## WETLAND DETERMINATION DATA FORM Great Plains Region

										_	
Project/Site:	L3R									Date:	10/08/14
Applicant:	Enbrid	lge								County:	Pennington
Investigators		<u> </u>			Subregio	n (MLRA	or LRR):	MLRA 56		State:	MN
Soil Unit:	150A				Gubrogio	•	Classification			Olalo.	
							Classification	·			450-40-204
Landform:	Dip			cal Relief:					Sample Point:	w-152n43w24-c1	
Slope (%):	0 - 2%	Lati	itude: 47.964	4504	Longitude:	-96.106	312	Datum:			
Are climatic/h	nydrologic conditions	s on the site tvr	pical for this	s time of vea	-			☑ Yes	□ No	Section:	
			•								
Are Vegetation			•			Are	e normal circun	•	esent?	Township:	
Are Vegetation	on 🗆 Soil 🗆, or	Hydrology Da	aturally prob	olematic?			⊠ Yes	🗆 No		Range:	Dir:
SUMMARY C	OF FINDINGS										
	Vegetation Present?	)	Yes					Hydric Soi	Is Present?	Voc	
• • •	-										
	rology Present?		Yes							it Within A W	etland? <b>Yes</b>
Remarks:	The wetland is a se	easonally flood	led basin lo	cated in a fa	rmed bea	n field ar	nd dominated b	y field hors	etail.		
		•						•			
HYDROLOG	Y										
Wetland Hy	drology Indicators	(Check all tha	at apply: Mir	nimum of on	o primary	or two sa	acondary requi	red)•			
-			at apply, will		epimary	01 100 56	econically requi	leu).	0		
Primary:						_			Secondary:		
	A1 - Surface Water				B11 - Salt (					B6 - Surface S	
	A2 - High Water Table	e			B13 - Aqua						Vegetated Concave Surface
	A3 - Saturation				C1 - Hydro	gen Sulfid	e Odor			B10 - Drainage	e Patterns
	B1 - Water Marks				C2 - Dry Se	eason Wa	ter Table			C3 - Oxidized	Rhizospheres on Living Roots (tilled)
	B2 - Sediment Deposi	its					pheres on Living	Roots (not till	€ □	C8 - Crayfish I	
	B3 - Drift Deposits			- п	C4 - Prese			(		•	n Visible on Aerial Imagery
	B4 - Algal Mat or Crus	st			C7 - Thin M					D2 - Geomorp	•••
	B4 - Algar Mat of Crus B5 - Iron Deposits									D5 - FAC-Neu	
		on Aorial Iman		Ц	Other (Exp	iaii i)					
	B7 - Inundation Visible	•	яу							DI - FIUST-HEA	aved Hummocks (LRR F)
	B9 - Water-Stained Le	eaves									
Field Observ	vations:										
		_	Denth		(in )						
	er Present? Yes		Depth:		(in.)			Wetland H	lydrology F	Present?	Y
Water Table	Present? Yes		Depth:		(in.)			rrottana i	i yai elegy i		
Saturation Pr	resent? Yes		Depth:		(in.)						
					,						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
Remarks: No primary wetland hydrology indicators present. Wetland hydrology is assumed based on landscape position and hydrophytic vegetation.											
Remarks <sup>.</sup>	No primary wetland	a nvaroloav ina	licators pres	sent vvetlan	nd hydrolog	226 21 Vr	umed based o	n landscane	nosition ar	na nvaropnyti	
Remarks:	No primary wetland	a nyarology ina	licators pres	sent. Wetlan	nd hydrolog	gy is ass	umed based o	n landscape	e position ar	na nyaropnyti	c vegetation.
	No primary wetland	a nyarology ina	licators pres	sent. Wetlan	id hydrolo	gy is ass	umed based o	n landscape	e position ar	na nyaropnyti	c vegetation.
SOILS					-			•	e position ar	ia nyaropnyti	c vegetation.
SOILS	No primary wetland				-			•	e position ar	ia nyaropnyti	
SOILS Profile Descri		ne depth neede	ed to docum	nent the indic	cator or co	onfirm the	e absence of ir	dicators.)	e position ar	ia nyaropnyti	
SOILS Profile Descri	ption (Describe to th	ne depth neede	ed to docum	nent the indic	cator or co	onfirm the	e absence of ir	dicators.)	e position ar	na nyaropnyti	
SOILS Profile Descri	ption (Describe to th htration, D=Depletion, RM	ne depth neede I=Reduced Matrix,	ed to docum	nent the indic	cator or co	onfirm the	e absence of ir ore Lining, M=Matr	dicators.)	e position ar	ia nyaropnyti	
SOILS Profile Descri (Type: C=Concer	ption (Describe to th htration, D=Depletion, RM	ne depth neede I=Reduced Matrix, Matrix	ed to docum , CS=Covered	nent the india /Coated Sand C	cator or co Grains; Locat	onfirm the ion: PL=Po Mottle	e absence of ir ore Lining, M=Matr	idicators.)	·		
SOILS Profile Descri	ption (Describe to th htration, D=Depletion, RM	ne depth neede I=Reduced Matrix,	ed to docum	nent the indic	cator or co Grains; Locat	onfirm the	e absence of ir ore Lining, M=Matr	dicators.)	Texture		Remarks
SOILS Profile Descri (Type: C=Concer Depth (In.)	ption (Describe to th tration, D=Depletion, RM Color (	ne depth neede I=Reduced Matrix, Matrix (Moist)	ed to docum , CS=Covered, %	nent the india /Coated Sand C	cator or co Grains; Locat	onfirm the ion: PL=Po Mottle	e absence of ir ore Lining, M=Matr	idicators.)	Texture		
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17	ption (Describe to the htration, D=Depletion, RM Color ( Hue_10YR	ne depth neede I=Reduced Matrix, Matrix (Moist) 2/1	ed to docum , CS=Covered % 100	nent the india /Coated Sand C Color (N	cator or cc Grains; Locat Moist)	onfirm the ion: PL=Po Mottle %	e absence of in ore Lining, M=Matr es Type	idicators.)	Texture FSL		
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28	ption (Describe to the httration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y	ne depth neede <u>A=Reduced Matrix,</u> Matrix (Moist) <u>2/1</u> <u>6/2</u>	ed to docum , CS=Covered % 100 70	nent the india /Coated Sand C	cator or cc Grains; Locat Moist)	onfirm the ion: PL=Po Mottle	e absence of ir ore Lining, M=Matr	idicators.)	Texture FSL SC		
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17	ption (Describe to the httration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y	ne depth neede I=Reduced Matrix, Matrix (Moist) 2/1	ed to docum , CS=Covered % 100	nent the india /Coated Sand C Color (N	cator or cc Grains; Locat Moist)	onfirm the ion: PL=Po Mottle %	e absence of in ore Lining, M=Matr es Type	idicators.)	Texture FSL		
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28	ption (Describe to the htration, D=Depletion, RM Color ( Hue_10YR	ne depth neede <u>A=Reduced Matrix,</u> Matrix (Moist) <u>2/1</u> <u>6/2</u>	ed to docum , CS=Covered % 100 70	nent the india /Coated Sand C Color (N	cator or cc Grains; Locat Moist)	onfirm the ion: PL=Po Mottle %	e absence of in ore Lining, M=Matr es Type	idicators.)	Texture FSL SC		
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28	ption (Describe to the httration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y	ne depth neede <u>A=Reduced Matrix,</u> Matrix (Moist) <u>2/1</u> <u>6/2</u>	ed to docum , CS=Covered % 100 70	nent the india /Coated Sand C Color (N	cator or cc Grains; Locat Moist)	onfirm the ion: PL=Po Mottle %	e absence of in ore Lining, M=Matr es Type	idicators.)	Texture FSL SC		
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28	ption (Describe to the httration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y	ne depth neede <u>A=Reduced Matrix,</u> Matrix (Moist) <u>2/1</u> <u>6/2</u>	ed to docum , CS=Covered % 100 70	nent the india /Coated Sand C Color (N	cator or cc Grains; Locat Moist)	onfirm the ion: PL=Po Mottle %	e absence of in ore Lining, M=Matr es Type	idicators.)	Texture FSL SC		
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28	ption (Describe to the httration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y	ne depth neede <u>A=Reduced Matrix,</u> Matrix (Moist) <u>2/1</u> <u>6/2</u>	ed to docum , CS=Covered % 100 70	nent the india /Coated Sand C Color (N	cator or cc Grains; Locat Moist)	onfirm the ion: PL=Po Mottle %	e absence of in ore Lining, M=Matr es Type	idicators.)	Texture FSL SC		
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28	ption (Describe to the intration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y Hue_10YR	ne depth neede M=Reduced Matrix, Matrix (Moist) 2/1 6/2 2/1	ed to docum , CS=Covered 100 70 20	nent the indic /Coated Sand C Color (N Hue_10YR	Cator or co Grains; Locat Moist) <u>6/8</u>	onfirm the ion: PL=Po Mottle %	e absence of in ore Lining, M=Matr es Type C	idicators.)	Texture FSL SC		
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28	ption (Describe to the httration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y	ne depth neede M=Reduced Matrix, Matrix (Moist) 2/1 6/2 2/1	ed to docum , CS=Covered 100 70 20	nent the india /Coated Sand C Color (N	Cator or co Grains; Locat Moist) <u>6/8</u>	onfirm the ion: PL=Po Mottle %	e absence of in ore Lining, M=Matr es Type	idicators.)	Texture FSL SC FSL		Remarks
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28	ption (Describe to the intration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y Hue_10YR	ne depth neede M=Reduced Matrix, Matrix (Moist) 2/1 6/2 2/1	ed to docum , CS=Covered 100 70 20	nent the indic /Coated Sand C Color (N Hue_10YR	Cator or co Grains; Locat Moist) <u>6/8</u>	onfirm the ion: PL=Po Mottle %	e absence of in ore Lining, M=Matr es Type C	idicators.)	Texture FSL SC FSL	or Problematio	Remarks
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y Hue_10YR	ne depth neede M=Reduced Matrix, Matrix (Moist) 2/1 6/2 2/1	ed to docum , CS=Covered 100 70 20 k here if indi	Color (N Hue_10YR	Cator or co Grains; Locat Voist) 6/8 ot present	onfirm the ion: PL=Po Mottle %	e absence of in ore Lining, M=Matr es Type C	Location	Texture FSL SC FSL	or Problematic	Remarks
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28	ption (Describe to the httration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y Hue_10YR ic Soil Field Indica A1- Histosol	ne depth neede M=Reduced Matrix, Matrix (Moist) 2/1 6/2 2/1	ed to docum CS=Covered % 100 70 20 x here if indi	Color (N Hue_10YR icators are n	Cator or co Grains; Locat Vloist) 6/8 ot present edox	onfirm the ion: PL=Po Mottle %	e absence of in ore Lining, M=Matr es Type C	Location	Texture FSL SC FSL Indicators f A9 - 1 cm M	or Problematic	Remarks
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y Hue_10YR ic Soil Field Indica A1- Histosol A2 - Histic Epipedon	ne depth neede M=Reduced Matrix, Matrix (Moist) 2/1 6/2 2/1	ed to docum , CS=Covered 100 70 20 k here if ind	Coated Sand C Color (N Hue_10YR icators are n S5 - Sandy Re S6 - Stripped	Cator or co Grains; Locat Voist) 6/8 6/8 not present edox Matrix	nfirm the ion: PL=Po Mottle % 10 t):	e absence of in ore Lining, M=Matr es Type C	Location M	Texture FSL SC FSL Indicators f A9 - 1 cm M A16 - Coast	or Problematic luck (LRR I, J) Prairie Redox	Remarks <u>c Soils<sup>1</sup></u> (LRR F, G, H)
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the httration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y Hue_10YR ic Soil Field Indica A1- Histosol A2 - Histic Epipedon A3 - Black Histic	ne depth neede <u>A=Reduced Matrix,</u> Matrix (Moist) 2/1 6/2 2/1 itors (check	ed to docum , CS=Covered 100 70 20 4 4 4 5 6 6 6 7 7 0 20 4 7 0 20 4 7 0 20 4 7 0 20 4 7 0 20 4 7 100 7 0 20 4 7 100 7 0 20 4 7 100 7 0 20	Color (N Coated Sand C Color (N Hue_10YR icators are n S5 - Sandy Ro S6 - Stripped F1 - Loamy M	Cator or co Grains; Locat Voist) 6/8 6/8 ot present edox Matrix lucky Minera	nfirm the ion: PL=Po Mottle % 10 t):	e absence of in ore Lining, M=Matr es Type C	Location M	Texture FSL SC FSL Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Su	or Problemation luck (LRR I, J) Prairie Redox of urface (LRR G)	<u>Remarks</u>
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y Hue_10YR ic Soil Field Indica A1- Histosol A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide	ne depth neede M=Reduced Matrix, Matrix (Moist) 2/1 6/2 2/1 tors (check	ed to docum CS=Covered % 100 70 20 c here if indi	Color (N Coated Sand C Color (N Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G	Cator or co Grains; Locat Vloist) 6/8 6/8 ot present edox Matrix lucky Minera	nfirm the ion: PL=Po Mottle % 10 t):	e absence of in ore Lining, M=Matr es Type C	Location M	Texture FSL SC FSL <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark Su F16 - High F	or Problematic luck (LRR I, J) Prairie Redox o urface (LRR G) Plains Depressio	Remarks <u>c Soils<sup>1</sup></u> (LRR F, G, H)
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y Hue_10YR Hue_10YR ic Soil Field Indica A1- Histosol A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide A5 - Stratified Layers (	ne depth neede <u>A=Reduced Matrix,</u> Matrix (Moist) 2/1 6/2 2/1 itors (check	ed to docum CS=Covered % 100 70 20 c here if indi 100 100 100 100 100 100 100 10	Color (N Coated Sand C Color (N Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted	Cator or co Grains; Locat Voist) 6/8 6/8 00t present edox Matrix lucky Minera ileyed Matrix	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C	Location M	Texture FSL SC FSL <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark Su F16 - High P F18 - Reduc	or Problematic luck (LRR I, J) Prairie Redox o urface (LRR G) Plains Depressio ced Vertic	<u>Remarks</u>
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y Hue_10YR ic Soil Field Indica A1- Histosol A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide A5 - Stratified Layers ( A9 - 1 cm Muck (LRR	ne depth neede <u>A=Reduced Matrix,</u> Matrix (Moist) 2/1 6/2 2/1 6/2 2/1 tors (check	ed to docum CS=Covered % 100 70 20 k here if indi	Color (N Coated Sand C Color (N Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da	Cator or co Grains; Locat Moist) 6/8 6/8 ot present edox Matrix lucky Minera leyed Matrix Matrix ark Surface	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C	Location M	Texture FSL SC FSL Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Su F16 - High P F18 - Reduc TF2 - Red P	or Problematic Juck (LRR I, J) Prairie Redox of urface (LRR G) Plains Depressio ed Vertic Parent Material	Remarks
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y Hue_10YR ic Soil Field Indica A1- Histosol A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide A5 - Stratified Layers A9 - 1 cm Muck (LRR A11 - Depleted Below	ne depth neede <u>A=Reduced Matrix,</u> Matrix (Moist) 2/1 6/2 2/1 6/2 2/1 itors (check	ed to docum CS=Covered % 100 70 20 c here if indi	Color (N Color (N Hue_10YR Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted	Cator or co Grains; Locat Voist) 6/8 6/8 ot present edox Matrix lucky Minera bleyed Matrix lucky Minera ark Surface Dark Surface	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C	Location M Location M Location Location Location Location	Texture FSL SC FSL	or Problematic luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressio ed Vertic Parent Material Shallow Dark S	Remarks
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y Hue_10YR ic Soil Field Indica A1- Histosol A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide A5 - Stratified Layers ( A9 - 1 cm Muck (LRR	ne depth neede <u>A=Reduced Matrix,</u> Matrix (Moist) 2/1 6/2 2/1 6/2 2/1 itors (check	ed to docum , CS=Covered % 100 70 20 	Color (N Coated Sand C Color (N Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted F8 - Redox Da	Cator or co Grains; Locat Voist) 6/8 6/8 ot present edox Matrix lucky Minera ileyed Matrix lucky Minera ileyed Matrix ark Surface Dark Surfa	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C	Location M	Texture FSL SC FSL	or Problematic Juck (LRR I, J) Prairie Redox of urface (LRR G) Plains Depressio ed Vertic Parent Material	Remarks
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RM Color ( Hue_10YR Hue_2.5Y Hue_10YR ic Soil Field Indica A1- Histosol A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide A5 - Stratified Layers A9 - 1 cm Muck (LRR A11 - Depleted Below	he depth neede <u>A=Reduced Matrix,</u> Matrix (Moist) 2/1 6/2 2/1 6/2 2/1 tors (check (LRR F) FGH) Dark Surface ace	ed to docum , CS=Covered % 100 70 20 	Color (N Coated Sand C Color (N Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted F8 - Redox Da	Cator or co Grains; Locat Voist) 6/8 6/8 ot present edox Matrix lucky Minera ileyed Matrix lucky Minera ileyed Matrix ark Surface Dark Surfa	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C	Location M	Texture FSL SC FSL	or Problematic luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressio ed Vertic Parent Material Shallow Dark S	Remarks
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RW         Color (         Hue_10YR         Hue_2.5Y         Hue_10YR         ic Soil Field Indica         A1- Histosol         A2 - Histic Epipedon         A3 - Black Histic         A4 - Hydrogen Sulfide         A5 - Stratified Layers of         A9 - 1 cm Muck (LRR         A11 - Depleted Below         A12 - Thick Dark Surfa         S1 - Sandy Mucky Mir	ne depth neede <u>A=Reduced Matrix,</u> <u>Matrix</u> (Moist) 2/1 6/2 2/1 6/2 2/1 tors (check (LRR F) FGH) Dark Surface ace heral	ed to docum CS=Covered % 100 70 20 c here if indi	Color (N Coated Sand C Color (N Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted F8 - Redox Da	Cator or co Grains; Locat Voist) 6/8 6/8 ot present edox Matrix lucky Minera ileyed Matrix lucky Minera ileyed Matrix ark Surface Dark Surfa	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C	Location M	Texture FSL SC FSL	or Problematic luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressio ed Vertic Parent Material Shallow Dark S	Remarks
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RM         Color (         Hue_10YR         Hue_2.5Y         Hue_10YR         ic Soil Field Indica         A1- Histosol         A2 - Histic Epipedon         A3 - Black Histic         A4 - Hydrogen Sulfide         A5 - Stratified Layers         A9 - 1 cm Muck (LRR         A11 - Depleted Below         A12 - Thick Dark Surfa         S1 - Sandy Mucky Mir         S2 - 2.5 cm Mucky Pe	ne depth neede A=Reduced Matrix, Matrix (Moist) 2/1 6/2 2/1 6/2 2/1 itors (check (LRR F) FGH) Dark Surface ace heral eat or Peat (LRR (	ed to docum , CS=Covered, % 100 70 20 C here if indi 0 0 0 0 0 0 0 0 0 0 0 0 0	Color (N Coated Sand C Color (N Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted F8 - Redox Da	Cator or co Grains; Locat Voist) 6/8 6/8 ot present edox Matrix lucky Minera ileyed Matrix lucky Minera ileyed Matrix ark Surface Dark Surfa	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C	Location M	Texture FSL SC FSL	or Problematic luck (LRR I, J) Prairie Redox o urface (LRR G) Plains Depressio ced Vertic Parent Material Shallow Dark S ain in Remarks)	Remarks <u>c Soils<sup>1</sup></u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73) Surface
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RW         Color (         Hue_10YR         Hue_2.5Y         Hue_10YR         ic Soil Field Indica         A1- Histosol         A2 - Histic Epipedon         A3 - Black Histic         A4 - Hydrogen Sulfide         A5 - Stratified Layers of         A9 - 1 cm Muck (LRR         A11 - Depleted Below         A12 - Thick Dark Surfa         S1 - Sandy Mucky Mir         S2 - 2.5 cm Mucky Peat	ne depth neede <u>A=Reduced Matrix,</u> <u>Matrix</u> (Moist) 2/1 6/2 2/1 itors (check (LRR F) FGH) Dark Surface ace heral eat or Peat (LRR C) t or Peat (LRR F)	ed to docum , CS=Covered, % 100 70 20 C here if indi 0 0 0 0 0 0 0 0 0 0 0 0 0	Color (N Coated Sand C Color (N Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted F8 - Redox Da	Cator or co Grains; Locat Voist) 6/8 6/8 ot present edox Matrix lucky Minera ileyed Matrix lucky Minera ileyed Matrix ark Surface Dark Surfa	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C	Location M	Texture FSL SC FSL	or Problematic luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressio ed Vertic Parent Material Shallow Dark S ain in Remarks)	Remarks
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RM         Color (         Hue_10YR         Hue_2.5Y         Hue_10YR         ic Soil Field Indica         A1- Histosol         A2 - Histic Epipedon         A3 - Black Histic         A4 - Hydrogen Sulfide         A5 - Stratified Layers         A9 - 1 cm Muck (LRR         A11 - Depleted Below         A12 - Thick Dark Surfa         S1 - Sandy Mucky Mir         S2 - 2.5 cm Mucky Pe	ne depth neede <u>A=Reduced Matrix,</u> <u>Matrix</u> (Moist) 2/1 6/2 2/1 itors (check (LRR F) FGH) Dark Surface ace heral eat or Peat (LRR C) t or Peat (LRR F)	ed to docum , CS=Covered, % 100 70 20 C here if indi 0 0 0 0 0 0 0 0 0 0 0 0 0	Color (N Coated Sand C Color (N Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted F8 - Redox Da	Cator or co Grains; Locat Voist) 6/8 6/8 ot present edox Matrix lucky Minera ileyed Matrix lucky Minera ileyed Matrix ark Surface Dark Surfa	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C	Location M	Texture FSL SC FSL	or Problematic luck (LRR I, J) Prairie Redox o urface (LRR G) Plains Depressio ced Vertic Parent Material Shallow Dark S ain in Remarks)	Remarks <u>c Soils<sup>1</sup></u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73) Surface
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RW         Color (         Hue_10YR         Hue_2.5Y         Hue_10YR         ic Soil Field Indica         A1- Histosol         A2 - Histic Epipedon         A3 - Black Histic         A4 - Hydrogen Sulfide         A5 - Stratified Layers of         A9 - 1 cm Muck (LRR         A11 - Depleted Below         A12 - Thick Dark Surfa         S1 - Sandy Mucky Mir         S2 - 2.5 cm Mucky Peat	ne depth neede <u>A=Reduced Matrix,</u> <u>Matrix</u> (Moist) 2/1 6/2 2/1 itors (check (LRR F) FGH) Dark Surface ace heral eat or Peat (LRR C) t or Peat (LRR F)	ed to docum , CS=Covered, % 100 70 20 C here if indi 0 0 0 0 0 0 0 0 0 0 0 0 0	Color (N Coated Sand C Color (N Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted F8 - Redox Da	Cator or co Grains; Locat Voist) 6/8 6/8 ot present edox Matrix lucky Minera ileyed Matrix lucky Minera ileyed Matrix ark Surface Dark Surfa	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C	Location M	Texture FSL SC FSL	or Problematic luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressio ed Vertic Parent Material Shallow Dark S ain in Remarks)	Remarks <u>c Soils<sup>1</sup></u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73) Surface
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RW         Color (         Hue_10YR         Hue_2.5Y         Hue_10YR         ic Soil Field Indica         A1- Histosol         A2 - Histic Epipedon         A3 - Black Histic         A4 - Hydrogen Sulfide         A5 - Stratified Layers         A9 - 1 cm Muck (LRR         A11 - Depleted Below         A12 - Thick Dark Surfa         S1 - Sandy Mucky Mir         S2 - 2.5 cm Mucky Peet         S3 - 5 cm Mucky Peet         S4 - Sandy Gleyed Ma	ne depth neede <u>A=Reduced Matrix,</u> <u>Matrix</u> (Moist) 2/1 6/2 2/1 itors (check (LRR F) FGH) Dark Surface ace heral eat or Peat (LRR C) t or Peat (LRR F)	ed to docum , CS=Covered, % 100 70 20 C here if indi 0 0 0 0 0 0 0 0 0 0 0 0 0	Color (M Color (M Hue_10YR Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted F8 - Redox Da F7 - Depleted F8 - Redox Da	Address Surface Provide Surface Provid	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C C	Location M M I I I I I I I I I I I I I I I I I	Texture FSL SC FSL Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Su F16 - High P F18 - Reduc TF2 - Red P TF12 - Very Other (Expla	or Problematic luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressio ed Vertic Parent Material Shallow Dark S ain in Remarks)	Remarks <u>c Soils<sup>1</sup></u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73) Surface
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RW         Color (         Hue_10YR         Hue_2.5Y         Hue_10YR         Hue_10YR         ic Soil Field Indica         A1- Histosol         A2 - Histic Epipedon         A3 - Black Histic         A4 - Hydrogen Sulfide         A5 - Stratified Layers         A9 - 1 cm Muck (LRR         A11 - Depleted Below         A12 - Thick Dark Surfa         S1 - Sandy Mucky Mir         S2 - 2.5 cm Mucky Peet         S3 - 5 cm Mucky Peet         S3 - 5 cm Mucky Peet         S4 - Sandy Gleyed Ma	ne depth neede <u>A=Reduced Matrix,</u> <u>Matrix</u> (Moist) 2/1 6/2 2/1 itors (check (LRR F) FGH) Dark Surface ace heral eat or Peat (LRR C) t or Peat (LRR F)	ed to docum , CS=Covered, % 100 70 20 C here if indi 0 0 0 0 0 0 0 0 0 0 0 0 0	Color (N Coated Sand C Color (N Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted F8 - Redox Da	Address Surface Provide Surface Provid	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C C	Location M	Texture FSL SC FSL Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Su F16 - High P F18 - Reduc TF2 - Red P TF12 - Very Other (Expla	or Problematic luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressio ed Vertic Parent Material Shallow Dark S ain in Remarks)	Remarks <u>c Soils<sup>1</sup></u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73) Surface
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RW         Color (         Hue_10YR         Hue_2.5Y         Hue_10YR         ic Soil Field Indica         A1- Histosol         A2 - Histic Epipedon         A3 - Black Histic         A4 - Hydrogen Sulfide         A5 - Stratified Layers of         A9 - 1 cm Muck (LRR         A11 - Depleted Below         A12 - Thick Dark Surfa         S1 - Sandy Mucky Mir         S2 - 2.5 cm Mucky Pe         S3 - 5 cm Mucky Pe         S3 - 5 cm Mucky Pe         S3 - 5 cm Mucky Pe         S4 - Sandy Gleyed Ma	ne depth neede <u>A=Reduced Matrix,</u> <u>Matrix</u> (Moist) 2/1 6/2 2/1 6/2 2/1 etors (check etors (check etors) FGH) Dark Surface ace heral eat or Peat (LRR F) atrix	ed to docum , CS=Covered, % 100 70 20 C here if indi 0 0 0 0 0 0 0 0 0 0 0 0 0	Color (M Color (M Hue_10YR Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted F8 - Redox Da F7 - Depleted F8 - Redox Da	Address Surface Provide Surface Provid	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C C	Location M M I I I I I I I I I I I I I I I I I	Texture FSL SC FSL Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Su F16 - High P F18 - Reduc TF2 - Red P TF12 - Very Other (Expla	or Problematic luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressio ed Vertic Parent Material Shallow Dark S ain in Remarks)	Remarks <u>c Soils<sup>1</sup></u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73) Surface
SOILS         Profile Descri         (Type: C=Concer         Depth (In.)         0-17         17-28         17-28         17-28         0 <td>ption (Describe to the intration, D=Depletion, RW         Color (         Hue_10YR         Hue_2.5Y         Hue_10YR         ic Soil Field Indica         A1- Histosol         A2 - Histic Epipedon         A3 - Black Histic         A4 - Hydrogen Sulfide         A5 - Stratified Layers         A9 - 1 cm Muck (LRR         A11 - Depleted Below         A12 - Thick Dark Surfa         S1 - Sandy Mucky Mir         S2 - 2.5 cm Mucky Peet         S3 - 5 cm Mucky Peet         S4 - Sandy Gleyed Ma</td> <td>ne depth neede <u>A=Reduced Matrix,</u> <u>Matrix</u> (Moist) 2/1 6/2 2/1 6/2 2/1 etors (check etors (check etors) FGH) Dark Surface ace heral eat or Peat (LRR F) atrix</td> <td>ed to docum , CS=Covered, % 100 70 20 C here if indi 0 0 0 0 0 0 0 0 0 0 0 0 0</td> <td>Color (M Color (M Hue_10YR Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted F8 - Redox Da F7 - Depleted F8 - Redox Da</td> <td>Address Surface Provide Surface Provid</td> <td>mfirm the ion: PL=Po Mottle % 10 10 t):</td> <td>e absence of in ore Lining, M=Matr es Type C C</td> <td>Location M M I I I I I I I I I I I I I I I I I</td> <td>Texture FSL SC FSL Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Su F16 - High P F18 - Reduc TF2 - Red P TF12 - Very Other (Expla</td> <td>or Problematic luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressio ed Vertic Parent Material Shallow Dark S ain in Remarks)</td> <td>Remarks <u>c Soils<sup>1</sup></u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73) Surface</td>	ption (Describe to the intration, D=Depletion, RW         Color (         Hue_10YR         Hue_2.5Y         Hue_10YR         ic Soil Field Indica         A1- Histosol         A2 - Histic Epipedon         A3 - Black Histic         A4 - Hydrogen Sulfide         A5 - Stratified Layers         A9 - 1 cm Muck (LRR         A11 - Depleted Below         A12 - Thick Dark Surfa         S1 - Sandy Mucky Mir         S2 - 2.5 cm Mucky Peet         S3 - 5 cm Mucky Peet         S4 - Sandy Gleyed Ma	ne depth neede <u>A=Reduced Matrix,</u> <u>Matrix</u> (Moist) 2/1 6/2 2/1 6/2 2/1 etors (check etors (check etors) FGH) Dark Surface ace heral eat or Peat (LRR F) atrix	ed to docum , CS=Covered, % 100 70 20 C here if indi 0 0 0 0 0 0 0 0 0 0 0 0 0	Color (M Color (M Hue_10YR Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted F8 - Redox Da F7 - Depleted F8 - Redox Da	Address Surface Provide Surface Provid	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C C	Location M M I I I I I I I I I I I I I I I I I	Texture FSL SC FSL Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Su F16 - High P F18 - Reduc TF2 - Red P TF12 - Very Other (Expla	or Problematic luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressio ed Vertic Parent Material Shallow Dark S ain in Remarks)	Remarks <u>c Soils<sup>1</sup></u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73) Surface
SOILS Profile Descri (Type: C=Concer Depth (In.) 0-17 17-28 17-28 17-28 NRCS Hydr	ption (Describe to the intration, D=Depletion, RW         Color (         Hue_10YR         Hue_2.5Y         Hue_10YR         ic Soil Field Indica         A1- Histosol         A2 - Histic Epipedon         A3 - Black Histic         A4 - Hydrogen Sulfide         A5 - Stratified Layers of         A9 - 1 cm Muck (LRR         A11 - Depleted Below         A12 - Thick Dark Surfa         S1 - Sandy Mucky Mir         S2 - 2.5 cm Mucky Pe         S3 - 5 cm Mucky Pe         S3 - 5 cm Mucky Pe         S3 - 5 cm Mucky Pe         S4 - Sandy Gleyed Ma	ne depth neede <u>A=Reduced Matrix,</u> <u>Matrix</u> (Moist) 2/1 6/2 2/1 6/2 2/1 etors (check etors (check etors) FGH) Dark Surface ace heral eat or Peat (LRR F) atrix	ed to docum , CS=Covered, % 100 70 20 C here if indi 0 0 0 0 0 0 0 0 0 0 0 0 0	Color (M Color (M Hue_10YR Hue_10YR icators are n S5 - Sandy Re S6 - Stripped F1 - Loamy M F2 - Loamy G F3 - Depleted F6 - Redox Da F7 - Depleted F8 - Redox Da F7 - Depleted F8 - Redox Da	Address Surface Provide Surface Provid	mfirm the ion: PL=Po Mottle % 10 10 t):	e absence of in ore Lining, M=Matr es Type C C	Location M M I I I I I I I I I I I I I I I I I	Texture FSL SC FSL Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Su F16 - High P F18 - Reduc TF2 - Red P TF12 - Very Other (Expla	or Problematic luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressio ed Vertic Parent Material Shallow Dark S ain in Remarks)	Remarks <u>c Soils<sup>1</sup></u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73) Surface

## WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	L3R				Sample Point: w-152n43w24-c1
		re non-native	species.)		
Tree Stratum	(Plot size: 30 ft. radius) <u>Species Name</u>	<u>% Cover</u>	Dominant	Ind.Status	Dominance Test Worksheet
1.		<u>// COver</u>	Dominant	<u>inu.Status</u>	
2.					Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
3.					
4.	<u> </u>				Total Number of Dominant Species Across All Strata: 2 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: <b>100.0%</b> (A/B)
7.					
8.	J				Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 10 $x 1 = 10$
	 Total Cover =	0			FACW spp. 5 $x 2 = 10$
					FACW spp.       5       x       2 =       10         FAC spp.       15       x       3 =       45         FACU spp.       5       x       4 =       20
Sapling/Shrub	Stratum (Plot size: 15 ft. radius)				FACU spp. 5 x 4 = 20
1.					UPL spp. $0   x   5 = 0$
2.					
3.					Total <u>35</u> (A) <u>85</u> (B)
4.					
5.					Prevalence Index = B/A = <b>2.429</b>
6.					1
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Rapid Test for Hydrophytic Vegetation
10.					X Dominance Test is > 50%
	Total Cover =	0			X Prevalence Index is $\leq 3.0$ *
					Morphological Adaptations (Explain) *
Herb Stratum (	Plot size: 5 ft. radius)				Problem Hydrophytic Vegetation (Explain) *
1.	Equisetum arvense	15	Y	FAC	
2.	Beckmannia syzigachne	10	Y	OBL	* Indicators of hydric soil and wetland hydrology must be
3.	Rumex fueginus	5	Ν	FACW	present, unless disturbed or problematic.
4.	Ambrosia artemisiifolia	5	N	FACU	Definitions of Vegetation Strata:
5.					
6					<b>Tree -</b> Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					
9.					<b>Sapling/Shrub -</b> 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.					
14.					
15.					Woody Vines - All woody vines, regardless of height.
	Total Cover =	35			
Woody Vine St	ratum (Plot size: 30 ft. radius)				
1.	<u> </u>				
2.					
3.					Hydrophytic Vegetation Present? Y
5.	1				4
4.	Tatalo				
Development	Total Cover =		a a d A	oon -l	
Remarks:	The wetland vegetation is dominated by field	d horsetail a	and Ameri	can sloug	ngrass.
Additional F	Remarks:				