WETLAND DETERMINATION DATA FORM - Great Plains Region W312 HK002

Project/Site: Keystone Xc	City/County:	_НҚ	_ Sampling Date: 10-9-12
Applicant/Owner:		State:	Sampling Point:
Investigator(s): _312	Section, Tow	nship, Range:	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):	Slope (%):
Subregion (LRR):	Lat:	Long:	Datum:
Soil Map Unit Name:	- <u>!</u>	NWI classi	fication:
Are climatic / hydrologic conditions on the site typical for the	is time of year? Yes	No X (If no, explain in	Remarks.)
Are Vegetation _ Y, Soil _ Y, or Hydrology _ N	significantly disturbed?	Are "Normal Circumstances	" present? Yes No 🛧
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling	point locations, transec	ts, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland?	Yes <u>+</u> No	
Remarks:				
- cattle grazing in wetland				

- drought conditions

VEGETATION – Use scientific names of plants.

— — — — — — — — — — — — — — — — — — —	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1		<u> </u>		That Are OBL, FACW, or FAC
2				
3	. <u> </u>			Total Number of Dominant
4			<u> </u>	Species Across All Strata: (B)
		= Total Cov	'er	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)				That Are OBL, FACW, or FAC:(00% (A/B)
1			<u> </u>	Devile to be been believed
2	·	<u> </u>		Prevalence index worksneet:
3				<u>Total % Cover of:</u> <u>Multiply by:</u>
4.				OBL species x1 =
5.				FACW species 50 x2 = 100
		= Total Cov	/er	FAC species x 3 =
Herb Stratum (Plot size:)		10121 001		FACU species x 4 =
1. Photosis acuading cra	50%	X	FALL	UPL species x 5 =
2.				Column Totals: <u>50</u> (A) <u>100</u> (B)
3.				
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				Y 1 - Rapid Test for Hydrophytic Vegetation
7				Y 2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0 ¹
8,				4 - Morphological Adaptations ¹ (Provide supporting
9				data in Remarks or on a separate sheet)
10				Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Distaire)	_50	= Total Cov	/er	¹ Indicators of bydric soil and wetland bydrology must
				be present, unless disturbed or problematic.
			<u> </u>	
2				Hydrophytic Vegetation
% Bare Ground in Herb Stratum	<u> </u>	= Total Cov	/er	Present? Yes X No
Remarks:				
i tomunto.				

SOIL

								Sampling Point:
Profile Des	cription: (Describe to the	depth neede	ed to docun	nent the i	ndicator	or confirm	n the absence	of indicators.)
Depth	Matrix		Redo:	<u>x Features</u>	<u> </u>			
(inches)	<u>Color (moist)</u> %	<u> </u>	<u>(moist)</u>	%	_Type'	Loc ²	<u> </u>	Remarks
() - 15	567 5/1 10	<u> </u>					<u>clay</u>	cracked soil surface
	<u> </u>	<u> </u>					·	
	<u> </u>			·		. <u></u>		
	······				<u> </u>			<u> </u>
1	<u> </u>							
<u>'Type: C=C</u> Hvdric Soll	oncentration, D=Depletion, Indicators: (Applicable t	RM=Reduce	d Matrix, CS	S=Covered	l or Coate	d Sand G	rains. ² Lo	cation: PL=Pore Lining, M=Matrix.
Histosol			Sondy (Wise Hote	$\frac{1}{1}$		indicators	Musk (AQ) (I DD L I)
Histoso	ninedon (A2)	-	Sandy C	sleyeu Ma Podov (S5)	trix (54) \		1 cm i	VIUCK (A9) (LKR I, J) Drainia Baday (A16) (LBB E. C. H)
Black H	istic (A3)	-	Ganuy r	Matriv (S	/ :6)		Coast	Surface (S7) (LRR G)
Hydroge	en Sulfide (A4)	-	Loamv I	Muckv Min	eral (F1)		High F	Plains Depressions (F16)
Stratifie	d Layers (A5) (LRR F)	-	Loamy (Gleved Ma	atrix (F2)		/g// /	RR H outside of MLRA 72 & 73)
1 cm M	uck (A9) (LRR F, G, H)	-	Deplete	d Matrix (F	=3)		Reduc	ced Vertic (F18)
Deplete	d Below Dark Surface (A1	1)	Redox [Dark Surfa			Red F	Parent Material (TF2)
Thick D	ark Surface (A12)		Deplete	d Dark Su	rface (F7))	Very S	Shallow Dark Surface (TF12)
Sandy N	Mucky Mineral (S1)		Redox I	Depressio	ns (F8)		Other	(Explain in Remarks)
2.5 cm	Mucky Peat or Peat (S2) (L	.RR G, H)	High Pla	ains Depre	essions (F	16)	³ Indicators	of hydrophytic vegetation and
5 cm M	ucky Peat or Peat (S3) (LR	RF)	(ML	RA 72 & 7	73 of LRF	RH)	wetlar	nd hydrology must be present,
							unles	s disturbed or problematic.
Restrictive	Layer (if present):							
Туре:	· · ·							
Depth (ir	nches):						Hydric Soi	I Present? Yes <u>★</u> No
Remarks:								
HYDROLC)GY							
Wetland Hy	drology Indicators:							
<u>Primary Indi</u>	icators (minimum of one re	quired; check	all <u>th</u> at appl	y)			<u>Second</u>	lary Indicators (minimum of two required)
Surface	Water (A1)	X	Salt Crust	(B11)			Su	rface Soil Cracks (B6)
High W	ater Table (A2)		_ Aquatic In	vertebrate	s (B13)		Sp:	arsely Vegetated Concave Surface (B8)
Saturat	ion (A3)		Hydrogen	Sulfide O	dor (C1)		Dra	ainage Patterns (B10)
Water N	Marks (B1)		Dry-Seaso	on Water 1	Table (C2))	Ox	idized Rhizospheres on Living Roots (C3
Sedime	ent Deposits (B2)		_ Oxidized I	Rhizosphe	res on Liv	ing Roots	(C3) (1	where tilled)
Drift De	posits (B3)		(where	not tilled)		v	Cra	ayfish Burrows (C8)
Algal M	at or Crust (B4)		Presence	of Reduce	ed Iron (C	4)	Sa	turation Visible on Aerial Imagery (C9)
Iron De	Iron Deposits (B5) Thin Muck Surface (C7) Geomorphic Position (D2)						omorphic Position (D2)	
Inundat	ion Visible on Aerial Image	rv (B7)	Other (Ex	plain in Re	marks)		60	C-Neutral Test (D5)
Water-9	Stained Leaves (B9)		_ 0 (mv)				Fro	ost-Heave Hummocks (D7) (LRR F)
Field Obse	rvations:							· · · · ·
Surface Wa	ter Present? Yes	No 🗡	Depth (in	ches):				

recent rains

Yes _____ No ____ Depth (inches): ______ Saturation Present? Wetland Hydrology Present? Yes 📐 No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Yes _____ No _ > _ Depth (inches): _____

Remarks: moist due to - arca 193

Water Table Present?

WETLAND DETERMINATION DATA FORM - Great Plains Region 6312 HKco 3

oject/Site: Keystone Xc		_ City/Count	у:НК		_ Sampling Da	ate: <u>10-9</u>	-12
oplicant/Owner:				State: S D	_ Sampling Pc	int: upla	
vestigator(s):		_ Section, T	ownship, Rar	ge:			
ndform (hillslope, terrace, etc.):		Local relie	ef (concave, c	onvex, none):		Slope (%):	
ibregion (LRR):	Lat:			Long:		Datum:	
il Map Unit Name:				NWI classi	fication:		
e climatic / hydrologic conditions on t	the site typical for this time of	vear? Yes	No	(If no, explain in	Remarks.)		
e Vegetation 🍾 . Soil 🗙 . or	Hydrology N significan	tlv disturbed?	Are "	Normal Circumstances	"present? Yes	s N	0 ~
Vegetation N/ Soil N) or	Hydrology N naturally	problematic?	(If ne	eded explain any answ	vers in Remark	s.)	
	Attach site map showin	ng sampli	ng point lo	ocations, transect	ts, importar	nt feature	es, etc.
	Yes NoX		the Compled				
Hydric Soil Present?	Yes No 🗲		the Sampleu	Area	No		
Netland Hydrology Present?	Yes No 💌	WI	unin a vvetian	ar tes	NO		
-dronght condition	tions						
	Absolu	Ite Domina	nt Indicator	Dominance Test wo	orksheet:		
Tree Stratum (Plot size:) <u>% Cov</u>	ver Species	<u>Status</u>	Number of Dominant	Species		
1				That Are OBL, FACV	V, or FAC	^	
2				(excluding FAC-):		0	(A)
3				Total Number of Dor	ninant	\wedge	
4				Species Across All S	trata:	<u> </u>	_ (□)
Sapling/Shrub Stratum (Plot size: _)	= Total C	Cover	Percent of Dominant That Are OBL, FAC	Species	0	_ (A/B)
1	4	····		Prevalence Index w	vorksheet:		
۲ ۲				Total % Cover c	of:N	Aultiply by:	
۵				OBL species	x1=	·	
<u></u>				FACW species	x2=		
		= Total (Cover	FAC species	x 3 =	=	
Herb Stratum (Plot size:)			FACU species	×4 =		
1. Agrypyron errsta	mm 101	<u>*</u> ×		UPL species	x5=		
2				Column Totals:	(A)	<u> </u>	(B)
3				Prevalence In	dex = B/A =	0	
4				Hydrophytic Veget	ation Indicato	rs:	
5				N 1 - Rapid Test f	ior Hydrophytic	Vegetation	
6				N 2 - Dominance	Test is >50%		
/	·			3 - Prevalence	Index is ≤3.0¹		
9				4 - Morphologic data in Rem	al Adaptations	¹ (Provide se parate shee	upporting et)
10				Problematic Hy	drophytic Vege	etation ¹ (Exp	olain)
Woody Vine Stratum (Plot size:)	💁 = Total	Cover	¹ Indicators of hydric be present, unless	soil and wetlar disturbed or pro	nd hydrolog oblematic.	y must
l				Lively = why fi =			
۷	<u>_</u>			Vegetation			
% Bare Ground in Herb Stratum		= 10tai	Cover	Present?	Yes	No 🗡	-
Remarks:							

SOIL

Profile Description: (Describe to the depth	needed to document the indicator or con	nfirm the absence of indicators.)			
Depth <u>Matrix</u>	Redox Features	- Texture Pomerks			
- 50 - 50 - 6 C	Tor sample to be take	in due to arought			
		·····			
		·			
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, CS=Covered or Coated Sar	nd Grains. ² Location: PL=Pore Lining, M=Matrix.			
Hydric Soil Indicators: (Applicable to all L	RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :			
Histosol (A1)	Sandy Gleyed Matrix (S4)	1 cm Muck (A9) (LRR I, J)			
Histic Epipedon (A2)	Sandy Redox (S5)	Coast Prairie Redox (A16) (LRR F, G, H)			
Black Histic (A3)	Stripped Matrix (S6)	Dark Surface (S7) (LRR G)			
Stratified Lavers (A5) (LRR F)	Loamy Gleved Matrix (F2)	(LRR H outside of MLRA 72 & 73)			
1 cm Muck (A9) (LRR F, G, H)	Depleted Matrix (F3)	Reduced Vertic (F18)			
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Red Parent Material (TF2)			
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Very Shallow Dark Surface (TF12)			
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and			
5 cm Mucky Peat of Peat (S2) (LRR F)	(MLRA 72 & 73 of LRR H)	wetland hydrology must be present.			
	(unless disturbed or problematic.			
Restrictive Layer (if present):					
Туре:					
Depth (inches):		Hydric Soll Present? Yes No			
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:	· · ·				
Primary Indicators (minimum of one required	check all that apply)	Secondary Indicators (minimum of two required)			
Surface Water (A1)	Salt Crust (B11)	Surface Soil Cracks (B6)			
High Water Table (A2)	Aquatic Invertebrates (B13)	Sparsely Vegetated Concave Surface (B8)			
Saturation (A3) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)					
VVater Marks (B1)	Dry-Season Water Table (C2)	Uxidized Rhizospheres on Living Roots (C3)			
Drift Deposits (B2)	Oxiaizea Knizospheres on Living F	Crowfieb Burrows (CP)			
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Saturation Visible on Aerial Imagery (C9)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Geomorphic Position (D2)			
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)		Frost-Heave Hummocks (D7) (LRR F)			
Field Observations:					
Surface Water Present? Yes N	No _ X _ Depth (inches):				
Water Table Present? Yes N	lo _ x Depth (inches):				
Saturation Present? Yes N	No _ > Depth (inches):	Wetland Hydrology Present? Yes No 🗻			
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous inspect	tions), if available:			
		,			
Remarks:					