WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: SPP	City/County	City/County: Aitkin			Sampling Date: 2016-08-16		
Applicant/Owner: Enbridge			State: Minnesota		Sampling Point:	u-50n26w6-a11	
Investigator(s): ZCW, MGH	Section	on, Township	p, Range: <u>S7, T50N,</u>	R26W			
Landform (hillslope, terrace, etc.): Side S	lope	_	Local Relief (concav	ve, convex, none): V	L	Slope (%): 0-2%	
Subregion (LRR or MLRA):		– Latitude: 46	.8323961832	Longitude: -93.683	 309869 Dat [,]	um: NAD83	
Soil Map Unit Name: 204B		_			NWI Classification	n: PSSB	
Are climatic/hydrologic conditions on th	e site typical for this !	ime of vear	? (if no. explain in Re	 emarks):		No	
Are Vegetation No_, Soil No_, or Hydrology No_ significantly disturbed? Are "Normal Circumstances" present? Yes_							
Are Vegetation No , Soil No , or Hydrology No naturally problematic? (If needed, explain any answers in Remarks)							
SUMMARY OF FINDINGS - Attach site	map showing samp	ling point lo			etc.		
Hydrophytic Vegetation Present?	<u>No</u>		Is the Sampled Are	a			
Hydric Soil Present?	<u>No</u>	No within a Wetland?			<u>No</u>		
Wetland Hydrology Present?	<u>No</u>		If yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedure	es here or in a separa	te report.)					
Climatic conditions are "wet" based on	the results of a WETS	analysis.					
HYDROLOGY							
Wetland Hydrology Indicators:				<u>Second</u>	ary Indicators (mir	nimum of two required)	
Primary Indicators (minimum of one is r	equired; check all tha	t apply)			Surface Soil Cracks (E	36)	
Surface Water (A1) Water-Stained Leav			es (B9) Drainage Patterns (B10)				
High Water Table (A2)			Moss Trim Lines (B16))	
Saturation (A3)	Saturation (A3) Marl Deposits (B15)		Dry-Season Water Table (C			ble (C2)	
Water Marks (B1)	Water Marks (B1) Hydrogen Sulfide Oc		or (C1)Crayfish B		Crayfish Burrows (C8)		
Sediment Deposits (B2)	Sediment Deposits (B2) Oxidized Rhizosph		es on Living Roots (C3)	9	Saturation Visible on A	Aerial Imagery (C9)	
Drift Deposits (B3) Presence of Redu		ce of Reduced	Iron (C4)		Stunted/Stressed Plan	ts (D1)	
Algal Mat or Crust (B4) Recent Iron Re		Iron Reduction	n in Tilled Soils (C6)		Geomorphic Position	(D2)	
Iron Deposits (B5) Thin Muck Surf		uck Surface (C	7)		Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7) Other		Other (Explain in Remarks)			Microtopographic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)				FAC-Neutral Test (D5)		
Field Observations:							
Surface Water Present?	<u>No</u> De	pth (inches)					
Water Table Present?	<u>No</u> De	pth (inches)					
Saturation Present?	<u>No</u> De	pth (inches)		Wetland Hyd	drology Present?	<u>No</u>	
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Remarks:							
1							

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot Size: 30	% Cover	Species?	Status	Number of Dominant Species
1. Populus tremuloides	40.00	Yes	FAC	That Are OBL, FACW, or FAC: 2 (A)
2. Acer rubrum	20.00	Yes	FAC	Total Number of Dominant
3				Species Across All Strata: 7 (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 28.5714285714 (A/B)
6.				Prevalence Index worksheet:
7			_	Total % Cover of: Multiply by:
/·	60			OBL species 0.00 x 1 0
Continue (Charak Charakana / Disk Cinus 15	<u> </u>	_ = Total Cover		
Sapling/Shrub Stratum (Plot Size: 15	35.00	Vas	LIDI	FACW species <u>0.00</u> x 2 <u>0</u>
1. Corylus cornuta	35.00	Yes	UPL	FACU species 50.00 x 3 200
2	_	_	-	UPL species <u>55.00</u> x 4 <u>275</u>
3				Column Totals(A)(B)
4		_	_	Prevalence Index = B/A = <u>3.9696969</u>
5		_		Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7			_	no 2 - Dominance Test is > 50%
	35	_ = Total Cover		<u>no</u> 3 - Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot Size: 5)				4 - Morphological Adaptations 1 (Provide
1. Eurybia macrophylla	20.00	Yes	FACU	supporting data in Remarks or on a separate sheet)
2. Carex woodii	20.00	Yes	_	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Pteridium aquilinum	15.00	Yes	FACU	
4. Aralia nudicaulis	15.00	Yes	FACU	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5.		•		Definitions of Vegetation Strata:
6.				1
7.				Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast
8.				height (DBH), regardless of height.
9	_			Sapling/Shrub - Woody plants less than 3 in. DBH and greater than
		_	_	or equal to 3.28 ft (1 m) tall.
10			_	4
11		_	_	Herb - All herbaeceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
12				-
	70	_ = Total Cover		Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot Size: 30)				
1			_	_
2.				Hydrophytic
3.	_			Vegetation Present? No
4	-			
·-	0	=Total Cover	_	1
Remarks: (include photo numbers here or on a separate sheet				
remarks: (include photo numbers here or on a separate sheet)			

Sampling Point: u-50n26w... **SOIL** Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Matrix **Redox Features** Depth Type¹ Loc² (inches) Color (moist) % Color (moist) % Texture Remarks 10YR 3 1 0-4 100 LS 10YR 4 3 100 4-24 S ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soil³: Hydric Soil Indicators: Polyvalue Below Surface (S8) (LRR R, MLRA Histosol (A1) 2 cm Muck (A10) (LRR K, L, MLRA 149B) 149B) Histic Epipedon (A2) Coast Prairie Redox (A16)(LRR K, L, R) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Dark Surface (S7) (LRR K, M) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Maganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (explain in remarks) Restrictive Layer (if observed): Hydric Soil Present? No Depth (inches): Remarks:

Site Photograph 1 Sampling Point: u-50n26w6-a11



小型では、10mmである。 10mmでは、10mmである。 10mmでは、10mmである。 10mmでる。 10mmでる				
Latitude:	46.8324188981641	Cowardin Classification:		
Longitude:	-93.6831508298346	Circular 39:		
Direction: Nor	th	Eggers & Reed:		
Remarks:				

Site Photograph 2

Latitude: 46.832421161278

Longitude: 93.6831587088235

Direction: East Eggers & Reed:

Remarks: