F, G, H)
- S7 - Dark Surface (LRR G)
- F16 - High Plains Depressions (LRR H, outside MLRA 72, 73)
- F18 - Reduced Vertic
- TF2 - Red Parent Material
- TF12 - Very Shallow Dark Surface
- Other (Explain in Remarks)

¹Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer	Type: highly compacted layer	Depth: 14	Hydic Soil Present? <u> N </u>
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Remarks: Soils could only be sampled to 14 inches due to a restrictive layer of highly compacted soil.

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Project/Site: **L3R** Sample Point: **u-151n42w15-p2**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft. radius)

1.	Species Name	% Cover	Dominant	Ind. Status
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Total Cover = 0

Sapling/Shrub Stratum (Plot size: 15 ft. radius)

1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Prevalence Index Worksheet

Total % Cover of:	Multiply by:	
OBL spp. <u>25</u>	x 1 =	<u>25</u>
FACW spp. <u>10</u>	x 2 =	<u>20</u>
FAC spp. <u>0</u>	x 3 =	<u>0</u>
FACU spp. <u>65</u>	x 4 =	<u>260</u>
UPL spp. <u>0</u>	x 5 =	<u>0</u>
Total <u>100</u> (A)		<u>305</u> (B)

Prevalence Index = B/A = 3.050

Total Cover = 0

Herb Stratum (Plot size: 5 ft. radius)

1.	<i>Trifolium pratense</i>	40	Y	FACU
2.	<i>Carex pellita</i>	25	Y	OBL
3.	<i>Phleum pratense</i>	20	Y	FACU
4.	<i>Agrostis gigantea</i>	10	N	FACW
5.	<i>Melilotus officinalis</i>	5	N	FACU
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				

Hydrophytic Vegetation Indicators:

Rapid Test for Hydrophytic Vegetation

Dominance Test is > 50%

Prevalence Index is ≤ 3.0 *

Morphological Adaptations (Explain) *

Problem Hydrophytic Vegetation (Explain) *

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Total Cover = 100

Woody Vine Stratum (Plot size: 30 ft. radius)

1.				
2.				
3.				
5.				
4.				

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.

Herb - All herbaceous (non-woody) plants, regardless of size.

Woody Vines - All woody vines, regardless of height.

Total Cover = 0

Hydrophytic Vegetation Present? N

Remarks: **The vegetation is dominated by non-hydrophytic species and has been grazed.**

Additional Remarks: