

**WETLAND DETERMINATION DATA FORM**  
Great Plains Region

Project/Site:	L3R	Subregion (MLRA or LRR):	MLRA 56	Date:	09/29/14
Applicant:	Enbridge	County:	Pennington	State:	MN
Investigators:	MRK/OTG	NWI Classification:		Sample Point:	w-152n43w10-e1
Soil Unit:	I53A	Local Relief:	CC	Section:	
Landform:	Depression	Latitude:	47.99529983	Longitude:	-96.1476121667
Slope (%):	0 - 2%	Datum:		Township:	
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 checked="" type="checkbox"/> Soil <input checked="" 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		
Range:				Dir:	

**SUMMARY OF FINDINGS**

Hydrophytic Vegetation Present?	Yes	Hydric Soils Present?	Yes
Wetland Hydrology Present?	Yes	<b>Is This Sampling Point Within A Wetland?</b>	<b>Yes</b>
Remarks: Wetland sample point is a fallow/natural field that has been recently tilled, most likely being prepared to farm next year. Remnants of cattails and rush species are scattered about.			

**HYDROLOGY**

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

<u>Primary:</u> <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)	<u>Secondary:</u> <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 checked="" type="checkbox"/> D2 - Geomorphic Position <input checked="" type="checkbox"/> D5 - FAC-Neutral Test <input type="checkbox"/> D7 - Frost-Heaved Hummocks (LRR F)
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<b>Field Observations:</b>	<b>Wetland Hydrology Present?</b> <u>Y</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: Wetland is located in a slight depression.

**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					SCL		
6-20	Hue_10YR	2/1	60	Hue_2.5Y	5/2	30	D	M	SC	gravel mixed in
				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 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 checked="" 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)	<b>Indicators for Problematic Soils<sup>1</sup></b> <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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<sup>1</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer	Type: _____	Depth: _____	<b>Hydric Soil Present?</b> <u>Y</u>
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Remarks: Soil is a layer of dark sandy clay loam underlain by a mixed layer of sandy clay with redox concentrations. Soil meets hydric indicator F6- Redox Dark Surface.

**WETLAND DETERMINATION DATA FORM**  
Great Plains Region

Project/Site: **L3R** Sample Point: **w-152n43w10-e1**

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

Tree Stratum (Plot size: 30 ft. radius)

	Species Name	% Cover	Dominant	Ind. Status
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
		Total Cover =	<b>0</b>	

**Dominance Test Worksheet**

Number of Dominant Species that are OBL, FACW, or FAC: **2** (A)  
 Total Number of Dominant Species Across All Strata: **2** (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: **100.0%** (A/B)

**Prevalence Index Worksheet**

Total % Cover of:		Multiply by:	
OBL spp.	<b>20</b>	x 1 =	<b>20</b>
FACW spp.	<b>30</b>	x 2 =	<b>60</b>
FAC spp.	<b>0</b>	x 3 =	<b>0</b>
FACU spp.	<b>0</b>	x 4 =	<b>0</b>
UPL spp.	<b>0</b>	x 5 =	<b>0</b>
Total		<b>50</b> (A)	<b>80</b> (B)
		Prevalence Index = B/A = <b>1.600</b>	

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

1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
		Total Cover =	<b>0</b>	

**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>Phalaris arundinacea</i>	25	<b>Y</b>	<b>FACW</b>
2.	<i>Typha angustifolia</i>	20	<b>Y</b>	<b>OBL</b>
3.	<i>Juncus torreyi</i>	5	<b>N</b>	<b>FACW</b>
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
		Total Cover =	<b>50</b>	

**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 =	<b>0</b>	

**Hydrophytic Vegetation Present?** Y

Remarks: **Wetland sample point is dominated by reed canary grass and narrowleaf cattail.**

**Additional Remarks:**