WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R								Date:	10/15/14
Applicant:	Enbridge									County:	Red Lake
Investigators					Subregion (MLRA or LRR): MLRA 56					State:	MN
Soil Unit:	159A						I Classification:			_	
Landform:	Talf				ocal Relief:					Sample Point	: u-151n42w24-q1
Slope (%):	0 - 2%		Latitude: 47.		Longitude			Datum:		4	
	, ,	nditions on the site		,					D No	Section:	
Are Vegetati	on Ļ Soil	G or Hydrology				Are	e normal circun	•	esent?	Township:	
Are Vegetation		C or Hydrology	Liturally p	roblematic?			Yes	□No		Range:	Dir:
SUMMARY OF FINDINGS Hydrophytic Vegetation Present? No Hydric Soils Present? No											
			No		_			Hydric Soi			
Wetland Hyd			No	· · · ·						nt Within A W	
Remarks:			cated in a fir	e-dependent	forest com	munity d	ominated by qu	laking aspe	n and bur c	bak with Penr	sylvania sedge and bracken fern
	in the groun	d layer.									
HYDROLOG	Y										
Wetland Hy	drology Indi	cators (Check all	l that apply; I	/inimum of o	ne primary	or two s	econdary requi	red):			
Primary									Secondary:		
A1 - Surface Water					B11 - Salt					B6 - Surface S	
	A2 - High Wat A3 - Saturatio				B13 - Aqua						Vegetated Concave Surface
	B1 - Water Ma				□ C1 - Hydrogen Sulfide Odor □ B10 - Drainage Patterns □ C2 - Dry Season Water Table □ C3 - Oxidized Rhizospheres on Living Root						
	B2 - Sedimen						spheres on Living	Roots (not till		C8 - Crayfish	
	B3 - Drift Dep				C4 - Prese	ence of Re	duced Iron			C9 - Saturatio	n Visible on Aerial Imagery
	B4 - Algal Mat						ace				bhic Position
	B5 - Iron Depo	n Visible on Aerial Im	ageny	L	Other (Exp	biain)				D5 - FAC-Neu	aved Hummocks (LRR F)
	B9 - Water-St		lagery						-	DI - FIOSI-HE	aved Hummocks (LRR F)
Field Obser	vations:										
Surface Wat		Yes 🛛	Den	th:	(in.)						
Water Table		Yes 🔲	Dep	th:				Wetland H	lydrology	Present?	N
Saturation Pr		Yes 🗆		th:	(in.)						<u> </u>
					_ 、 /						
		tream gauge, moni	-				if available:				
Remarks:	No primary	or secondary indic	cators of wet	and hydrolog	y were obs	served.					
	intion (Docori	SOILS									
	Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
(Type: C=Concer											
(Type: C=Concer		be to the depth ne etion, RM=Reduced Ma									
(Type: C=Concer		etion, RM=Reduced M				ation: PL=P	ore Lining, M=Mati				
	ntration, D=Deple	etion, RM=Reduced Matrix	atrix, CS=Cove	ed/Coated Sand	Grains; Loca	ation: PL=P Mottle	ore Lining, M=Matr	rix)	Texture		Remarks
Depth (In.)	ntration, D=Deple	etion, RM=Reduced M Matrix Color (Moist)	atrix, CS=Cove	ed/Coated Sand	Grains; Loca	ation: PL=P	ore Lining, M=Mati		Texture		Remarks
Depth (In.) 0-7	htration, D=Deplo	Matrix Color (Moist) 3/1	Atrix, CS=Cove	Color	Grains; Loca (Moist)	Mottle	ore Lining, M=Mati es Type	Location	L		Remarks
Depth (In.) 0-7 7-11	Hue_10YR	Matrix Color (Moist) 3/1 6/1	% 10	Color Color Hue_10YF	Grains; Loca (Moist)	ation: PL=P Mottle	ore Lining, M=Matr	rix)	L FSL		Remarks
Depth (In.) 0-7 7-11 7-11	Hue_10YR Hue_10YR Hue_10YR Hue_10YR	Matrix Matrix Color (Moist) 3/1 6/1 3/1	atrix, CS=Cove % 10 58 40	Color Color Hue_10YF	Grains; Loca (Moist) R 5/6	Mottle	ore Lining, M=Matr es Type C	Location M	L FSL SCL		Remarks
Depth (In.) 0-7 7-11	Hue_10YR	Matrix Color (Moist) 3/1 6/1	% 10	Color Color Hue_10YF	Grains; Loca (Moist) R 5/6	Mottle	ore Lining, M=Mati es Type	Location	L FSL		Remarks
Depth (In.) 0-7 7-11 7-11	Hue_10YR Hue_10YR Hue_10YR Hue_10YR	Matrix Matrix Color (Moist) 3/1 6/1 3/1	atrix, CS=Cove % 10 58 40	Color Color Hue_10YF	Grains; Loca (Moist) R 5/6	Mottle	ore Lining, M=Matr es Type C	Location M	L FSL SCL		Remarks
Depth (In.) 0-7 7-11 7-11 11-18	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y	etion, RM=Reduced M Matrix Color (Moist) 3/1 6/1 3/1 3/2	atrix, CS=Cove % 10 58 4(98	Color Color Hue_10YF	Grains; Loca (Moist) R 5/6 R 5/6	Mottle % 2 2 2	ore Lining, M=Matr	Location M	L FSL SCL		Remarks
Depth (In.) 0-7 7-11 7-11 11-18	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y	Matrix Matrix Color (Moist) 3/1 6/1 3/1	atrix, CS=Cove % 10 58 4(98	Color Color Hue_10YF	Grains; Loca (Moist) R 5/6 R 5/6	Mottle % 2 2 2	ore Lining, M=Matr es Type C	Location M	L FSL SCL SC		
Depth (In.) 0-7 7-11 7-11 11-18	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y Fic Soil Field	etion, RM=Reduced M Matrix Color (Moist) 3/1 6/1 3/1 3/2	Atrix, CS=Cove	Color Color Hue_10YF	Grains; Loca (Moist) R 5/6 R 5/6 Not preser	Mottle % 2 2 2	ore Lining, M=Matr	Location M M M	L FSL SCL SC	for Problemati	
Depth (In.) 0-7 7-11 7-11 11-18	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol	Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (ch	Atrix, CS=Cove % 10 58 40 98 neck here if i	Color Color Hue_10YF	Grains; Loca (Moist) R 5/6 R 5/6 not preser Redox	Mottle % 2 2 2	ore Lining, M=Matr	Location M M M	L FSL SCL SC Indicators 1 A9 - 1 cm M	luck (LRR I, J)	<u>c Soils¹</u>
Depth (In.) 0-7 7-11 7-11 11-18	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep	Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (cf	atrix, CS=Cove % 10 58 40 98 neck here if i	Color Color Hue_10YF Hue_10YF Hue_10YF Hue_10YF S5 - Sandy f S5 - Sandy f S6 - Stripped	Grains; Loca (Moist) R 5/6 R 5/6 not preser Redox d Matrix	Mottl % 2 2 2	ore Lining, M=Matr	Location M M	L FSL SCL SC Indicators 1 A9 - 1 cm M A16 - Coast	luck (LRR I, J) t Prairie Redox	<u>c Soils¹</u> (LRR F, G, H)
Depth (In.) 0-7 7-11 7-11 11-18 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol	tion, RM=Reduced M Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (ch ipedon tic	Atrix, CS=Cove	Color Color Hue_10YF	Grains; Loca (Moist) R 5/6 R 5/6 not preser Redox d Matrix Mucky Miner	Mottle Mottle % 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	ore Lining, M=Matr	Location M M M	L FSL SCL SC Indicators A9 - 1 cm M A16 - Coast S7 - Dark S	/luck (LRR I, J) t Prairie Redox surface (LRR G)	<u>c Soils¹</u> (LRR F, G, H)
Depth (In.) 0-7 7-11 7-11 11-18 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified	Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (ch ipedon tic 1 Sulfide Layers (LRR F)	atrix, CS=Cove	Color Color Hue_10YF Hue_10YF Hue_10YF Hue_10YF S Hue_10YF S - Sandy f S5 - Sandy f S6 - Strippe F1 - Loamy F2 - Loamy F3 - Deplete	Grains; Loca (Moist)	And the second s	ore Lining, M=Matr	Location M M	L FSL SCL SC A9 - 1 cm N A16 - Coast S7 - Dark S F16 - High F	Muck (LRR I, J) t Prairie Redox surface (LRR G) Plains Depressi ced Vertic	<u>c Soils1</u> (LRR F, G, H)
Depth (In.) 0-7 7-11 7-11 11-18 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y Tic Soil Field A1- Histosol A2 - Histic Ep A3 - Black Higer A4 - Hydroger A5 - Stratified A9 - 1 cm Mur	Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (ch ipedon tic tic filde Layers (LRR F) ck (LRR FGH)	atrix, CS=Cove	Color Color Hue_10YF Hue_10YF Hue_10YF Hue_10YF S5 - Sandy F S6 - Stripped F1 - Loamy F1 - Loamy F3 - Deplete F6 - Redox f	Grains; Loca (Moist) Control (Moist) Control (Moist) C	Mottl Mottl % 2 2 2 1 1 1 2 2 1 1 1 1 2 2 1 1 1 2 1 2 1 1 2 1 2 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 1 1 2 1 2 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	ore Lining, M=Matr	Location M M	L FSL SCL SC A9 - 1 cm N A16 - Coast S7 - Dark S F16 - High F F18 - Redut TF2 - Red F	Muck (LRR I, J) t Prairie Redox surface (LRR G) Plains Depressi ced Vertic Parent Material	<u>c Soils¹</u> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73)
Depth (In.) 0-7 7-11 7-11 11-18 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y Hue	tion, RM=Reduced M Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (cf ipedon tic ipedon tic Layers (LRR F) b (LRR FGH) d Below Dark Surfac	e	Color Color Hue_10YF Hue_10YF Hue_10YF Hue_10YF S Hue_10YF S - Sandy F S - Sandy F S - Strippe F - Loamy F - Loamy F - Loamy F - Redox I F - Redox I F - Deplete	Grains; Loca (Moist) Construction Construc	Mottl Mottl % 2 2 1 1 2 1 1 1 2 1 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	ore Lining, M=Matr	Location M M	L FSL SCL SC A9 - 1 cm N A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	Muck (LRR I, J) t Prairie Redox surface (LRR G) Plains Depressi ced Vertic Parent Material v Shallow Dark s	<u>c Soils1</u> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface
Depth (In.) 0-7 7-11 7-11 11-18 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D	Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (cf ipedon titic bulfide Laufide Laufide Laufide Laufide Laufide Laufide Laufide Char FGH) d Below Dark Surface	e	Sector Sector Color Color Color Color Hue_10YF Color Hue_10YF Color Hue_10YF Color S5 - Sandy f S6 - Strippe S5 - Sandy f S7 - Comy F1 - Loamy F2 - Loamy F3 - Deplete F6 - Redox f F8 - Redox f F8 - Redox f	Grains; Loca (Moist) 5/6 5/6 5/6 Construction Redox d Matrix Mucky Miner Gleyed Matri d Matrix Dark Surface Depressions	Mottl- Mottl- % 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ore Lining, M=Matr	Location M M M	L FSL SCL SC A9 - 1 cm N A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	Muck (LRR I, J) t Prairie Redox surface (LRR G) Plains Depressi ced Vertic Parent Material	<u>c Soils1</u> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface
Depth (In.) 0-7 7-11 7-11 11-18 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_25Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M	Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (cf ipedon titic bulfide Laufide Laufide Laufide Laufide Laufide Laufide Laufide Char FGH) d Below Dark Surface	e	Sector Sector Color Color Color Color Hue_10YF Color Hue_10YF Color Hue_10YF Color S5 - Sandy f S6 - Strippe S5 - Sandy f S7 - Comy F1 - Loamy F2 - Loamy F3 - Deplete F6 - Redox f F8 - Redox f F8 - Redox f	Grains; Loca (Moist) 5/6 5/6 5/6 Construction Redox d Matrix Mucky Miner Gleyed Matri d Matrix Dark Surface Depressions	Mottl- Mottl- % 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ore Lining, M=Matr	Location M M M	L FSL SCL SC A9 - 1 cm N A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	Muck (LRR I, J) t Prairie Redox surface (LRR G) Plains Depressi ced Vertic Parent Material v Shallow Dark s	<u>c Soils1</u> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface
Depth (In.) 0-7 7-11 7-11 11-18 NRCS Hydr 0 0 0 0 0 0 0 0 0 0 0 0 0	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y Hue_3.5Y Hue	tion, RM=Reduced M Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (cf ipedon tic buffide Layers (LRR F) k (LRR FGH) d Below Dark Surface ark Surface ucky Mineral lucky Peat or Peat (LR	e RR G, H)	Sector Sector Color Color Color Color Hue_10YF Color Hue_10YF Color Hue_10YF Color S5 - Sandy f S6 - Strippe S5 - Sandy f S7 - Comy F1 - Loamy F2 - Loamy F3 - Deplete F6 - Redox f F8 - Redox f F8 - Redox f	Grains; Loca (Moist) 5/6 5/6 5/6 Construction Redox d Matrix Mucky Miner Gleyed Matri d Matrix Dark Surface Depressions	Mottl- Mottl- % 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ore Lining, M=Matr	Location M M M	L FSL SCL SC A9 - 1 cm N A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	Muck (LRR I, J) t Prairie Redox iurface (LRR G) Plains Depressi ced Vertic Parent Material / Shallow Dark ain in Remarks)	<u>c Soils1</u> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface
Depth (In.) 0-7 7-11 7-11 11-18 NRCS Hydr 0 0 0 0 0 0 0 0 0 0 0 0 0	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y Tic Soil Field A1- Histosol A2 - Histic Ep A3 - Black Hig A4 - Hydroger A5 - Stratified A9 - 1 cm Mur A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M	tion, RM=Reduced M Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (cf ipedon tic buffide Layers (LRR F) k (LRR FGH) d Below Dark Surface ark Surface ucky Mineral lucky Peat or Peat (LR	e RR G, H)	Sector Sector Color Color Color Color Hue_10YF Color Hue_10YF Color Hue_10YF Color S5 - Sandy f S6 - Strippe S5 - Sandy f S7 - Comy F1 - Loamy F2 - Loamy F3 - Deplete F6 - Redox f F8 - Redox f F8 - Redox f	Grains; Loca (Moist) 5/6 5/6 5/6 Construction Redox d Matrix Mucky Miner Gleyed Matri d Matrix Dark Surface Depressions	Mottl- Mottl- % 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ore Lining, M=Matr	Location M M M	L FSL SCL SC A9 - 1 cm N A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	Muck (LRR I, J) t Prairie Redox Jurface (LRR G) Plains Depressi ced Vertic Parent Material / Shallow Dark (ain in Remarks)	<u>c Soils¹</u> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface)
Depth (In.) 0-7 7-11 7-11 11-18 NRCS Hydr 0 0 0 0 0 0 0 0 0 0 0 0 0	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y Hue_3.5Y Hue	tion, RM=Reduced M Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (cf ipedon tic buffide Layers (LRR F) k (LRR FGH) d Below Dark Surface ark Surface ucky Mineral lucky Peat or Peat (LR	e RR G, H)	Sector Sector Color Color Color Color Hue_10YF Color Hue_10YF Color Hue_10YF Color S5 - Sandy f S6 - Strippe S5 - Sandy f S7 - Comy F1 - Loamy F2 - Loamy F3 - Deplete F6 - Redox f F8 - Redox f F8 - Redox f	Grains; Loca (Moist) 5/6 5/6 5/6 Construction Redox d Matrix Mucky Miner Gleyed Matri d Matrix Dark Surface Depressions	Mottl- Mottl- % 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ore Lining, M=Matr	Location M M M	L FSL SCL SC A9 - 1 cm N A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	Muck (LRR I, J) t Prairie Redox iurface (LRR G) Plains Depressi ced Vertic Parent Material / Shallow Dark ain in Remarks)	<u>c Soils¹</u> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface)
Depth (In.) 0-7 7-11 7-11 11-18 NRCS Hydr 0 0 0 0 0 0 0 0 0 0 0 0 0	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_25Y Hue_2.5Y Hue_3.5Y Hue_	tion, RM=Reduced M Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (cf ipedon tic buffide Layers (LRR F) k (LRR FGH) d Below Dark Surface ark Surface ucky Mineral lucky Peat or Peat (LR	e RR G, H)	Sector Sector Color Color Color Color Hue_10YF Color Hue_10YF Color Hue_10YF Color S5 - Sandy f S6 - Strippe S5 - Sandy f S7 - Comy F1 - Loamy F2 - Loamy F3 - Deplete F6 - Redox f F8 - Redox f F8 - Redox f	Grains; Loca (Moist) Control (Moist) Control (Moist) C	Mottl- Mottl- % 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RA 72, 73 of LRF	Location M M M H)	L FSL SCL SC A9 - 1 cm N A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	Muck (LRR I, J) t Prairie Redox iurface (LRR G) Plains Depressi ced Vertic Parent Material / Shallow Dark ain in Remarks)	<u>c Soils¹</u> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface)
Depth (In.) 0-7 7-11 7-11 11-18 NRCS Hydr 0 0 0 0 0 0 0 0 0 0 0 0 0	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A9 - 1 cm Muc A11 - Deplete A12 - Thick D S1 - Sandy Mi S2 - 2.5 cm Mu S3 - 5 cm Mu S3 - 5 cm Mu S4 - Sandy Gi	Attion, RM=Reduced M Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (ch ipedon tic buffide Layers (LRR F) ck (LRR FGH) d Below Dark Surface ark Surface ucky Mineral lucky Peat or Peat (LR ky Peat or Peat (LR ky Peat or Peat (LR	e RR G, H) R F)	Color Color Hue_10YF Hue_10YF Hue_10YF Hue_10YF Solution	Crains; Loca	ral ix sssions (ML	RA 72, 73 of LRF	itx) Location M M M M R H)	L FSL SCL SC A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	Muck (LRR I, J) t Prairie Redox surface (LRR G) Plains Depressi ced Vertic Parent Material / Shallow Dark s ain in Remarks) hydrophytic vegeta ed or problematic.	<u>c Soils¹</u> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface) tion and wetland hydrology must be present,
Depth (In.) 0-7 7-11 11-18 NRCS Hydr 0 0 0 0 0 0 0 0 0 0 0 0 0	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_25Y Hue_2.5Y Fic Soil Field A1- Histosol A2 - Histic Ep A3 - Black Histic Ep A3 - Black Histic Ep A3 - Black Histic Ep A3 - Black Histic A4 - Hydroger A5 - Stratified A9 - 1 cm Mur A11 - Deplete A12 - Thick D S1 - Sandy Mi S2 - 2.5 cm Mu S3 - 5 cm Mu S3 - 5 cm Mu S4 - Sandy Gi r Type:	Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (ch ipedon tic n Sulfide Layers (LRR F) ck (LRR FGH) d Below Dark Surface ark Surface ucky Mineral lucky Peat or Peat (LR ky Peat or Peat (LR ky Peat or Peat (LR so f a dark loam u	e RR G, H) R F)	Color Color Color Hue_10YF Hue_10YF Hue_10YF Color Solution Color	Grains; Loca (Moist) Construction Construc	Mottl Mottl % 2 2 1 1 1 2 2 1 1 2 1 2 2 1 1 2 2 1 1 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	RA 72, 73 of LRF	itx) Location M M M M R H)	L FSL SCL SC A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	Muck (LRR I, J) t Prairie Redox surface (LRR G) Plains Depressi ced Vertic Parent Material / Shallow Dark s ain in Remarks) hydrophytic vegeta ed or problematic.	<u>c Soils¹</u> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface)
Depth (In.) 0-7 7-11 7-11 11-18 NRCS Hydr 0 0 0 0 0 0 0 0 0 0 0 0 0	Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_25Y Hue_2.5Y Fic Soil Field A1- Histosol A2 - Histic Ep A3 - Black Histic Ep A3 - Black Histic Ep A3 - Black Histic Ep A3 - Black Histic A4 - Hydroger A5 - Stratified A9 - 1 cm Mur A11 - Deplete A12 - Thick D S1 - Sandy Mi S2 - 2.5 cm Mu S3 - 5 cm Mu S3 - 5 cm Mu S4 - Sandy Gi r Type:	Attion, RM=Reduced M Matrix Color (Moist) 3/1 6/1 3/1 3/2 Indicators (ch ipedon tic buffide Layers (LRR F) ck (LRR FGH) d Below Dark Surface ark Surface ucky Mineral lucky Peat or Peat (LR ky Peat or Peat (LR ky Peat or Peat (LR	e RR G, H) R F)	Color Color Color Hue_10YF Hue_10YF Hue_10YF Color Solution Color	Grains; Loca (Moist) Construction Construc	Mottl Mottl % 2 2 ti): ral ix ssions (ML re sandy	RA 72, 73 of LRF	itx) Location M M M M R H)	L FSL SCL SC A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	Muck (LRR I, J) t Prairie Redox surface (LRR G) Plains Depressi ced Vertic Parent Material / Shallow Dark s ain in Remarks) hydrophytic vegeta ed or problematic.	<u>c Soils¹</u> (LRR F, G, H)) ONS (LRR H, outside MLRA 72, 73) Surface) tion and wetland hydrology must be present,

WETLAND DETERMINATION DATA FORM

Great Plains Region

Project/Site:	L3R				Sample Point: u-151n42w24-q1
VEGETATIO		e non-native	species.)		
Tree Stratum ((Plot size: 30 ft. radius)				Deminence Test Werkehest
1.	Species Name Populus tremuloides	<u>% Cover</u> 30	Dominant Y	Ind.Status FAC	Dominance Test Worksheet
2.	Quercus macrocarpa	30	Y	FAC	Number of Dominant Species that are ORL EACIN or EAC: 1 (A)
3.		30	I	FACU	Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3. 4.					Total Number of Dominant Species Across All Strata: 4 (B)
4. 5.					Total Number of Dominant Species Across All Strata: 4 (B)
6.	<u> </u>				Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)
7.	<u> </u>				
8.					Prevalence Index Worksheet
9.	<u> </u>				Total % Cover of: Multiply by:
10.					$\frac{10 \text{ Multiply by:}}{\text{OBL spp.}} 0 \qquad \text{x 1 = } 0$
10.	 Total Cover =	60			FACW spp. 6 x 2 = 12
		00			FAC spp. 37 \times 3 = 111
Sanling/Shrub	Stratum (Plot size: 15 ft. radius)				FACU spp. 86 x 4 = 344
1.	Quercus macrocarpa	20	Y	FACU	UPL spp. 70 x 5 = 350
2.	Amelanchier alnifolia	5	N	FACU	
3.	Cornus racemosa	5	N	FAC	Total 199 (A) 817 (B)
4.	Cornus alba	2	N	FACW	
4. 5.	Rosa blanda	2	N	FACU	Prevalence Index = B/A = 4.106
6.	Salix discolor	2	N	FACW	
7.		2	IN .	TAON	
8.	<u> </u>				Hydrophytic Vegetation Indicators:
9.	<u> </u>				Rapid Test for Hydrophytic Vegetation
9. 10.					Dominance Test is > 50%
10.	Total Cover =	36			Prevalence Index is ≤ 3.0 *
		50	_		
Harb Stratum (Diet eize, 5 ft rediue)				Morphological Adaptations (Explain) * Problem Hydrophytic Vegetation (Explain) *
1.	Plot size: 5 ft. radius) Carex pensylvanica	70	Y	NI	
2.	Pteridium aquilinum	20	N	FACU	* Indicators of hydric soil and wetland hydrology must be
3.	Solidago canadensis	5	N	FACU	present, unless disturbed or problematic.
4.	Geum aleppicum	2	N	FACU	Definitions of Vegetation Strata:
5.	Zizia aurea	2	N	FAC	
6	Galium boreale	2	N	FACU	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.	Thalictrum dioicum	2	N	FACW	height (DBH), regardless of height.
8.		2	IN .	TAON	
9.					Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.
10.					oupling office and the second s
10.					
11.					Herb - All herbaceous (non-woody) plants, regardless of size.
12.					
13.					
14.	<u> </u>			-	Woody Vines - All woody vines, regardless of height.
10.	Total Cover =	102			Today Tilloo Today Toda Construction
		103	_		
Woody Vino St	ratum (Plot size: 30 ft radius)				
1.	ratum (Plot size: 30 ft. radius)				
2.	<u> </u>				
3.	<u> </u>				Hydrophytic Vegetation Present? N
5.	<u> </u>				
5. 4.					
4.	Total Cover =	0			
Remarks:			(in the car	nony with	bur oak saplings in the understory. Herbaceous vegetation is dominated by
i tomarito.	Pennsylvania sedge and bracken fern.		chi ule cal	Spy with	our our ouplings in the understory. Herbacedus vegetation is dominated by
	. c.mojivana obugo ana braditer rem.				
A al al 16 1 -) - w - wk-				
Additional R	kemarks:				