## WETLAND DETERMINATION DATA FORM - Great Plains Region

| SPP Project/Site: City  | Polk<br>County:       |  |                  | Sampling Date:  | 2015-07-13             |
|---|-----------------------|--|------------------|---|------------------------|
| Enbridge Applicant/Owner:   | , county              | Min<br>State:  | nesota           | Sampling Point:   | w-149n42w7-a1          |
| Investigator(s): ACM/LEB  |                       | Section, Townsl                                      | hip, Range:      |   |                        |
| Landform (hillslope, terrace, etc.):  |                       |  | f (concave, conv |   | 0-2<br>Slope (%):      |
| Subregion (LRR or MLRA):  | Latitude:             | 47.738806852   | .184<br>Longit   | -95.95776172<br>ude:  |                        |
| Minnesota State Plane North, NAD 83 Datum:                                      | (2011) U.S. feet      |  |                  |   |                        |
| I15A<br>Soil Map Unit Name:   |                       |  |                  | NWI Classification  | on:                    |
| Are climatic/hydrologic conditions on the site typical                          | for this time of y    | ear? (if no, expl                                    | lain in Remarks) | ):  | Yes                    |
| Are Vegetation No                           |                       |  |                  |   |                        |
| No No No Are Vegetation, Soil, or Hydrology                                     |                       |  |                  |   |                        |
| SUMMARY OF FINDINGS - Attach site map showi                                     | ng sampling poin      | t locations, tra                                     | nsects, importa  | ant features, etc.  |                        |
| Hydrophytic Vegetation Present?   | es                    | Is the Sam   | pled Area        |   |                        |
| Y   | es                    |  |                  | Yes   |                        |
| Hydric Soil Present? Yes  |                       | within a Wetland?  If yes, optional Wetland Site ID: |                  |   | -                      |
| Wetland Hydrology Present?  Remarks: (Explain alternative procedures here or in | <br>a separate report |  |                  |   |                        |
| The wetland is a fresh wet meadow found in a roads                              |                       | •  | d canary grass a | nd prairie cordgrass.                                       |                        |
|   |                       | ,  | , 0              | ,   |                        |
| <b>VEGETATION</b> - Use scientific names of plants.                             |                       |  |                  |   |                        |
| Ose scientific frames of plants.  | Absolute              | Dominant   | Indicator        | Dominance Test worksheet:                                   |                        |
| <u>Tree Stratum</u> (Plot Size:)  | % Cover               | Species?   | Status           | Number of Dominant Species                                  |                        |
| 1   |                       |  |                  | That Are OBL, FACW, or FAC: 2                               | (A)                    |
| 2   |                       |  |                  | Total Number of Dominant                                    |                        |
| 3.  |                       |  |                  | 2 Species Across All Strata:                                | (B)                    |
| 4.  |                       |  | -                | Percent of Dominant Species                                 | (b)                    |
|   |                       |  | •                | 100   |                        |
|   | 0                     | = Total Cover  |                  | That Are OBL, FACW, or FAC:                                 | (A/B)                  |
| Sapling/Shrub Stratum (Plot Size:)  1.  |                       |  |                  | Prevalence Index worksheet:  Total % Cover of:              | Multiply by            |
| 2.  |                       |  |                  | OBL species 10.00   | Multiply by:<br>x 1 10 |
| 3.  |                       |  |                  | FACW species 94.00  |                        |
| 4.  |                       |  |                  | FACU species 0.00   | x3 0                   |
| 5   |                       |  |                  | UPL species 2.00  | x 4 10                 |
|   | 0                     | = Total Cover  |                  | Column Totals 106   | (A) <u>208</u> (B)     |
| Herb Stratum (Plot Size: 5 ft )   |                       |  |                  | Prevalence Index = B,                                       | /A = 1.9622641         |
| 1. Phalaris arundinacea   | 50.00                 | Yes  | FACW             | Hydrophytic Vegetation Indicator                            | 5:                     |
| 2. Spartina pectinata 2. Persicaria amphibia                                    | 30.00                 | Yes  | FACW             | yes 1 - Rapid Test for Hydrop                               |                        |
| Agreetic gigantee   | 10.00                 | No   | OBL              | yes 2 - Dominance Test is > 50                              | _                      |
| Anomono canadonsis  | 5.00                  | No.  | FACW<br>FACW     | yes 3 - Prevalence Index is ≤ 3                             |                        |
| Asclepias syriaca   | 2.00                  | No<br>No   | UPL              | 4 - Morphological Adapta<br>supporting data in Remarks or o |                        |
| 7. Carex tenera   | 2.00                  | No   | FACW             | Problematic Hydrophytic Vegetatio                           | m <sup>1</sup>         |
| 8. Lysimachia ciliata   | 2.00                  | No   | FACW             | (Explain)   | "                      |
|   |                       |  |                  | Indicators of hydric soil and wetland hydro                 | ology must be present, |
| 9   |                       |  | -                | unless disturbed or problematic.                            | •                      |
| 10  |                       |  |                  |   |                        |
|   | 106                   | = Total Cover  |                  |   |                        |
| Woody Vine Stratum (Plot Size:)   |                       |  |                  |   |                        |
| 1   |                       |  |                  |   |                        |
| 2.  |                       |  |                  |   |                        |
|   | 0                     | = Total Cover  |                  | ]   |                        |
|   | <u>-</u>              | - Total Cover  |                  | Hardwood atta   |                        |
| % Bare Ground in Herb Stratum 0   |                       |  |                  | Hydrophytic<br>Vegetation                                   |                        |
|   |                       |  |                  | Present?  |                        |
| Remarks:  |                       |  |                  |   |                        |
| The vegetation is dominated by reed canary grass and prairie of                 | ordgrass.             |  |                  |   |                        |
|   |                       |  |                  |   |                        |
|   |                       |  |                  |   |                        |

SOIL Sampling Point: w-149n42...

| Depth Matrix  (inches) Color (moist)  Depth Matrix  Color (moist)  Depth |             | Redox Features  Color (moist) % Type¹ Lor  T | 2Location: PL=Pore Lining, M=M Indicators for Problematic Hydric Soil <sup>3</sup> :  1cm Muck (A9) (LRR I, J) Coast Prairie Redox (A16)(LRR K, L, R) Dark Surface (S7) (LRR G) High Plains Depressions (F16) (LRR H outside of MLRA 72 & 73) |
|--|-------------|--|---|
| ydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  1cm Muck (A9) (LRR F, G, H)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  2.5cm Mucky Peat or Peat (S2)(LRR G, H)  5cm Mucky Peat or Peat (S3) (LRR F)  |             | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3)   | Indicators for Problematic Hydric Soil <sup>3</sup> :  1cm Muck (A9) (LRR I, J)  Coast Prairie Redox (A16)(LRR K, L, R)  Dark Surface (S7) (LRR G)  High Plains Depressions (F16)  (LRR H outside of MLRA 72 & 73)                            |
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| Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  1cm Muck (A9) (LRR F, G, H)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  2.5cm Mucky Peat or Peat (S2)(LRR G, H)  5cm Mucky Peat or Peat (S3) (LRR F)   |             | Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3)  | Coast Prairie Redox (A16)(LRR K, L, R)  Dark Surface (S7) (LRR G)  High Plains Depressions (F16)  (LRR H outside of MLRA 72 & 73)   |
| Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  1cm Muck (A9) (LRR F, G, H)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  2.5cm Mucky Peat or Peat (S2)(LRR G, H)  5cm Mucky Peat or Peat (S3) (LRR F)   |             | Stripped Matrix (S6)  Loamy Mucky Mineral (F1) (LRR K, L)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  | Dark Surface (S7) (LRR G) High Plains Depressions (F16) (LRR H outside of MLRA 72 & 73)   |
| Hydrogen Sulfide (A4)  Stratified Layers (A5)  1cm Muck (A9) (LRR F, G, H)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  2.5cm Mucky Peat or Peat (S2)(LRR G, H)  Scm Mucky Peat or Peat (S3) (LRR F)  |             | Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3)  | High Plains Depressions (F16) (LRR H outside of MLRA 72 & 73)   |
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| Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) 2.5cm Mucky Peat or Peat (S2)(LRR G, H 5cm Mucky Peat or Peat (S3) (LRR F)   |             |  | Deducador of free   |
| Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  2.5cm Mucky Peat or Peat (S2)(LRR G, H  5cm Mucky Peat or Peat (S3) (LRR F)  | n.          | Redox Dark Surface (F6)  | Reduced Vertic (F18)  |
| Sandy Mucky Mineral (S1)  2.5cm Mucky Peat or Peat (S2)(LRR G, H  5cm Mucky Peat or Peat (S3) (LRR F)  | n.          |  | Red Parent Material (F21)   |
| Sandy Mucky Mineral (S1)  2.5cm Mucky Peat or Peat (S2)(LRR G, H  5cm Mucky Peat or Peat (S3) (LRR F)  |             | Depleted Dark Surface (F7)   | Very Shallow Dark Surface (TF12)  |
| 2.5cm Mucky Peat or Peat (S2)(LRR G, H 5cm Mucky Peat or Peat (S3) (LRR F)   | • \         | Redox Depressions (F8)   | ✓ Other (explain in remarks)  |
| 5cm Mucky Peat or Peat (S3) (LRR F)  |             |  | Const. (explain in remains)   |
|  | 1)          | High Plains Depressions (F16)  | <sup>3</sup> Indicators of hydrophytic vegetation and   |
| poteriotivo Lovor (if  |             | (MLRA 72 & 73 of LRR H)  | wetland hydrology must be present, unless<br>disturbed or problematic.  |
|  | П           |  | disturbed of problematic.   |
| estrictive Layer (if present):   | Ш           |  |   |
| Type:  |             |  | Hydric Soil Present? Yes  |
| Depth (inches):  |             |  |   |
| YDROLOGY   |             |  |   |
| Vetland Hydrology Indicators:  |             |  |   |
|  |             |  |   |
| rimary Indicators (minimum of one is re  | equired; ch |  | Secondary Indicators (minimum of two require  |
| Surface Water (A1)   | _           | Salt Crust (B11)   | Surface Soil Cracks (B6)  |
| High Water Table (A2)  | _           | Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  | Sparsely Vegetated Concave Surface (B8)   |
| Saturation (A3) Water Marks (B1)   | _           | Dry-Season Water Table (C2)  | <ul><li>Drainage Patterns (B10)</li><li>Oxidized Rhizospheres on Living Roots (C3)</li></ul>  |
| Sediment Deposits (B2)   | _           | Oxidized Rhizospheres on Living Roots (6)  |   |
| Drift Deposits (B3)  | _           | (where not tilled)   | Crayfish Burrows (C8)   |
| Algal Mat or Crust (B4)  | _           | Presence of Reduced Iron (C4)  | Saturation Visible on Aerial Imagery (C9)   |
| Iron Deposits (B5)   |             | Thin Muck Surface (C7)   | yes Geomorphic Position (D2)  |
| Water-Stained Leaves (B9)  | _           | Other (Explain in Remarks)   | yes FAC-Neutral Test (D5)   |
| Inundation Visible on Aerial Imagery (B7   | 7)          |  | Frost-Heave Hummocks (D7) (LRR F)   |
| eld Observations:  |             |  |   |
| urface Water Present?  | No          | Depth (inches)   |   |
| /ater Table Present?   | <u>No</u>   | Depth (inches)   |   |
| aturation Present?   | No          | Depth (inches)   | Wetland Hydrology Present? Yes  |
| ncludes capillary fringe)  |             |  |   |
| escribe Recorded Data (stream gauge,   | monitoring  | g well, aerial photos, previous inspectio  | ons), if available:   |
|  |             |  |   |
| emarks:  |             |  |   |
| he wetland is located in a ditch and pa  | sses the FA | AC-neutral test.   |   |
|  |             |  |   |
|  |             |  |   |
|  |             |  | Northcontrol and Northcost Design Marie   |
| US Army Corps of Engineers   |             |  | Northcentral and Northeast Region – Version   |
| JS Army Corps of Engineers<br>te Photograph 1  |             |  | Northcentral and Northeast Region – Version Sampling Point: <u>w-149n42w7-a1</u>  |
|  |             |  | _   |
|  |             |  | _   |