

**WETLAND DETERMINATION DATA FORM**  
Great Plains Region

|  |          |                          |   |   |                |
|--|----------|--------------------------|---|---|----------------|
| Project/Site:  | L3R      | Subregion (MLRA or LRR): | MLRA 56   | Date:   | 09/26/14       |
| Applicant:   | Enbridge |                          |   | County:   | Pennington     |
| Investigators:   | NTT/BEH  |                          |   | State:  | MN             |
| Soil Unit:   | I48A     | NWI Classification:      | PEMBd   | Sample Point:   | u-154n44w19-c1 |
| Landform:  | Rise     | Local Relief:            | CV  | Section:  |                |
| Slope (%):   | 8 - 15%  | Latitude:                | 48.149362   | Longitude:  | -96.351674     |
| Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks)                            |          |                          |   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                |
| Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> significantly disturbed? |          |                          | Are normal circumstances present?                                   |   |                |
| Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> naturally problematic?   |          |                          | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |   |                |
| Township:  |          |                          |   | Dir:  |                |

**SUMMARY OF FINDINGS**

|                                 |    |   |           |
|---------------------------------|----|---|-----------|
| Hydrophytic Vegetation Present? | No | Hydric Soils Present?                           | No        |
| Wetland Hydrology Present?      | No | <b>Is This Sampling Point Within A Wetland?</b> | <b>No</b> |

Remarks: **The upland point is located on the edge of an aspen forest. The upland vegetation is dominated by smooth brome, creeping wild rye, and Kentucky blue grass.**

**HYDROLOGY**

**Wetland Hydrology Indicators** (Check all that apply; Minimum of one primary or two secondary required):

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

**Field Observations:**

|   |  |
|---|--|
| Surface Water Present? Yes <input type="checkbox"/> Depth: _____ (in.)<br>Water Table Present? Yes <input type="checkbox"/> Depth: _____ (in.)<br>Saturation Present? Yes <input type="checkbox"/> Depth: _____ (in.) | <b>Wetland Hydrology Present?</b> <u>  N  </u> |
|---|--|

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

Remarks: **No wetland hydrology indicators are present.**

**SOILS**

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.)  
 (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

| Depth (In.) | Matrix        |     |     | Mottles       |   |      | Texture | Remarks |
|-------------|---------------|-----|-----|---------------|---|------|---------|---------|
|             | Color (Moist) | %   |     | Color (Moist) | % | Type |         |         |
| 0-12        | Hue_10YR      | 2/1 | 100 |               |   |      |         | SCL     |
| 12-28       | Hue_10YR      | 3/1 | 100 |               |   |      |         | CL      |
|             |               |     |     |               |   |      |         |         |
|             |               |     |     |               |   |      |         |         |

**NRCS Hydric Soil Field Indicators** (check here if indicators are not present):

|   |  |   |
|---|--|---|
| <input type="checkbox"/> A1 - Histosol<br><input type="checkbox"/> A2 - Histic Epipedon<br><input type="checkbox"/> A3 - Black Histic<br><input type="checkbox"/> A4 - Hydrogen Sulfide<br><input type="checkbox"/> A5 - Stratified Layers (LRR F)<br><input type="checkbox"/> A9 - 1 cm Muck (LRR FGH)<br><input type="checkbox"/> A11 - Depleted Below Dark Surface<br><input type="checkbox"/> A12 - Thick Dark Surface<br><input type="checkbox"/> S1 - Sandy Mucky Mineral<br><input type="checkbox"/> S2 - 2.5 cm Mucky Peat or Peat (LRR G, H)<br><input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat (LRR F)<br><input type="checkbox"/> S4 - Sandy Gleyed Matrix | <input type="checkbox"/> S5 - Sandy Redox<br><input type="checkbox"/> S6 - Stripped Matrix<br><input type="checkbox"/> F1 - Loamy Mucky Mineral<br><input type="checkbox"/> F2 - Loamy Gleyed Matrix<br><input type="checkbox"/> F3 - Depleted Matrix<br><input type="checkbox"/> F6 - Redox Dark Surface<br><input type="checkbox"/> F7 - Depleted Dark Surface<br><input type="checkbox"/> F8 - Redox Depressions<br><input type="checkbox"/> F16 - High Plains Depressions (MLRA 72, 73 of LRR H) | <b>Indicators for Problematic Soils<sup>1</sup></b><br><input type="checkbox"/> A9 - 1 cm Muck (LRR I, J)<br><input type="checkbox"/> A16 - Coast Prairie Redox (LRR F, G, H)<br><input type="checkbox"/> S7 - Dark Surface (LRR G)<br><input type="checkbox"/> F16 - High Plains Depressions (LRR H, outside MLRA 72, 73)<br><input type="checkbox"/> F18 - Reduced Vertic<br><input type="checkbox"/> TF2 - Red Parent Material<br><input type="checkbox"/> TF12 - Very Shallow Dark Surface<br><input type="checkbox"/> Other (Explain in Remarks) |
|---|--|---|

<sup>1</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

|                   |             |              |  |
|-------------------|-------------|--------------|--|
| Restrictive Layer | Type: _____ | Depth: _____ | <b>Hydric Soil Present?</b> <u>  N  </u> |
|-------------------|-------------|--------------|--|

Remarks: **No hydric soil indicators are present.**

**WETLAND DETERMINATION DATA FORM**  
Great Plains Region

Project/Site: **L3R** Sample Point: **u-154n44w19-c1**

**VEGETATION** (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft. radius)

|     | Species Name | % Cover | Dominant | Ind. Status |
|-----|--------------|---------|----------|-------------|
| 1.  |              |         |          |             |
| 2.  |              |         |          |             |
| 3.  |              |         |          |             |
| 4.  |              |         |          |             |
| 5.  |              |         |          |             |
| 6.  |              |         |          |             |
| 7.  |              |         |          |             |
| 8.  |              |         |          |             |
| 9.  |              |         |          |             |
| 10. |              |         |          |             |

**Dominance Test Worksheet**

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Sapling/Shrub Stratum (Plot size: 15 ft. radius)

|     |  |  |  |  |
|-----|--|--|--|--|
| 1.  |  |  |  |  |
| 2.  |  |  |  |  |
| 3.  |  |  |  |  |
| 4.  |  |  |  |  |
| 5.  |  |  |  |  |
| 6.  |  |  |  |  |
| 7.  |  |  |  |  |
| 8.  |  |  |  |  |
| 9.  |  |  |  |  |
| 10. |  |  |  |  |

Total Cover = 0

**Prevalence Index Worksheet**

| Total % Cover of:           | Multiply by: |                |
|-----------------------------|--------------|----------------|
| OBL spp. <u>0</u>           | x 1 =        | <u>0</u>       |
| FACW spp. <u>0</u>          | x 2 =        | <u>0</u>       |
| FAC spp. <u>0</u>           | x 3 =        | <u>0</u>       |
| FACU spp. <u>75</u>         | x 4 =        | <u>300</u>     |
| UPL spp. <u>25</u>          | x 5 =        | <u>125</u>     |
| <b>Total</b> <u>100</u> (A) |              | <u>425</u> (B) |

Prevalence Index = B/A = 4.250

Herb Stratum (Plot size: 5 ft. radius)

|     |                        |    |   |      |
|-----|------------------------|----|---|------|
| 1.  | <i>Elymus repens</i>   | 40 | Y | FACU |
| 2.  | <i>Bromus inermis</i>  | 25 | Y | UPL  |
| 3.  | <i>Phleum pratense</i> | 20 | Y | FACU |
| 4.  | <i>Poa pratensis</i>   | 15 | N | FACU |
| 5.  |                        |    |   |      |
| 6.  |                        |    |   |      |
| 7.  |                        |    |   |      |
| 8.  |                        |    |   |      |
| 9.  |                        |    |   |      |
| 10. |                        |    |   |      |
| 11. |                        |    |   |      |
| 12. |                        |    |   |      |
| 13. |                        |    |   |      |
| 14. |                        |    |   |      |
| 15. |                        |    |   |      |

Total Cover = 100

**Hydrophytic Vegetation Indicators:**

Rapid Test for Hydrophytic Vegetation

Dominance Test is > 50%

Prevalence Index is ≤ 3.0 \*

Morphological Adaptations (Explain) \*

Problem Hydrophytic Vegetation (Explain) \*

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

Woody Vine Stratum (Plot size: 30 ft. radius)

|    |  |  |  |  |
|----|--|--|--|--|
| 1. |  |  |  |  |
| 2. |  |  |  |  |
| 3. |  |  |  |  |
| 5. |  |  |  |  |
| 4. |  |  |  |  |

Total Cover = 0

**Definitions of Vegetation Strata:**

**Tree** - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub** - Woody plants less than 3 in. DBH, regardless of height.

**Herb** - All herbaceous (non-woody) plants, regardless of size.

**Woody Vines** - All woody vines, regardless of height.

Remarks: **The upland vegetation is dominated by creeping wild rye, Kentucky blue grass, and timothy.**

**Additional Remarks:**

**Hydrophytic Vegetation Present?** N