WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R									Date:	10/01/14
Applicant:		Enbridge									County:	Red Lake
Investigators						n (MLRA	or LRR):	MLRA 56		State:	MN	
Soil Unit:	I59A											
Landform:	Depression				Lo	cal Relief:					Sample Point:	w-151n42w9-e2
Slope (%):	16 - 25%		Latitude:	47.919	9048	Longitude:	-96.041	563	Datum:			
Are climatic/h	hydrologic co	nditions on the sit	e typical	for this	s time of yea	ar? (If no, exp	olain in rema	arks)	⊡Yes	□No	Section:	
Are Vegetation	on 🖵 Soil	☐ or Hydrology	□gnific	cantly	disturbed?		Are	normal circum	stances pre	esent?	Township:	
Are Vegetation		or Hydrology		ly prob	olematic?			Yes	□No		Range:	Dir:
SUMMARY C	OF FINDINGS	3										
Hydrophytic \	Vegetation P	resent?		Yes					Hydric Soil	ls Present?	Yes	
Wetland Hyd			-	Yes		•						etland? Yes
Wetland Hydrology Present? Yes Is This Sampling Point Within A Wetland? Yes Remarks: The wetland is a fresh wet meadow located within a roadside ditch adjacent to a farm field planted with soybeans. Dominant vegetation includes reed ca												
grass and woolly sedge.												
HYDROLOG	Υ											
		inatara (Chaak all	l that ann	de Min	imum of on	o primoru	or two or	oondon, roquir	od).			
Primary:		icators (Check all	і шасарр	ny, iviii	iiiiiuiii oi oii	e primary	OI IWO SE	econdary requir	eu).	Secondary:		
	A1 - Surface \	Nater			П	B11 - Salt (Crust				B6 - Surface S	Soil Cracks
□ A1 - Surface Water □ B11 - Salt Crust □ A2 - High Water Table □ B13 - Aquatic Fauna										Vegetated Concave Surface		
	A3 - Saturatio										B10 - Drainage	
	B1 - Water M					C2 - Dry Se						Rhizospheres on Living Roots (tille
	B2 - Sedimen							spheres on Living	Roots (not till		C8 - Crayfish E	
	B3 - Drift Dep B4 - Algal Ma					C4 - Prese C7 - Thin M					D2 - Geomorp	n Visible on Aerial Imagery
	B5 - Iron Dep					Other (Exp		ace			D5 - FAC-Neu	
		n Visible on Aerial Im	nagery		_	oution (EMP	,					aved Hummocks (LRR F)
	B9 - Water-St		- 3 - 7									,
Field Observ	vations:											
Surface Water	er Present?	Yes		Depth:		(in.)						.,
Water Table		Yes 🗆							Wetland H	lydrology	Present?	Y
Saturation Pr		Yes 🗆		Depth:		(in.)						_
	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
		troom acuse mon	itarinaa	ال ممعند	al abataa ar	ovieus inen	ootiona)	if available.				
												1 99
Remarks:		stream gauge, moni hydrology indicato							Irophytic ve	getation pro	esent and lan	dscape position.
Remarks:									Irophytic ve	getation pro	esent and lan	dscape position.
Remarks:	No primary	hydrology indicato	ors are pr	esent.	Wetland hy	drology is	assume	ed based on hyd		getation pro	esent and lan	dscape position.
Remarks: SOILS Profile Descri	No primary	hydrology indicato	ors are pr	esent.	Wetland hy	rdrology is	assume	ed based on hyde	dicators.)	getation pro	esent and lan	dscape position.
Remarks: SOILS Profile Descri	No primary	hydrology indicato	ors are pr	esent.	Wetland hy	rdrology is	assume	ed based on hyde	dicators.)	getation pro	esent and lan	dscape position.
Remarks: SOILS Profile Descri	No primary	hydrology indicato be to the depth ne etion, RM=Reduced M	ors are pr	esent.	Wetland hy	rdrology is	assume	ed based on hyd e absence of in ore Lining, M=Matri	dicators.)	getation pro	esent and lan	dscape position.
Remarks: SOILS Profile Descri (Type: C=Concer	No primary	hydrology indicato be to the depth ne etion, RM=Reduced M Matrix	ors are pr	docum	Wetland hy nent the indi /Coated Sand	rdrology is cator or co Grains; Locat	assume onfirm the tion: PL=Pe	ed based on hyde e absence of in ore Lining, M=Matri es	dicators.)		esent and lan	
Remarks: SOILS Profile Descri	No primary	hydrology indicato be to the depth ne etion, RM=Reduced M	ors are pr	esent.	Wetland hy	rdrology is cator or co Grains; Locat	assume	ed based on hyd e absence of in ore Lining, M=Matri	dicators.)	getation pro	esent and lan	dscape position. Remarks
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Remarks: SOILS Profile Descri (Type: C=Concer	No primary iption (Description, D=Depl ic Soil Field A1- Histosol A2 - Histic Ep	be to the depth neetion, RM=Reduced Mi Matrix Color (Moist) Indicators (chippedon	eeded to eatrix, CS=C	docum Covered/ %	Color (I	drology is cator or co Grains; Local Moist) not presen edox Matrix	assume onfirm the tion: PL=Pe Mottle % tt):	ed based on hyde e absence of in one Lining, M=Matri	dicators.) x) Location	Texture Indicators 1 A9 - 1 cm M A16 - Coast	For Problematie uuck (LRR I, J) Prairie Redox (Remarks c Soils ¹ (LRR F, G, H)
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	No primary ption (Descrintration, D=Depl ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His	hydrology indicato be to the depth ne etion, RM=Reduced M Matrix Color (Moist) Indicators (ch	eeded to eatrix, CS=C	docum Covered/ %	Color (I	drology is cator or cc Grains; Local Moist) Moist) not presen edox Matrix lucky Minera	assume on firm the tion: PL=Po Mottle %	ed based on hyde e absence of in one Lining, M=Matri	dicators.) x) Location	Indicators 1 A9 - 1 or 1 A16 - Coast S7 - Dark S6	For Problematic luck (LRR I, J) Prairie Redox (urface (LRR G)	Remarks c Soils¹ (LRR F, G, H)
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) NRCS Hydr	ption (Descriptration, D=Depl	hydrology indicato be to the depth ne etion, RM=Reduced M: Matrix Color (Moist) Indicators (ch ipedon stic in Sulfide	eeded to eatrix, CS=C	docum Covered/ %	Color (I	cator or co Grains; Local Moist) Moist) not presen edox Matrix Mucky Mineraleleyed Matrix	assume on firm the tion: PL=Po Mottle %	ed based on hyde e absence of in one Lining, M=Matri	dicators.) x) Location	Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F	For Problematicuck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depression	Remarks c Soils ¹ (LRR F, G, H)
Remarks: SOILS Profile Descri (Type: C=Concer	ption (Descriptation, D=Depl	be to the depth neetion, RM=Reduced Mi Matrix Color (Moist) Indicators (chairpedon stic in Sulfide Layers (LRR F)	eeded to eatrix, CS=C	docum Covered/ %	Color (I	drology is cator or co Grains; Local Moist) not presen edox Matrix Mutrix Minera eleyed Matrix Matrix Matrix Matrix Matrix Matrix	Assume on firm the tion: PL=Pe Mottle %	ed based on hyde e absence of in one Lining, M=Matri	Location	Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduc	For Problematicuck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depression	Remarks c Soils¹ (LRR F, G, H)
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) NRCS Hydr	ption (Description), D=Depl ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydrogel A9 - 1 cm Mu	be to the depth neetion, RM=Reduced Mi Matrix Color (Moist) Indicators (chipedon in Sulfide Layers (LRR F) ck (LRR FGH)	eeded to eatrix, CS=C	docum Covered/ %	Color (I	cator or co Grains; Local Moist) Moist) not presen edox Matrix lucky Minera Eleyed Matrix Matrix ark Surface	Assume on firm the tion: PL=Pe Mottle %	ed based on hyde e absence of in one Lining, M=Matri	Location	Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark SF F18 - Reduc TF2 - Red F	For Problematic luck (LRR I, J) Prairie Redox (Jurface (LRR G) Plains Depression led Vertic Parent Material	Remarks C Soils¹ (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73)
Remarks: SOILS Profile Descri (Type: C=Concer	ption (Description), D=Depl ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydrogel A9 - 1 cm Mu	hydrology indicato be to the depth ne etion, RM=Reduced M Matrix Color (Moist) Indicators (ch ipedon stic n Sulfide Layers (LRR F) ck (LRR FGH) d Below Dark Surface	eeded to eatrix, CS=C	docum Covered/ %	Color (I	drology is cator or cc Grains; Local Moist) Moist) not presen edox Matrix Jucky Minera lielyed Matrix Matrix Matrix ark Surface Dark Surface	Assume on firm the tion: PL=Pe Mottle %	ed based on hyde e absence of in one Lining, M=Matri	Location	Indicators 1 A9 - 1 or M A16 - Coast S7 - Dark S F16 - High F F18 - Red F TF2 - Red F TF12 - Very	For Problematicuck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depression	Remarks c Soils¹ (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73) Surface
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	ption (Descriptation, D=Depl	be to the depth neetion, RM=Reduced Minester (Color (Moist) Indicators (Chapter of the Color (Moist) Indicators (Chapter of the Chapter of the Chapt	eeded to eatrix, CS=C	docum Covered/ %	Color (I Coated Sand of Color (I Coated Sand of Color (I Color	drology is cator or co Grains; Locat Moist) not presen edox Matrix lucky Minera lleyed Matrix atrix Surface Dark Surfae epressions	Assume on firm the tion: PL=Per Mottle % Mottle % tt):	ed based on hyde e absence of in one Lining, M=Matri	dicators.) x) Location	Indicators 1 A9 - 1 or M A16 - Coast S7 - Dark S F16 - High F F18 - Red F TF2 - Red F TF12 - Very	For Problematic luck (LRR J.) Prairie Redox (urface (LRR G) Plains Depression ced Vertic arent Material Shallow Dark S	Remarks c Soils¹ (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73) Surface
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	ption (Descrintration, D=Depl ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydrogel A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M	hydrology indicato be to the depth ne etion, RM=Reduced M Matrix Color (Moist) Indicators (ch ipedon stic n Sulfide Layers (LRR F) ck (LRR FGH) d Below Dark Surface ark Surface ucky Mineral lucky Peat or Peat (L	eeded to elatrix, CS=C	docum Covered/ %	Color (I Coated Sand of Color (I Coated Sand of Color (I Color	drology is cator or co Grains; Locat Moist) not presen edox Matrix lucky Minera lleyed Matrix atrix Surface Dark Surfae epressions	Assume on firm the tion: PL=Per Mottle % Mottle % tt):	e absence of in ore Lining, M=Matri	dicators.) x) Location	Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Explain	for Problematic luck (LRR I, J) Prairie Redox (urface (LRR G) urfains Depression led Vertic learent Material Shallow Dark S ain in Remarks)	Remarks c Soils¹ (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73) Surface
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	ption (Descrintration, D=Depl ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydrogel A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M	hydrology indicator be to the depth neetion, RM=Reduced M Matrix Color (Moist) Indicators (chair)	eeded to elatrix, CS=C	docum Covered/ %	Color (I Coated Sand of Color (I Coated Sand of Color (I Color	drology is cator or co Grains; Locat Moist) not presen edox Matrix lucky Minera lleyed Matrix atrix Surface Dark Surfae epressions	Assume on firm the tion: PL=Per Mottle % Mottle % tt):	e absence of in ore Lining, M=Matri	dicators.) x) Location	Indicators I A9 - 1 cm M A16 - Coast S7 - Dark SI F18 - Reduc TF2 - Red F TF12 - Very Other (Explain	for Problematic luck (LRR I, J) Prairie Redox (urface (LRR G) urfains Depression led Vertic learent Material Shallow Dark S ain in Remarks)	Remarks c Soils¹ (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73) Surface
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WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	L3R				Sample Point: w-151n42w9-e2			
VEGETATION	(Species identified in all uppercase are	e non- <u>native</u>	species.)					
	Plot size: 30 ft. radius)		<u>'</u>					
,	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet			
1.								
2.					Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)			
3.					Number of Bornmant openies that are OBE, FNOW, OF FNO.			
					T. (D)			
4.					Total Number of Dominant Species Across All Strata: 1 (B)			
5.								
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)			
7.								
8.					Prevalence Index Worksheet			
9.					Total % Cover of: Multiply by:			
10.					OBL spp. 15 X 1 = 15			
	Total Cover =	0			FACW spp. 80 x 2 = 160			
	Total Cover		_					
0 11 101 1 0	N ((()) () () ()				· · · · · · · · · · · · · · · · · · ·			
	Stratum (Plot size: 15 ft. radius)				FACU spp. 0 x 4 = 0			
1.					UPL spp			
2.								
3.					Total 100 (A) 190 (B)			
4.								
5.					Prevalence Index = B/A = 1.900			
6.								
7.	_							
					Hardwards de Manatadan Indiantana			
8.					Hydrophytic Vegetation Indicators:			
9.					Rapid Test for Hydrophytic Vegetation			
10.	<u> </u>				X Dominance Test is > 50%			
	Total Cover =	0			X Prevalence Index is ≤ 3.0 *			
					Morphological Adaptations (Explain) *			
Herb Stratum (F	Plot size: 5 ft. radius)				Problem Hydrophytic Vegetation (Explain) *			
1.	Phalaris arundinacea	80	Υ	FACW				
2.	Carex pellita	15	N	OBL	* Indicators of hydric soil and wetland hydrology must be			
3.	Apocynum cannabinum	5	N	FAC	present, unless disturbed or problematic.			
4.	Apocyrium camabinum	3	IN	TAC				
					Definitions of Vegetation Strata:			
5.				-	_			
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast			
7.					height (DBH), regardless of height.			
8.								
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.					ildin () in the second control of the s			
				_				
14.				_	March Version Allows desired a secondary of the last			
15.					Woody Vines - All woody vines, regardless of height.			
	Total Cover =	100						
Woody Vine Str	ratum (Plot size: 30 ft. radius)							
1.	,							
2.								
3.				_	Hydrophytic Vegetation Present? Y			
5. 5.					Tryurophytic vegetation Fresent:			
				_				
4.				_				
	Total Cover =	0		.,				
Remarks:	The wetland vegetation is dominated by reed	l canary gr	ass with w	oolly sed	ge and dogbane mixed in.			
Additional Remarks:								
A MARIANTE TO THE TOTAL TO								