

WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: SPP City/County: Carlton Sampling Date: 2016-09-01

Applicant/Owner: Enbridge State: Minnesota Sampling Point: CRR51010_612c4W

Investigator(s): DPT, MGH Section, Township, Range: S31, T48N, R31W

Landform (hillslope, terrace, etc.): Depression Local Relief (concave, convex, none): CC Slope (%): 0-2%

Subregion (LRR or MLRA): _____ Latitude: 46.6053176857... Longitude: -92.54569245... Datum: NAD83

Soil Map Unit Name: 533 NWI Classification: PFOB

Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in Remarks): 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 sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	<u>Yes</u>	Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: <u>CRR51010_612c1W</u>
Hydric Soil Present?	<u>Yes</u>	
Wetland Hydrology Present?	<u>Yes</u>	
Remarks: (Explain alternative procedures here or in a separate report.) No digging, existing road, potential buried utilities. Precipitation above normal based on WETS analysis.		

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<u>yes</u> Surface Water (A1) <u>yes</u> High Water Table (A2) <u>yes</u> Saturation (A3) _____ Water Marks (B1) _____ Sediment Deposits (B2) _____ Drift Deposits (B3) _____ Algal Mat or Crust (B4) _____ Iron Deposits (B5) _____ Inundation Visible on Aerial Imagery (B7) _____ Sparsely Vegetated Concave Surface (B8)	_____ Water-Stained Leaves (B9) _____ Aquatic Fauna (B13) _____ Marl Deposits (B15) _____ Hydrogen Sulfide Odor (C1) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Presence of Reduced Iron (C4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Thin Muck Surface (C7) _____ Other (Explain in Remarks)	_____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted/Stressed Plants (D1) <u>YES</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>YES</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? <u>Yes</u> Depth (inches) <u>2</u> Water Table Present? <u>Yes</u> Depth (inches) <u>0</u> Saturation Present? <u>Yes</u> Depth (inches) <u>0</u> (includes capillary fringe)		Wetland Hydrology Present? <u>Yes</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

Sampling Point: CRR51010...

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
6.				
7.				
Sapling/Shrub Stratum (Plot Size: 15)		0 = Total Cover		
1.	Alnus incana	70.00	Yes	FACW
2.	Salix petiolaris	10.00	No	OBL
3.	Larix laricina	5.00	No	FACW
4.	Acer rubrum	5.00	No	FAC
5.				
6.				
7.				
Herb Stratum (Plot Size: 5)		90 = Total Cover		
1.	Impatiens capensis	40.00	Yes	FACW
2.	Calamagrostis canadensis	30.00	Yes	FACW
3.	Phalaris arundinacea	20.00	Yes	FACW
4.	Bidens frondosa	10.00	No	FACW
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
Woody Vine Stratum (Plot Size: 30)		100 = Total Cover		
1.				
2.				
3.				
4.				
		0 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species

That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant

Species Across All Strata: 4 (B)

Percent of Dominant Species

That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of: Multiply by:

OBL species	10.00	x 1	10
FACW species	175.00	x 2	350
FACU species	0.00	x 3	0
UPL species	0.00	x 4	0
Column Totals	190 (A)		375 (B)

Prevalence Index = B/A = 1.9736842...

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

yes 2 - Dominance Test is > 50%

yes 3 - Prevalence Index is ≤ 3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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 than or equal to 3.28 ft (1 m) tall.

Herb - All herbaecaeous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes

Remarks: (include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: CRR51010...

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:		Indicators for Problematic Hydric Soil ³ :
☐ Histosol (A1)	☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Histic Epipedon (A2)	☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)	☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ Black Histic (A3)	☐ Loamy Mucky Mineral (F1) (LRR K, L)	☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Hydrogen Sulfide (A4)	☐ Loamy Gleyed Matrix (F2)	☐ Dark Surface (S7) (LRR K, M)
☐ 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-Manganese Masses (F12) (LRR K, L, R)
☐ Sandy Mucky Mineral (S1)	☐ Redox Depressions (F8)	☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
☐ Sandy Gleyed Matrix (S4)		☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
☐ 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): ☐ Type: _____ Depth (inches): _____		Hydric Soil Present? <u>Yes</u>
Remarks: No digging, soils assumed hydric based on veg/hydro.		

Site Photograph 1

Sampling Point: CRR51010_612c4W



Latitude: 46.6053160513254

Cowardin Classification: PSS

Longitude: -92.5457165949909

Circular 39: 6

Direction: east

Eggers & Reed: Shrub-Carr/Alder Thicket

Remarks:



Latitude: 46.6053114412786

Cowardin Classification: PSS

Longitude: -92.5457154215244

Circular 39: 6

Direction: south

Eggers & Reed: Shrub-Carr/Alder Thicket

Remarks: