

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: L3R City/County: Marshall Sampling Date: 2015-06-06
 Applicant/Owner: Enbridge State: Minnesota Sampling Point: u-156n46w27-b1
 Investigator(s): ACM/KRG Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): talf Local Relief (concave, convex, none): _____ linear l... Slope (%): 0-2
 Subregion (LRR or MLRA): _____ Latitude: 48.3035515761... Longitude: -96.56574985...
 Datum: Minnesota State Plane North, NAD 83 (2011) U.S. feet

Soil Map Unit Name: I24A 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 No, 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>No</u>	Is the Sampled Area within a Wetland?	
Hydric Soil Present?	<u>No</u>		<u>No</u>
Wetland Hydrology Present?	<u>No</u>		If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) The upland sample point is located at the edge of a crop field and buffer strip.			

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot Size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species _____
2. _____	_____	_____	_____	That Are OBL, FACW, or FAC: <u>0</u> (A)
3. _____	_____	_____	_____	Total Number of Dominant _____
4. _____	_____	_____	_____	Species Across All Strata: <u>1</u> (B)
	<u>0</u> = Total Cover			Percent of Dominant Species _____
Sapling/Shrub Stratum (Plot Size: <u>15</u>)				That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. _____	_____	_____	_____	Prevalence Index worksheet:
2. _____	_____	_____	_____	Total % Cover of: _____ Multiply by:
3. _____	_____	_____	_____	OBL species <u>2.00</u> x 1 <u>2</u>
4. _____	_____	_____	_____	FACW species <u>5.00</u> x 2 <u>10</u>
5. _____	_____	_____	_____	FACU species <u>22.00</u> x 3 <u>68</u>
	<u>0</u> = Total Cover			UPL species <u>25.00</u> x 4 <u>125</u>
Herb Stratum (Plot Size: <u>5</u>)				Column Totals <u>71</u> (A) <u>271</u> (B)
1. Bromus inermis	25.00	Yes	UPL	Prevalence Index = B/A = <u>3.8169014...</u>
2. Zizia aurea	10.00	No	FAC	Hydrophytic Vegetation Indicators:
3. Poa pratensis	10.00	No	FACU	_____ 1 - Rapid Test for Hydrophytic Vegetation
4. Rumex crispus	5.00	No	FAC	<u>no</u> 2 - Dominance Test is > 50%
5. Erigeron philadelphicus	5.00	No	FAC	<u>no</u> 3 - Prevalence Index is ≤ 3.0 ¹
6. Equisetum hyemale	5.00	No	FACW	_____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
7. Ambrosia artemisiifolia	5.00	No	FACU	Problematic Hydrophytic Vegetation ¹
8. Melilotus officinalis	2.00	No	FACU	(Explain)
9. Typha angustifolia	2.00	No	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
10. Solidago gigantea	2.00	No	FAC	
	<u>71</u> = Total Cover			
Woody Vine Stratum (Plot Size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
	<u>0</u> = Total Cover			
% Bare Ground in Herb Stratum <u>50</u>				Hydrophytic Vegetation Present? _____
Remarks: The vegetation is dominated by smooth brome with approximately half of the area consisting of unplanted, tilled cropland.				

SOIL

Sampling Point: u-156n46...

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 ¹	Loc ²			
0-10	10YR 2 1	100					sicl		
10-18	10YR 3 2	100					FS	fine sand	

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

Hydric Soil Indicators: <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)		Indicators for Problematic Hydric Soil³: <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 type="checkbox"/> Other (explain in remarks)	
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): <input type="checkbox"/> Type: _____ Depth (inches): _____	Hydric Soil Present? <u>No</u>
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Remarks:
No hydric soil indicators were observed.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ High Water Table (A2) _____ 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) _____ Geomorphic Position (D2) _____ FAC-Neutral Test (D5) _____ Frost-Heave Hummocks (D7) (LRR F)	
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Field Observations: 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)	Wetland Hydrology Present? <u>No</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology indicators were observed.

Site Photograph 1

Sampling Point: u-156n46w27-b1

