WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R									Date:	09/22/14	
Applicant:		Enbridge									County:	Marshall	
Investigators: NTT/BEH				Subregion (MLRA or LRR): MLRA 56					State:	MN			
Soil Unit:						NWI Classification:					1		
Landform:	Talf Local Relief: LL								Sample Point:	u-155n46w2-g1			
Slope (%):													
Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) If Yes INO Section:													
Are Vegetation , Soil , or Hydrology significantly disturbed? Are normal circumstances present?								esent?	Township:				
Are Vegetation	•	□, or Hydrology	•					☑ Yes	□ No .		Range:	Dir:	
SUMMARY C			j								- Jan Gara		
Hydrophytic ^V			No	0					Hydric Soil	ls Present?	Νο		
Wetland Hyd	-		No								nt Within A W	etland? No	
Remarks:		sample point is lo			lanted to n	asture ara	asses Th	ne vegetation h					
Remarks.	The upland			neiu p	named to p	asture gra	15565. 11	le vegetation n		., but it is st		•	
HYDROLOG													
Wetland Hy	drology Ind	icators (Check al	I that apply	; Mini	mum of one	e primary	or two se	econdary requir	red):				
Primary:						_	_			Secondary:			
	A1 - Surface					B11 - Salt (B6 - Surface S		
A2 - High Water Table						B13 - Aqua				 B8 - Sparsely Vegetated Concave Surface B10 - Drainage Patterns 			
	A3 - Saturatio B1 - Water M					C1 - Hydrog							
	B2 - Sedimen					C2 - Dry Se		spheres on Living	Roots (not till	4 D	C8 - Crayfish E	Rhizospheres on Living Roots (tilled)	
	B3 - Drift Dep	•				C4 - Prese						n Visible on Aerial Imagery	
	B4 - Algal Ma					C7 - Thin M					D2 - Geomorp		
	B5 - Iron Dep					Other (Expl					D5 - FAC-Neut		
		on Visible on Aerial Ir	nagery								D7 - Frost-Hea	aved Hummocks (LRR F)	
□ B9 - Water-Stained Leaves													
Field Observ	vations:												
Surface Wate	er Present?	Yes 🛛	De	epth:		(in.)					-	N	
Water Table		Yes 🗆							Wetland H	lydrology	Present?	Ν	
Saturation Present? Yes				Depth: (in.)									
				· -	• •								
		stream gauge, mor	-			evious insp	ections),	if available:					
Remarks:	No indicato	rs of wetland hydr	ology were	obse	rved.								
SOILS													
		ibe to the depth n											
(Type: C=Concer	ntration, D=Depl	etion, RM=Reduced M	latrix, CS=Cov	vered/C	Coated Sand C	Grains; Locat	ion: PL=P	ore Lining, M=Matr	ix)				
	-									1	1		
		Matrix	<u>.</u>				Mottle	es					
Depth (In.)		Color (Moist)		%	Color (N	Moist)	%	Туре	Location	Texture		Remarks	
0-18	Hue_10YR	2/1	1	100						FSL			
									1				
									+				
							I	1	1		1		

NPCS Hydric Soil Field Indicators (check here if indicators are not present).

NRCS Hydr	ic Soil Field Indicators (check	here if ind	licators 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 (ML	RA 72, 73 of LRR H)	
	S2 - 2.5 cm Mucky Peat or Peat (LRR G	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	Type:		Depth:	Hydric Soil Present	? <u>N</u>
Remarks:	No indicators of hydric soil were of	bserved.			
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Project/Site:	: L3R				Sample Point: u-155n46w2-g1	
		e non-native	species.)			
Tree Stratum ((Plot size: 30 ft. radius)		Deminant		Dominance Test Worksheet	
1.	<u>Species Name</u>	<u>% Cover</u>	<u>Dominant</u>	Ind.Status		
2.					$-\frac{1}{2}$	
,					Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)	
3.						
<u>4.</u>	-				Total Number of Dominant Species Across All Strata: 2 (B)	
5.						
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)	
7.						
8.					Prevalence Index Worksheet	
9.					Total % Cover of: Multiply by:	
10.					OBL spp. 0 x 1 = 0 FACW spp. 0 x 2 = 0 FAC spp. 10 x 3 = 30 FACU spp. 50 x 4 = 200	
	Total Cover =	0			FACW spp. 0 $x 2 = 0$	
					FAC spp. 10 X $3 = 30$	
Sapling/Shrub 5	Stratum (Plot size: 15 ft. radius)				FACU spp. 50 x 4 = 200	
1.					UPL spp. <u>45</u> X 5 = <u>225</u>	
2.						
3.					Total 105 (A) 455 (B)	
4.						
5.	-			,	Prevalence Index = B/A = 4.333	
6.	-			,	-	
7.	-			,	+	
8.	-				Hydrophytic Vegetation Indicators:	
9.	-				Rapid Test for Hydrophytic Vegetation	
10.	-				Napid Test for Hydrophytic Vegetation Dominance Test is > 50%	
	 Total Cover =	0			$\qquad \qquad $	
I				,		
					Morphological Adaptations (Explain) *	
	(Plot size: 5 ft. radius)				Problem Hydrophytic Vegetation (Explain) *	
1.	Bromus inermis	45	<u> </u>	UPL		
2.	Poa pratensis	25	Y	FACU		
3.	Elymus repens	20	<u>N</u>	FACU		
4.	Solidago gigantea	10	N	FAC	Definitions of Vegetation Strata:	
5.	Trifolium hybridum	5	Ν	FACU	1	
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast	
7.					height (DBH), regardless of height.	
8.				,	1	
9.				,	Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.	
10.	<u>.</u>				- · ~	
11.	<u></u>				1	
12.	<u>/</u>				Herb - All herbaceous (non-woody) plants, regardless of size.	
12.	<u> </u>			,		
14.					-	
	<u>/</u>				Woody Vines - All woody vines, regardless of height.	
15.		405		,	- Woody vines - Air woody vince, regulated of height	
l	Total Cover =	105		,		
Woody Vine Str	tratum (Plot size: 30 ft. radius)					
1.						
2.						
3.				,	Hydrophytic Vegetation Present? N	
5.				,		
4.				,		
	Total Cover =					
Remarks:	The upland sample point is dominated by cut	t pasture ç	rasses.			
l						
Additional R						
	Cemarks:					
1						
I						
1						