

**WETLAND DETERMINATION DATA FORM**  
Great Plains Region

Project/Site:	L3R	Subregion (MLRA or LRR):	MLRA 56	Date:	09/30/14
Applicant:	Enbridge	County:	Red Lake	State:	MN
Investigators:	LEB/DGL	Soil Unit:	144A	NWI Classification:	
Landform:	Side slope	Local Relief:	VL	Sample Point:	u-151n42w15-i1
Slope (%):	0 - 2%	Latitude:	47.902136	Longitude:	-96.027746
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?			Section:	
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			Township:	
				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 slightly upslope from the wetland in a large cattle 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)

<b>Field Observations:</b>	<b>Wetland Hydrology Present?</b> <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	2/1	100					SIL	
6-14	Hue_10YR	2/1	100					SICL	
14-18	Hue_10YR	4/1	100					C	

**NRCS Hydric 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 Soils<sup>1</sup>**

- 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)

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

Restrictive Layer	Type: _____	Depth: _____	<b>Hydic Soil Present?</b> <u>  N  </u>
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Remarks: The soil is dry and compacted throughout the profile.

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Great Plains Region

Project/Site: **L3R** Sample Point: **u-151n42w15-i1**

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

Tree Stratum (Plot size: 30 ft. radius)

1.	Species Name	% Cover	Dominant	Ind. Status
1.	<i>Quercus macrocarpa</i>	25	Y	FACU
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

**Dominance Test Worksheet**

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Total Cover = 25

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

1.	<i>Symphoricarpos occidentalis</i>	25	Y	
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

**Prevalence Index Worksheet**

Total % Cover of:	Multiply by:	
OBL spp. <u>10</u>	x 1 =	<u>10</u>
FACW spp. <u>10</u>	x 2 =	<u>20</u>
FAC spp. <u>0</u>	x 3 =	<u>0</u>
FACU spp. <u>50</u>	x 4 =	<u>200</u>
UPL spp. <u>60</u>	x 5 =	<u>300</u>
Total <u>130</u> (A)		<u>530</u> (B)

Prevalence Index = B/A = 4.077

Total Cover = 25

Herb Stratum (Plot size: 5 ft. radius)

1.	<i>Carex pensylvanica</i>	60	Y	NI
2.	<i>Taraxacum officinale</i>	15	N	FACU
3.	<i>Phleum pratense</i>	10	N	FACU
4.	<i>Carex pellita</i>	10	N	OBL
5.	<i>Anemone canadensis</i>	10	N	FACW
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 = 105

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

1.				
2.				
3.				
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 moderately grazed.**

**Additional Remarks:**