WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

A II 1/0 E I 1 1	y/County: <u>Carlton</u>	Sampling Date: 6/9/2014
Applicant/Owner: Enbridge	State: MN	Sampling Point: CR103c1U
Investigator(s): JRT/KJA		wnship, Range:
Landform (hillslope, terrace, etc.) Side slope		cave, convex, noneCL
	ng.: <u>-92.457741</u> Datum:	NNW 01 - 15 - C
Soil Map Unit Name: 975C Are climatic/hydrologic conditions of the site typical for the site site site site.		NWI Classification:(If no, explain in remarks)
Are vegetation, soil, or hydrology		Are "normal
Are vegetation \Box , soil \Box , or hydrology	naturally problematic?	circumstances" present?
(If needed, explain any answers in remarks)	naturally problematic:	circumstances present:
(if ficeded, explain any answers in remarks)		
SUMMARY OF FINDINGS		
Lludrophytic vegetation procent?	lo the compled area within	a a watland?
Hydrophytic vegetation present? Hydric soil present? N N	Is the sampled area within	n a wetland? N
Indicators of wetland hydrology present?	If yes, optional wetland site	ID:
Remarks: (Explain alternative procedures here or in a se		
The upland sample point is located in a mesic for		aple, paper birch, and some
ironwood. The point is within six feet of a drivey	vay area.	
HYDROLOGY		
		Secondary Indicators (minimum of two
Primary Indicators (minimum of one is required; check a		required)
	Stained Leaves (B9)	Surface Soil Cracks (B6)
	c Fauna (B13) eposits (B15)	□ Drainage Patterns (B10)□ Moss Trim Lines (B16)
	eposits (B13) jen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)
	ed Rhizospheres on	☐ Crayfish Burrows (C8)
	Roots (C3)	☐ Saturation Visible on Aerial Imagery
☐ Drift Deposits (B3) Living F	•	Saturation Visible on Aerial Imagery (C9)
□ Drift Deposits (B3) Living F □ Algal Mat or Crust (B4) □ Presen □ Iron Deposits (B5) □ Recent	Roots (C3) ce of Reduced Iron (C4) Iron Reduction in Tilled	(C9) ☐ Stunted or Stressed Plants (D1)
□ Drift Deposits (B3) Living F □ Algal Mat or Crust (B4) □ Presen □ Iron Deposits (B5) □ Recent □ Inundation Visible on Aerial Soils (0	Roots (C3) ce of Reduced Iron (C4) Iron Reduction in Tilled C6)	(C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2)
 □ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Inundation Visible on Aerial □ Imagery (B7) □ Living F □ Presen □ Recent Soils (C □ Thin M 	Roots (C3) ce of Reduced Iron (C4) Iron Reduction in Tilled C6) uck Surface (C7)	(C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3)
 □ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Inundation Visible on Aerial □ Imagery (B7) □ Sparsely Vegetated Concave □ Living F □ Recent □ Soils (0 □ Thin M □ Other (Roots (C3) ce of Reduced Iron (C4) Iron Reduction in Tilled C6)	(C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ Microtopographic Relief (D4)
 □ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Inundation Visible on Aerial □ Imagery (B7) □ Living F □ Presen □ Recent Soils (C □ Thin M 	Roots (C3) ce of Reduced Iron (C4) Iron Reduction in Tilled C6) uck Surface (C7)	(C9) ☐ Stunted or Stressed Plants (D1) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3)
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□ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Inundation Visible on Aerial □ Imagery (B7) □ Sparsely Vegetated Concave Surface (B8) □ Thin M □ Other (□ Other (□ Surface water present? Yes □ Water table present? Yes Saturation present? Yes □ □	Roots (C3) ce of Reduced Iron (C4) : Iron Reduction in Tilled C6) uck Surface (C7) Explain in Remarks) Depth (inches):	(C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) Indicators of wetland hydrology
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□ Drift Deposits (B3) □ Living For Algal Mat or Crust (B4) □ Present Iron Deposits (B5) □ Recent Soils (Gammagery (B7) □ Thin Modern (B8) □ Sparsely Vegetated Concave Surface (B8) □ Other (Gammagery (B7) □ Thin Modern (B8) □ Other (Gammagery (B8	Roots (C3) ce of Reduced Iron (C4) Iron Reduction in Tilled C6) uck Surface (C7) Explain in Remarks) Depth (inches): Depth (inches):	(C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) Indicators of wetland hydrology present? N
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Matrix lor (moist) YR 3/ YR 4/ Point ation, Pore Linin icators: (A1) Dipedon (Aistic (A3) en Sulfide) % /2 100 /4 100 D=Depletion in its	n, RM=Reduce	Redonoist) ed Matrix lyvalue E b) (LRR I	x Feature %	es Type* Nered or C Inface A 149B)	Loc** Indica Co	Texture SIL SIL and Grains tors for Prolem Muck (A1 past Prairie Rem Mucky Pe	Remarks Remarks blematic Hydric Soils: 0) (LRR K, L, MLRA 149B tedox (A16) (LRR K, L, R) teat or Peat (S3) (LRR K, L, R)
Matrix lor (moist) YR 3/ YR 4/ Point ation, Pore Linin icators: (A1) Dipedon (Aistic (A3) en Sulfide) % /2 100 /4 100 D=Depletion in its	n, RM=Reduce	Redonoist) ed Matrix lyvalue E b) (LRR I	x Feature % % A, CS=Co Below Sur	es Type* Nered or C Inface A 149B)	Loc** Indica Co	Texture SIL SIL and Grains tors for Prolem Muck (A1 past Prairie Rem Mucky Pe	Diematic Hydric Soils: 0) (LRR K, L, MLRA 149B Redox (A16) (LRR K, L, R) Reat or Peat (S3) (LRR K, L, R)
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entration, Pore Linin icators: (A1) pipedon (Aistic (A3) en Sulfide	D=Depletio g, M=Matri:	Pol	lyvalue B	Below Su	ırface \ 149B)	Indica	and Grains tors for Prol cm Muck (A1 past Prairie R cm Mucky Pe	0) (LRR K, L, MLRA 149B Redox (A16) (LRR K, L, R) Reat or Peat (S3) (LRR K, L, R)
Pore Linin icators: (A1) pipedon (A istic (A3) en Sulfide	ng, M=Matrix	Pol	lyvalue B	Below Su	ırface \ 149B)	Indica	tors for Prol cm Muck (A1 past Prairie R cm Mucky Pe	0) (LRR K, L, MLRA 149B Redox (A16) (LRR K, L, R) Reat or Peat (S3) (LRR K, L, R)
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icators: (A1) pipedon (Aistic (A3) en Sulfide	A2)	<u>□</u> Pol (S8	3) (LRR I	R, MLRA	149B)	☐ 2 d	cm Muck (A1 past Prairie R cm Mucky Pe	0) (LRR K, L, MLRA 149B Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R)
(A1) pipedon (A istic (A3) en Sulfide		(S8	3) (LRR I	R, MLRA	149B)	☐ 2 d	cm Muck (A1 past Prairie R cm Mucky Pe	0) (LRR K, L, MLRA 149B Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R)
oipedon (A istic (A3) en Sulfide		(S8	3) (LRR I	R, MLRA	149B)	Co	oast Prairie R cm Mucky Pe	dedox (A16) (LRR K, L, R) eat or Peat (S3) (LRR K, L, R)
ark Surfac Mucky Min Gleyed Ma Redox (S5 I Matrix (S rface (S7)	À5) Park Suface de (A12) eral (S1) dtrix (S4)) (66)) (LRR R, M	(A11) (LF Loa (A11) (LF De De Rec Rec ILRA	RR R, MI amy Muc RR K, L) amy Gley pleted M dox Dark pleted D dox Dep	yed Matri latrix (F3) k Surface ark Surfa ressions	ral (F1) ix (F2)) e (F6) ace (F7) (F8)	Po Th Iro Pie Me Ve	in Dark Surfa on-Manganes edmont Flood esic Spodic (' ed Parent Ma ery Shallow D her (Explain	w Surface (S8) (LRR K, L) ace (S9) (LRR K, L) be Masses (F12) (LRR K, L, R) dplain Soils (F19) (MLRA 149B TA6) (MLRA 144A, 145, 149B) terial (F21) bark Surface (TF12) in Remarks)
r (if obser	ved):							
						Hydri	c soil prese	nt? <u>N</u>
oil indica	tors were	observed.						
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Mucky Min Gleyed Ma Redox (S5 d Matrix (S urface (S7) ydrophytic	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M ydrophytic vegetation er (if observed):	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) Ded Matrix (S6) Inface (S7) (LRR R, MLRA Inverying word word and wetland higher (if observed):	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) Depleted D Depleted D Redox Dep Irface (S7) (LRR R, MLRA Advirophytic vegetation and wetland hydrology Der (if observed):	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) Depleted Dark Surface Matrix (S6) Matrix (S6) Depleted Dark Surface Redox Depressions Unface (S7) (LRR R, MLRA Mydrophytic vegetation and wetland hydrology must be Per (if observed):	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) Matrix (S6) Matrix (S7) (LRR R, MLRA Addrophytic vegetation and wetland hydrology must be present, user (if observed):	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) Depleted Matrix (S6) Medox (S5) Medox (S6) Redox Depressions (F8) Wrface (S7) (LRR R, MLRA Wrdrophytic vegetation and wetland hydrology must be present, unless discrete (if observed): Hydri	Mucky Mineral (S1) Gleyed Matrix (S4) Redox Dark Surface (F6) Mesic Spodic (Redox (S5) Mesic Spodic (Redox Depressions (F8) Mesic Spodic (Red Parent Ma Very Shallow Depressions (F8) Other (Explain Very Shallow Depressions (F8) Were (if observed): Hydric soil preserved