V	VETLAND DETER	RMINATION DA	TA FORM - North C	entral and No	rtheast Region				
SPP Project/Site:	Ci	Carlto ty/County:	n		2015-06-27 Sampling Date:				
Enbridge pplicant/Owner:			Minnesot State:	a	CR162h1U Sampling Point:				
ACM, Investigator(s):	/LEB		Section, Township, R						
	Rise		Local Relief (cor		Conve	Slope	0-2 e (%):		
Subregion (LRR or MLRA):		Latitude	46.357788 ::	Longitude:	-92.178498	N Datum:	1innesota State		
303 Soil Map Unit Name:						NWI Classification:			
					IN WI Clas	Yes			
Are climatic/hydrologic conditions					Vee				
Are Vegetation No, Soil No, Are Vegetation No, Soil No, o									
SUMMARY OF FINDINGS - Atta	ch site map show	ving sampling poi	nt locations, transect	s, important fea	atures, etc.				
Hydrophytic Vegetation Present?		No	Is the Sampled						
Hydric Soil Present?	No		within a Wetlar		No				
	-	No	If yes, optional						
Wetland Hydrology Present? Remarks: (Explain alternative proc				Wetiand Site ID.					
HYDROLOGY									
Wetland Hydrology Indicators:				S	econdary Indicat	ors (minimun	n of two required)		
Primary Indicators (minimum of or	ne is required: ch	eck all that apply)	1	-	Surface Soi				
Surface Water (A1) Water-Stair			-		Drainage Patterns (B10)				
High Water Table (A2) Aquatic Fau			(B13)		Moss Trim Lines (B16)				
Saturation (A3)	Saturation (A3) Marl Depos				Dry-Season Water Table (C2)				
Water Marks (B1)	Water Marks (B1) Hydrogen Si			ulfide Odor (C1)					
Sediment Deposits (B2)	Sediment Deposits (B2) Oxidized Rh			izospheres on Living Roots (C3)			magery (C9)		
Drift Deposits (B3) Presence of			duced Iron (C4)	Stunted/Stressed Plants (D1) Geomorphic Position (D2)					
	• • • • • · · ·			Reduction in Tilled Soils (C6)					
	Iron Deposits (B5) Thin Muck S						Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7) Other (Explai			in Remarks)	Microtopographic Relief (D4) FAC-Neutral Test (D5)					
Sparsely Vegetated Concave Surf Field Observations:					FAC-Neutral	Test (D5)			
Surface Water Present?	No	Denth (inc	hes)						
Water Table Present?	No		hes)						
Saturation Present?	No		hes)	Wetla	nd Hydrology Pr	esent?	No		
(includes capillary fringe)									
Describe Recorded Data (stream g	auge, monitoring	well, aerial photo	os, previous inspectio	ns), if available:					
Pomarka									
Remarks:	www.oro.obcome-l								
No indicators of wetland hydrolog	gy were observed								

## **VEGETATION** - Use scientific names of plants.

Sampling Point: CR162h1U

	Absolute	Dominant	Indicator	Dominance Test works	neet:			
Tree Stratum (Plot Size: 30 ft	) % Cover	Species?	Status	Number of Dominant Sp	oecies			
1. Populus tremuloides		Yes	FACU	That Are OBL, FACW, or	FAC: 1		(A)	
2				Total Number of Domin	ant			
				Culoring Association All Churche	3		(D)	
3				_ Species Across All Strata			(B)	
4				Percent of Dominant Sp	ecies 33.33333	22222		
5				That Are OBL, FACW, or			 (A/B)	
5				Prevalence Index works	heet:			
7				Total % Cover of:	M	ultiply	by:	
	30	= Total Cover		OBL species	0.00	x 1	0	_
Sapling/Shrub Stratum (Plot Size: 15 ft)				FACW species	35.00	x 2	70	_
1. Populus tremuloides	30.00	Yes	FACU	FACU species	10.00	x 3	580	_
2. Cornus alba	20.00	Yes	FACW	UPL species	15.00	x 4	75	_
3	10.00	No	FAC	Column Totals	205 (A)	)	755	(B)
4. Salix discolor	5.00	No	FACW	Prevalence	Index = $B/A = \frac{3}{2}$	3.68292	2	
5. llex verticillata	5.00	No	FACW	Hydrophytic Vegetation	Indicators:			
5. Viburnum rafinesquianum	5.00	No		1 - Rapid Test f	or Hydrophytic \	Vegeta	tion	
7. Fraxinus nigra	5.00	No	FACW	no 2 - Dominance	Test is > 50%			
	80	= Total Cover		no 3 - Prevalence I	ndex is $\leq 3.0^1$			
Herb Stratum (Plot Size: 5 ft)				4 - Morphologi	cal Adaptations	<sup>1</sup> (Provid	le	
1. Pteridium aquilinum	50.00	Yes	FACU	supporting data in Remarks or on a separate sheet)				
2. Trifolium repens	15.00	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
3. Eurybia macrophylla	10.00	No	UPL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
4. Asclepias syriaca	5.00	No	UPL					less
5. Rosa acicularis	5.00	No	FACU	Definitions of Vegetation	on Strata:			
6. Vicia americana	5.00	No	FACU					
7. Valeriana officinalis	5.00	No		Tree - Woody plants 3 in.	(.76 cm) or more	in dian	neter at b	preast
<sub>8.</sub> Sanicula marilandica	5.00	No	FACU	height (DBH), regardless of height.				
9. Sonchus arvensis	5.00	No	FACU	Sapling/Shrub - Woody p	ants less than 3 i	n DBH	and grea	ater tha
10				or equal to 3.28 ft (1 m) to			una Brea	
				— Herb - All herbaeceous (n	on-woody) plants	rogar	dlass of s	izo and
11				woody plants less than 3.2		s, regar	01233 01 3	nze, and
12	105			- Woody vines - All woody		- 2 204	Et in heid	h.#
	105	= Total Cover		woody vines - All woody	vines greater tha	n 3.28 I	it in neigr	nt.
<u>Woody Vine Stratum</u> (Plot Size:)								
L								
2			<u> </u>	Hydrophytic Vegetation				
3				Present?				
4				_				
	0	=Total Cover						

SOIL

Profile Descrip	tion: (Describe to the	depth ne	eded to document the	indicato	or or co	nfirm th	e absence of in	dicators.)			
Depth	epth Matrix		Redox Features								
(inches) 0-4	Color (moist) 5YR 3 2	% 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture sic	Remarks			
4-24	5YR 4 4	45	5YR 4 4	5	с		c				
4-24	5YR 3 2	50					с	Mixed matrix.			
						·		·			
						·					
17	tration D Depletion DM					·		<sup>2</sup> Location: PL=Pore Lining, M=Matrix.			
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators:							Indicators for Problematic Hydric Soil <sup>3</sup> :				
Histosol (/	Polyvalue Below Surface (S8) (L			8) <b>(LRR F</b>	R, MLRA	-					
	bedon (A2)			(SQ) (I RR		A 1/19R)		past Prairie Redox (A16)(LRR K, L, R)			
Black Hist			Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L)				5 cm Mucky Peat or Peat (S3) ( <b>LRR K, L, R</b> )				
<b>—</b>	Sulfide (A4)		Loamy Gleyed Matrix (F2)				Dark Surface (S7) (LRR K, M)				
Stratified	Layers (A5)		Depleted Matrix (	F3)			e Below Surface (S8) (LRR K, L)				
Depleted	Below Dark Surface (A11)		Redox Dark Surfa	ce (F6)	Thin Dark Surface (S9) (LRR K, L)						
Thick Darl	surface (A12)		Depleted Dark Surface (F7)				Iron-Maganese Masses (F12) (LRR K, L, R)				
Sandy Mu	cky Mineral (S1)	Alineral (S1) Redox Depressions (F8)					Piedmont Floodplain Soils (F19) (MLRA 149B)				
Sandy Gle	eyed Matrix (S4)						Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
Sandy Rec	lox (S5)						Red Pare	ent Material (F21)			
Stripped N	Matrix (S6)						Very Sha	illow Dark Surface (TF12)			
Dark Surfa	ace (S7) <b>(LRR R, MLRA 149E</b>	3)					🗌 Other (e	xplain in remarks)			
Restrictive Layer	(if observed):	[									
Туре:						Hydric Soil Present? No					
Depth (inches):											
Remarks:											
The soil is dense	and clayey with many root	s present.	No hydric indicators were of	oserved.							