

WETLAND DETERMINATION DATA FORM - North Central and Northeast Region

Project/Site: SPP City/County: Hubbard Sampling Date: 2015-06-29
Applicant/Owner: Enbridge State: Minnesota Sampling Point: HUC5034_200a1U
Investigator(s): BEH/BCS Section, Township, Range: _____
Landform (hillslope, terrace, etc.): Side Slope Local Relief (concave, convex, none): LL Slope (%): 3-7
Subregion (LRR or MLRA): LRR K Latitude: 47.18465158 Longitude: -95.12958367 Datum: Minnesota State ...
Soil Map Unit Name: 526C NWI Classification: _____

Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in Remarks):

YesAre Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? YesAre 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.) The upland sample point is located in a mesic hardwood forest. The sample site contains hydric soil, but lacks wetland hydrology and hydrophytic veget...		

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: No primary or secondary hydrological indicators were observed.		

VEGETATION - Use scientific names of plants.

Sampling Point: HUC5034_...

		Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot Size: <u>30 ft</u>)					Dominance Test worksheet:
1.	<u>Acer rubrum</u>	<u>35.00</u>	<u>Yes</u>	<u>FAC</u>	Number of Dominant Species
2.	<u>Populus tremuloides</u>	<u>30.00</u>	<u>Yes</u>	<u>FACU</u>	That Are OBL, FACW, or FAC: <u>1</u> (A)
3.	<u>Fraxinus pennsylvanica</u>	<u>15.00</u>	<u>No</u>	<u>FACW</u>	Total Number of Dominant
4.					<u>5</u>
5.					Species Across All Strata: (B)
6.					Percent of Dominant Species
7.					<u>20</u>
					That Are OBL, FACW, or FAC: (A/B)
					Prevalence Index worksheet:
		<u>80</u>	= Total Cover		Total % Cover of: Multiply by:
<u>Sapling/Shrub Stratum</u> (Plot Size: <u>15 ft</u>)					OBL species <u>0.00</u> x 1 <u>0</u>
1.	<u>Corylus cornuta</u>	<u>60.00</u>	<u>Yes</u>	<u>FACU</u>	FACW species <u>25.00</u> x 2 <u>50</u>
2.	<u>Fraxinus pennsylvanica</u>	<u>10.00</u>	<u>No</u>	<u>FACW</u>	FACU species <u>35.00</u> x 3 <u>500</u>
3.					UPL species <u>0.00</u> x 4 <u>0</u>
4.					Column Totals <u>185</u> (A) <u>655</u> (B)
5.					Prevalence Index = B/A = <u>3.54054</u>
6.					Hydrophytic Vegetation Indicators:
7.					<u>1</u> - Rapid Test for Hydrophytic Vegetation
		<u>70</u>	= Total Cover		<u>no</u> <u>2</u> - Dominance Test is > 50%
					<u>no</u> <u>3</u> - Prevalence Index is ≤ 3.0 ¹
					<u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
<u>Herb Stratum</u> (Plot Size: <u>5 ft</u>)					Problematic Hydrophytic Vegetation ¹ (Explain)
1.	<u>Uvularia grandiflora</u>	<u>20.00</u>	<u>Yes</u>		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2.	<u>Pteridium aquilinum</u>	<u>15.00</u>	<u>Yes</u>	<u>FACU</u>	
3.	<u>Oryzopsis asperifolia</u>	<u>10.00</u>	<u>No</u>		
4.	<u>Streptopus lanceolatus</u>	<u>10.00</u>	<u>No</u>	<u>FACU</u>	
5.	<u>Thalictrum dioicum</u>	<u>10.00</u>	<u>No</u>	<u>FACU</u>	
6.					Definitions of Vegetation Strata:
7.					Tree - Woody plants 3 in. (.76 cm) or more in diameter at breast height (DBH), regardless of height.
8.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9.					Herb - All herbaceous (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.					
12.					
		<u>65</u>	= Total Cover		
<u>Woody Vine Stratum</u> (Plot Size:)					Hydrophytic Vegetation Present? _____
1.					
2.					
3.					
4.					
		<u>0</u>	=Total Cover		
Remarks: (include photo numbers here or on a separate sheet.)					
The canopy is dominated by red maple and quaking aspen with a shrub component of beaked hazelnut. Ground cover is predominantly bracken fern and large-flower bellwort.					

SOIL

Sampling Point: HUC5034_...

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? Yes ☐	
Remarks:		
The soil is dark silty loam underlain by depleted loamy sand. The profile meets hydric soil indicator A11-Depleted Below Dark Surface.		