

**WETLAND DETERMINATION DATA FORM**  
Great Plains Region

|  |          |                          |   |   |                |
|--|----------|--------------------------|---|---|----------------|
| Project/Site:  | L3R      | Subregion (MLRA or LRR): | MLRA 56   | Date:   | 09/27/14       |
| Applicant:   | Enbridge | County:                  | Pennington  | State:  | MN             |
| Investigators:   | NTT/BEH  | NWI Classification:      |   | Sample Point:   | u-154n44w28-g1 |
| Soil Unit:   | I48A     | Local Relief:            | VL  | Section:  |                |
| Landform:  | Rise     | Latitude:                | 48.122885   | Longitude:  | -96.315448     |
| Slope (%):   | 8 - 15%  | Datum:                   |   | Township:   |                |
| 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 |   |                |
| <b>SUMMARY OF FINDINGS</b>   |          |                          |   | Range: Dir:   |                |

|  |    |  |    |
|--|----|--|----|
| Hydrophytic Vegetation Present?  | No | Hydric Soils Present?                              | No |
| Wetland Hydrology Present?   | No | <b>Is This Sampling Point Within A Wetland? No</b> |    |
| Remarks: <span style="color: red;">The upland point is located in an open meadow area near the edge of a small aspen forest. The dominant plants are smooth brome and Canada thistle.</span> |    |  |    |

**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) |
|---|---|--|

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

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 |         |         |
| 0-20        | Hue_10YR      | 2/1 | 100 |               |   |      |         | SL      |
| 20-28       | Hue_10YR      | 3/2 | 100 |               |   |      |         | S       |
|             |               |     |     |               |   |      |         |         |
|             |               |     |     |               |   |      |         |         |

**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> N |
|--|-------------------------------|

Remarks: Solid layer of dark black sandy loam over a lighter sand layer.

**WETLAND DETERMINATION DATA FORM**  
Great Plains Region

Project/Site: **L3R** Sample Point: **u-154n44w28-g1**

**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. |              |               |          |             |
|     |              | Total Cover = | <b>0</b> |             |

**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.  |  | 15            | <b>Y</b>  |  |
| 2.  |  |               |           |  |
| 3.  |  |               |           |  |
| 4.  |  |               |           |  |
| 5.  |  |               |           |  |
| 6.  |  |               |           |  |
| 7.  |  |               |           |  |
| 8.  |  |               |           |  |
| 9.  |  |               |           |  |
| 10. |  |               |           |  |
|     |  | Total Cover = | <b>15</b> |  |

**Prevalence Index Worksheet**

| Total % Cover of:        | Multiply by: |                |
|--------------------------|--------------|----------------|
| OBL spp. <b>0</b>        | x 1 =        | <b>0</b>       |
| FACW spp. <b>0</b>       | x 2 =        | <b>0</b>       |
| FAC spp. <b>0</b>        | x 3 =        | <b>0</b>       |
| FACU spp. <b>25</b>      | x 4 =        | <b>100</b>     |
| UPL spp. <b>75</b>       | x 5 =        | <b>375</b>     |
| Total <b>100</b> (A)     |              | <b>475</b> (B) |
| Prevalence Index = B/A = |              | <b>4.750</b>   |

Herb Stratum (Plot size: 5 ft. radius)

|     |                        |               |            |             |
|-----|------------------------|---------------|------------|-------------|
| 1.  | <i>Bromus inermis</i>  | 75            | <b>Y</b>   | <b>UPL</b>  |
| 2.  | <i>Poa pratensis</i>   | 20            | <b>Y</b>   | <b>FACU</b> |
| 3.  | <i>Cirsium arvense</i> | 5             | <b>N</b>   | <b>FACU</b> |
| 4.  |                        |               |            |             |
| 5.  |                        |               |            |             |
| 6.  |                        |               |            |             |
| 7.  |                        |               |            |             |
| 8.  |                        |               |            |             |
| 9.  |                        |               |            |             |
| 10. |                        |               |            |             |
| 11. |                        |               |            |             |
| 12. |                        |               |            |             |
| 13. |                        |               |            |             |
| 14. |                        |               |            |             |
| 15. |                        |               |            |             |
|     |                        | Total Cover = | <b>100</b> |             |

**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 = | <b>0</b> |  |

**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.

**Hydrophytic Vegetation Present?**   N  

Remarks: **Dominant plants within the upland area are smooth brome and Kentucky blue grass.**

**Additional Remarks:**