

WETLAND DETERMINATION DATA FORM
Great Plains Region

| | | | | | |
|---|----------|---|-------------|---|----------------|
| Project/Site: | L3R | Subregion (MLRA or LRR): | MLRA 56 | Date: | 09/30/14 |
| Applicant: | Enbridge | County: | Pennington | State: | MN |
| Investigators: | MRK/OTG | NWI Classification: | | Sample Point: | u-152n43w15-c1 |
| Soil Unit: | I50A | Local Relief: | LL | Section: | |
| Landform: | Talf | Latitude: | 47.98934083 | Longitude: | -96.1399736667 |
| Slope (%): | 0 - 2% | 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 checked="" type="checkbox"/> or Hydrology <input type="checkbox"/> significantly disturbed? | | Are normal circumstances present? | | Range: Dir: | |
| 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 | | | |

SUMMARY OF FINDINGS

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

Remarks: Upland sample point is located in a soybean field.

HYDROLOGY

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

Primary:

- A1 - Surface Water
- A2 - High Water Table
- A3 - Saturation
- B1 - Water Marks
- B2 - Sediment Deposits
- B3 - Drift Deposits
- B4 - Algal Mat or Crust
- B5 - Iron Deposits
- B7 - Inundation Visible on Aerial Imagery
- B9 - Water-Stained Leaves

- B11 - Salt Crust
- B13 - Aquatic Fauna
- C1 - Hydrogen Sulfide Odor
- C2 - Dry Season Water Table
- C3 - Oxidized Rhizospheres on Living Roots (not till)
- C4 - Presence of Reduced Iron
- C7 - Thin Muck Surface
- Other (Explain)

Secondary:

- B6 - Surface Soil Cracks
- B8 - Sparsely Vegetated Concave Surface
- B10 - Drainage Patterns
- C3 - Oxidized Rhizospheres on Living Roots (tilled)
- C8 - Crayfish Burrows
- C9 - Saturation Visible on Aerial Imagery
- D2 - Geomorphic Position
- D5 - FAC-Neutral Test
- D7 - Frost-Heaved Hummocks (LRR F)

Field Observations:

| | | | |
|------------------------|------------------------------|--------|-------|
| Surface Water Present? | Yes <input type="checkbox"/> | Depth: | (in.) |
| Water Table Present? | Yes <input type="checkbox"/> | Depth: | (in.) |
| Saturation Present? | Yes <input type="checkbox"/> | Depth: | (in.) |

Wetland Hydrology Present? N

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

Remarks: No primary or secondary hydrological indicators were observed.

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 | | |
| 0-14 | Hue_10YR | 2/1 | 100 | | | | | SCL |
| 14-18 | Hue_10YR | 4/3 | 100 | | | | | LS |
| 18-21 | Hue_2.5Y | 4/1 | 100 | | | | | SIC |
| | | | | | | | | |
| | | | | | | | | |

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

- A1 - Histosol
- A2 - Histic Epipedon
- A3 - Black Histic
- A4 - Hydrogen Sulfide
- A5 - Stratified Layers (LRR F)
- A9 - 1 cm Muck (LRR FGH)
- A11 - Depleted Below Dark Surface
- A12 - Thick Dark Surface
- S1 - Sandy Mucky Mineral
- S2 - 2.5 cm Mucky Peat or Peat (LRR G, H)
- S3 - 5 cm Mucky Peat or Peat (LRR F)
- S4 - Sandy Gleyed Matrix

- S5 - Sandy Redox
- S6 - Stripped Matrix
- F1 - Loamy Mucky Mineral
- F2 - Loamy Gleyed Matrix
- F3 - Depleted Matrix
- F6 - Redox Dark Surface
- F7 - Depleted Dark Surface
- F8 - Redox Depressions
- F16 - High Plains Depressions (MLRA 72, 73 of LRR H)

Indicators for Problematic Soils¹

- A9 - 1 cm Muck (LRR I, J)
- A16 - Coast Prairie Redox (LRR F, G, H)
- S7 - Dark Surface (LRR G)
- F16 - High Plains Depressions (LRR H, outside MLRA 72, 73)
- F18 - Reduced Vertic
- TF2 - Red Parent Material
- TF12 - Very Shallow Dark Surface
- 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: Soil is a layer of dark sandy loam underlain by a lighter loamy sand. Bottom layer is a silty clay. Soil does not meet any hydric indicators.

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Great Plains Region

Project/Site: **L3R** Sample Point: **u-152n43w15-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. | | | | |
| | | 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: **1** (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: **0.0%** (A/B)

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. | 0 | x 4 = | 0 |
| UPL spp. | 75 | x 5 = | 375 |
| Total | | 75 (A) | 375 (B) |
| | | Prevalence Index = B/A = 5.000 | |

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

| | | | | |
|-----|--|---------------|----------|--|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |
| 6. | | | | |
| 7. | | | | |
| 8. | | | | |
| 9. | | | | |
| 10. | | | | |
| | | Total Cover = | 0 | |

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.

Herb Stratum (Plot size: 5 ft. radius)

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

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: **Upland sample point is dominated by cultivated soybeans.**

Additional Remarks: