## WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R									Date:	09/16/14	
Applicant:		Enbridge									County:	Marshall	
Investigators	S:	BJC/RAJ				_Subregio	•	or LRR):	MLRA 56		State:	MN	
Soil Unit:	165A							I Classification:					
Landform:	Talf					cal Relief:					Sample Point:	u-156n46w33-g1	
Slope (%):	0 - 2%		Latitude: 48			Longitude:			Datum:				
		nditions on the site				ar? (If no, exp				□ No	Section:		
Are Vegetation	•	☑, or Hydrology	•	•			Are	e normal circum	istances pre	esent?	Township:		
Are Vegetation		, ,	□aturally	proble	ematic?			Yes	□ No		Range:	Dir:	
SUMMARY (													
	Vegetation P		No	)		-				s Present?			
Wetland Hyd	drology Prese	nt?	No	)					Is This Sar	npling Poin	t Within A We	etland? <b>No</b>	
Remarks:	The upland	sample point is loc	cated in a c	cultiva	ated soybe	an field on	very fla	t land. The veg	etation is dis	sturbed due	to herbicide	application. The soils are	
	significantly	disturbed due to ti	illing.										
<b>HYDROLOG</b>	Υ												
Wetland Hy	drology Indi	icators (Check all	that annly	Minir	mum of on	a nrimary	or two se	econdary requir	ed):				
Primary		icators (Check all	шасарріу,	, IVIII III	mum or on	e primary	OI TWO S	econdary requir	eu).	Secondary:			
	<u>·</u>	Nater				B11 - Salt (	Crust				B6 - Surface S	oil Cracks	
	A2 - High Wa					B13 - Aqua						Vegetated Concave Surface	
	A3 - Saturatio					C1 - Hydro					B10 - Drainage	_	
	B1 - Water Ma					C2 - Dry Se						Rhizospheres on Living Roots (tilled	d)
	B2 - Sedimen	•						spheres on Living	Roots (not tille	• 🗀	C8 - Crayfish E		
	B3 - Drift Dep					C4 - Prese						Note:	
	B4 - Algal Ma B5 - Iron Dep					C7 - Thin N		ace			D2 - Geomorpl D5 - FAC-Neut		
	•	ก Visible on Aerial Ima	agery			Other (Exp	iaiii)					ived Hummocks (LRR F)	
	B9 - Water-St		agory							_	27 110001100	ived Hammooko (Erkik i )	
Field Obser	vations:												
Surface Wat		Yes	Do	epth:		(in )							
Water Table		Yes □ Yes □		epth:		_ (in.) _ (in.)			Wetland H	lydrology F	Present?	N	
Saturation P		Yes				_ (in.) - (in.)						<del></del>	
Saturation	resent?	res 🗆	De	epth:		_ (in.)							
Describe Rec	orded Data (s	stream gauge, monit	toring well,	aerial	photos, pro	evious insp	ections),	if available:					
Describe Rec Remarks:	`	stream gauge, monit				evious insp	ections),	if available:					
	`					evious insp	ections),	if available:					
	`					evious insp	ections),	if available:					
Remarks:  SOILS Profile Descri	No indicator	rs of wetland hydro	ology were	obser cume	rved	cator or co	onfirm th	e absence of in					
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Remarks:  SOILS Profile Descri	No indicator	be to the depth needling, RM=Reduced Ma	ology were	obser cume	rved	cator or co	onfirm the	e absence of in ore Lining, M=Matri					
Remarks:  SOILS Profile Descri	No indicator	be to the depth need to the Reduced Ma	eded to do	obser ocume vered/C	ent the indi	cator or co	onfirm the	e absence of in ore Lining, M=Matri					
Remarks:  SOILS Profile Descri	No indicator	be to the depth needling, RM=Reduced Ma	eded to do	obser cume	rved	cator or co	onfirm the	e absence of in ore Lining, M=Matri		Texture		Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer	No indicator	be to the depth need to the de	eded to do	obser ocume vered/C	ent the indi	cator or co	onfirm the	e absence of in ore Lining, M=Matri	x)	Texture LFS		Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer	No indicator	be to the depth need to the de	eded to do atrix, CS=Cov	obser ocume vered/C	ent the indi	cator or co	onfirm the	e absence of in ore Lining, M=Matri	x)			Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15	No indicator	be to the depth need to the de	eded to do atrix, CS=Cov	obser ocume vered/C	ent the indi	cator or co	onfirm the	e absence of in ore Lining, M=Matri	x)	LFS		Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15	No indicator	be to the depth need to the de	eded to do atrix, CS=Cov	obser ocume vered/C	ent the indi	cator or co	onfirm the	e absence of in ore Lining, M=Matri	x)	LFS		Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15	No indicator	be to the depth need to the de	eded to do atrix, CS=Cov	obser ocume vered/C	ent the indi	cator or co	onfirm the	e absence of in ore Lining, M=Matri	x)	LFS		Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15	No indicator	be to the depth need to the de	eded to do atrix, CS=Cov	obser ocume vered/C	ent the indi	cator or co	onfirm the	e absence of in ore Lining, M=Matri	x)	LFS		Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15 15-18	No indicator iption (Description, D=Depleted in tration, D=Depleted	be to the depth need to the depth need to the depth need to the depth need to make the depth need to make the depth need to the depth need	eded to do atrix, CS=Cov	obser ocume vered/C	ent the indicoated Sand (	cator or co	Mottle	e absence of in ore Lining, M=Matri es Type	x)	LFS		Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15 15-18	No indicator	be to the depth need to the depth need to the depth need to the depth need to make the depth need to make the depth need to the depth need	eded to do atrix, CS=Cov	obser ocume vered/C	ent the indicoated Sand (	cator or co	Mottle	e absence of in ore Lining, M=Matri	x)	LFS FS			
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15 15-18	No indicator iption (Descrintration, D=Depleted Price Soil Field	be to the depth need to the depth need to the depth need to the depth need to make the depth need to make the depth need to the depth need	eded to do atrix, CS=Cov	obser ocume vered/C % 00 00	ent the indicated Sand (	cator or co Grains; Local Moist)	Mottle	e absence of in ore Lining, M=Matri es Type	Location	LFS FS	or Problematic		
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15 15-18  NRCS Hydr	iption (Descrintration, D=Deplementation, D=Deplementation) Hue_10YR Hue_10YR A1- Histosol	be to the depth need to the de	eded to do atrix, CS=Cov	obser ocume vered/C 00 00 indicate	ent the indicated Sand Color (	cator or co	Mottle	e absence of in ore Lining, M=Matri es Type	Location	LFS FS Indicators f A9 - 1 cm M	uck (LRR I, J)	: Soils <sup>1</sup>	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15 15-18  NRCS Hydr	iption (Descrintration, D=Deplementation, D=Deplementation) Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep	be to the depth need to the de	eded to do atrix, CS=Cov	observered/C	cated Sand Coated Sand Color (  Color (  cators are reserved)	cator or co Grains; Local Moist)  not present	Mottle %	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Coast	uck (LRR I, J) Prairie Redox (	: Soils <sup>1</sup>	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15 15-18  NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black His	be to the depth need to the de	eded to do atrix, CS=Cov	observered/C	cators are resonance of the state of the sta	cator or co Grains; Local Moist)  not presentedox Matrix Mucky Minera	Mottle %	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St	uck (LRR I, J) Prairie Redox ( urface (LRR G)	Soils <sup>1</sup> LRR F, G, H)	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15 15-18  NRCS Hydr	iption (Descrintration, D=Deplementation, D=Depl	be to the depth need to the de	eded to do atrix, CS=Cov	observered/C	cators are respectively and the indicated Sand of the indicated Sa	cator or co Grains; Local Moist)  Moist)  not present	Mottle %	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F	uck (LRR I, J) Prairie Redox ( urface (LRR G) Pains Depressio	: Soils <sup>1</sup>	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15 15-18  NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified	be to the depth need to the depth need to the depth need to the depth need to the detection, RM=Reduced Marx  Matrix  Color (Moist)  2/1  4/1  Indicators (check to be sulfide Layers (LRR F)	eded to do atrix, CS=Cov	observered/C	cators are respectively compared to the indicated Sand of the control of the cont	cator or co Grains; Local Moist)  Moist)  not present  dedox  Matrix  Mucky Minera  Gleyed Matrix  Matrix	Mottle  Mottle  // // // // // // // // // // // // /	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High P F18 - Reduce	uck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressic ed Vertic	Soils <sup>1</sup> LRR F, G, H)	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15 15-18  NRCS Hydr	iption (Descrintration, D=Deplementation, D=Depl	be to the depth need to the depth need to the depth need to the depth need to the detection, RM=Reduced Matrix  Color (Moist)  2/1  4/1  Indicators (check ipedonestic in Sulfide Layers (LRR F) ck (LRR FGH)	eded to do atrix, CS=Cov	observered/C	cators are respectively and the indicated Sand of the indicated Sa	cator or co Grains; Local Moist)  Moist)  not present dedox Matrix Mucky Minera Gleyed Matrix d Matrix Dark Surface	mottle which was all and a second conformation. The properties of the conformation of	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F F18 - Reduct TF2 - Red P	uck (LRR I, J) Prairie Redox ( urface (LRR G) Pains Depressio	Soils <sup>1</sup> LRR F, G, H)  ONS (LRR H, outside MLRA 72, 73)	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15 15-18  NRCS Hydr	iption (Descrintration, D=Deplementation, D=Depl	be to the depth need to the de	eded to do atrix, CS=Cov	observered/C	cated Sand Coated Sand Coated Sand Color (Color (Co	cator or co Grains; Local Moist)  Moist)  not present ledox Matrix Mucky Minera Gleyed Matrix Matrix Dark Surface Dark Surface	Mottle  Mottle  Mottle  Mottle  Mottle  Mottle  Mottle  Mottle	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F F18 - Reduc TF2 - Red P TF12 - Very	uck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressic ed Vertic arent Material	Soils <sup>1</sup> LRR F, G, H)  ONS (LRR H, outside MLRA 72, 73)	
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Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15 15-18	Hue_10YR Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M S3 - 5 cm Mu	be to the depth need to the depth need to the depth need to the depth need to the detect of the depth need to the depth	eded to do atrix, CS=Cov	observered/C	cated Sand Coated Sand Coated Sand Color (Color (Co	cator or co Grains; Local Moist)  Moist)  not present ledox Matrix Mucky Minera Gleyed Matrix Matrix Dark Surface Dark Surface	Mottle  Mottle  Mottle  Mottle  Mottle  Mottle  Mottle  Mottle	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F F18 - Reduc TF2 - Red P TF12 - Very Other (Expla	uck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depression ed Vertic arent Material Shallow Dark S ain in Remarks)	Soils <sup>1</sup> LRR F, G, H)  ONS (LRR H, outside MLRA 72, 73)	nt,
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15 15-18  NRCS Hydr	iption (Descrintration, D=Deplementation, D=Depl	be to the depth need to the depth need to the depth need to the depth need to the detect of the depth need to the depth	eded to do atrix, CS=Cov	observered/C	cated Sand Coated Sand Coated Sand Color (Color (Co	cator or co Grains; Local Moist)  Moist)  not present ledox Matrix Mucky Minera Gleyed Matrix Matrix Dark Surface Dark Surface	Mottle  Mottle  Mottle  Mottle  Mottle  Mottle  Mottle  Mottle	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F F18 - Reduc TF2 - Red P TF12 - Very Other (Expla	uck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depression ed Vertic arent Material Shallow Dark S in in Remarks)	ESOIIS <sup>1</sup> LRR F, G, H)  ONS (LRR H, outside MLRA 72, 73)  Gurface	nt,
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-15 15-18	Hue_10YR Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M S3 - 5 cm Mu	be to the depth need to the depth need to the depth need to the depth need to the detect of the depth need to the depth	eded to do atrix, CS=Cov	observered/C	cated Sand Coated Sand Coated Sand Color (Color (Co	cator or co Grains; Local Moist)  Moist)  not present ledox Matrix Mucky Minera Gleyed Matrix Matrix Dark Surface Dark Surface	Mottle  Mottle  Mottle  Mottle  Mottle  Mottle  Mottle  Mottle	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F F18 - Reduc TF2 - Red P TF12 - Very Other (Expla	uck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depression ed Vertic arent Material Shallow Dark S ain in Remarks)	ESOIIS <sup>1</sup> LRR F, G, H)  ONS (LRR H, outside MLRA 72, 73)  Gurface	nt,
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## WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	L3R				Sample Point: u-156n46w33-g1
VEGETATION (	、 .	re non-native spec	cies.)		
Tree Stratum (	(Plot size: 30 ft. radius) Species Name	% Cover Dor	minant	Ind.Status	Dominance Test Worksheet
1.	<u>Species Manne</u>	<u>70 0000.</u> <u>Do.</u>	<del>TITITICI II</del>	<u>maiotatao</u>	
2.					Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
3.					
4.					Total Number of Dominant Species Across All Strata:(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.	_l Total Cover =				OBL spp. 0
	Total Cover =				FAC spp. $0$ $X Z = 0$ $0$ $X Z = 0$
Sanling/Shrub 9	Stratum (Plot size: 15 ft. radius)				$\begin{array}{cccccccccccccccccccccccccccccccccccc$
1.	etratam (Fiot Size: 15 ft. radias)				$\begin{array}{cccccccccccccccccccccccccccccccccccc$
2.					
3.					Total 90 (A) 450 (B)
4.					``´
5.					Prevalence Index = B/A = 5.000
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Rapid Test for Hydrophytic Vegetation
10.	Total Cayer				Dominance Test is > 50%
	Total Cover =	= 0			Prevalence Index is ≤ 3.0 *
Llamb Otrations (	Dist size. 5 ft modius)				Morphological Adaptations (Explain) *
1.	Plot size: 5 ft. radius)  Glycine max	90		NI	Problem Hydrophytic Vegetation (Explain) *
2.	Glycine max	90	'	INI	* Indicators of hydric soil and wetland hydrology must be
3.					present, unless disturbed or problematic.
4.				-	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.				-	<b>Herb</b> - All herbaceous (non-woody) plants, regardless of size.
13.					$\dashv$
14. 15.					Woody Vines - All woody vines, regardless of height.
15.	Total Cover =	90			Woody Villes - All Woody Villes, Tegardless of Height.
	Total Cover =	90			
Woody Vine St	ratum (Plot size: 30 ft. radius)				
1.	Tatam (Flot Size: 50 ft. radius)				
2.				-	
3.					Hydrophytic Vegetation Present? N
5.					
4.					
	Total Cover =				
Remarks:	The upland sample point is dominated by he	ealthy soybeans	3.		
	<del></del>				
Additional R	Remarks:				