

WETLAND DETERMINATION DATA FORM
Great Plains Region

Project/Site:	L3R	Date:	10/11/14
Applicant:	Enbridge	County:	Red Lake
Investigators:	KRG/BCS	State:	MN
Soil Unit:	159A	Subregion (MLRA or LRR):	MLRA 56
Landform:	Talf	NWI Classification:	
Slope (%):	0 - 2%	Local Relief:	LL
	Latitude: 47.8843528	Longitude: -95.9829141	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?		
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		
Section:			
Township:			
Range:			Dir:

SUMMARY OF FINDINGS

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

Remarks: The upland sample point is located within a mowed hayfield. Vegetation is dominated by orchard grass, Kentucky bluegrass, and milk-vetch.

HYDROLOGY

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

<p><u>Primary:</u></p> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B9 - Water-Stained Leaves	<input type="checkbox"/> B11 - Salt Crust <input type="checkbox"/> B13 - Aquatic Fauna <input type="checkbox"/> C1 - Hydrogen Sulfide Odor <input type="checkbox"/> C2 - Dry Season Water Table <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots (not till) <input type="checkbox"/> C4 - Presence of Reduced Iron <input type="checkbox"/> C7 - Thin Muck Surface <input type="checkbox"/> Other (Explain)	<p><u>Secondary:</u></p> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots (tilled) <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input type="checkbox"/> D2 - Geomorphic Position <input type="checkbox"/> D5 - FAC-Neutral Test <input type="checkbox"/> D7 - Frost-Heaved Hummocks (LRR F)
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Field Observations:

Surface Water Present? Yes <input type="checkbox"/>	Depth: _____ (in.)	Wetland Hydrology Present? <u> N </u>
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		
0-9	Hue_10YR	2/1	100					FSL	
9-11	Hue_10YR	6/2	100					FS	
11-18	Hue_2.5Y	4/2	90	Hue_10YR	5/6	10	C	M	SC

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

<input type="checkbox"/> A1 - Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers (LRR F) <input type="checkbox"/> A9 - 1 cm Muck (LRR FGH) <input checked="" type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Mucky Mineral <input type="checkbox"/> S2 - 2.5 cm Mucky Peat or Peat (LRR G, H) <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat (LRR F) <input type="checkbox"/> S4 - Sandy Gleyed Matrix	<input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Mucky Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions <input type="checkbox"/> F16 - High Plains Depressions (MLRA 72, 73 of LRR H)	<p>Indicators for Problematic Soils¹</p> <input type="checkbox"/> A9 - 1 cm Muck (LRR I, J) <input type="checkbox"/> A16 - Coast Prairie Redox (LRR F, G, H) <input type="checkbox"/> S7 - Dark Surface (LRR G) <input type="checkbox"/> F16 - High Plains Depressions (LRR H, outside MLRA 72, 73) <input type="checkbox"/> F18 - Reduced Vertic <input type="checkbox"/> TF2 - Red Parent Material <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks)
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¹Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer Type: _____	Depth: _____	Hydric Soil Present? <u> Y </u>
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Remarks: Soil consists of a black fine sandy loam underlain by a depleted matrix. The profile meets indicator A11- Depleted Below Dark Surface; however the area has no wetland hydrology and lacks hydrophytic vegetation. Soils are calcic and the lower clay layer holds moisture, allowing redox to form within and above it. Gravel fragments and calcium carbonate accumulations are common in the bottom layer.

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Great Plains Region

Project/Site: **L3R** Sample Point: **u-151n42w24-h1**

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.				

Total Cover = **0**

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)

Prevalence Index Worksheet

Total % Cover of:		Multiply by:	
OBL spp.	0	x 1 =	0
FACW spp.	4	x 2 =	8
FAC spp.	0	x 3 =	0
FACU spp.	112	x 4 =	448
UPL spp.	0	x 5 =	0
Total		116 (A)	456 (B)
Prevalence Index = B/A = 3.931			

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

1.	<i>Salix discolor</i>	2	N	FACW
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Total Cover = **2**

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.

Herb Stratum (Plot size: 5 ft. radius)

1.	<i>Dactylis glomerata</i>	50	Y	FACU
2.	<i>Poa pratensis</i>	25	Y	FACU
3.	<i>Astragalus agrestis</i>	25	Y	FACU
4.	<i>Cirsium arvense</i>	5	N	FACU
5.	<i>Setaria pumila</i>	5	N	FACU
6.	<i>Agrostis gigantea</i>	2	N	FACW
7.	<i>Taraxacum officinale</i>	2	N	FACU
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				

Total Cover = **114**

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.

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

1.				
2.				
3.				
5.				
4.				

Total Cover = **0**

Hydrophytic Vegetation Present? N

Remarks: **Vegetation is dominated by orchard grass, Kentucky bluegrass, and milk-vetch. The area has been recently mowed.**

Additional Remarks: