

WETLAND DETERMINATION DATA FORM
Great Plains Region

| | | | | | |
|--|----------|---|-----------|---|------------|
| Project/Site: | L3R | Subregion (MLRA or LRR): | MLRA 56 | Date: | 09/24/14 |
| Applicant: | Enbridge | County: | Marshall | State: | MN |
| Investigators: | NTT/BEH | | | | |
| Soil Unit: | I24A | NWI Classification: | | | |
| Landform: | Rise | Local Relief: | VV | | |
| Slope (%): | 3 - 7% | Latitude: | 48.199114 | Longitude: | -96.418309 |
| | | | | Datum: | |
| 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? | | Section: | |
| 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: | |
| | | | | Range: Dir: | |

| | |
|--|----|
| SUMMARY OF FINDINGS | |
| Hydrophytic Vegetation Present? | No |
| Wetland Hydrology Present? | No |
| Hydic Soils Present? No | |
| Is This Sampling Point Within A Wetland? No | |
| Remarks: The upland point is located on a rise in a farmed soybean field with no vegetation growing besides soybeans and small clumps of creeping wild rye. | |

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 | | |
| 0-25 | Hue_10YR | 2/1 | 100 | | | | | SCL |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

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) | <u>Indicators for Problematic Soils¹</u> <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: _____ | Hydic Soil Present? | N |
|-------------------|-------------|--------------|----------------------------|---|

Remarks: **No hydric soil indicators are present. Dark sandy clay loam is present throughout the entire soil profile.**

WETLAND DETERMINATION DATA FORM
Great Plains Region

Project/Site: **L3R** Sample Point: **u-155n45w34-11**

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 = | 0 | |

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. 0 | x 1 = | 0 |
| FACW spp. 0 | x 2 = | 0 |
| FAC spp. 0 | x 3 = | 0 |
| FACU spp. 25 | x 4 = | 100 |
| UPL spp. 50 | x 5 = | 250 |
| Total 75 (A) | | 350 (B) |
| Prevalence Index = B/A = | | 4.667 |

Herb Stratum (Plot size: 5 ft. radius)

| | | | | |
|-----|----------------------|---------------|-----------|------|
| 1. | <i>Glycine max</i> | 50 | Y | NI |
| 2. | <i>Elymus repens</i> | 25 | Y | FACU |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |
| 6. | | | | |
| 7. | | | | |
| 8. | | | | |
| 9. | | | | |
| 10. | | | | |
| 11. | | | | |
| 12. | | | | |
| 13. | | | | |
| 14. | | | | |
| 15. | | | | |
| | | Total Cover = | 75 | |

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.

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.

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

| | | | | |
|----|--|---------------|----------|--|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 5. | | | | |
| 4. | | | | |
| | | Total Cover = | 0 | |

Hydrophytic Vegetation Present? N

Remarks: **The vegetation throughout the upland consists of planted soybeans.**

Additional Remarks: