WETLAND DETERMINATION DATA FORM - Great Plains Region

L3R Project/Site: City	Red Lak //County:			Sampling Date:	2015-07-09
Enbridge Applicant/Owner:			nesota	Sampling Point:	u-150n41w2-c1
Investigator(s): BJC/BCS	Section, Townsh	ection, Township, Range:			
Investigator(s): S Landform (hillslope, terrace, etc.): LRR F		Local Relief (concave, convex		Conca vex, none): -95.85885073	0-2% Slope (%):
Subregion (LRR or MLRA): Minnesota State Plane North, NAD 83 (:	Longit	rude:	
Datum: Bowstring-Fluvaquents complex					PEMA
Soil Map Unit Name:			NWI Classification	on:	
Are climatic/hydrologic conditions on the site typical					Yes
Are Vegetation No Soil No , or Hydrology No	_ significantly dis	sturbed? Are "N	ormal Circums	tances" present?	
Are Vegetation No	naturally problem	natic? (If neede	ed, explain any	answers in Remarks)	
SUMMARY OF FINDINGS - Attach site map showing	ng sampling poin	nt locations, tran	nsects, importa	ant features, etc.	
No Hydrophytic Vegetation Present?		Is the Samp	Is the Sampled Area		
No lydric Soil Present?		within a W	etland?		
N ₁	0		If yes, optional Wetland Site ID:		
Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in	a separate report				
The upland sample point is located within a mapped			ted to a valve s	tation for an underground pip	eline. The soils could n
VEGETATION - Use scientific names of plants.					
	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot Size:)	% Cover	Species?	Status	Number of Dominant Species	(1)
1				That Are OBL, FACW, or FAC: Total Number of Dominant	(A)
					(0)
3				Species Across All Strata: Percent of Dominant Species	(B)
	0	- Total Cover		That Are OBL, FACW, or FAC:	(A/B)
Sapling/Shrub Stratum (Plot Size:)	0	= Total Cover		Prevalence Index worksheet:	(M/D)
1				Total % Cover of:	Multiply by:
2				OBL species	x1 <u>0</u>
3				FACW species FACU species	x2 0 x3 0
5				UPL species	x 4 0
	0	= Total Cover		Column Totals	(A) (B)
Herb Stratum (Plot Size:) 1.				Prevalence Index = B	
2				Hydrophytic Vegetation Indicators 1 - Rapid Test for Hydropl	
3				2 - Dominance Test is > 50	
4	-			3 - Prevalence Index is ≤ 3	_
5				4 - Morphological Adapta supporting data in Remarks or o	
7				Problematic Hydrophytic Vegetatio	n^1
8				(Explain)	
9				¹ Indicators of hydric soil and wetland hydro unless disturbed or problematic.	logy must be present,
10					
	0	= Total Cover			
Woody Vine Stratum (Plot Size:)					
1				_	
2.				_	
	0	= Total Cover			
% Bare Ground in Herb Stratum 100				Hydrophytic	
				Vegetation Present?	
Remarks:				-	
No vegetation is present as the area has been covered with gravel.					
I					

SOIL Sampling Point: u-150n41...

inches) Color (moist)		Redox Features	m the absence of indicators.)
	%		oc ² Texture Remarks
,			
			<u> </u>
			
Type: C=Concentration, D=Depletion, RN	M=Reduced Matrix	, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Ma
ydric Soil Indicators:			Indicators for Problematic Hydric Soil ³ :
Histosol (A1)		Sandy Gleyed Matrix (S4)	1cm Muck (A9) (LRR I, J)
Histic Epipedon (A2)		Sandy Redox (S5)	Coast Prairie Redox (A16)(LRR K, L, R)
\neg			Dark Surface (S7) (LRR G)
Black Histic (A3)		Stripped Matrix (S6)	
Hydrogen Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR K, L)	High Plains Depressions (F16)
Stratified Layers (A5)		Loamy Gleyed Matrix (F2)	(LRR H outside of MLRA 72 & 73)
1cm Muck (A9) (LRR F, G, H)		Depleted Matrix (F3)	Reduced Vertic (F18)
Depleted Below Dark Surface (A11	1)	Redox Dark Surface (F6)	Red Parent Material (F21)
Thick Dark Surface (A12)		Depleted Dark Surface (F7)	Very Shallow Dark Surface (TF12)
Sandy Mucky Mineral (S1)		Redox Depressions (F8)	Other (explain in remarks)
2.5cm Mucky Peat or Peat (S2)(LRF	R G, H)	High Plains Depressions (F16)	³ Indicators of hydrophytic vegetation and
5cm Mucky Peat or Peat (S3) (LRR	F)	(MLRA 72 & 73 of LRR H)	wetland hydrology must be present, unless
			disturbed or problematic.
estrictive Layer (if present):			
	_		
Type:			Hydric Soil Present? No
Depth (inches):emarks:			
IYDROLOGY Vetland Hydrology Indicators:			
rimary Indicators (minimum of on	<u>ie is required; cl</u>	neck all that apply)	Secondary Indicators (minimum of two require
Surface Water (A1)	=	Salt Crust (B11)	Surface Soil Cracks (B6)
High Water Table (A2)	=	Aquatic Invertebrates (B13)	
Saturation (A3)		Aquatic invertebrates (B13)	Sparsely Vegetated Concave Surface (B8)
Saturation (A3)	-	Hydrogen Sulfide Odor (C1)	Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
Water Marks (B1)	-		
• •	- - -	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10) Oxidized Rhizospheres on Living Roots (C3)
Water Marks (B1)	- - -	Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)	Drainage Patterns (B10) Oxidized Rhizospheres on Living Roots (C3)
Water Marks (B1) Sediment Deposits (B2)	- - -	Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots	Drainage Patterns (B10) Oxidized Rhizospheres on Living Roots (C3) (C3) (where tilled)
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Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	- - - - - - -	Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7)	Cay Cayfish Burrows (C9) — Cayfish Burrows (C8) — Cayfish Burrows (C8) — Cayfish Derrows (C9) — Geomorphic Position (D2)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Water-Stained Leaves (B9) Inundation Visible on Aerial Image	- - - - - - 	Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7)	Drainage Patterns (B10) Oxidized Rhizospheres on Living Roots (C3) (C3) (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) FAC-Neutral Test (D5)
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Longitude: -95.8588477225004	Circular 39:				
Direction: West	Eggers & Reed:				
Remarks:					
Valve station where NWI polygon is located.					
_					
US Army Corps of Engineers	Northcentral and Northeast Region – Version 2.0				
Site Photograph 2	Sampling Point: u-150n41w2-c1				
Latitude:	Cowardin Classification:				
Longitude:	Circular 39:				
Direction:	Eggers & Reed:				
Remarks:					

US Army Corps of Engineers

Northcentral and Northeast Region – Version 2.0