

WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: SPP City/County: Cass Sampling Date: 2015-07-24
 Applicant/Owner: Enbridge State: Minnesota Sampling Point: CA129a1U_R
 Investigator(s): ZCW/DPT Section, Township, Range: 19, 139N, 26W
 Landform (hillslope, terrace, etc.): Side Slope Local Relief (concave, convex, none): Convex Slope (%): 5
 Subregion (LRR or MLRA): LRR K Latitude: 46.8461188255... Longitude: -94.02724438... Datum: Minnesota State ...
 Soil Map Unit Name: 119B NWI Classification: _____

Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in Remarks): Yes
 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>No</u>	Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: _____
Hydric Soil Present?	<u>Yes</u>	
Wetland Hydrology Present?	<u>No</u>	
Remarks: (Explain alternative procedures here or in a separate report.)		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Water-Stained Leaves (B9)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Aquatic Fauna (B13)	☐ Drainage Patterns (B10)	
☐ Saturation (A3)	☐ Marl Deposits (B15)	☐ Moss Trim Lines (B16)	
☐ Water Marks (B1)	☐ Hydrogen Sulfide Odor (C1)	☐ Dry-Season Water Table (C2)	
☐ Sediment Deposits (B2)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Crayfish Burrows (C8)	
☐ Drift Deposits (B3)	☐ Presence of Reduced Iron (C4)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Algal Mat or Crust (B4)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Stunted/Stressed Plants (D1)	
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Other (Explain in Remarks)	☐ Shallow Aquitard (D3)	
☐ Sparsely Vegetated Concave Surface (B8)		☐ Microtopographic Relief (D4)	
		☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	<u>No</u> Depth (inches) _____	Wetland Hydrology Present? <u>No</u>	
Water Table Present?	<u>No</u> Depth (inches) _____		
Saturation Present? (includes capillary fringe)	<u>No</u> Depth (inches) _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants.

Sampling Point: CA129a1U...

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot Size: 30)				Dominance Test worksheet:
1. <u>Quercus alba</u>	20.00	Yes	FACU	Number of Dominant Species
2. _____	_____	_____	_____	That Are OBL, FACW, or FAC: 0 (A)
3. _____	_____	_____	_____	Total Number of Dominant
4. _____	_____	_____	_____	3
5. _____	_____	_____	_____	Species Across All Strata: (B)
6. _____	_____	_____	_____	Percent of Dominant Species
7. _____	_____	_____	_____	0
	20	= Total Cover		That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot Size: 15)				Prevalence Index worksheet:
1. <u>Populus tremuloides</u>	5.00	Yes	FACU	Total % Cover of: Multiply by:
2. _____	_____	_____	_____	OBL species 15.00 x 1 15
3. _____	_____	_____	_____	FACW species 5.00 x 2 10
4. _____	_____	_____	_____	FACU species 10.00 x 3 340
5. _____	_____	_____	_____	UPL species 0.00 x 4 0
6. _____	_____	_____	_____	Column Totals 115 (A) 395 (B)
7. _____	_____	_____	_____	Prevalence Index = B/A = 3.4347826...
	5	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot Size: 5)				1 - Rapid Test for Hydrophytic Vegetation
1. <u>Poa pratensis</u>	20.00	Yes	FACU	no 2 - Dominance Test is > 50%
2. <u>Plantago major</u>	15.00	No	FACU	no 3 - Prevalence Index is ≤ 3.0 ¹
3. <u>Scirpus atrovirens</u>	15.00	No	OBL	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. <u>Trifolium pratense</u>	10.00	No	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u>Pteridium aquilinum</u>	10.00	No	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
6. <u>Thalictrum dasycarpum</u>	5.00	No	FACW	Definitions of Vegetation Strata:
7. <u>Athyrium angustum</u>	5.00	No	FAC	Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.
8. <u>Prunella vulgaris</u>	5.00	No	FAC	Sapling/Shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9. <u>Vicia americana</u>	5.00	No	FACU	Herb - All herbaeceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10. _____	_____	_____	_____	Woody vines - All woody vines greater than 3.28 ft in height.
11. _____	_____	_____	_____	Hydrophytic Vegetation Present? _____
12. _____	_____	_____	_____	
	90	= Total Cover		
Woody Vine Stratum (Plot Size: 30)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	0	=Total Cover		
Remarks: (include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: CA129a1U...

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): ☐	Hydric Soil Present? <u>Yes</u>	
Type: <u>Rock</u>		
Depth (inches): <u>14</u>		
Remarks:		



Latitude: 46.846119035079

Cowardin Classification:

Longitude: -94.0272442159187

Circular 39:

Direction: West

Eggers & Reed:

Remarks:



Latitude: 46.8461187417124

Cowardin Classification: _____

Longitude: -94.0272444673758

Circular 39: _____

Direction: North

Eggers & Reed: _____

Remarks: