

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: SPP City/County: Red Lake Sampling Date: 2016-06-22
 Applicant/Owner: Enbridge State: Minnesota Sampling Point: u-150n44w36-aa1
 Investigator(s): DPT, ZCW Section, Township, Range: S36, T150N, R44W
 Landform (hillslope, terrace, etc.): Rise Local Relief (concave, convex, none): VL Slope (%): 0-2%
 Latitude: 47.7739802515... Longitude: -96.22534945...

Datum: NAD83
 Soil Map Unit Name: 166A NWI Classification: N/A

Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in Remarks): Yes
 Are Vegetation Yes, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? No
 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 | |
| Hydric Soil Present? | <u>No</u> | within a Wetland? | <u>No</u> |
| Wetland Hydrology Present? | <u>No</u> | If yes, optional Wetland Site ID: | |
| Remarks: (Explain alternative procedures here or in a separate report.) Agricultural field - row crop. No digging allowed due to buried utilities. | | | |

VEGETATION - Use scientific names of plants.

| | Absolute % Cover | Dominant Species? | Indicator Status | |
|---|-------------------------|-------------------|------------------|--|
| Tree Stratum (Plot Size: _____) | | | | Dominance Test worksheet: |
| 1. _____ | _____ | _____ | _____ | Number of Dominant Species |
| 2. _____ | _____ | _____ | _____ | That Are OBL, FACW, or FAC: <u>0</u> (A) |
| 3. _____ | _____ | _____ | _____ | Total Number of Dominant |
| 4. _____ | _____ | _____ | _____ | Species Across All Strata: <u>1</u> (B) |
| | <u>0</u> = Total Cover | | | Percent of Dominant Species |
| | | | | That Are OBL, FACW, or FAC: <u>0</u> (A/B) |
| Sapling/Shrub Stratum (Plot Size: _____) | | | | Prevalence Index worksheet: |
| 1. _____ | _____ | _____ | _____ | Total % Cover of: |
| 2. _____ | _____ | _____ | _____ | Multiply by: |
| 3. _____ | _____ | _____ | _____ | OBL species <u>0.00</u> x 1 <u>0</u> |
| 4. _____ | _____ | _____ | _____ | FACW species <u>0.00</u> x 2 <u>0</u> |
| 5. _____ | _____ | _____ | _____ | FACU species <u>0.00</u> x 3 <u>0</u> |
| | <u>0</u> = Total Cover | | | UPL species <u>50.00</u> x 4 <u>250</u> |
| | | | | Column Totals <u>50</u> (A) <u>250</u> (B) |
| | | | | Prevalence Index = B/A = <u>5</u> |
| Herb Stratum (Plot Size: <u>5</u>) | | | | Hydrophytic Vegetation Indicators: |
| 1. <u>Zea mays</u> | <u>50.00</u> | <u>Yes</u> | <u>NI</u> | <u>no</u> 1 - Rapid Test for Hydrophytic Vegetation |
| 2. _____ | _____ | _____ | _____ | <u>no</u> 2 - Dominance Test is > 50% |
| 3. _____ | _____ | _____ | _____ | <u>no</u> 3 - Prevalence Index is ≤ 3.0 ¹ |
| 4. _____ | _____ | _____ | _____ | _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) |
| 5. _____ | _____ | _____ | _____ | Problematic Hydrophytic Vegetation ¹ |
| 6. _____ | _____ | _____ | _____ | (Explain) |
| 7. _____ | _____ | _____ | _____ | ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 8. _____ | _____ | _____ | _____ | |
| 9. _____ | _____ | _____ | _____ | |
| 10. _____ | _____ | _____ | _____ | |
| | <u>50</u> = Total Cover | | | |
| Woody Vine Stratum (Plot Size: <u>30</u>) | | | | |
| 1. _____ | _____ | _____ | _____ | |
| 2. _____ | _____ | _____ | _____ | |
| | <u>0</u> = Total Cover | | | |
| % Bare Ground in Herb Stratum <u>50</u> | | | | Hydrophytic Vegetation Present? _____ |

Remarks:

SOIL

Sampling Point: u-150n44...

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

| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
|-------------------|---------------|---|----------------|---|-------------------|------------------|---------|---------|
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
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¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

| | | |
|--|---|--|
| <p>Hydric Soil Indicators:</p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 1cm Muck (A9) (LRR F, G, H) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 2.5cm Mucky Peat or Peat (S2)(LRR G, H) <input type="checkbox"/> 5cm Mucky Peat or Peat (S3) (LRR F) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> High Plains Depressions (F16) <p style="text-align: center;">(MLRA 72 & 73 of LRR H)</p> | <p>Indicators for Problematic Hydric Soil³:</p> <input type="checkbox"/> 1cm Muck (A9) (LRR I, J) <input type="checkbox"/> Coast Prairie Redox (A16)(LRR K, L, R) <input type="checkbox"/> Dark Surface (S7) (LRR G) <input type="checkbox"/> High Plains Depressions (F16) <p style="text-align: center;">(LRR H outside of MLRA 72 & 73)</p> <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (explain in remarks) |
|--|---|--|

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

| | |
|--|--------------------------------|
| Restrictive Layer (if present): <input type="checkbox"/> Type: _____ Depth (inches): _____ | Hydric Soil Present? <u>No</u> |
|--|--------------------------------|

Remarks:
 No digging allowed due to buried utilities. Soils assumed non-hydric based on veg/hydro.

HYDROLOGY

Wetland Hydrology Indicators:

| | | |
|--|---|--|
| <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <p style="text-align: center;">(where not tilled)</p> <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks) | <p><u>Secondary Indicators (minimum of two required)</u></p> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <p style="text-align: center;">(where tilled)</p> <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F) |
|--|---|--|

| | |
|---|--|
| <p>Field Observations:</p> Surface Water Present? <u>No</u> Depth (inches) _____ Water Table Present? <u>No</u> Depth (inches) _____ Saturation Present? <u>No</u> Depth (inches) _____ (includes capillary fringe) | <p>Wetland Hydrology Present? <u>No</u></p> |
|---|--|

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Site Photograph 1

Sampling Point: u-150n44w36-aa1



Latitude: 47.7739802515579

Cowardin Classification: _____

Longitude: -96.2253494561615

Circular 39: _____

Direction: southeast

Eggers & Reed: _____

Remarks:
upland

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Site Photograph 2

Sampling Point: u-150n44w36-aa1



Latitude: 47.7739802515579

Cowardin Classification: _____

Longitude: -96.2253494561615

Circular 39: _____

Direction: northwest

Eggers & Reed: _____

Remarks:
upland

US Army Corps of Engineers

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