

WETLAND DETERMINATION DATA FORM
Great Plains Region

| | | | | | |
|--|------------|---|---|---------------|----------------|
| Project/Site: | L3R | Subregion (MLRA or LRR): | MLRA 56 | Date: | 09/16/14 |
| Applicant: | Enbridge | County: | Pennington | State: | MN |
| Investigators: | NTT/BEH | NWI Classification: | | Sample Point: | u-154n44w32-a1 |
| Soil Unit: | I55A | Local Relief: | LC | Latitude: | 48.114744 |
| Landform: | Side slope | Longitude: | -96.344149 | Datum: | |
| Slope (%): | 3 - 7% | 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> naturally problematic? | | | Section: | | |
| | | | Township: | | |
| | | | Range: Dir: | | |

SUMMARY OF FINDINGS

| | | | |
|---|----|---|-----------|
| Hydrophytic Vegetation Present? | No | Hydric Soils Present? | No |
| Wetland Hydrology Present? | No | Is This Sampling Point Within A Wetland? | No |
| Remarks: The upland point is located in an open meadow dominated by <i>Poa pratensis</i> and <i>Elymus repens</i>. | | | |

HYDROLOGY

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

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

| | |
|--|-----------------------------------|
| Field Observations: | Wetland Hydrology Present? |
| 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 | | |
| 0-8 | Hue_10YR | 2/1 | 100 | | | | | CL |
| 8-14 | Hue_10YR | 3/2 | 100 | | | | | C |
| 14-18 | Hue_2.5YR | 7/3 | 100 | | | | | S |
| | | | | | | | | |
| | | | | | | | | |

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

| | | |
|---|--|---|
| <input type="checkbox"/> A1 - Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers (LRR F) <input type="checkbox"/> A9 - 1 cm Muck (LRR FGH) <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Mucky Mineral <input type="checkbox"/> S2 - 2.5 cm Mucky Peat or Peat (LRR G, H) <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat (LRR F) <input type="checkbox"/> S4 - Sandy Gleyed Matrix | <input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Mucky Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions <input type="checkbox"/> F16 - High Plains Depressions (MLRA 72, 73 of LRR H) | Indicators for Problematic Soils¹ <input type="checkbox"/> A9 - 1 cm Muck (LRR I, J) <input type="checkbox"/> A16 - Coast Prairie Redox (LRR F, G, H) <input type="checkbox"/> S7 - Dark Surface (LRR G) <input type="checkbox"/> F16 - High Plains Depressions (LRR H, outside MLRA 72, 73) <input type="checkbox"/> F18 - Reduced Vertic <input type="checkbox"/> TF2 - Red Parent Material <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input type="checkbox"/> Other (Explain in Remarks) |
|---|--|---|

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

| | | | | |
|-------------------|-------------|--------------|-----------------------------|---|
| Restrictive Layer | Type: _____ | Depth: _____ | Hydric Soil Present? | N |
|-------------------|-------------|--------------|-----------------------------|---|

Remarks: **The profile contains a dark clay loam layer with a middle layer of clay followed by a layer of lighter sand; no hydric soil indicators are present.**

WETLAND DETERMINATION DATA FORM
Great Plains Region

Project/Site: **L3R** Sample Point: **u-154n44w32-a1**

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: 2 (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>20</u> | x 3 = | <u>60</u> |
| FACU spp. <u>75</u> | x 4 = | <u>300</u> |
| UPL spp. <u>0</u> | x 5 = | <u>0</u> |
| Total <u>95</u> (A) | | <u>360</u> (B) |

Prevalence Index = B/A = 3.789

Herb Stratum (Plot size: 5 ft. radius)

| | | | | |
|-----|--------------------------|----|---|------|
| 1. | <i>Poa pratensis</i> | 50 | Y | FACU |
| 2. | <i>Elymus repens</i> | 25 | Y | FACU |
| 3. | <i>Sonchus arvensis</i> | 10 | N | FAC |
| 4. | <i>Solidago gigantea</i> | 10 | N | FAC |
| 5. | | | | |
| 6. | | | | |
| 7. | | | | |
| 8. | | | | |
| 9. | | | | |
| 10. | | | | |
| 11. | | | | |
| 12. | | | | |
| 13. | | | | |
| 14. | | | | |
| 15. | | | | |

Total Cover = 95

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 Poa pratensis and Elymus repens.**

Additional Remarks:

Hydrophytic Vegetation Present? N