WETLAND DETERMINATION DATA FORM Great Plains Region

| Project/Site: | | L3R | | | | | | | | Date: County: | 10/04/14 | | | | | |
|--|--|--|--|--|--|--|---|---|---|--|--|-----------------|--|--|--|--|
| Applicant: Enbridge | | | | | | | | | | | Red Lake | | | | | |
| Investigators: BEH/NTT | | | | Subregion (MLRA or LRR): MLRA 56 | | | | | | State: | MN | | | | | |
| Soil Unit: 150A | | | | | | NWI Classification: | | | | | | | | | | |
| Landform: | Talf | | | | cal Relief: | | | <u> </u> | | Sample Poir | t: u-151n42w10-f2 | | | | | |
| Slope (%): | 0 - 2% | | Latitude: 47.90 | | Longitude: | | | Datum | | | | | | | | |
| | | nditions on the site | | | IF? (If no, exp | | | ⊡Yes | □ No | Section: | | | | | | |
| Are Vegetatio | | G or Hydrology | | | | Are | e normal circur | | resent? | Township: | | | | | | |
| Are Vegetation | | C or Hydrology | Liturally pro | blematic? | | | ⊡ Yes | □No | | Range: | Dir: | | | | | |
| SUMMARY C | | | | | | | | L hushris O a | la Drasanto | No. | | | | | | |
| | | | | No | | | Hydric Soils Present | | | | | | | | | |
| Remarks: | | | No | instad asttla | posturo - | odiocont | to o oodro ma | | | | Vetland? No is present, but no oth | orwetland | | | | |
| Remarks. | | rere observed. | in a grass-uon | | pasture, a | aujacent | to a seuge me | | and complex | | is present, but no oth | | | | | |
| | | ere observed. | | | | | | | | | | | | | | |
| HYDROLOG | Y | | | | | | | | | | | | | | | |
| - | | icators (Check all | that apply; Mi | nimum of on | e primary | or two se | econdary requi | ired): | | | | | | | | |
| Primary | | Mater | | _ | D11 0-44 | 0 | | | Secondary: | | Call Creater | | | | | |
| A1 - Surface Water A2 - High Water Table | | | | | B11 - Salt | | | | | B6 - Surface | | face | | | | |
| | A3 - Saturatio | | | B13 - Aquatic Fauna Image: C1 - Hydrogen Sulfide Odor Image: C2 - Dry Season Water Table | | | | | | | B8 - Sparsely Vegetated Concave Surface B10 - Drainage Patterns | | | | | |
| | B1 - Water M | | | | | | | | | | Rhizospheres on Living | Roots (tilled) | | | | |
| | B2 - Sedimen | | | | | | spheres on Living | g Roots (not ti | | | | | | | | |
| | B3 - Drift Dep B4 - Algal Ma | | | | C4 - Prese C7 - Thin M | | | | | D2 - Geomor | on Visible on Aerial Image | ery | | | | |
| | B5 - Iron Dep | | | | Other (Exp | | | | | D5 - FAC-Ne | | | | | | |
| | | on Visible on Aerial Im | nagery | | 、 · | , | | | | D7 - Frost-He | eaved Hummocks (LRR F | -) | | | | |
| | B9 - Water-St | tained Leaves | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| Field Obser | | | | | | | | | | | | | | | | |
| Surface Wat | | | Depth: | | (in.) | | | Wetland I | Hydrology | Present? | Ν | | | | | |
| Water Table | | Yes 🔲 | | | | | | | ., | | <u> </u> | | | | | |
| Saturation Pi | resent? | Yes 🛛 | Depth: | | (in.) | Saturation Present? Yes Depth: (in.) | | | | | | | | | | |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: | | | | | | | | | | | | | | | | |
| Describe Rec | orded Data (s | stream gauge, moni | itoring well, aer | ial photos, pre | evious insp | pections), | if available: | | | | | | | | | |
| Describe Reco Remarks: | | stream gauge, moni or secondary hydr | | | | pections), | if available: | | | | | | | | | |
| Remarks: | | | | | | pections), | if available: | | | | | | | | | |
| Remarks: SOILS | No primary | or secondary hydr | ological indica | tors observe | d. | | | | | | | | | | | |
| Remarks: SOILS Profile Descri | No primary | or secondary hydr | eeded to docur | tors observe | d. cator or co | onfirm th | e absence of i | | | | | | | | | |
| Remarks: SOILS Profile Descri | No primary | or secondary hydr | eeded to docur | tors observe | d. cator or co | onfirm th | e absence of i | | | | | | | | | |
| Remarks: SOILS Profile Descri | No primary | or secondary hydr ibe to the depth ne etion, RM=Reduced Ma | eeded to docur | tors observe | d. cator or co | onfirm the | e absence of i ore Lining, M=Mat | | 1 | | | | | | | |
| Remarks: SOILS Profile Descri (Type: C=Concer | No primary | or secondary hydr ibe to the depth ne etion, RM=Reduced Ma Matrix | eded to docur atrix, CS=Covered | tors observe | d. cator or co Grains; Loca | onfirm th tion: PL=P Mottle | e absence of in ore Lining, M=Mat | trix) | Texture | | Remarks | | | | | |
| Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) | No primary | or secondary hydr be to the depth ne etion, RM=Reduced Ma Matrix Color (Moist) | eeded to docur atrix, CS=Covered | tors observe | d. cator or co Grains; Loca | onfirm the | e absence of i ore Lining, M=Mat | | - | | Remarks | | | | | |
| Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 | No primary ption (Descrintration, D=Depl Hue_10YR | or secondary hydr be to the depth ne etion, RM=Reduced Ma Matrix Color (Moist) 2/1 | eeded to docur atrix, CS=Covered % 100 | tors observe | d. cator or co Grains; Loca | onfirm th tion: PL=P Mottle | e absence of in ore Lining, M=Mat | trix) | FSL | | Remarks | | | | | |
| Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-13 | No primary ption (Descri htration, D=Depl Hue_10YR Hue_10YR | or secondary hydr be to the depth ne etion, RM=Reduced Ma Matrix Color (Moist) 2/1 2/1 | eeded to docur atrix, CS=Covered % 100 85 | tors observe | d. cator or co Grains; Loca | onfirm th tion: PL=P Mottle | e absence of in ore Lining, M=Mat | trix) | FSL FSL | | Remarks | | | | | |
| Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-13 9-13 | No primary ption (Descri htration, D=Depl Hue_10YR Hue_10YR Hue_10YR | or secondary hydr be to the depth ne etion, RM=Reduced Ma Matrix Color (Moist) 2/1 2/1 6/3 | eeded to docur atrix, CS=Covered % 100 85 15 | tors observe | d. cator or cc Grains; Loca Moist) | Mottle | e absence of i ore Lining, M=Mat es Type | Location | FSL FSL S | | Remarks | | | | | |
| Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-13 9-13 13-21 | No primary ption (Descrintration, D=Depi Hue_10YR Hue_10YR Hue_10YR Hue_5Y | or secondary hydr be to the depth ne etion, RM=Reduced Ma Matrix Color (Moist) 2/1 2/1 6/3 5/2 | eeded to docur atrix, CS=Covered % 100 85 15 95 | tors observe nent the indii u/Coated Sand (Color (I Hue_10YR | d. cator or cc Grains; Loca Moist) 6/8 | Mottle | e absence of i ore Lining, M=Mat es Type C | Location M | FSL FSL S C | | Remarks | | | | | |
| Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-13 9-13 | No primary ption (Descri htration, D=Depl Hue_10YR Hue_10YR Hue_10YR | or secondary hydr be to the depth ne etion, RM=Reduced Ma Matrix Color (Moist) 2/1 2/1 6/3 | eeded to docur atrix, CS=Covered % 100 85 15 | tors observe | d. cator or cc Grains; Loca Moist) | Mottle | e absence of i ore Lining, M=Mat es Type | Location | FSL FSL S | | Remarks | | | | | |
| Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-13 9-13 13-21 21-24 | No primary ption (Descri tration, D=Depi Hue_10YR Hue_10YR Hue_10YR Hue_5Y Hue_5Y | or secondary hydr be to the depth ne etion, RM=Reduced Ma Matrix Color (Moist) 2/1 2/1 6/3 5/2 6/2 | eded to docur atrix, CS=Covered % 100 85 15 95 85 | tors observe ment the indii //Coated Sand (Color (! Hue_10YR Hue_10YR | d. cator or cc Grains; Loca Moist) <u>6/8</u> 6/8 | Mottle | e absence of in ore Lining, M=Mat es Type C C | Location M | FSL FSL S C | | Remarks | | | | | |
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| Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-13 9-13 13-21 21-24 NRCS Hydr | No primary ption (Descri tration, D=Depi Hue_10YR Hue_10YR Hue_10YR Hue_5Y Hue_5Y ic Soil Field | or secondary hydr be to the depth ne etion, RM=Reduced Ma Matrix Color (Moist) 2/1 2/1 6/3 5/2 6/2 | eded to docur atrix, CS=Covered % 100 85 15 95 85 eck here if inc | tors observe ment the indid VCoated Sand C Color (f Hue_10YR Hue_10YR licators are r | d. cator or cco rains; Loca Moist) 6/8 6/8 6/8 ot presen | Mottle | e absence of in ore Lining, M=Mat es Type C C | Location M M | FSL FSL S C C Indicators 1 | for Problemat | ic Soils ¹ | | | | | |
| Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-13 9-13 13-21 21-24 | No primary ption (Descri tration, D=Depi Hue_10YR Hue_10YR Hue_10YR Hue_5Y Hue_5Y | or secondary hydr be to the depth ne etion, RM=Reduced Ma Matrix Color (Moist) 2/1 2/1 6/3 5/2 6/2 Indicators (ch | eded to docur atrix, CS=Covered % 100 85 15 95 85 eck here if inc | tors observe ment the india //Coated Sand (Color (f Hue_10YR Hue_10YR licators are r | d. cator or cco rains; Loca Moist) 6/8 6/8 ot presen edox | Mottle | e absence of in ore Lining, M=Mat es Type C C | Location M M | FSL S C C Indicators 1 A9 - 1 cm M | luck (LRR I, J) | ic Soils ¹ | | | | | |
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| Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-13 9-13 13-21 21-24 NRCS Hydr □ □ □ □ □ □ | No primary ption (Descri- tration, D=Depl Hue_10YR Hue_10YR Hue_10YR Hue_5Y Hue_5Y Hue_5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M | or secondary hydr be to the depth ne etion, RM=Reduced Ma Matrix Color (Moist) 2/1 2/1 6/3 5/2 6/2 Indicators (ch ipedon stic n Sulfide Layers (LRR F) ck (LRR FGH) d Below Dark Surface ucky Mineral lucky Peat or Peat (L | eeded to docur atrix, CS=Covered % 100 85 15 95 85 16 85 15 95 85 16 85 17 85 100 85 100 85 100 85 100 85 100 85 85 100 85 85 85 85 85 85 85 85 85 85 85 85 85 | tors observe ment the indii //Coated Sand (Color (! Hue_10YR Hue_10YR Hue_10YR Hue_10YR Hue_10YR G5 - Sandy R S5 - Sandy R S6 - Stripped S6 - Stripped S7 - Depleted F6 - Redox D F7 - Depleted F8 - Redox D | d. cator or co Grains; Loca Moist) 6/8 6/8 6/8 6/8 ot presen adox Matrix ucky Miner: leyed Matrix | mfirm th tion: PL=P Mottle % 5 15 t): | e absence of in ore Lining, M=Mat es Type C C | Location M M M C C C C C C C C C C C C C C C C | FSL FSL S C D A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduc TF2 - Red P TF12 - Very Other (Expland) | luck (LRR I, J) Prairie Redox urface (LRR G Plains Depress ced Vertic Parent Material Shallow Dark ain in Remarks | ic Soils ¹ : (LRR F, G, H) :) iions (LRR H, outside MLRA 72, 73) Surface :) | | | | | |
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WETLAND DETERMINATION DATA FORM

Great Plains Region

| Project/Site: | L3R | | | | Sample Point: u-151n42w10-f2 | | | | |
|--|--|--------------|-----------|------------|--|--|--|--|--|
| | | | | | | | | | |
| VEGETATION | (Species identified in all uppercase ar Plot size: 30 ft. radius) | e non-native | species.) | | | | | | |
| The ended in (| Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet | | | | |
| 1. | Quercus macrocarpa | 10 | Y | FACU | | | | | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 3 (B) | | | | |
| 5. | | | | | Demonstra (Demonstration That Are ODL FAOM) as FAO. (A/D) | | | | |
| 6. 7. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B) | | | | |
| 8. | <u> </u> | | | | Prevalence Index Worksheet | | | | |
| 9. | | | | | Total % Cover of: Multiply by: | | | | |
| 10. | <u> </u> | | | | $\frac{1}{\text{OBL spp.}} 5 \times 1 = 5$ | | | | |
| | Total Cover = | 10 | | | FACW spp. 15 x 2 = 30 | | | | |
| | | | _ | | FAC spp. 15 x 3 = 45 | | | | |
| Sapling/Shrub S | Stratum (Plot size: 15 ft. radius) | | | | FACU spp. 85 x 4 = 340 | | | | |
| 1. | | | | | UPL spp. 0 x 5 = 0 | | | | |
| 2. | | | | | | | | | |
| 3. | | | | | Total <u>120</u> (A) <u>420</u> (B) | | | | |
| 4. | | | | | | | | | |
| 5. | | | | | Prevalence Index = B/A = <u>3.500</u> | | | | |
| 6. 7. | <u> </u> | | | | | | | | |
| 7. 8. | | | | | Hydrophytic Vagatation Indicators: | | | | |
| 9. | | | | | Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation | | | | |
| 10. | <u> </u> | | | | Dominance Test is > 50% | | | | |
| 10. | Total Cover = | 0 | | | Prevalence Index is ≤ 3.0 * | | | | |
| | | | _ | | Morphological Adaptations (Explain) * | | | | |
| Herb Stratum (F | Plot size: 5 ft. radius) | | | | Problem Hydrophytic Vegetation (Explain) * | | | | |
| 1. | Poa pratensis | 30 | Y | FACU | | | | | |
| 2. | Phleum pratense | 25 | Y | FACU | * Indicators of hydric soil and wetland hydrology must be | | | | |
| 3. | Taraxacum officinale | 20 | N | FACU | present, unless disturbed or problematic. | | | | |
| 4. | Plantago major | 15 | N | FAC | Definitions of Vegetation Strata: | | | | |
| 5. | Agrostis gigantea | 10 | N | FACW | - | | | | |
| 6 | Juncus dudleyi | 5 | N | FACW | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. | | | | |
| 7. 8. | Carex granularis | 5 | N | OBL | | | | | |
| 9. | | | | - | Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height. | | | | |
| 10. | | | | | | | | | |
| 11. | | | | - | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size. | | | | |
| 13. | | | | | | | | | |
| 14. | | | | | | | | | |
| 15. | | | | | Woody Vines - All woody vines, regardless of height. | | | | |
| | Total Cover = | 110 | | | | | | | |
| | | | | | | | | | |
| | atum (Plot size: 30 ft. radius) | | | | | | | | |
| 1. 2. | 1 | | | | | | | | |
| 3. | <u> </u> | | | | Hydrophytic Vegetation Present? N | | | | |
| 5. | | | | - | | | | | |
| 4. | | | | | | | | | |
| | Total Cover = | 0 | | | | | | | |
| Remarks: Sample site dominated by Kentucky bluegrass and timothy with a single bur oak tree. | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Additional Remarks: | | | | | | | | | |
| | | | | | | | | | |
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