WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:										
		L3R							Date:	09/17/14
Applicant:		Enbridge							County:	Marshall
Investigators	:	BJC/RAJ		S	ubregion (MLRA	or LRR):	MLRA 56		State:	MN
Soil Unit:	165A				•	I Classification:			1	
Landform:	Talf			Loca	I Relief: LL				Sample Point:	u-156n46w33-l1
Slope (%):	0 - 2%		Latitude: 46.28		ongitude: -96.573	659	Datum:			
		nditions on the sit						□ No	Section:	
Are Vegetatio		. or Hydrology				e normal circum			Township:	
•		□, or Hydrology					•	-36111:	•	Dim
Are Vegetatio						⊠ Yes	□ No		Range:	Dir:
SUMMARY C										
Hydrophytic \	-		No				Hydric Soil			
Wetland Hyd			No						t Within A W	
Remarks:	The upland	sample point is lo	cated in a cut w	vheat field whe	ere the vegetatio	n is still identifi	able. The ve	egetation is	significantly	disturbed due to herbicide
	application.	The soils are sigr	hificantly disturb	ed due to tillir	ng.					
HYDROLOG	Y									
		instars (Chack al	Lthat apply: Mir	imum of ono i	orimory or two o	ooondory roqui	(ad)			
-	•••	icators (Check al	r that apply, will	innum of one [onmary of two s	econdary requil	ed):	Secondor "		
Primary:	A1 - Surface	Mator			11 - Salt Crust			Secondary:	B6 - Surface S	coil Crocks
	A2 - High Wa				13 - Aquatic Fauna					Vegetated Concave Surface
	A3 - Saturatio				1 - Hydrogen Sulfic				B10 - Drainage	
	B1 - Water M				2 - Dry Season Wa					Rhizospheres on Living Roots (till
	B2 - Sedimen	t Deposits			3 - Oxidized Rhizos		Roots (not tille		C8 - Crayfish E	
	B3 - Drift Dep	osits			4 - Presence of Re		``		C9 - Saturation	n Visible on Aerial Imagery
	B4 - Algal Ma	t or Crust			7 - Thin Muck Surfa	ace			D2 - Geomorp	
	B5 - Iron Dep				ther (Explain)				D5 - FAC-Neut	
		on Visible on Aerial In	nagery						D7 - Frost-Hea	aved Hummocks (LRR F)
	B9 - Water-St	tained Leaves								
Field Observ	vations:									
		Yes 🗆	Depth:		(in.)				D	
Surface Wate	er Present?				(in.) (in.)		Wetland H	lydrology l	Present?	Ν
Surface Wate Water Table	er Present? Present?	Yes 🛛	Depth:		(in.)		Wetland H	lydrology l	Present?	<u>N</u>
Surface Wate Water Table Saturation Pr	er Present? Present? esent?	Yes □ Yes □	Depth: Depth:		(in.) (in.)		Wetland H	lydrology l	Present?	<u>N</u>
Surface Wate Water Table Saturation Pr	er Present? Present? esent?	Yes 🛛	Depth: Depth:		(in.) (in.)	if available:	Wetland H	lydrology l	Present?	<u>N</u>
Surface Wate Water Table Saturation Pr	er Present? Present? esent? orded Data (s	Yes □ Yes □	Depth: Depth: itoring well, aeri	al photos, previ	(in.) (in.)	if available:	Wetland H	lydrology l	Present?	<u>N</u>
Surface Wate Water Table Saturation Pr Describe Reco	er Present? Present? esent? orded Data (s	Yes □ Yes □ stream gauge, mon	Depth: Depth: itoring well, aeri	al photos, previ	(in.) (in.)	if available:	Wetland H	lydrology l	Present?	<u>N</u>
Surface Wate Water Table Saturation Pr Describe Reco	er Present? Present? esent? orded Data (s	Yes □ Yes □ stream gauge, mon	Depth: Depth: itoring well, aeri	al photos, previ	(in.) (in.)	if available:	Wetland H	lydrology I	Present?	<u>N</u>
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Surface Water Water Table Saturation Pr Describe Reco Remarks: SOILS Profile Descri (Type: C=Concen	er Present? Present? esent? orded Data (s No indicator	Yes Yes stream gauge, mon rs of wetland hydr be to the depth ne etion, RM=Reduced M Matrix	Depth: Depth: itoring well, aeri ology were obs eeded to docum	al photos, previ erved. nent the indica /Coated Sand Gra	(in.) ous inspections), tor or confirm th hins; Location: PL=P Mottle	e absence of in ore Lining, M=Matr es	dicators.)		Present?	
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NPCS Hydric Soil Field Indicators (check here if indicators are not present).

NRCS Hydr	ic Soil Field Indicators (check here	if indicators are not present):	
			Indicators for Problematic Soils ¹
	A1- Histosol	S5 - Sandy Redox	□ A9 - 1 cm Muck (LRR I, J)
	A2 - Histic Epipedon	S6 - Stripped Matrix	A16 - Coast Prairie Redox (LRR F, G, H)
	A3 - Black Histic	F1 - Loamy Mucky Mineral	□ S7 - Dark Surface (LRR G)
	A4 - Hydrogen Sulfide	F2 - Loamy Gleyed Matrix	□ F16 - High Plains Depressions (LRR H, outside MLRA 72, 73)
	A5 - Stratified Layers (LRR F)	F3 - Depleted Matrix	□ F18 - Reduced Vertic
	A9 - 1 cm Muck (LRR FGH)	F6 - Redox Dark Surface	TF2 - Red Parent Material
	A11 - Depleted Below Dark Surface	F7 - Depleted Dark Surface	TF12 - Very Shallow Dark Surface
	A12 - Thick Dark Surface	F8 - Redox Depressions	Other (Explain in Remarks)
	S1 - Sandy Mucky Mineral	F16 - High Plains Depressions (M	LRA 72, 73 of LRR H)
	S2 - 2.5 cm Mucky Peat or Peat (LRR G, H)		
	S3 - 5 cm Mucky Peat or Peat (LRR F)		¹ Indicators of hydrophytic vegetation and wetland hydrology must be present,
	S4 - Sandy Gleyed Matrix		unless disturbed or problematic.
Restrictive Layer	Туре:	Depth:	Hydric Soil Present? N
Remarks:	No indicators of hydric soil were observ	ued .	
TGHAINS.	The indicators of fryancison were observed		

WETLAND DETERMINATION DATA FORM **Great Plains Region**

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Control of a large control of large control of a large control of large control of a large control of large contr	Project/Site:	L3R				Sample Point: u-156n46w33-I1
Bittory Source Dutilization Lossing Deminance Test Worksheet 1.						
Species Name Species Name Species Name Deminand Dres Morksheet 2.			e non-native	species.)		
1.			% Cover	Dominant	Ind.Status	Dominance Test Worksheet
3.	1.					
4.	2.					Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
S.	3.					
6.	4.					Total Number of Dominant Species Across All Strata: 1 (B)
7.	5.					
8.	6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
9. Image: Stratum (Plot size: 15 II: radius) Total Cover = O X 1 = 0 10.	7.					
10.	8.					Prevalence Index Worksheet
2.						Total % Cover of: Multiply by:
2.	10.					OBL spp. 0 $x 1 = 0$
2.		Total Cover =	0			FACW spp. 0 $x 2 = 0$
2.						FAC spp. 0 $X 3 = 0$
2.	apling/Shrub S	Stratum (Plot size: 15 ft. radius)				FACU spp. 7 $X 4 = 28$
3.	1.					UPL spp. 90 X 5 = 450
4.						
5.						$1 \text{ otal} \underline{97}$ (A) $\underline{478}$ (B)
6.						
7.						Prevalence index = $B/A = 4.928$
8.						
9.						Hydrophytic Vegetation Indicators,
10.	-					
Total Cover =						
b. Stratum (Plot size: 5 ft. radius) 1. 1. 2. Artemisia biennis 3. 2. 4. 5. 6 7. 1. 7. 7. 7. 7. 8. 9. 10. 11. 11. 12. 7. 7. 7. 7. 7. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 7. 18. 19. 10. 11. 12. 13. 14. 15. 16. 17. 7. 7. 7. 10. 11. 12. 13. 14. 15. 16. 17. 7. 7. 7. 7. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 19. 11. 12. 13. 14. 15. 16. 17. 18. 19. 19. </td <td>10.</td> <td>Total Cover –</td> <td>0</td> <td></td> <td></td> <td>· · · · · · · · · · · · · · · · · · ·</td>	10.	Total Cover –	0			· · · · · · · · · · · · · · · · · · ·
tb. Stratum (Plot size: 5 ft. radius) 1. 1. 1. 1. 2. Arribicum aesthum 3. 2. Arribicum aesthum 3. 2. 4. 3. 3. 3. 1. 1. <			0	_		
1. Triteum assilvam 90 Y Ni 2. Artemisia biamis 5 N FACU * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 4.	arh Stratum (Diet eize: Eft. rediue)				
2. Artemisia biennis 5 N FACU * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 3. Etymus repens 2 N FACU Definitions of Vegetation Strata: 5.	,		00	V	NI	
3. Eymus reparts 2 N FACU present, unless disturbed or problematic. 4.				 N		* Indicators of hydric soil and wetland hydrology must be
a. b. b. b. c. b. c. c. c. <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. Total Cover =			<u> </u>		17.00	
6 7. 8. 9. 10. 11. 12. 13. 14. 15. Total Cover =	,					
7	,					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
8						height (DBH), regardless of height.
9						
10. 11. 12. 13. 14. 15. Woody Vines - All herbaceous (non-woody) plants, regardless of size. 14. 15. Woody Vines - All woody vines, regardless of height. Hydrophytic Vegetation Present? N 3. 5. 4. Total Cover = 0 marks: The upland sample point is dominated by cut wheat.						Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.
12						
13. 14. 15. Total Cover =	11.					
13. 14. 15. Total Cover =						Herb - All herbaceous (non-woody) plants, regardless of size.
15. Woody Vines - All woody vines, regardless of height. Total Cover =	13.					
Total Cover =97 nody Vine Stratum (Plot size: 30 ft. radius) 1. 2. 3. 5. 4. Total Cover =0 Hydrophytic Vegetation Present?N	14.					
nody Vine Stratum (Plot size: 30 ft. radius) 1. 2. 3. 3. 5. 4. Total Cover = 0 Hydrophytic Vegetation Present? N marks: The upland sample point is dominated by cut wheat.	15.					Woody Vines - All woody vines, regardless of height.
1. 2. 3. 5. 4. Total Cover = 0 Hydrophytic Vegetation Present? N smarks: The upland sample point is dominated by cut wheat.		Total Cover =	97			
1. 2. 3. 5. 4. Total Cover = 0 Hydrophytic Vegetation Present? N smarks: The upland sample point is dominated by cut wheat.						
3.	oody Vine St	ratum (Plot size: 30 ft. radius)				
3.	1.					
5.						
4. Total Cover = 0 emarks: The upland sample point is dominated by cut wheat.						Hydrophytic Vegetation Present? N
Total Cover = 0 emarks: The upland sample point is dominated by cut wheat.						
marks: The upland sample point is dominated by cut wheat.	4.	Tatal Oassa				
	omorila					
Iditional Remarks:	kemarks:	i ne upland sample point is dominated by cut	i wneat.			
lditional Remarks:						
Iditional Remarks:						
	dditional R	Remarks:				