WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R									Date:	06/30/14	-
Applicant:	Enbridge										County:	Kittson	_
Investigators:	EAB/RAJ				Subregion (MLRA or LRR): MLRA 56					State:	MN	-	
Soil Unit:	I132A NWI Classification: PUBGx												
Landform:	Depression Local Relief: CC									Sample Point:	w-159n4923-a1		
Slope (%):	0 - 2%		Latitude: 48	8.574	112	Longitude:	-96.936	421	Datum:		1		
Are climatic/h	nydrologic co	nditions on the site	typical fo	r this	s time of yea	r? (If no, exp	lain in rema	arks)	□Yes	☑ No	Section:		
Are Vegetation		☐ or Hydrology			disturbed?			normal circum	stances pre	esent?	Township:		
Are Vegetation		☐ or Hydrology	□turally						□No		Range:	Dir:	
SUMMARY O			— ittarany	proc	nomatio:						range.	Dir.	
			V						Lludria Cail	o Drocont?	Voc		
Hydrophytic \	•		_	es					Hydric Soil			11 10 V	
Wetland Hyd				es							t Within A We		
Remarks:		is a fresh meadow											
		with prairie cordg									barley, and qu	ıackgrass. The ve	getation in the
	southern leg	j is a mixture of we	etland and	upla	ind species t	that appea	ars to be	the result of pi	peline distu	rbance.			
HYDROLOGY	Y												
		4 (0) 1 11		. A.		•			D				
		cators (Check all	that apply	; Mır	ilmum of one	e primary o	or two se	econdary requii	red):	0			
Primary:		M-1				D44 0-11 0				Secondary:		.". 0	
_	A1 - Surface V A2 - High Wat											oil Cracks /egetated Concave S	turface
	A3 - Saturatio					C1 - Hydro					B10 - Drainage		ullace
_	B1 - Water Ma					C2 - Dry Se						Rhizospheres on Livin	na Roots (tilled)
	B2 - Sediment							pheres on Living	Roots (not till		C8 - Cravfish E		ig rtooto (tillea)
_	B3 - Drift Dep					C4 - Preser						Visible on Aerial Ima	agery
	B4 - Algal Mat					C7 - Thin M	luck Surfa	ace		✓	D2 - Geomorph		0 ,
	B5 - Iron Depo	osits				Other (Expl	ain)				D5 - FAC-Neut	ral Test	
		n Visible on Aerial Ima	agery								D7 - Frost-Hea	ved Hummocks (LRF	₹ F)
	B9 - Water-St	ained Leaves											
Field Observ	vations:												
Surface Water	er Present?	Yes 🗹	De	epth:	4	(in.)							
Water Table	Present?	Yes 🗹		epth:	0	(in.)			Wetland H	lydrology i	Present?	Υ	
Saturation Pr		Yes ☑			0	(in.)						_	
Saturation Present? Yes Depth: 0 (in.)													
						` '							
Describe Reco		tream gauge, monit	toring well,	aeria	al photos, pre	vious insp							
Describe Reco		tream gauge, monit sulfide odor was a	toring well,	aeria	al photos, pre	vious insp			oing rains h	nave contrib	outed to eleva	ted surface water	at the site.
			toring well,	aeria	al photos, pre	vious insp			oing rains h	nave contrib	outed to eleva	ted surface water	at the site.
			toring well,	aeria	al photos, pre	vious insp			oing rains h	nave contrib	outed to eleva	ted surface water	at the site.
Remarks: SOILS Profile Descri	A hydrogen ption (Descri	sulfide odor was a	toring well, pparent weded to do	aeria /hen	al photos, prewalking thro	evious inspugh the we	etland. F	Recent and ong	dicators.)	nave contrib	outed to eleva	ted surface water	at the site.
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Remarks: SOILS Profile Descrip (Type: C=Concent Depth (In.) 0-5 5-10 10-13 10-13 13-18 13-18 NRCS Hydri	Hue 2.5Y Hue 2.5Y Hue 2.5Y Hue 2.5Y Hue 2.5Y Hue 2.5Y Gradient Solid Field A1- Histosol A2- Histic Ep A3- Black His A4- Hydroger A5- Stratified A9- 1 cm Muc A11- Deplete A12- Thick D S1- Sandy S2- 2.5 cm M	be to the depth necession, RM=Reduced Markix Color (Moist) 2.5/1 2.5/1 2.5/1 5/1 2.5/1 Indicators (check of the color of the col	eded to do strix, CS=Cor	aeria //hen Occum //ren % 100 80 47 f indi	color (N Color (N Lue 2.5Y Hue 2.5Y Hue 10YR Hue 2.5Y Cators are n S5 - Sandy Re S5 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox De F7 - Depleted F8 - Redox De	evious inspugh the work atterior or coefficients; Located Moist) 4/1 4/1 4/4 4/4 7/1 ot present edox Matrix ucky Mineraleyed Matrix Matrix ark Surface park Surface peressions	etland. Fermion the ion: PL=Po Mottle % 20 47 6 4 4 4	e absence of inore Lining, M=Matrices Type D C C D	dicators.) Location	Texture C C C C C C C A9 - 1 cm M A16 - Cost F S7 - Dark Sq. F16 - High F F18 - Reduc TF2 - Red P TF12 - Very Other (Expla	Gley also observe For Problematic Luck (LRR I, J) Prairie Redox (L Lurface (LRR G) Plains Depression Led Vertic Parent Material Shallow Dark S Jain in Remarks)	Remarks d at 2% in pore linings. Soils¹ RR F, G, H) ons (LRR H, outisde MLRA 72, urface	73)
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Remarks: SOILS Profile Descrip (Type: C=Concent Depth (In.) 0-5 5-10 10-13 10-13 13-18 13-18 NRCS Hydri	Hue 2.5Y Hue 2.5Y Hue 2.5Y Hue 2.5Y Hue 2.5Y Hue 2.5Y Gradient Solid Field A1- Histosol A2- Histic Ep A3- Black His A4- Hydroger A5- Stratified A9- 1 cm Muc A11- Deplete A12- Thick D S1- Sandy S2- 2.5 cm M	sulfide odor was a be to the depth nee etion, RM=Reduced Ma Matrix Color (Moist) 2.5/1 2.5/1 2.5/1 2.5/1 Indicators (che pedon tic 1 Sulfide Layers (LRR F) ck (LRR FGH) d Below Dark Surface ark Surface ucky Mineral ucky Peat or Peat (LRR ck) Peat or Peat (LRR	eded to do strix, CS=Cor	aeria //hen Occum //ren % 100 80 47 f indi	color (N Color (N Lue 2.5Y Hue 2.5Y Hue 10YR Hue 2.5Y Cators are n S5 - Sandy Re S5 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox De F7 - Depleted F8 - Redox De	evious inspugh the work atterior or coefficients; Located Moist) 4/1 4/1 4/4 4/4 7/1 ot present edox Matrix ucky Mineraleyed Matrix Matrix ark Surface park Surface peressions	etland. Fermion the ion: PL=Po Mottle % 20 47 6 4 4 4	e absence of inore Lining, M=Matrices Type D C C D	dicators.) Location	Texture C C C C C C Mindicators f A9 - 1 cm M A16 - Cost F S7 - Dark Si F16 - High F F18 - Reduc F12 - Red P TF12 - Very Other (Expla	Gley also observe For Problematic Luck (LRR I, J) Prairie Redox (L Lurface (LRR G) Plains Depression Led Vertic Parent Material Shallow Dark S Jain in Remarks)	Remarks d at 2% in pore linings. Soils¹ RR F, G, H) ons (LRR H, outisde MLRA 72, urface	73)
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Remarks: SOILS Profile Descri (Type: C=Concent Depth (In.) 0-5 5-10 10-13 10-13 13-18 13-18 NRCS Hydri	A hydrogen ption (Descrintration, D=Depletration, D=Depletrat	sulfide odor was a be to the depth nee etion, RM=Reduced Ma Matrix Color (Moist) 2.5/1 2.5/1 2.5/1 2.5/1 Indicators (che pedon tic 1 Sulfide Layers (LRR F) ck (LRR FGH) d Below Dark Surface ark Surface ucky Mineral ucky Peat or Peat (LRR ck) Peat or Peat (LRR	eded to do strix, CS=Cor	aeria aeria //hen Occum vered/ // // // // // // // // // // // // /	color (N Color (N Lue 2.5Y Hue 2.5Y Hue 10YR Hue 2.5Y Cators are n S5 - Sandy Re S5 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox De F7 - Depleted F8 - Redox De	evious inspugh the work atterior or coefficients; Located Moist) 4/1 4/1 4/4 4/4 7/1 ot present edox Matrix ucky Mineraleyed Matrix Matrix ark Surface park Surface peressions	etland. Fermion the ion: PL=Po Mottle % 20 47 6 4 4 4	Recent and ong e absence of in ore Lining, M=Matr es Type D C C C D	dicators.) Location	Texture C C C C C C Mindicators f A9 - 1 cm M A16 - Cost F S7 - Dark St F16 - High F F18 - Reduc F12 - Red P TF12 - Very Other (Explain Indicators of hunless disturbed)	Gley also observe For Problematic For	Remarks d at 2% in pore linings. Soils¹ RR F, G, H) ons (LRR H, outisde MLRA 72, urface	73)
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WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	L3R				Sample Point: w-159n4923-a1		
VEGETATIO	(Species identified in all uppercase are	non-native	species.)				
Tree Stratum (Plot size: 30 ft. radius)						
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet		
1.							
2.					Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)		
3.					`` <i>`</i>		
4.					Total Number of Dominant Species Across All Strata: 2 (B)		
5.					(=)		
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)		
					Percent of Dominant Species That Ale Obl., PACW, of PAC		
7.					<u> </u>		
8.					Prevalence Index Worksheet		
9.					Total % Cover of: Multiply by:		
10.					OBL spp. <u>25</u> x 1 = <u>25</u>		
	Total Cover =	0			FACW spp. 21 X 2 = 42		
	-				FAC spp. 0 x 3 = 0		
Sanling/Shrub 9	Stratum (Plot size: 15 ft. radius)				FACU spp. 26 x 4 = 104		
1.	(lot oizo: To ta radiao)				UPL spp. 0 x 5 = 0		
2.					о. 2 орр. <u> </u>		
3.					Total 70 (A) 474 (D)		
					Total 72 (A) 171 (B)		
4.							
5.					Prevalence Index = B/A = 2.375		
6.							
7.							
8.					Hydrophytic Vegetation Indicators:		
9.					Rapid Test for Hydrophytic Vegetation		
10.					Dominance Test is > 50%		
10.	_ Total Cover =	0					
	Total Cover =_	U	_		X Prevalence Index is ≤ 3.0 *		
					Morphological Adaptations (Explain) *		
	Plot size: 5 ft. radius)				Problem Hydrophytic Vegetation (Explain) *		
1.	Elymus repens	20	Y	FACU			
2.	Beckmannia syzigachne	20	Υ	OBL	* Indicators of hydric soil and wetland hydrology must be		
3.	Symphyotrichum lanceolatum	10	N	FACW	present, unless disturbed or problematic.		
4.	Hordeum jubatum	10	N	FACW	Definitions of Vegetation Strata:		
5.	Typha X glauca	5	N	OBL			
6	Trifolium hybridum	5	N	FACU	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast		
7.	Phalaris arundinacea	1	N	FACW	height (DBH), regardless of height.		
				_	. 3 . (
8.	Poa pratensis	1	N	FACU	O - 1 - (Ot - 1 - Weeds plants less than 2 in DDI I repardless of height		
9.					Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.		
10.							
11.							
12.					Herb - All herbaceous (non-woody) plants, regardless of size.		
13.							
14.							
15.					Woody Vines - All woody vines, regardless of height.		
, · · ·	Total Cover =	72			· · · · · · · · · · · · · · · · · · ·		
	Total Cover =	12	_				
M/	orter (District Office at 1)						
	ratum (Plot size: 30 ft. radius)						
1.							
2.							
3.					Hydrophytic Vegetation Present?Y		
5.		-	-				
4.							
	Total Cover =	0					
Remarks:	The sample site is dominated by American sl		and quad	ckgrass			
		ougg.uo	ona qua	ong. acc			
Additional Remarks:							