WETLA	ND DETEF	RMINATION DATA F	ORM - North Central	and Northeast Reg	ion	
Project/Site: SPP	City/County: <u>Aitkin</u>			Sampling Date: 2016-08-29		
Applicant/Owner: Enbridge			State: Minnesota	Sam	pling Point: <u>w-47n22w11-aa1</u>	
Investigator(s): DPT, MGH		Section, Townshi	p, Range: <u>S11, T47N, R22</u>	2W		
Landform (hillslope, terrace, etc.): Depres	sion		Local Relief (concave, co	onvex, none): <u>CL</u>	Slope (%): <u>0-2%</u>	
Subregion (LRR or MLRA):		Latitude: 46	5.568627120039 Lon	gitude: <u>-93.0792650</u>	4 Datum: <u>NAD83</u>	
Soil Map Unit Name: 736				NWI	Classification: N/A	
Are climatic/hydrologic conditions on the	site typica	al for this time of year	? (if no, explain in Remar	ks):	No	
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hyd	rology <u>No</u>	significantly disturb	oed? Are "Normal Circun	nstances" present? Y	es	
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> naturally problematic? (If needed, explain any answers in Remarks)						
SUMMARY OF FINDINGS - Attach site	map show	ving sampling point lo	cations, transects, impo	rtant features, etc.		
Hydrophytic Vegetation Present?		Yes	Is the Sampled Area			
Hydric Soil Present?		Yes	within a Wetland?		Yes	
Wetland Hydrology Present?		Yes	If yes, optional Wetland	Site ID:	w-47n22w11-aa	
Remarks: (Explain alternative procedure	s here or ir	n a separate report.)	•			
Existing forest road, no digging, potentia						
Wetland Hydrology Indicators:				Secondary Inc	dicators (minimum of two required)	
	quirad: ch	ock all that apply)				
Primary Indicators (minimum of one is re yes Surface Water (A1)	<u>quirea; chi</u>	· · · · · · · ·	ec (BO)		e Soil Cracks (B6)	
High Water Table (A2)	_	Water-Stained Leave Aquatic Fauna (B13)	3 (65)		Drainage Patterns (B10) Moss Trim Lines (B16)	
Saturation (A3)	_	Marl Deposits (B15)		ason Water Table (C2)		
Water Marks (B1)			or (C1)	n Burrows (C8)		
Sediment Deposits (B2)			es on Living Roots (C3)			
Drift Deposits (B3)						
Algal Mat or Crust (B4)			n in Tilled Soils (C6) Yes Geomorphic Position (D2)			
Iron Deposits (B5)		Thin Muck Surface (C				
Inundation Visible on Aerial Imagery (B7)			arks)Microtopographic Relief (D4)			
Sparsely Vegetated Concave Surface (B8)			yes_FAC-Ne	utral Test (D5)		
Field Observations:						
Surface Water Present?	Yes	Depth (inches)	2			
Water Table Present?	Yes	Depth (inches)	0			
Saturation Present?	Yes	Depth (inches)	0	Wetland Hydrolog	y Present? Yes	
(includes capillary fringe)						
Describe Recorded Data (stream gauge, r	nonitoring	well, aerial photos, p	revious inspections), if av	vailable:		
Deventer						
Remarks:						

VEGETATION - Use scientific names of plants.

Sampling Point: w-47n22w...

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
ree Stratum (Plot Size: 30)	% Cover	Species?	Status	Number of Dominant Species		
·				That Are OBL, FACW, or FAC: 5 (A)		
				Total Number of Dominant		
				Species Across All Strata: 5 (B)		
				Percent of Dominant Species		
				That Are OBL, FACW, or FAC: 100 (A/B)		
·				Prevalence Index worksheet:		
·				—		
·				Total % Cover of: Multiply by:		
	0	= Total Cover		OBL species 20.00 x 1 20 120.00 x 1 20 210		
apling/Shrub Stratum (Plot Size: <u>15</u>)				FACW species <u>120.00</u> x 2 <u>240</u>		
Alnus incana	30.00	Yes	FACW	FACU species 0.00 x 3 0		
Salix petiolaris	20.00	Yes	OBL	UPL species 0.00 x 4 0		
Fraxinus nigra	10.00	No	FACW	Column Totals <u>160</u> (A) <u>320</u> (B)		
				Prevalence Index = B/A = 2		
				Hydrophytic Vegetation Indicators:		
				1 - Rapid Test for Hydrophytic Vegetation		
				yes 2 - Dominance Test is > 50%		
	60	= Total Cover		yes 3 - Prevalence Index is $\leq 3.0^1$		
lerb Stratum (Plot Size: 5)				4 - Morphological Adaptations ¹ (Provide		
Calamagrostis canadensis	40.00	Yes	FACW	supporting data in Remarks or on a separate sheet)		
Solidago gigantea	20.00	Yes	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)		
Osmundastrum cinnamomeum	20.00	Yes	FACW			
Phalaris arundinacea	10.00	<u>No</u>	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless		
, Onoclea sensibilis	10.00	No	FACW	disturbed or problematic.		
			FACW	Definitions of Vegetation Strata:		
				Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.		
				-		
				Sapling/Shrub - Woody plants less than 3 in. DBH and greater th or equal to 3.28 ft (1 m) tall.		
0						
1.				Herb - All herbaeceous (non-woody) plants, regardless of size, a		
2.				woody plants less than 3.28 ft tall.		
	100	= Total Cover		Woody vines - All woody vines greater than 3.28 ft in height.		
Voody Ving Stratum (Plot Size: 30						
		·				
·				Hydrophytic Vegetation		
Voody Vine Stratum (Plot Size: <u>30</u>)						
·				Vegetation		

US Army Corps of Engineers

Northcentral and Northeast Region – Version 2.0

SOIL

Sampling Point	: w-47n22w
----------------	------------

Depth Matr	ix	Redox F	eatures			
(inches) Color (moist	:) %	Color (moist)	% Ту	pe ¹ Loc ²	Texture	Remarks
					·	
Type: C=Concentration, D=Depletion,	, RM=Reduced M	atrix, MS=Masked Sand Gra	ins.		·	² Location: PL=Pore Lining, M=Matri
Hydric Soil Indicators:		Polyvalue Below S	urfaco (SS) (I I		Indicators for	Problematic Hydric Soil ³ :
Histosol (A1)		149B)	unace (56) (E	TR R, WILKA	🗌 2 cm Mu	ick (A10) (LRR K, L, MLRA 149B)
Histic Epipedon (A2)		Thin Dark Surface	(S9) (LRR R, N	1LRA 149B)	Coast Pra	airie Redox (A16)(LRR K, L, R)
Black Histic (A3)		Loamy Mucky Min	eral (F1) (LRR	K, L)	_	icky Peat or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4)		Loamy Gleyed Ma				face (S7) (LRR K, M)
Stratified Layers (A5)		Depleted Matrix (I				e Below Surface (S8) (LRR K, L)
Depleted Below Dark Surface (A	11)	Redox Dark Surfac	e (F6)			< Surface (S9) (LRR K, L)
Thick Dark Surface (A12)		Depleted Dark Sur	face (F7)		Iron-Mag	ganese Masses (F12) (LRR K, L, R)
Sandy Mucky Mineral (S1)		Redox Depression	s (F8)		Piedmon	t Floodplain Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4)					Mesic Sp	odic (TA6) (MLRA 144A, 145, 149B)
Sandy Redox (S5)					Red Pare	ent Material (F21)
Stripped Matrix (S6)					🗌 Very Sha	illow Dark Surface (TF12)
Dark Surface (S7) (LRR R, MLRA	149B)				🖌 Other (e	xplain in remarks)
Restrictive Layer (if observed):						
Туре:					Hydric Soil Present?	? Yes
Depth (inches):					•	
Remarks:				I		
No digging, existing forest road, soils a	assumed hydric b	ased on veg/hydro.				

Site Photograph 1



Latitude: 46.5686311433525

Longitude: -93.0792641268047

Cowardin Classification: PSS

Circular 39: 6

Remarks:

Direction: north

Eggers & Reed: Shrub-Carr/Alder Thicket

Site Photograph 2



Latitude: 46.5686342865662

Longitude: -93.079264881176

Cowardin Classification: PSS

Circular 39: 6

Remarks:

Direction: west

Eggers & Reed: Shrub-Carr/Alder Thicket