## WETLAND DETERMINATION DATA FORM Great Plains Region

Applicant	D 1/0:1		LOD								I Data:	00/07/44
Investigations: BLOCRAU Solution: ISSA   New Control   New	Project/Site:		L3R Enbridge								Date:	09/27/14  Reprington
Solit Discovered to the control of t						Subregio	n (MIRA	\ or I RR\.	MI RA 56			
Landform: Tail Local Relief: LD Local Re			DOC/TCAO	<b>_</b>		_ Subregio	•	•			State.	IVIIA
Slope (%)   0.2%   Long Helphology Conditions on the site typical of roths is man of years?   respect servers   3 Yea   No					<u> </u>	ocal Relief:		i Olassiiloatioii.			Sample Point:	u-153n44w2-a1
Are Cologistical (Control of the sile to lyapid for this sime of lyapid to unsure invested. In Yes In No Recognition (Commission of Control of				Latitude: 48.				2613	Datum:			
Are viceptation   Soil   Soil	. , ,		nditions on the site			_					Section:	
Are Vegetation   Soil C, or Hydrology   Calumally problematic?   E Yes   INN   Range   Dis	Are Vegetation	on 🗵 Soil	☑, or Hydrology	⊏significant	tly disturbed?		Are	e normal circum	nstances pre	esent?	Township:	
Mydracology Present?   No	_		□, or Hydrology	□aturally p	roblematic?			Yes	□ No		Range:	Dir:
Wetland Hydrology Present?   No   BTNS Sempling Point Within A Westland T No Remarks: The upland sample point is located in a wheat field that has been cut and disked. The soils are disturbed due to tilling and the vegetation is disturbed to the vegetation i	SUMMARY C	OF FINDINGS	6									
Remarks: The upland sample point is located in a wheat field that has been cut and disked. The soils are disturbed due to tilling and the vegetation is disturbed due to tilling and the vegetation is dist				No		_						
### Note of the property of th												
Wetland Hydrology Indicators (Check all that apply; Minimum of one primary or two secondary required);	Remarks:	•			heat field that	has been o	cut and o	disked. The soil	s are disturl	ped due to	tilling and the	vegetation is disturbed due to
Primary  A1 - Surface Water  A2 - High Water Table  B13 - Applic Faunt  B14 - Faunt  B15 - Sample Faunt  B15 - Sample Faunt  B15 - Sample Faunt  B15 - Sample Faunt  B	<b>HYDROLOG</b>	Υ										
A1 - Surface Water   B11 - Solt Cross   B13 - Aqualic Pation   B13		•	icators (Check all	that apply; I	Minimum of or	ne primary	or two s	econdary requir	red):	Secondary:		
A3 - Sauration   C1 - Hydrogen Sulfate Odor   B10 - Drainage Patterns   C3 - Oxidate Affizospheres on Living Roots (filled)   C3 - Suck and Affizospheres on Living Roots (filled)   C3 - Considerate Affizospheres Affizospheres on Living Roots (filled)   C3 - Considerate Affizospheres on Living Roots (fil		-	Nater			B11 - Salt	Crust				•	oil Cracks
BI - Water Marks   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Staturation Water Parks Burrows   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Staturation Water Parks Burrows   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Staturation Water Parks Burrows   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Rhozospheras on Living Roots (not tilling)   C3 - Oxidized Rhozospheras on Living Rhozosphe						•						
B2 - Sadiment Deposits   C3 - Oxidized Rhizospheres on Living Roots (not tills   C6 - Crayfish Burrows   C7 - Thin Musk Surface   C7 -												
B3 - Orlf Deposits   C4 - Presence of Reduced Iron   C2 - Saturation Visible on Aerial Imagery   Debe									Roots (not till	⊔ • □		
B4 - Algal Mater of Crust   C7 - Thin Muck Surface   D2 - Geomorphic Position   D2 - Geomorphic Position   D3 - Frost-Heaved Hummocks (LRR F)   D7 - Frost-Heaved Hummocks (LRR F)   D7 - Frost-Heaved Hummocks (LRR F)   D8 - Invadiation Visible on Aerial Imagery   D8 - Water Saline Leaves   D8 - FA-Neutral Test   D7 - Frost-Heaved Hummocks (LRR F)   D7 - Frost-Heaved Hummocks (LRR F)   D8 - Water Saline Testers   D8 - Wa			•						rtooto (riot tiii	`	-	
B7 - Inundation Visible on Aerial Imagery   B7 - Invadation Visi		•						ace			D2 - Geomorpl	nic Position
B9 - Water-Stained Leaves   Field Observations:						Other (Exp	lain)					
Field Observations:  Surface Water Present? Yes   Depth:				agery						П	D7 - Frost-Hea	ved Hummocks (LRR F)
Surface Water Present? Yes   Depth: (in.) Water Table Present? Yes   Depth: (in.) D		Do Waler G	anoa Loavoo									
Surface Water Present? Yes   Depth: (in.) Water Table Present? Yes   Depth: (in.) D	Field Observ	vations:										
Water Table Present? Yes   Depth: (in.)   Wetland Hydrology Present?   Naturation Present? Yes   Depth: (in.)			Yes □	Dep	oth:	(in.)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				•					Wetland H	lydrology	Present?	N
Remarks: No indicators of wetland hydrology were observed.    Soll S			Yes □	•								<del>_</del>
Remarks: No indicators of wetland hydrology were observed.    Soll S	Describe Rec	orded Data (s	tream gauge moni	itoring well a	erial photos, pi	revious insp	ections)	if available:				
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.)  (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix  Depth (In.)												
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.)  (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix  Depth (In.)	SOILS											
Matrix   Mottles   Color (Moist)   %   Color (Moist)   %   Type   Location   Texture   Remarks		iption (Descri	be to the depth ne	eded to doc	cument the ind	icator or co	onfirm th	e absence of in	dicators.)			
Depth (In.)  Color (Moist)												
Depth (In.)  Color (Moist)										1	_	
O-6 Hue_10YR 2/1 100 CL Calcic horizon 8-12 Hue_10YR 5/1 100 C Calcic horizon  NRCS Hydric Soil Field Indicators (check here if indicators are not present):    A1- Histosol									T -			
6-8			, ,			(Moist)	%	Туре	Location	Texture		Remarks
Remarks:    Soils could not be sampled past 12 inches due to presence of dense gravel. The soil has a 6-inch dark clay loam surface over a 2-inch calcic layer. Below 8 inches is a loamy fine sand with abundant gravel. Though it colors as depleted, the calcic horizon sould not be considered a depleted layer as the color is due		_								CL		
NRCS Hydric Soil Field Indicators (check here if indicators are not present):    A1- Histosol										С	Calcic horizon	
Indicators for Problematic Soils   A1- Histosol	8-12	Hue_10YR	6/3	10	00					LFS	Lots of gravel pres	sent
Indicators for Problematic Soils   A1- Histosol												
Indicators for Problematic Soils   A1- Histosol												
Indicators for Problematic Soils   A1- Histosol												
A1- Histosol	NRCS Hydr	ic Soil Field	<b>Indicators</b> (ch	eck here if i	indicators are	not presen	t):	✓				
A2 - Histic Epipedon					П 05 6	<b>5</b> !			_			: Soils¹
A3 - Black Histic										IDD E C H)		
A4 - Hydrogen Sulfide									LRR F, G, H)			
A5 - Stratified Layers (LRR F)									DNS (LRR H, outside MLRA 72, 73)			
A11 - Depleted Below Dark Surface		A5 - Stratified Layers (LRR F)										
A12 - Thick Dark Surface												
S1 - Sandy Mucky Mineral S2 - 2.5 cm Mucky Peat or Peat (LRR G, H) S3 - 5 cm Mucky Peat or Peat (LRR F) S4 - Sandy Gleyed Matrix    Type: Gravel	_	·						·				
S2 - 2.5 cm Mucky Peat or Peat (LRR G, H) S3 - 5 cm Mucky Peat or Peat (LRR F) S4 - Sandy Gleyed Matrix    Type: Grave    Soils could not be sampled past 12 inches due to presence of dense gravel. The soil has a 6-inch dark clay loam surface over a 2-inch calcic layer. Below 8 inches is a loamy fine sand with abundant gravel. Though it colors as depleted, the calcic horizon sould not be considered a depleted layer as the color is due	_											
S3 - 5 cm Mucky Peat or Peat (LRR F) S4 - Sandy Gleyed Matrix  Type: Gravel  Collaboration and Wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer  Type: Gravel  Collaboration and Wetland hydrology must be present, unless disturbed or problematic.  Hydric Soil Present?  N  Soils could not be sampled past 12 inches due to presence of dense gravel. The soil has a 6-inch dark clay loam surface over a 2-inch calcic layer. Below 8 inches is a loamy fine sand with abundant gravel. Though it colors as depleted, the calcic horizon sould not be considered a depleted layer as the color is due		•	,				(1716		,			
Restrictive Layer  Type: Gravel  Depth: 12 inches  Hydric Soil Present?  N  Soils could not be sampled past 12 inches due to presence of dense gravel. The soil has a 6-inch dark clay loam surface over a 2-inch calcic layer. Below 8 inches is a loamy fine sand with abundant gravel. Though it colors as depleted, the calcic horizon sould not be considered a depleted layer as the color is due		S3 - 5 cm Mu	cky Peat or Peat (LRI									on and wetland hydrology must be present,
Remarks: Soils could not be sampled past 12 inches due to presence of dense gravel. The soil has a 6-inch dark clay loam surface over a 2-inch calcic layer. Below 8 inches is a loamy fine sand with abundant gravel. Though it colors as depleted, the calcic horizon sould not be considered a depleted layer as the color is due			leved Matrix							uniess disturbe	ed or problematic.	
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inches is a loamy fine sand with abundant gravel. Though it colors as depleted, the calcic horizon sould not be considered a depleted layer as the color is due					Depth	12 inches		Hydric So	il Present?	N		
	Restrictive Layer	r Type:	Gravel	net 12 inches			eo arove				n curtoso ovo	r a 2 inch calaia layar Palay 9
	Restrictive Layer	Type:	Gravel not be sampled pa		s due to prese	nce of den	•	el. The soil has	a 6-inch da	rk clay loar		•

## WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	L3R				Sample Point: u-153n44w2-a1
VEGETATION	· · ·	ire non-native	species.)		
Tree Stratum (	Plot size: 30 ft. radius)  Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	<u> </u>	<u>70 0000.</u>	Dominant	<u>ma.o.a.ao</u>	
2.					Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
3.					
4.		1			Total Number of Dominant Species Across All Strata:1(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.		]			OBL spp. $0   x   1 = 0$
	Total Cover =	= 0			FACW spp. 0
					FAC spp. $\underline{\qquad}$ $\underline{\qquad}$ $\underline{\qquad}$ $\underline{\qquad}$ $\underline{\qquad}$ $\underline{\qquad}$ $\underline{\qquad}$ $\underline{\qquad}$ $\underline{\qquad}$
	Stratum (Plot size: 15 ft. radius)	1			FACU spp. $\frac{15}{2}$ $\times$ $4 = \frac{60}{2}$
1.					UPL spp. 20
2. 3.					Total 40 (A) 175 (B)
4.					Total 40 (A) 175 (B)
5.					Prevalence Index = B/A = 4.375
6.	<u></u>	1			Trevalence index = B/A = 4.370
7.	<u></u>				
8.					Hydrophytic Vegetation Indicators:
9.		_			Rapid Test for Hydrophytic Vegetation
10.					Dominance Test is > 50%
	Total Cover =	= 0			Prevalence Index is ≤ 3.0 *
					 Morphological Adaptations (Explain) *
Herb Stratum (I	Plot size: 5 ft. radius)				Problem Hydrophytic Vegetation (Explain) *
1.	Triticum aestivum	20	Υ	NI	
2.	Plantago major	5	N	FAC	* Indicators of hydric soil and wetland hydrology must be
3.	Ambrosia artemisiifolia	5	N	FACU	present, unless disturbed or problematic.
4.	Trifolium repens	5	N	FACU	Definitions of Vegetation Strata:
5.	Taraxacum officinale	5	N	FACU	
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.		I			
11.					
12.		1			<b>Herb</b> - All herbaceous (non-woody) plants, regardless of size.
13.					
14.					
15.		ı			Woody Vines - All woody vines, regardless of height.
	Total Cover =	= 40			
Woody Vine Str	ratum (Plot size: 30 ft. radius)	1			
1.		1			
2.		1			II. Local da Varadada Barando N
3.	<u> </u>	1			Hydrophytic Vegetation Present?N
5.	<u> </u>				
4.	Total Cover				
Domorko	Total Cover =		o from onil	led arein	There are also a let of old wheat stalks in the area. Dare sail accounts for
Remarks:	approximately 60 percent of ground cover.	neat sprout	s from spil	lied grain.	There are also a lot of old wheat stalks in the area. Bare soil accounts for
	approximately to percent of ground cover.				
A al al!4! a ! 🔽	lamanta.				
Additional R	emarks:				
1					