

WETLAND DETERMINATION DATA FORM
Great Plains Region

Project/Site:	L3R	Subregion (MLRA or LRR):	MLRA 56	Date:	10/04/14
Applicant:	Enbridge	County:	Polk	State:	MN
Investigators:	JLS/SAM	NWI Classification:		Sample Point:	u-150n40w24-e1
Soil Unit:	712	Local Relief:	VV	Latitude:	47.8041635
Landform:	Rise	Longitude:	-95.71769	Datum:	
Slope (%):	0 - 2%	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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> naturally problematic?			Section:		
			Township:		
			Range:		
			Dir:		

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present? <u>No</u>	Hydric Soils Present? Yes
Wetland Hydrology Present? <u>No</u>	Is This Sampling Point Within A Wetland? <u>No</u>

Remarks: **The upland sample point is located on a slight rise within an open pasture. Soils contain relict hydric features; however, no other wetland indicators were observed.**

HYDROLOGY

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

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

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		
0-12	Hue 10YR	2/1	100					CL	
12-16	Hue 10YR	2/1	90	Hue 5YR	4/6	10	C	M	CL
16-22	Hue 2.5Y	5/1	98	Hue 5YR	4/6	2	C	M	C

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

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

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: **The profile contains relict hydric soils; however, past drainage has converted the area to upland. The soils do not support hydrophytic vegetation.**

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Project/Site: **L3R** Sample Point: **u-150n40w24-e1**

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: 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 = 0

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

1.	<i>Rhamnus cathartica</i>	5	Y	FACU
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Prevalence Index Worksheet

Total % Cover of:	Multiply by:	
OBL spp. <u>0</u>	x 1 =	<u>0</u>
FACW spp. <u>15</u>	x 2 =	<u>30</u>
FAC spp. <u>5</u>	x 3 =	<u>15</u>
FACU spp. <u>50</u>	x 4 =	<u>200</u>
UPL spp. <u>55</u>	x 5 =	<u>275</u>
Total <u>125</u> (A)		<u>520</u> (B)

Prevalence Index = B/A = 4.160

Total Cover = 5

Herb Stratum (Plot size: 5 ft. radius)

1.	<i>Bromus inermis</i>	50	Y	UPL
2.	<i>Poa pratensis</i>	20	Y	FACU
3.	<i>Solidago canadensis</i>	10	N	FACU
4.	<i>Euthamia graminifolia</i>	10	N	FACW
5.	<i>Galium boreale</i>	10	N	FACU
6.	<i>Pycnanthemum virginianum</i>	5	N	FAC
7.	<i>Fragaria virginiana</i>	5	N	FACU
8.	<i>Agrostis gigantea</i>	5	N	FACW
9.	<i>Carduus acanthoides</i>	5	N	NI
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 = 120

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 site is dominated by smooth brome and Kentucky bluegrass. The area gradually transitions downslope into a Shrub-Carr community.**

Additional Remarks: