

**WETLAND DETERMINATION DATA FORM - Great Plains Region**

Project/Site: SPP City/County: Polk Sampling Date: 2015-07-15  
 Applicant/Owner: Enbridge State: Minnesota Sampling Point: w-149n43w1-a1  
 Investigator(s): BCS/BJC Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Depression Local Relief (concave, convex, none): CC Slope (%): 0-2  
 Subregion (LRR or MLRA): LRR F Latitude: 47.7596904896... Longitude: -96.09605222...  
 Datum: Minnesota State Plane North, NAD 83 (2011) U.S. feet

Soil Map Unit Name: Ulen; I65A NWI Classification: \_\_\_\_\_

Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in Remarks): Yes  
 Are Vegetation No, Soil Yes, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes  
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	<u>Yes</u>	<b>Is the Sampled Area within a Wetland?</b>	
Hydric Soil Present?	<u>Yes</u>		<u>Yes</u>
Wetland Hydrology Present?	<u>Yes</u>		If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) The wetland is a seasonally flooded basin dominated by slough grass and located at the edge of a tilled wheat field. Although hydric soil indicators were ...			

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot Size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species _____
2. _____	_____	_____	_____	That Are OBL, FACW, or FAC: <u>1</u> (A)
3. _____	_____	_____	_____	Total Number of Dominant Species _____
4. _____	_____	_____	_____	Species Across All Strata: <u>1</u> (B)
0 _____ = Total Cover				Percent of Dominant Species _____
Sapling/Shrub Stratum (Plot Size: _____)				That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b>
2. _____	_____	_____	_____	Total % Cover of: _____ Multiply by:
3. _____	_____	_____	_____	OBL species <u>40.00</u> x 1 <u>40</u>
4. _____	_____	_____	_____	FACW species <u>19.00</u> x 2 <u>38</u>
5. _____	_____	_____	_____	FACU species <u>10.00</u> x 3 <u>28</u>
0 _____ = Total Cover				UPL species <u>0.00</u> x 4 <u>0</u>
Herb Stratum (Plot Size: <u>5 ft</u> )				Column Totals <u>76</u> (A) <u>136</u> (B)
1. <u>Beckmannia syzigachne</u>	<u>40.00</u>	<u>Yes</u>	<u>OBL</u>	Prevalence Index = B/A = <u>1.7894736...</u>
2. <u>Puccinellia distans</u>	<u>10.00</u>	<u>No</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b>
3. <u>Portulaca oleracea</u>	<u>10.00</u>	<u>No</u>	<u>FAC</u>	<u>yes</u> 1 - Rapid Test for Hydrophytic Vegetation
4. <u>Phleum pratense</u>	<u>5.00</u>	<u>No</u>	<u>FACU</u>	<u>yes</u> 2 - Dominance Test is > 50%
5. <u>Rumex fueginus</u>	<u>5.00</u>	<u>No</u>	<u>FACW</u>	<u>yes</u> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup>
6. <u>Hordeum jubatum</u>	<u>2.00</u>	<u>No</u>	<u>FACW</u>	_____ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
7. <u>Diplachne fusca</u>	<u>2.00</u>	<u>No</u>	<u>FACW</u>	Problematic Hydrophytic Vegetation <sup>1</sup>
8. <u>Chenopodium album</u>	<u>2.00</u>	<u>No</u>	<u>FACU</u>	(Explain) _____
9. _____	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
10. _____	_____	_____	_____	
76 _____ = Total Cover				
Woody Vine Stratum (Plot Size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
0 _____ = Total Cover				
% Bare Ground in Herb Stratum _____				<b>Hydrophytic Vegetation Present?</b> _____
Remarks: The wetland sample area is dominated by slough grass with a variety of other forbs and graminoids interspersed.				

**SOIL**

Sampling Point: w-149n43...

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 2 1	100					FSL	
6-10	2.5Y 3 1	100					FSL	
10-20	10YR 5 3	100					LCOS	Loamy coarse sand. Gravel fragments pres...

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators:</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 1cm Muck (A9) (LRR F, G, H) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 2.5cm Mucky Peat or Peat (S2)(LRR G, H) <input type="checkbox"/> 5cm Mucky Peat or Peat (S3) (LRR F)		<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> High Plains Depressions (F16)		<b>Indicators for Problematic Hydric Soil<sup>3</sup>:</b> <input type="checkbox"/> 1cm Muck (A9) (LRR I, J) <input type="checkbox"/> Coast Prairie Redox (A16)(LRR K, L, R) <input type="checkbox"/> Dark Surface (S7) (LRR G) <input type="checkbox"/> High Plains Depressions (F16) (LRR H outside of MLRA 72 & 73) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input checked="" type="checkbox"/> Other (explain in remarks)	
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): <input type="checkbox"/>	Hydric Soil Present? <u>Yes</u>
Type: _____	
Depth (inches): _____	

Remarks:  
The observed profile consists of a dark fine sandy loam underlain by a light loamy coarse sand. The soil does not meet any hydric soil indicators, but it is significantly disturbed by tillage, which may obscure hydric features.

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ High Water Table (A2) <sup>no</sup> _____ Saturation (A3) _____ Water Marks (B1) _____ Sediment Deposits (B2) _____ Drift Deposits (B3) _____ Algal Mat or Crust (B4) _____ Iron Deposits (B5) _____ Water-Stained Leaves (B9) _____ Inundation Visible on Aerial Imagery (B7)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Sparsely Vegetated Concave Surface (B8) _____ Drainage Patterns (B10) _____ Oxidized Rhizospheres on Living Roots (C3) (where tilled) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) <u>yes</u> _____ Geomorphic Position (D2) <u>yes</u> _____ FAC-Neutral Test (D5) _____ Frost-Heave Hummocks (D7) (LRR F)	
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<b>Field Observations:</b> Surface Water Present? <u>No</u> Depth (inches) _____ Water Table Present? <u>No</u> Depth (inches) _____ Saturation Present? <u>No</u> Depth (inches) _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> <u>Yes</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
The sample point is located in a depression, and the vegetation passes the FAC-Neutral test.

Site Photograph 1

Sampling Point: w-149n43w1-a1

