Wetland Delineation Report for

South Rochford Road

Pennington County, South Dakota

July 2014

Prepared for:



# South Dakota Department of Transportation

Prepared by:



#### Table of Contents

1.0	Introduction	1
2.0	Methods	1
3.0	Wetlands Overview	6
4.0	Conclusions	9
5.0	References	10

#### List of Tables

Table 1 Wetland Determination Data Sheet Summary	2
Table 2 Wetland Area within Study Area	4

### List of Figures

Figure 1 Project Location	11
Figure 2 Project Area and NWI Wetlands	12
Figure 3 – 31 Wetland Boundaries	

#### List of Appendices

Appendix A	Routine Wetland Determination Data Forms
Appendix B	Site Photographs

# 1.0 INTRODUCTION

The South Dakota Department of Transportation (SDDOT) has initiated a study to analyze the current and future transportation needs of the traveling public on South Rochford Road from the Rochford, South Dakota, to Deerfield Road (the Project). The Project is located in western South Dakota near Rochford in Pennington County (County) and is approximately 12 miles long. The existing South Rochford Road extends from Rochford southwest to the Deerfield Lake area. South Rochford Road is part of the County's transportation network and is vital for the County's residents and roadway users in the area. The transportation network offers a limited number of corridors, particularly corridors that run north to south.

The Study Area is generally located west and south of Rochford, South Dakota, and east and north of Deerfield Lake (Figure 1). The Study Area encompasses approximately 853 acres of which 570 acres are National Forest System lands and 283 acres are interspersed private land.

HDR Engineering, Inc. (HDR) conducted a wetland delineation of the Study Area on August 26 through 29, 2013. The delineation was performed to identify wetlands within the Study Area of the South Rochford Road improvements.

## 2.0 METHODS

Topography in the Rochford Road Study Area is broken with many small drainages leading into larger and more developed drainages of Rapid Creek, Smith Gulch, and North Fork Castle Creek. Elevations range from 5,300 feet on the northern edge of the Study Area near Rochford, South Dakota, to 6,200 feet at the southern edge of the Study Area. Much of the lands within and adjacent to the Study Area are ponderosa pine (*Pinus pondersa*) forest, white spruce (*Picea glauca*) forest, or a mix of aspen (*Populus tremuloides*) and pine forest. The area commonly referred to as Reynold's Prairie (Figure 2), which lies in the center of the Study Area is a montane grassland consisting of herbaceous cover, with a mix of native and invasive species.

Prior to field work, a desktop review was conducted by evaluating U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, U.S. Geological Survey (USGS) topographic maps, contours, the Pennington County soil survey and hydric soils list. This information was illustrated using Geographic Information System (GIS) mapping. The desktop review was used to identify potential wetland areas requiring further on-site evaluation. Several NWI areas are present within and just outside the Study Area (Figure 2).

After completion of the desktop review, a field review was conducted to determine the wetland boundaries within the Study Area. HDR surveyed the potential wetland areas for hydric soils, surface and subsurface hydrology, and hydrophytic vegetation. If all three indicators were present during the growing season, then the area was identified as wetland. The on-site delineations were conducted on August 26 through 29, 2013.

Upland and wetland plot data were evaluated and recorded at representative and/or unique wetland sites. At such sites, a soil pit was dug for observation of soil and hydrologic characteristics. Many of the wetland areas are part of a stream system and are connected hydrologyically. Soil pits were excavated in representative areas along the wetlands throughout the Study Area.

Hydric soil characteristics were identified using methods described in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountain Valleys and Coast Region (USACE 2010). Hydrology was described based on primary and secondary indicators. The vegetation was analyzed for species dominance. The wetland indicator status of plants was determined using the USFWS 2012National List of Plant Species that Occur in Wetlands.

Data collection points and the wetland boundaries were mapped using a global positioning system (GPS). Using GIS, an accurate delineation map was created from the GPS data to provide a permanent record of the on-site delineation wetland boundaries within the Study Area.

A summary of the wetland evaluation is presented in Table 1. Copies of the 37 data sheets are in Appendix A. A total of 35 wetland areas were field-identified within the Study Area. Wetlands 4 and 36 through 40 were desktop delineated as access to the property had not been granted at the time of the delineations. The desktop delineation used several years of aerial photographs, field visual observations from the road right-of-way soils and topography data to determine wetland boundaries in areas without property access.

Many of the wetlands are connected hydrologically and are adjacent to perennial streams. Those streams and wetlands connected via a culvert were assigned the same number. Streams and fen areas were numbered separately from adjacent wetlands, though they were usually connected hydrologically. Additionally, different wetland types (for example, palustrine emergent vs. palustrine forested) were also numbered separately, though they may have been connected hydrologically. Though water was flowing in many of the wetland areas, a defined bed or bank was not always present. Therefore, defined stream segments may appear disjunct along the Study Area. Data was collected at adjacent upland points to confirm the wetland boundaries. Figures 3 through 31 display the wetland boundaries. Photographs of the wetlands are in Appendix B.

Sampling Point #	Dominant Vegetation	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Wetland
1	Carex nebrascensis (H) OBL 90%	Yes	Yes	Yes	Wetland 24
2	Alopecurus arundinaceus (H) FACW 50% Taraxicum offcinale (H) FACU 20% Trifolium hybridum (H) FACU 20%	Yes* *Disturbed Vegetation	Yes	Yes	Wetland 24
3	Taraxicum offcinale (H) FACU 20% Verbascum thapsus (H) FACU 20% Brumus inermis (H) FAC 20% Alopecurus arundinaceus (H) FAC 20%	No	No	No	N/A
4	Carex nebrascensis (H) OBL 80%	Yes	Yes	Yes	Wetland 25
5	Picea glauca (I) FAC 70% Agrostis stolonifera (H) FAC 20% Carex nebrascensis (H) OBL 50%	Yes	Yes	Yes	Wetland 24
6	Picea glauca (I) FAC 70% Poa palustris (H) FAC 50% Carex nebrascensis (H) OBL 40% Salix discolor (S) FACW 20% Salix amygdaloides (S) FACW 25%	Yes	Yes	Yes	Wetland 24 & 25
7	Rosa arkansas (H) FACU 20% Solidago canadensis (H) FACU 20% Trifolium repens (H) FAC 60%	No	No	No	N/A
8	Carex nebrascensis (H) OBL 90% Salix discolor (S) FACW 10%	Yes	Yes	Yes	Wetland 24
9	Poa pratensis (H) FAC 60% Phleum pretense (H) FAC 20%	Yes	No	No	N/A
10	Bromus inermis (H) FAC 95%	Yes	No	No	N/A
11	Solidago missouriensis (H) NI 25% Carex sp. (H) 30% Panicum vigatum (H) FACW 15% Cirsium arvense (H) FAC 10% Trifolium repens (H) FAC 10%	Yes	Yes	Yes	Wetland 22 & 23
12	Phleum pratense (H) FAC 80% Poa pratensis (H) FAC 20%	Yes	Yes	No	N/A

01	Table 1
Wetland D	etermination Data Sheet Summary

Wetland Delineation Report

Sampling Point #	Dominant Vegetation	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Wetland
13	Agrostis gigantea (H) OBL 60%	Yes	Yes	Yes	Wetland 17
14	Populuw tremuloides (T) FACU 80% Carex nebrascensis (H) OBL 90%	Yes	Yes	Yes	Wetland 20 & 21
15	Picea glauca (I) FAC 100% Shepherdia argentea (S) FACU 25% Rosa arkansas (H) FACU 20% Rubus parviflorus (H) FACU 10% Anemone canadensis (H) FAC 10%	No	No	No	N/A
16	Picea glauca (I) FAC15% Salix amygdaloides (S) FACW 65% Salix discolor (S) FACW 25% Juncus sp. (H) – 100%	Yes	Yes	Yes	Wetland 17-19
17	Populus tremuloides (S) FACU 30% Salix discolors (S) FACW 70% Juncus sp. (H) – 75% Trifolium repens (H) 10%	Yes	Yes	Yes	Wetland 12-18
18	Salix amygdakoides (S) FACW 10% Bromus inermis (H) FAC 35% Phleum pretense (H) FAC 35%	Yes	No	No	N/A
19	Populus tremuloides (T) FACU 10% Picea glauca (T) FAC 20% Salix bebbiana (S) FACW 20% Salix discolor (S) FACW 20% Betula pumila (S) OBL 20%	Yes	Yes	Yes	Wetlands 8, 11
20	<i>Taraxacum officinale</i> (H) FACU 40% <i>Phleum pratense</i> (H) FAC 20%	No	Yes	No	N/A
21	Populus tremuloides (T) FACU 20% Picea glauca (I) FAC 80% Salix bebbiana (S) FACW 20% Poa palustris (H) FAC 30% Agrostis gigantean (H) FAC 20%	Yes	Yes	Yes	Wetlands 9, 10
22	Populus tremuloides (I) FACU 30% Picea glauca (I) FAC 70% Smilacina stellatum (H) FAC 40% Geum aleppium (H) FACW 30% Rosa arkansas (H) FACU 25%	Yes	No	No	N/A
23	Agrostis stolonifera (H) FAC 30% Carex nebrascensis (H) OBL 70%	Yes	Yes	Yes	Wetland 35
24	Bromus inermis (H) FAC 70% Thinopyrum intermedium (H) UPL 20%	No	No	No	N/A
25	Phalaris arundinacea (H) FACW 100%	Yes	Yes	Yes	Wetland 34
26	Bromus inermis (H) FAC 60% Solidago canadensis (H) FACU 25%	No	No	No	N/A
27	Agrostis stolonifera (H) FAC 30% Panicum capillare (H) FAC 30% Carex nebrascensis (H) OBL 20%	Yes	Yes	Yes	Wetland 33
28	Bromus inermis (H) FAC 60%	Yes	No	No	N/A
29	Carex nebrascensis (H) OBL 70%	Yes	Yes	Yes	Wetland 32
30	Solidago missouriensis (H) UPL (NI) 20% Bromus inermis (H) FAC 60% Symphoricarpos ocidentalis (H) FAC 20%	Yes	No	No	N/A
31	Carex nebrascensis (H) OBL 80%	Yes	Yes	Yes	Wetlands 30 & 31
32	Thinopyrum intermedium (H) UPL (NI) 30% Phleum pratense (H) FAC 50%	No	No	No	N/A
33	Carex nebrascensis (H) OBL 80% Salix discolor (S) FACW 5%	Yes	Yes	Yes	Wetlands 28 & 29

Sampling Point #	Dominant Vegetation	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Wetland
34	Phleum pretense (H) FAC 60% Solidago canadensis (H) FACU 20%	No	Yes	No	N/A
35	Bromus inermis (H) FAC 70% Solidago canadensis (H) FACU 20%	No	No	No	N/A
36	Carex nebrascensis (H) OBL 95%	Yes	Yes	Yes	Wetlands 26 & 27
37	Cornus alba (S) FACW 70% Rubus parviflorus (S) FACW 30% Panicum virgatum (H) FACW 70%	Yes	Yes	Yes	Wetlands 1-3, 5-7

Table 2 displays the area of each delineated wetland within the Study Area.

wettand Area within Study Area						
Wetland	Area of Wetland within Study Area (acres)	Wetland Type	Special Feature	Figure #		
1	0.82	PEMB		3		
2	2.02	R3RBH		3,4		
3	0.49	PEMB		3		
4	2.14	PABG	Desktop	3		
5	0.97	PSSC		3		
6	0.82	PSSC		3,4		
7	0.43	PFOC		4		
8a	1.06	R3RBH		4		
			Channel	4		
8b	0.04	R3RBH	within Fen			
8c	0.20	PEMB		4,5,6		
8d	0.11	R3RBH		4,5,6		
9	0.14	R4SBC		4,5		
10	0.02	R4SBC		4,5		
11a	0.49	PEMB	Fen	5,6		
11b	0.12	PEMB	Fen	5,6		
11c	1.76	PEMB	Fen	5,6		
11d	1.22	R3RBH	Fen	5,6		
12	0.24	PSSC		5,6,7		
13	0.20	PSSC		6,7		
			Channel	6,7		
14	0.04	R3RBH	within Fen			
15	0.02	PEMB	Fen	6,7		
16	0.18	PEMB	Fen	6,7		
17a	0.96	PEMB	Fen	8,9		

Table 2Wetland Area within Study Area

Wetland	Area of Wetland within Study Area (acres)	Wetland Type	Special Feature	Figure #
17b	2.32	PEMB	Fen	7,8,9
17c	2.10	PEMB	Fen	9
17d	7.18	PEMB	Fen	6,7,8
18	<0.01	R3ABH	Channel within Fen	6,7
19	0.18	R3ABH	Channel within Fen	6,7
20	0.13	PFOB	Fen	8,9
21	0.14	PFOB	Fen	8,9
22a	0.36	R4SBC		8,9,10
22b	0.08	R3RBH		9,10
23	0.31	PEMB		9
24a	0.47	PEMB	Fen	10,11
24b	0.89	PEMB	Fen	10,11
24c	0.25	PEMB	Fen	9,10
24d	3.59	PEMB	Fen	10,11,12
25	0.14	R3ABH	Channel within Fen	10,11,12
26	0.20	PEMB	Fen	15,16
27	0.03	R3RBH	Channel within Fen	15,16
28	4.71	PEMB	Fen	15,16,17,18
29	0.11	R3RBH	Channel within Fen	16,17,18
30	0.44	РЕМБ	Fen Cl 1	16,17
31	0.07	R3RBH	within Fen	10,17
32	0.12	PEMA		17,18
33a	0.14	PEMA		22,23
33b	0.17	PEMA		22,23
34a	0.17	PEMA		23,24
34b	0.14	PEMA		23,24
35	1.05	PEMC		30,31
36	0.06	R3RBH	Desktop	8,9
37	0.02	R3RBH	Desktop	8,9
38	0.24	PEMB	Desktop/Fen	8,9
39	4.00	PEMB	Desktop/Fen	15,16
40 <b>Total</b>	2.89 <b>47.19</b>	PEMB	Desktop/Fen	16,17,18

## 3.0 WETLANDS OVERVIEW

The following sections describe the general features of wetland areas within the Study Area.

#### Wetland 1-3 & 5-7

Wetlands 1 through 3 and 5 through 7 are riverine and palustrine wetlands associated with Rapid Creek. Rapid Creek flows from the southwest to the northeast, crossing South Rochford Road and flowing parallel to Rochford Road. The stream is a rocky, perennial stream with many riffle and pool complexes and little vegetation in the channel. Its riparian wetlands area includes steep slopes with primarily a shrub community including red osier dogwood (*Cornus alba*) and raspberry (*Rubus parviflora*). (See Sampling Point 37, Appendix A).

#### Wetland 4\*

Wetland 4 was desktop determined as property access had not been granted at time of field delineation. This palustrine wetland is located just south of the Mickelson trail and is a shallow pond. Black Hills spruce (*Picea glauca*) and *Carex sp.* are the primary vegetation cover adjacent to the pond.

#### Wetland 8

Wetland 8 includes riverine and palustrine wetlands associated with Smith Gulch and its riparian area. Smith Gulch is a narrow, small perennial stream with primarily a rocky substrate. Riparian cover includes aspen (*Populus deltoides*), Black Hills spruce, and willows (*Salix sp.*). The area around the wetland has a high percentage of forested canopy cover. This wetland associated with Smith Gulch was not considered a fen as the hydrology was primarily from channel flow and no seepage or groundwater influence was apparent. (See Sampling Point 19, Appendix A).

#### Wetland 9&10

Wetland 9 and 10 are long, linear wetlands that appear to originate from a spring southwest of the wetlands. At the time of the delineation, there was little to no flow. In many areas, the substrate of the wetlands was rock. The primary vegetation includes fowl bluegrass (*Poa palustris*), Bebb willow (*Salix bebbiana*), Black Hills spruce. (See Sampling Point 21, Appendix A).

<sup>\*</sup> Desktop Delineated Wetlands

#### Wetland 11

Wetland 11 is part of Smith Gulch, but wetland 11 is where the wetland transitions into a fen. Groundwater highly influences the wetland 11. A portion of Wetland 11 on the west side of South Rochford Road is referred to as Rochford Cemetery Fen. Vegetation includes Bebb willow, pussy willow (*Salix discolor*) and bog birch (*Betula pumila*), Black Hills spruce saplings and grown trees and *Juncus* sp. A channel exists within the fen, originating from the culvert under South Rochford Road. Some erosion was present around the culvert on the east side of South Rochford Road. (See Sampling Points 19, Appendix A).

#### Wetland 12 & 13

Wetlands 12 and 13 are part of Smith Gulch, but Wetlands 12 and 13 are where the Wetland 11 fen transitions into a channelized, palustrine wetland. The wetland is is within the riparian area and is narrow as channel slopes are steep. Substrates were composed primarily of rock and little herbaceous vegetative cover was present within Wetland 12. Tree cover includes ponderosa pine (*Pinus ponderosa*), though the species was not rooted in the wetland area. At wetland 13, the wetland became shrubby and cover was composed of pussy willow. (See Sampling Point 17, Appendix A).

#### Wetlands 14-19

Wetlands 14 through 19 are all connected hydrologically and are part of Smith Gulch. These wetlands are also connected hydrologically to Wetland 13. These wetlands are all considered fens because the source of their hydrology is highly influenced by groundwater. Wetlands 14, 18, and 19 are in small intermittent channels that have formed from water flowing within the fen. Wetlands 15 through17 are all palustrine areas where water is still or moving slow enough that no channels have formed. Primary vegetation includes bog birch, several species of willow and *Juncus* sp. (See Sampling Points 13, 16 and 17, Appendix A).

#### Wetlands 20 & 21

Wetlands 20 and 21 considered fens and are connected all part of Smith Gulch. The wetlands include a patch of forested wetland adjacent to Wetland 17. Wetlands 20 and 21 include two forested areas connected via a driveway culvert. Tree cover in Wetlands 20 and 21 included aspen with herbaceous cover consisting primarily of Nebraska sedge (*Carex nebrascensis*). (See Sampling Point 14, Appendix A).

#### Wetlands 22 & 23

Wetlands 22 and 23 are part of Smith Gulch, but have little to no groundwater influence. Wetland 22 includes a narrow channel and Wetland 23 is a small area where the wetland expands into a nonchannelized area. Both wetland areas are part of Smith Gulch and is narrow with steep sides and very little riparian area (Wetland 23) exists along most of its length. Most wetland vegetation is within the channel and consisted of *Carex sp.* (See Sampling Point 11, Appendix A).

#### Wetlands 24 & 25

Wetland 24 includes the headwaters for Smith Gulch and includes a spring seep at the west end of the wetland where flow begins in Smith Gulch. Wetland 24 is crossed by several driveways, but connected hydrologically through culverts. Wetland 25 is an intermittent channel that exists within Wetland 24. Both Wetland 24 and 25 would be considered fens since their primary source of hydrology originates from groundwater seepage along its length. Dominant vegetation within these wetlands include Nebraska sedge, Black Hills spruce, aspen, and creeping foxtail (*Alopecurus arundinaceus*). (See Sampling Points 1, 2, 4, 5, 6, Appendix A).

#### Wetlands 26 & 27

Wetlands 26 and 27 are the fen and vegetated channel associated with North Fork Castle Creek. The majority of vegetation within these wetlands consists of the Nebraska sedge. (See Sampling Points 36, Appendix A).

#### Wetlands 28 & 29

Wetlands 28 and 29 include vegetated portions of North Fork Castle Creek and are connected hydrologically to Wetlands 26 and 27. Wetland 29 is an intermittent channel that runs through Wetland 28. These vegetated channels do not run the length of the fen, they are intermittently formed along the fen in Castle Creek. Both Wetland 28 and 29 would be considered fens since its primary source of hydrology appeared to be groundwater seepage along its length.. The wetlands are dominated by the Nebraska sedge with some patchy areas of pussy willow. (See Sampling Point 33, Appendix A).

#### Wetland 30 & 31

Wetlands 30 and 31 are also vegetated portions of North Fork Castle Creek and are connected hydrologically to Wetlands 28 and 29 via a culvert under South Rochford Road. Wetland 31 is a vegetated channel that exists within wetland 30. This channel does not run the length of Wetland 31 and is intermittently formed Both Wetland 30 and Wetland 31 would be considered fens since its primary source of hydrology appeared to be groundwater seepage along its length. Vegetation consists mostly of Nebraska sedge. (See Sampling Point 31, Appendix A).

#### Wetland 32

Wetland 32 is in a narrow, intermittent channel on the west side of South Rochford Road. The channel does not appear to be connected to the North Fork Castle Creek, though during flooding events, overflow likely makes its way down to the Creek. The channel is vegetated throughout and has relatively steep slopes. Dominant vegetation consists of Nebraska sedge. (See Sampling Point 29, Appendix A).

#### Wetland 33

Wetland 33 is a grassy drainageway that exists within Reynold's Prairie on either side of South Rochford Road that is hydrologically connected via a culvert. The dominant vegetation includes creeping bentgrass (*Agrostis stolonifera*) and witchgrass (*Panicum capillare*) (See Sampling Point 27, Appendix A).

#### Wetland 34

Wetland 34 is a grassy drainageway on either side of South Rochford Road that is hydrologically connected via a culvert. Water was present within the wetland during the time of delineation and vegetation was disturbed by cattle trampling and grazing. Dominant wetland vegetation is reed canary grass (*Phalaris arundinacea*) (See Sampling Point 25, Appendix A).

#### Wetland 35

Wetland 35 is a narrow drainageway that originates from a spring on the north part of the wetland and flows downhill. Much of the drainageway is disturbed by cattle trampling and grazing. Water was present during the time of the field delineation. The vegetation consists of Nebraska sedge and creeping bentgrass. (See Sampling Point 23, Appendix A).

#### Wetlands 36 & 37\*

<sup>\*</sup> Desktop Delineated Wetlands

Wetlands 36 and 37 were desktop delineated as property access had not been granted at the time of the field delineation. These wetlands are an extension of Wetland 22 and include a narrow channel. Hydrologically, they are part of the Smith Gulch system. Refer to sampling point 10 for likely similar vegetation and soils (Appendix A).

#### Wetland 38\*

Wetland 38 is a desktop delineated wetland as property access had not been granted at the time of the field delineation. The wetland is an extension of Wetland 17 and would be considered a fen since its primary source of hydrology appeared to be groundwater seepage along its length. Hydrologically, this wetland is part of the Smith Gulch system. Refer to sampling point 13 for likely similar vegetation and soils (Appendix A).

#### Wetlands 39 and 40\*

Wetlands 39 and 40 were desktop delineated as property access had not been granted at the time of the field delineation. Both wetlands are part of the North Fork Castle Creek system and would be considered fens since its primary source of hydrology appeared to be groundwater seepage along its length. Refer to sampling points 31 or 33 for likely similar vegetation and soils (Appendix A).

## 4.0 CONCLUSIONS

Based on the desktop review and site visits, the wetland areas within the proposed Study Area have been identified. This report will be used to identify avoidance and minimization opportunities, as well as to identify unavoidable wetland impacts for the Project. The SDDOT will work with the US Army Corps of Engineers to obtain appropriate permits for the temporary and/or permanent impacts for jurisdictional wetlands. SDDOT will work with the FHWA to mitigate necessary impacts to any non-jurisdictional wetlands. Permanent impacts to wetlands will be mitigated according to regulatory requirements.

## 5.0 **REFERENCES**

- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of wetlands and deepwater habitats of the United States.* United States Department of Interior, Fish and Wildlife Service. FWS/OBS-79/31. 103 p.
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- Center.U.S. Department of Agriculture, NRCS. 2006. *Field Indicators of Hydric Soils in the United States* – *Guide for Identifying and Delineating Hydric Soils*, Version 6.0. G.W. Hurt, P.M. Whited, and R.F. Pringle (eds.). USDA, NRCS in cooperation with the National Technical Committee for Hydric Soil, Fort Worth, TX.
- U.S. Department of Agriculture, NRCS. Web Soil Survey for Pennington County, South Dakota. http://websoilsurvey.nrcs.usda.gov/app/






























































## Appendix A

**Routine Wetland Determination Data Forms** 

WETLAND DETERMINATION DA	ra form – '	Western Mount	ains, Valleys, and Coast Region
Com Dashed Roud	Citv/0	County: Penninat	on County Sampling Date: 3/27/13
ct/Site: <u>Douter processor</u>		• • 0	State: State: Sampling Point:
T Talkator J. DUSI	Sect	on, Township, Rang	e: Twp 2 N. Kng 35 2008
stigator(s): <u>1. Internet case</u> or the start	Loca	al relief (concave, co	Invex, none): CONCOVC Slope (%): O
Iform (hillslope, terrace, etc.) - $\frac{1000}{100}$	Lat: 44.00	1897	Long: $-103.765077$ Datum: $12.194-177$
region (LRR): MILLER VE	mica, 2-	10% stops	Roaded NWI classification: N/A
Map Unit Name: <u>Dr Actor to cito typical for thi</u>	s time of year?	Yes No	(If no, explain in Remarks.)
climatic / hydrologic conditions on the site typical for the	significantly dist	urbed? Are "N	lormal Circumstances" present? Yes Ves No
Vegetation, Soil, or Hydrology	naturally probler	natic? (If nee	ded, explain any answers in Remarks.)
Vegetation, Soil, of Hydrology	ebowing sa	mpling point lo	cations, transects, important features, etc.
MMARY OF FINDINGS - Attach site map			
ydrophytic Vegetation Present? Yes	No	Is the Sampled	Area
ydric Soll Present?	No 0/	within a Wetland	
emarks: Welland pit. MdV SpVin	4 Q 3t	with and a	of smith guirn small
Sharing Douter	(n	o channe	1 strongly altored photo
CETATION - Use scientific names of pla	nts. Veget	two distance	a a go ting
EGETATION - Ose setember -	Absolute D	ominant Indicator	Dominance Test worksheet:
ree Stratum (Plot size:)	<u>% Cover</u> _		That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant Species Across All Strata: (B)
		·····	Percent of Dominant Species
	=	Total Cover	That Are OBL, FACW, 01 FAC:
Sapling/Shrub Stratum (Plot size:/			Total % Cover of:Multiply by:
1			OBL species $\underline{90}$ x1= $\underline{90}$
2			FACW species x 2 =
۵			FAC species $10$ $x_3 = 30$
5	······	Tatal Cover	FACU species x 4 =
			UPL species $x = \frac{x = 1}{2}$ (B)
Herb Stratum (Plot size:)	90%	OBL	$- \begin{bmatrix} \text{Column Totals:} & (0,0) & (A) & (A) \\ - \end{bmatrix}$
$\frac{1}{2} \frac{1}{100} \frac{1}{1$	10%	FAC	Prevalence index = B/A =
2			Hydrophytic Vegetation Indicators:
4			_ 1 - Rapid Test for Hydrophylic Vegetation
5			2 - Dominance results 200 M
6			4 - Morphological Adaptations' (Provide supporting
7			data in Remarks or on a separate sheet)
8			5 - Wetland Non-Vascular Plants
9			Problematic Hydrophytic Vegetation (Explain)
10			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
11		_= Total Cover	be precising entrees a state of the state of
Woody Vine Stratum (Plot size:)			Ludronhytic
1		· · · · · ·	Vegetation
2	<u> </u>	= Total Cover	Present? Yes V No
W Boro Cround in Herb Stratum			
Remarks: Drynd taken in low	just in	wetlord	near channyl ligitation
Maxin Roam and	1 		V
dicherbral thomas	<u> Arazva</u>	`	Western Mountains, Valleys, and Coast - Version 2.

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Profile Description: (Describe to the depth needed to document the indicator or con	
	firm the absence of indicators.)
Depth Matrix Redox Features	
(inches) <u>Color (moist)</u> <u>%</u> <u>Color (moist)</u> <u>%</u> <u>Type</u> <u>Loc</u> <sup>2</sup>	
<u>2-18 10/123/1 90 5/12 4/16 20 0 M</u>	SHIMM
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand	Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix
Hydric Soil indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2) Stripped Matrix (S6)	Red Parent Material (TF2)
Loamy Mucky Mineral (F1) (except MLRA	1) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	,
Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Garuy Mucky Mineral (S1) Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4) Redox Depressions (F8)	unless disturbed or problematic.
Tuno:	
Ponth /inches/	
	Hydric Soil Present? Yes 📈 No
venarks:	
YDROLOGY	
YDROLOGY Vetland Hydrology Indicators:	
YDROLOGY Vetland Hydrology Indicators: Yrimary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more received)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water Stained Leaves (R0) (arcent	Secondary Indicators (2 or more required)
YDROLOGY         Vetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
YDROLOGY         Vetland Hydrology Indicators:         'rimary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
YDROLOGY         Vetland Hydrology Indicators:         trimary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
YDROLOGY         Vetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
YDROLOGY         Vetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
YDROLOGY         Vetland Hydrology Indicators:         trimary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Ro	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Doots (C3) Geomorphic Position (D2)
YDROLOGY         Vetland Hydrology Indicators:         trimary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Ro         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3)
YDROLOGY         Vetland Hydrology Indicators:         trimary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Stallow Aquitard (D3) FAC-Neutral Test (D5)
YDROLOGY         Vetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	<ul> <li>Secondary Indicators (2 or more required)</li> <li>Water-Stained Leaves (B9) (MLRA 1, 2,</li> <li>4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Sots (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>A)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> </ul>
YDROLOGY         Vetland Hydrology Indicators:         trimary Indicators (minimum of one required; check all that apply)	<ul> <li>Secondary Indicators (2 or more required)</li> <li>Water-Stained Leaves (B9) (MLRA 1, 2,</li> <li>4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>A)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> <li>Frost-Heave Hummocks (D7)</li> </ul>
YDROLOGY         Vetland Hydrology Indicators:         trimary Indicators (minimum of one required; check all that apply)	<ul> <li>Secondary Indicators (2 or more required)</li> <li>Water-Stained Leaves (B9) (MLRA 1, 2,</li> <li>4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Sotos (C3)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>A)</li> <li>Raised Ant Mounds (D6) (LRR A)</li> <li>Frost-Heave Hummocks (D7)</li> </ul>
YDROLOGY         Vetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Ro         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Imager (B7)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Doots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOGY         Vetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Ro         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C0)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Depth (inches):	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) bots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOGY         Vetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) pots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOGY         Vetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Water Marks (B1)         Sediment Deposits (B2)         Implement Interpretent (B4)         Prisence of Reduced Iron (C4)         Iron Deposits (B5)         Surface Soil Cracks (B6)         Inundation Visible on Aerial Imagery (B7)         Sparsely Vegetated Concave Surface (B8)         ield Observations:         urface Water Present?         Yes       No         Depth (inches):         Ater Table Present?         Yes       No         Depth (inches):         Water Table Present?	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) pots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOGY         Vetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Stallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)     Saturation Visible on Aerial Imagery (D9)     Saturation Visible on Aerial Imagery
YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial imagery (C9)     Sots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     FAC-Neutral Test (D5)     A) Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)
YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)     Saturation Visible on Aerial Imagery (C9)     Shallow Aquitard (D3)     FAC-Neutral Test (D5)     Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)

		1 – Western Mou	ntains, valleys, and Coast Region $\sqrt{n + lp}$
roject/Site: South Kochtard Kou	<u>d</u> c	ity/County: <u>Venn</u>	IMTBN (D Sampling Date: 0/27/D
pplicant/Owner: <u>SDUOI</u>			State: $\Delta P$ Sampling Point: $\Delta P$
nvestigator(s): <u>A DHPLY F.J. 120</u>	<u>៥។                                    </u>	Section, Township, Ra	nge: <u>Iwp ZN, Kng 35, Karan 25</u>
andform (hillslope, terrace, etc.): <u>-+10udup</u>	$\underline{\lambda}$	Local relief (concave,	convex, none): $(\gamma \gamma \alpha \sqrt{\lambda})$ Slope (%): $\bigcirc$
ubregion (LRR): NICLA 62	Lat: <u>44</u> .	19910 F	Long: $-103, -103, -72$ Datum: $0-104$
ioil Map Unit Name: LOY AUSTON 100M	nian mica 7	1-10-70 Sloper A	<u>Tryyydd</u> / NWI classification: <u>V / / 1</u>
re climatic / hydrologic conditions on the site typic	al for this time of yea	r? Yes <u>V</u> No _	(If no, explain in Remarks.)
re Vegetation, Soil, or Hydrology _	significantly d	listurbed? Are	Normal Circumstances present 7 Yes year No
re Vegetation, Soil, or Hydrology	naturally proc	ematic? (if ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach sit	e map showing	sampling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?     Yes       Hydric Soil Present?     Yes       Wetland Hydrology Present?     Yes	No No No	is the Sampled within a Wetla	i Area nd? Yes <u>No</u> No
Remarks: Point talkin in	•		<u>Augusta</u>
transitional area	between	pil 1+ 3	Avoid in the second state
	here f A and a d	<u> </u>	ann nig-spicins distribut
/EGETATION – Use scientific names	or plants.	Demine of her "	Demingnes Test werkehest
Tree Stratum (Plot size:)	Absolute <u>% Cover</u>	Species? Status	Number of Dominant Species
1	·		That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4		= Total Cover	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:	)		Prevalence Index worksheet:
1			Total % Cover of:Multiply by:
2			OBL species x 1 =
3.			FACW species x 2 =
+ 5.			FAC species $\frac{160}{200}$ x 3 = $\frac{240}{100}$
×		= Total Cover	FACU species $2 \cdot 4 = -9(1 - 1)$
Herb Stratum (Plot size:)	Mic m	V FAM	Column Totals: $1100$ (A) $320$ (B)
1. JALOWICHUM DIVICINAL	The FO	FA-C	2.7.
3 Trating his annumarch	7.0	T FAC	Prevalence Index = B/A =
4. Agaistis solucitera		NFAC	1 - Rapid Test for Hydrophytic Vegetation
5	· · · · · · · · · · · · · · · · · · ·		2 - Dominance Test is >50%
6			3 - Prevalence Index is ≤3.0 <sup>1</sup>
7			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8			5 - Wetland Non-Vascular Plants <sup>1</sup>
9			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11.			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
· · · · · · · · · · · · · · · · · · ·		= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:	_)		
1			Hydrophytic Vegetation
۲ <b>۵</b>		= Total Cover	Present? Yes No
% Bare Ground in Herb Stratum			See nermarks
Remarks: Vegotation disturbed	d by h	eany giazi	rz.

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<u> </u>		
Sampling	Point	have
Gampinia	I UIIII.	~

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Profile Desc	ription: (Describe	to the depth	needed to docu	ment the i	ndicator	or confirm	the absence of	indicators.)
Depth	Matrix		Redo	x Features	3.			
(inches)	Color (moist)		Color (moist)	<u>%</u>	<u>Type'</u>	Loc <sup>2</sup>		Remarks
<u>6-3</u>	10412 2/2	<u> </u>	54R 46	15	,		<u> </u>	
3-192	10 V12 3/1	90 -	342 4/6	0	<u>,                                    </u>	M	SL.	
	r		14	································	$\mathcal{V}$	,		
<del></del>	<u></u>	<u> </u>				·····		
								- <u> </u>
<del></del>	·			<del></del>	<del>,</del>			
								······
				<u> </u>		<u></u>	<u></u>	
<sup>1</sup> Type: C=C	oncentration. D=Dep	etion. RM=F	educed Matrix, C	S=Covered	or Coate	d Sand Gra	ains. <sup>2</sup> Locatio	on: PL=Pore Lining, M=Matrix,
Hydric Soil	Indicators: (Application	able to all L	RRs, unless othe	rwise note	ed.)		Indicators f	or Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy Redox (	S5)			2 cm M	uck (A10)
Histic Ep	pipedon (A2)		Stripped Matrix	(S6)			Red Pa	rent Material (TF2)
Black Hi	stic (A3)		_ Loamy Mucky I	Mineral (F1	) (except	MLRA 1)	Very Sh	allow Dark Surface (TF12)
Hydroge	en Sulfide (A4)		_ Loamy Gleyed	Matrix (F2)	)		Other (E	Explain in Remarks)
Depleter	d Below Dark Surface	ə (A11) _	_ Depleted Matrix	x (F3) いたのの (ごた)			3 Indiantana a	
Sandy M	ark Sunace (A12) Aucky Mineral (S1)	Y	Redox Dark Su Depleted Dark	mace (ro) Surface /F	7)		Indicators o	or nyorophytic vegetation and
Sandy G	Sleved Matrix (S4)	-	Redox Depress	sions (F8)	''		unless di	sturbed or problematic
Restrictive	Layer (if present):						1	
Type:	,							and the second
Depth (in	ches):						Hydric Soil Pre	sent? Yes No
Remarks:	,							
(	lile mart	Aud	in rul	evia				
. Ū	DOUT MULLEY	пцо	n Corro	CAL	•			
		Ý						
		,,,,,,,,,						
HTURULU	GT							
Wetland Hy	drology indicators:						_	
Primary India	cators (minimum of o	ne required:	check all that appl	y)			<u>Secondar</u>	v Indicators (2 or more required)
Surface	Water (A1)		Water-Sta	ined Leave	es (89) (e:	xcept	Wate	r-Stained Leaves (B9) (MLRA 1, 2,
High Wa	ater Table (A2)		MLRA	1, 2, 4A, a	nd 4B)		4/	A, and 4B)
Saturation	on (A3)		Sait Crust	(811)	10 1 0		⊻ Drain	age Patterns (B10)
Vvater IV	arks (81)		Aquatic in	vertebrates	S (B13)		Ury-s	Season Water Table (C2)
Sectimen	nt Deposits (82)		Hydrogen			Lindow Dana		ation Visible on Aerial Imagery (C9)
Algel Ms	ot or Cruet (B4)		Oxiuizeu r	of Doduco	es along d kon (C4	LIVING RUUI	is (Co) 🔮 Geon Shall	norphic Position (D2)
Iron Der	vosite (B5)		Becent in	n Reductio	n in Tiller	') I Saile (CA'		Neutral Test (D5)
Surface	Soil Cracks (B6)		Stupted or	Stressed	Plants (D)	1) (LRR A)	, <u> </u>	ed Ant Mounds (D6) (I RR A)
Inundati	on Visible on Aerial I	magery (B7)	Other (Exe	olain in Rei	marks)	., (,	Frost	-Heave Hummocks (D7)
Sparsel	Vegetated Concave	Surface (B	3)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Field Obser	vations:	<b>`</b>						
Surface Wat	er Present? Ye	es N	Depth (in	ches):				
Water Table	Present? Ye	es N	Depth (in	ches);		_		/
Saturation P	resent? Y	es N	Depth (in	ches):		Wetla	and Hydrology Pr	resent? Yes No
(includes ca	oillary fringe)		(					
Describe Re	corded Data (stream	gauge, mon	itoring well, aerial	photos, pre	evious ins	pections), i	f available:	
Remarks:								
No soil contration it down secondary is directors present								
14		∳a ovriv) ′	IN HINDING	]') ^	. ~ (24 EU	ana) ''		
			U.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				

WETLAND DETERMINATION D	ATA FORM	I – Western Mour	ntains, Valleys, and Coast Region
iectraite: Sout-Un Rachford Rad	0	ity/County: Bnn'n	<u>xtbn (0,</u> Sampling Date: <u>8/27/13</u>
nicant/Owner: SDDUT		· · ·	State: SD Sampling Point: 3
anticatorion I Tallolder V. J. P.MCT	5	Section Townshin Rar	ner Twin 2N, Rng 3E, Se 2B
estigator(s). <u> </u>		ocal relief (concave, c	$\frac{1}{2} \frac{1}{2} \frac{1}$
hatorm (nillslope, terrace, etc.): $\underline{-\chi_1(\chi)\chi_2(\chi_0)}$	Lati Will	MAR170	Long: TUR. Florida Datum: D N-A
pregion (LRR): <u>Victor Productor</u>	Lat	Trate Lebrudation	10 NAM alassification: N/A
I Map Unit Name: <u>LovingStain Loving, nigh Vyuria</u>	1 2 01	STOP	(free surficie in Demorter)
climatic / hydrologic conditions on the site typical for th	his time of yea	r? Yes No	(if no, explain in Remarks.)
Vegetation, Soil, or Hydrology	significantly c	listurbed? Are "	Normal Circumstances" present? Yes No
Vegetation, Soil, or Hydrology	naturally prot	plematic? (If ne	eded, explain any answers in Remarks.)
JMMARY OF FINDINGS – Attach site map	showing	sampling point k	ocations, transects, important features, etc.
lydrophytic Vegetation Present? Yes	No_		
lydric Soil Present? Yes	No <u> </u>	Is the Sampled	Area
Vetland Hydrology Present? Yes	No	within a wetian	
emarks: Upland opini nonr fehr	line	A	
I status declarited by a	1. 3. 4. 1.	14 ~3.5.	a bout the and self files.
<u> </u>	Wight		A DITE
EGETATION – Use scientific names of pla	nts. V	Deminent Indicator	Dominance Test worksheet
ree Stratum (Plot size:	<u>% Cover</u>	Species? Status	Number of Dominant Species
······································			That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant
			Species Across All Strata: (B)
·			Percent of Dominant Species
		= Total Cover	That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
		·	Total % Cover of: Multiply by:
·		<u></u> _	OBL species x1 =
·			FACW species $x^2 = 1500$
			FAC species $\frac{1}{15}$ $x_3 = \frac{1}{120}$
		= Total Cover	$\frac{1}{100} \text{ species } \frac{-1}{50} \text{ x}^{4} = \frac{1}{25}$
Herb Stratum (Plot size:)	~ 17	NT 3714	Column Totals: $1012$ (A) $2552$ (B)
. Waxadum afficinale	······································	<u> </u>	2 55
Acoust - CAPILLA-CAPILLA		- FAL	Prevalence index = B/A =
A MONOCOULOR A MAR (BMC	<u> </u>	<u> </u>	Hydrophytic Vegetation Indicators:
Employed Willewark	212	EAC	2 - Dominance Test is >50%
American AR ANIMAMANNI	212	FA-C	$3 - $ Prevalence index is $\leq 3.0^3$
- Pordune Witches		UPL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
			data in Remarks or on a separate sheet)
)			5 - Wetland Non-Vascular Plants
10			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11			Indicators of hydric soil and wetland hydrology must
		= Total Cover	be present, ameas distance of problematic.
1			Hydrophytic Vegetation
la,		= Total Cover	Present? Yes No V
% Bare Ground in Herb Stratum	<del></del>		
Remarks:	••••		``````````````````````````````````````
Grand Viciliahon - mind	- 11×C	- from	points 122.
CHANGER TO A PORT	· vho	ng- ····	

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SOI	L
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S 2	mol	ling	Point:	
va	11121	IR IVE	E OHIU.	

SOIL								Sampling Poir	1t: _ <u>3</u>
Profile Desci	ription: (Describe to	the depth	needed to docum	ent the in	dicator o	or confirm	the absence	e of indicators.)	
Depth	Matrix		Redox	Features					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	; ;
0-10	10V12 4/2	<u>    \oo     </u>					<u>Silty</u> ch	.v <u>y</u>	
-	(* )						J	Ŷ	
		<u></u>		<u></u> .					
		<u></u>						· · · · · · · · · · · · · · · · · · ·	
<u> </u>		<del></del> . <u></u>	<del></del>						
<u> </u>								<u></u>	
1 Turney C=Ce			aduaad Matrix CS	-Covered	or Coato	d Sand Gr		artion: Dt - Daro Lining	M-Matrix
Hydric Soil I	ndicators: (Applica	ble to all LF	Rs. unless other	vise noted	di.)		Indicate	ors for Problematic Hy	tric Soils <sup>3</sup> :
Histosolu	(A1)		Sandy Redox (S	5)	,		2 cr	m Muck (A10)	
Histic Ep	ipedon (A2)		Stripped Matrix (	(S6)			Rec	d Parent Material (TF2)	
Black His	stic (A3)		_ Loamy Mucky M	ineral (F1)	(except	MLRA 1)	Ver	y Shallow Dark Surface	(TF12)
Hydroger	n Sulfide (A4)		Loamy Gleyed N	latrix (F2)			Oth	er (Explain in Remarks)	
Depleted	Below Dark Surface	(A11)	_ Depleted Matrix	(F3)					
Thick Da	rk Surface (A12)		_ Redox Dark Sur	face (F6)			Indicate	ors of hydrophytic vegeta	ation and
Sandy M	ucky Mineral (S1)	<u> </u>	_ Depleted Dark S	urface (F7	)		wetla	and hydrology must be p	resent,
Sandy G	aver (if present):		_ Redux Depress					ss disturbed of problema	
Type	aver a present.								
Depth (inc	(1)						Hydric Soil	Present? Yes	No. Icon
Deptit (inc	ales).						- Hyune don	11 1030 nci 103	
	whatted offer	hing w	prosent	ut da Saa	- She M	1 2 Yold	, Assu <u>Horgo -</u>	umed ho <u>Vig</u> tation.	hydrae
Wetland Hyd	Irology Indicators:								
Primary Indic	ators (minimum of or	e required; (	check all that apply	)			Seco	ndary Indicators (2 or me	ore required)
Surface \	Water (A1)		Water-Stair	ned Leaves	s (B9) ( <b>e</b> :	xcept	V	Nater-Stained Leaves (B	9) (MLRA 1, 2,
High Wa	ter Table (A2)		MLRA 1	, 2, 4A, ar	id 4B)			4A, and 4B)	
Saturatio	n (A3)		Salt Crust (	B11)			C	Drainage Patterns (B10)	
Water M	arks (B1)		Aquatic Inv	ertebrates	(813)		[	Dry-Season Water Table	(C2)
Sedimen	t Deposits (B2)		Hydrogen S	Sulfide Odd	or (C1)		9	Saturation Visible on Aeri	al Imagery (C9)
Drift Dep	osits (B3)		Oxidized R	hizosphere	es along l	Living Roof	ts (C3) C	Geomorphic Position (D2	)
Algal Ma	t or Crust (B4)		Presence of the presence of	f Reduced	Iron (C4	-}	S	Shallow Aquitard (D3)	
Iron Dep	osits (B5)		Recent Iron	n Reduction	n in Tilleo	d Soils (C6)	) F	AC-Neutral Test (D5)	
Surface :	Soil Cracks (86)	(m = )	Stunted or	Stressed P	Plants (D	1) (LRR A)	· F	Raised Ant Mounds (D6)	(LRR A)
Inundatio	on Visible on Aeriai In	nagery (B7)	, Other (Exp	iain in Ren	narks)		P	-rost-Heave Hummocks	(07)
Sparsery	vegetated Concave	Sunace (Bo	)					···· ·· · ·	
Field Observ	vations:	- N-	- Danth (inc	hoa).					
Surface wate	Descent? Te	- NC	Depth (inc	nes):		-			
Vvaler Table	Present? Te	INC	Depth (inc	nes)					No. Comment
(includes car	esentry Ye villary fringe)	sə NC	Depth (Inc	aies):			anu nyurolog	y rivsentr 105	
Describe Red	corded Data (stream	gauge, moni	toring well, aerial p	hotos, pre	vious ins	pections), i	if available:		
Remarks:									
1	In modeste	$\gamma_{M}$ , $\gamma_{M}$	diratore	0119	nt.				
[ ]	NO YINGHUN	N N	W. CNIM I	1.620	• • •				
	)	<u>م</u> رب							

# WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Sarth Rahford Rad C	Sity/County: <u>Punnikigton</u> Sampling Date: <u>127/13</u>
Applicant/Owner: <u>SDD6T</u>	State:
Investigator(s): <u>T, Talbitzer i J. Rust</u> s	Section, Township, Range: <u>Jup 2 N, Rng 3E, Sec 28</u>
Landform (hillslope, terrace, etc.): <u>-Augt.philo</u>	Local relief (concave, convex, none):(OV ULX Slope (%): 2
Subregion (LRR): MURA 62 Lat: 44	.099169 Long: <u>-103, 764452</u> patum: <u>DMA198</u> 3
Soil Map Unit Name: Coudeston lam, his Mice, 2-	-10% Slupes, Roolpath NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year	ar? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly of	disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally prof	blematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No	Is the Sampled Area within a Wetland? Yes <u>No</u> <u>No</u>
Remarks: Photos 213 Forested	begins (& Mus point.

**VEGETATION – Use scientific names of plants.** 

Tree Stratum (Plot size:) 1. 人気が (^	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:           Number of Dominant Species           That Are OBL, FACW, or FAC:
2 3			Total Number of Dominant Species Across All Strata: (B)
4	<u> </u>	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Saping/shiub Suaturn (Flot size	10		Prevalence Index worksheet:
1. (XAII X (XAII (XAI) (XAI)))			Total % Cover of: Multiply by:
2			OBL species $300 \times 1 = 300$
3	<u> </u>		FACW species x 2 =
4			FAC species $15 \times 3 = 45$
5			EACUS provides $5 \times 4 = 20$
		_ = Total Cover	
Herb Stratum (Plot size:)	(mar)	2-12-FT-1 1	
1. Carux nu proscepsis	<u>– põ</u> le		Column Lotals: $(A)$ $(A)$ $(B)$
2. QUARTS DAWIFLOYA	<u> </u>	FACIA	Prevalence Index = $B/A = 1.45$
3. PHWILLY CRISPUS	5	YAC	Hydrophytic Vegetation Indicators:
4. CIVSINM O'WUMSI	5	FAC	1 - Rapid Test for Hydrophytic Vegetation
5 Por Dalustris	5	FAC	2 - Dominance Test is >50%
e			$3$ - Prevalence Index is $\leq 3.0^{1}$
7			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.			data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants
10			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10		• ••••••	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		- Total Coulor	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:			
4			Unironhutia
			Vegetation
<u> </u>			Present? Yes <u>No</u> No
% Bare Ground in Herb Stratum		iotal Cover	
Remarks:			1
Hydric vegitation prosen	H.		

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Sampling Point	4

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Profile Desc	ription: (Describe	to the depi	th needed to docur	nent the i	ndicator o	or confirm	the absence of ind	icators.)
Depth	Matrix		Redo	x Features	s			
(inches)	Color (moist)	%	Color (moist)	%	Type'	_L.oc <sup>4</sup>	Texture	Remarks
<u>V-6</u>	10 YK 311	00		·			SIHLOOM	
6-12	INTR44	90	5124/10	117			CLAIN	
12 10				~ ~ ~		(		
12-40	CING TH	00	2416 416			`	ST MALKA	
	·							
				·				
				·				
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		nintina DM-						
Hydric Soil	Indicatore: (Appli	pieuori, rtivi- cable to all	Reduced Malinx, Co		ad)	u Sanu Gra	Indicators for	Problematic Hydric Soile <sup>3</sup> :
riguite Som	mulcators, (Appli		Lixits, unless othe	1W130 11010	<i>s</i> u.)		intuicators for	(14)
Histosol	(A1)		Sandy Redox (	55) (CC)			2 cm Muck	( (A1U) A Madarial (TEO)
HISUC E	olpedon (A2)		Stripped Matrix	(56) Kanada / Ed			Red Paren	it Material (TF2)
Black H	ISUC (A3)		Loamy Mucky r	Alineral (Fi	) (except	MLRA 1)	Very Shall	ow Dark Surface (TF12)
Hydroge	en Sulfide (A4)	(4 (4)	Loamy Gleyed	Matrix (F2	}		Other (Exp	nain in Remarks)
	a Below Dark Sunai	ce (A11)	Depleted Watrix	((F3) -faaa (F0)			3 landtantana af b	
THICK Da	ark Surface (A12)		Redux Dark Su	(1808 (F6) Cunto o /F	7)		Indicators or n	ydrophytic vegetation and
Sandy K	Nucky Mineral (51)		Depleted Dark	Sunace (r	1)		wetiand nyo	rology must be present,
Sandy C	sleyed Matrix (S4)		✓ Redox Depress	aons (Fo)			uniess aistu	rbed of problematic.
Restrictive	Layer (ir present):							
Type:		····						
Depth (in	ches):						Hydric Soil Prese	nt? Yes <u>v</u> No
Remarks:								
Ċ	Sails in	AD-t 1	andra	nuto	No.			
	0011- 11	_0.2_/1	infor a	6	na.			
			)					
							<u> </u>	
HYDROLO	GY							
Wetland Hy	drology indicators	:						
Primary Indi	cators (minimum of	one required	I: check all that appl	V)			Secondary I	ndicators (2 or more required)
N Surface	Mator (A1)		Mistor Sta	inod Loow	ac (80) (as	t		
Ulah Ma	vva(e) (A1)				55 (55) (67 	cept		and AD
	ater Table (AZ)		MLRA	1, Z, 4A, a	na 48)		4A, a	ING 4B)
V Saturati	on (A3)		Salt Crust	(811)			V Drainag	e Patterns (B10)
Water N	larks (B1)		Aquatic In	vertebrate	s (B13)		Dry-Sea	ison Water Table (C2)
Sedime	nt Deposits (B2)		Hydrogen	Sulfide Oc	ior (C1)		Saturati	on Visible on Aerial Imagery (C9)
Drift De	posits (B3)		Oxidized F	Rhizosphei	res along l	Living Root	ts (C3) 🟒 Geomor	phic Position (D2)
Algal Ma	at or Crust (B4)		Presence	of Reduce	d Iron (C4	)	Shallow	Aquitard (D3)
Iron Dep	oosits (B5)		Recent irc	n Reductio	on in Tillec	I Soils (C6)	) 🗹 FAC-Ne	utral Test (D5)
Surface	Soil Cracks (B6)		Stunted or	Stressed	Plants (D'	1) (LRR A)	Raised /	Ant Mounds (D6) (LRR A)
Inundati	ion Visible on Aerial	Imagery (B)	7) Other (Ex	plain in Re	marks)	,	Frost-He	eave Hummocks (D7)
Sparse!	v Vegetated Concav	ve Surface (I	, <u> </u>		,			
Field Obser	vations:		-/					
Surface Met	tations.		Va Danih (in	ahaay J	(in c	hannel)	l .	
Sunace was				ches):	(n)	101111-010		
Water Table	Present?	Yes/	No V Depth (in	ches):	~			
Saturation P	resent?	Yes <u>/</u>	No Depth (in	ches):	$\mathcal{O}_{\mathbb{C}}$	_ Wetla	nd Hydrology Pres	ent? Yes <u>/  </u> No
Uncludes ca	pillary fringe)	n aguae	nitoring well period	nhotos na	avious inc.	nections) 1	favailable:	
Descine K6	cornen mara (streat	n gauge, mo	antoanig well, aeria:	paoros, pri	evious ins	pecaons), t	availaule.	
Remarks:	Marine 1		.C. 1			1		1 0 005
	Criantice 1	/MUNA /A	-ind her	1 pl	1. CV	anni	NNOP prov	WI EN
	LANC .			4			1 1	
P <sup>e</sup>	11(1)							

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# WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: South Rocford Road	City/County: Phin	ination Sampling Date: 9/2=1/13
Applicant/Owner: SD DOT		$\underline{}$ State: <u>SD</u> Sampling Point: <u>5</u>
nuestinator(s): J. RUST, T. Talbitzer	Section, Township, Ra	nge: Twp 2, 2na 3 Sec 28
andform (billslope terrace etc.): +Del el Slop (	Local relief (concave.	convex none): (ON CAVA Slope (%): 10
Subragion (LRR): NALD A to 7	Lat: 44.099294	Long: ~103, 762103 Datum: D_N_A.1997
Sall Man Linit Name, Partila -Virkula -Dark nutr	une counder 10-40%	RUNO NWI classification: N/A
Son map onn Name. <u>For regar VIV party - to are the site to be to the site to the site to be and the site to</u>	in time of yours? You I I No	//f no. explain in Remarks )
Are climatic / hydrologic conditions on the site typical for th	is time of year? res Ao	
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are	Normal Circumstances present? Tes No
Are Vegetation, Soil, or Hydrology	naturally problematic? (If ne	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling point I	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No is the Sampler	Aroa
Hydric Soil Present? Yes	within a Wetlan	nd? Yes No
Wetland Hydrology Present? Yes V	No	
Remarks: Point taken near Simily Quilab	a seep that aim.	ugs from slope, whin
VEGETATION – Use scientific names of pla	nts.	
	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u> <u>Species?</u> <u>Status</u>	Number of Dominant Species
1. Picea glavico	-70% $-70%$ $-70%$	That Are OBL, FACW, or FAC:(A)
2		Total Number of Dominant (B)
4	- +	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (AVB)
Sapling/Shrub Stratum (Plot size:)		Prevalence Index worksheet:
1		Total % Cover of: Multiply by:
2		OBL species         50         x1 =         50
3		FACW species x 2 =
5		FAC species $100 \times 3 = -200$
····	= Total Cover	FACU species × 4 =
Herb Stratum (Plot size:)		UPL species $x_5 = $
1. Ane Moni Canadensis	- U N FAC	Column Totals: $132$ (A) $272$ (B)
2. Mentha Sp		Prevalence Index = B/A =, O
3. Adviche Stonnetera	$-\frac{70}{50}$ $-\frac{7}{10}$ $-\frac{7}{10}$	Hydrophytic Vegetation Indicators:
4. (1) M/2 We W(A) (KAUY(S) S)		Rapid Test for Hydrophytic Vegetation
D		2 - Dominance Test is >50%
7	·····	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.	······	data in Remarks or on a separate sheet)
9		5 - Wetland Non-Vascular Plants <sup>1</sup>
10		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	= Total Cover	De present, unless disturbed of problematic.
Woody Vine Stratum (Plot size:)		
1		Hydrophytic Vegetation
Z	- Total Cover	Present? Yes <u>No</u>
% Bare Ground in Herb Stratum		
Remarks:	. La	~~1026
Sphagnum muss	on ground i	
- Parlustail forsted	N Black Hills	Spruce QS Campag

US Army Corps of Engineers

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Western Mountains, Valleys, and Coast – Version 2.0

Sampling Point: <u>5</u>

Profile Description: (D	Describe to	the dept	n needed to docur	nent the in	dicator o	r confirm	the absence	of indicators.)
Depth	Matrix		Redo	x Features				
(inches) Color (i	moist)	<u>%                                    </u>	Color (moist)	<u>    %                                </u>	Туре'	Loc <sup>2</sup>	<u>    Texture     </u>	Remarks
<u> 2-16 10 VR</u>	211.	<u> 15 -</u>	10 VR 416	5			Loam	
			. ,					
				·				
		······ ·						
				·		<del></del>	<del> </del>	
						·····	<del>.,</del>	
	·····							
<sup>1</sup> Type: C=Concentratio	n, D=Deple	tion, RM=I	Reduced Matrix, CS	S=Covered	or Coated	I Sand Gr	ains. <sup>2</sup> Loc	ation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	: (Applical	ole to all L	RRs, unless other	rwise noted	i.)		Indicator	s for Problematic Hydric Soils":
Histosol (A1)		-	Sandy Redox (	55) (DO)			2 cm	Muck (A10)
Histic Epipedon (A2	2)	-	Stripped Matrix	(S6) Ainerel (E1)	(avaant		Red	Parent Material (TF2) Shellow Dark Surface (TF12)
Black Histic (A3)	۸۸)	-	Loamy Gleved	/Illineral (FT) Matrix (F2)	(except	WILKA 1)	Very	r (Explain in Remarks)
Prycrogen Sunde (/ Depleted Below Da	ark Surface	(A11)	Depleted Matrix	(F3)				(Explain in Stellario)
Thick Dark Surface	e (A12)		Redox Dark Su	rface (F6)			<sup>3</sup> Indicator	s of hydrophytic vegetation and
Sandy Mucky Mine	ral (S1)	_	Depleted Dark :	Surface (F7	)		wetlar	d hydrology must be present,
Sandy Gleyed Matr	rix (S4)	7	_ Redox Depress	ions (F8)			unless	disturbed or problematic.
Restrictive Layer (if pi	resent):							
Type: <u>1/20/1/</u>	1							
Depth (inches):	0						Hydric Soll	Present? Yes <u>V</u> No
Remarks:								
HYDROLOGY Wetland Hydrology In	dicators:							· · · · · · · · · · · · · · · · · · ·
HYDROLOGY Wetland Hydrology In Primary Indicators (min	dicators: imum of on	e required	check all that appl	y)			Secon	dary Indicators (2 or more required)
HYDROLOGY Wetland Hydrology In Primary Indicators (min Surface Water (A1)	dicators: imum of on	e required	<u>; check all that appl</u>	y) ined Leaves	s (B9) ( <b>ex</b>	cept	<u>Secon</u> W	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2,
HYDROLOGY Wetland Hydrology In Primary Indicators (min Surface Water (A1) High Water Table (	dicators: imum of on ) (A2)	e required	<u>; check all that appl</u> Water-Sta MLRA	y) ined Leave: 1, 2, 4A, ar	s (B9) (ex id 4 <b>B</b> )	cept	<u>Secon</u> W	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
HYDROLOGY Wetland Hydrology In Primary Indicators (min Surface Water (A1) High Water Table ( Saturation (A3)	dicators: imum of on ) (A2)	e required	<u>; check all that appl</u> Water-Sta <b>MLRA</b> Salt Crust	<u>y)</u> ined Leave: <b>1, 2, 4A, a</b> r (B11)	s (B9) (ex id 4B)	cept	<u>Secon</u> W W	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10)
HYDROLOGY         Wetland Hydrology In         Primary Indicators (min         Surface Water (A1)         High Water Table (         Saturation (A3)         Water Marks (B1)	dicators: imum of on ) (A2)	e required	<u>check all that appl</u> Water-Sta MLRA Salt Crust Aquatic In	y) ined Leave: <b>1, 2, 4A, a</b> r (B11) vertebrates	s (B9) (ex id 4B) (B13)	cept	<u>Secon</u> W D: D:	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2)
HYDROLOGY Wetland Hydrology In Primary Indicators (min Surface Water (A1) High Water Table ( Saturation (A3) Water Marks (B1) Sediment Deposits	dicators: imum of on ) (A2) s (B2)	e required	<u>; check all that appl</u> Water-Sta MLRA Salt Crust Aquatic In Hydrogen	y) ined Leaves <b>1, 2, 4A, ar</b> (B11) vertebrates Sulfide Odd	s (B9) (ex ad 4B) (B13) or (C1)	cept	<u>Secon</u> W Dr Dr Sa	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) ituration Visible on Aerial Imagery (C9)
HYDROLOGY Wetland Hydrology In Primary Indicators (min Surface Water (A1) High Water Table ( Saturation (A3) Water Marks (B1) Sediment Deposits Drift Deposits (B3)	dicators: imum of on ) (A2) : (B2)	e required	<u>; check all that appl</u> Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	y) ined Leaves <b>1, 2, 4A, a</b> r (B11) vertebrates Sulfide Odd Rhizosphere	s (B9) (ex id 4B) (B13) or (C1) es along L	cept .iving Roo	<u>Secon</u> W Dr Dr Sr ts (C3) G	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) ituration Visible on Aerial Imagery (C9) comorphic Position (D2)
HYDROLOGY Wetland Hydrology In Primary Indicators (min Surface Water (A1) High Water Table ( Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Drift Deposits (B3) Algal Mat or Crust	dicators: imum of on ) (A2) (B2) (B4)	e required	<u>check all that appl</u> <u> </u> Water-Sta <u>MLRA</u> <u>    Salt Crust</u> <u>    Aquatic In</u> <u>    Hydrogen</u> <u>    Oxidized F</u> <u>    Presence</u>	y) ined Leaves 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced of Reduced	s (B9) (ex id 4B) (B13) or (C1) iss along L lron (C4)	iving Roo	<u>Secon</u> W Dr Dr Sr ts (C3) Gr Sr	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) ituration Visible on Aerial Imagery (C9) comorphic Position (D2) hallow Aquitard (D3)
HYDROLOGY Wetland Hydrology In Primary Indicators (min Surface Water (A1) High Water Table ( Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Surface Sail Crack	dicators: <u>imum of on</u> ) (A2) (B2) (B4) (B4)	e required	<u>check all that appl</u> <u> </u> Water-Sta <b>MLRA</b> <u>    Salt Crust</u> <u>    Aquatic In</u> <u>    Hydrogen</u> <u>    Oxidized F</u> <u>    Presence</u> <u>    Recent Irc</u>	y) ined Leaves 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reductio	s (B9) (ex d 4B) (B13) or (C1) es along L Iron (C4) n in Tilled	iving Roo Soils (C6	<u>Secon</u> W Dr Dr Sr ts (C3) Gr Sr ) F/	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) comorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) bined Ant Mounds (D6) (LPB A)
HYDROLOGY Wetland Hydrology In Primary Indicators (min Surface Water (A1) High Water Table ( Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Drift Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Surface Soil Crack Inundation Visible	dicators: <u>imum of on</u> (A2) (B2) (B4) s (B6) on Aerial In	e required	<u>check all that appl</u> <u> </u> Water-Sta <u>MLRA</u> <u>    Salt Crust</u> <u>    Aquatic In</u> <u>    Hydrogen</u> <u>    Oxidized F</u> <u>    Presence</u> <u>    Recent Irco</u> <u>    Stunted or</u>	y) ined Leaves <b>1, 2, 4A, ar</b> (B11) vertebrates Sulfide Odd Rhizosphere of Reduced on Reductio <sup>c</sup> Stressed F	s (B9) (ex d 4B) (B13) or (C1) es along L lron (C4) n in Tilled Plants (D1	iving Roo ) Soils (C6 ) (LRR A)	<u>Secon</u> W Dr Dr St ts (C3) Gr St ) F/ ) Rr Fr	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) comorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
HYDROLOGY Wetland Hydrology In Primary Indicators (min Surface Water (A1) High Water Table ( Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Drift Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Surface Soil Crack Inundation Visible of Sparsely Vegetated	dicators: imum of on (A2) (B2) (B4) s (B6) on Aerial Im d Concave	e required agery (B7 Surface (B7	<u>; check all that appl</u> Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted or Stunted or Other (Ex)	y) ined Leaves <b>1, 2, 4A, ar</b> (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reductio <sup>r</sup> Stressed F plain in Ren	s (B9) (ex d 4B) (B13) or (C1) es along L lron (C4) n in Tilled Plants (D1 narks)	iving Roo ) Soils (C6 ) (LRR A)	<u>Secon</u> W Dr Sr ts (C3) Gr Sr ) F/ 1 Rr Fr	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) ecomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
HYDROLOGY         Wetland Hydrology In         Primary Indicators (min         Surface Water (A1)         High Water Table (         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B3)         Algal Mat or Crust         Iron Deposits (B5)         Surface Soil Crack:         Inundation Visible         Sparsely Vegetated	dicators: imum of on (A2) (B2) (B4) s (B6) on Aerial Im d Concave	e required hagery (B7 Surface (E	; check all that appl	y) ined Leaves <b>1, 2, 4A, ar</b> (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reductio Stressed F olain in Ren	s (B9) (ex ad 4B) (B13) or (C1) es along L lron (C4) n in Tilled Plants (D1 narks)	.iving Roo ) Soils (C6 ) (LRR A)	<u>Secon</u> W Dr Dr Sr ts (C3) Gr Sr ) Fr ) Fr	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) ituration Visible on Aerial Imagery (C9) ecomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
HYDROLOGY         Wetland Hydrology In         Primary Indicators (min         Surface Water (A1)         High Water Table (         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B3)         Algal Mat or Crust         Iron Deposits (B5)         Surface Soil Crack         Inundation Visible (         Sparsely Vegetated         Field Observations:	dicators: imum of on (A2) (B2) (B4) s (B6) on Aerial In d Concave 2 Ye	e required	<ul> <li><u>check all that appl</u></li> <li>Water-Sta</li> <li>MLRA</li> <li>Salt Crust</li> <li>Aquatic In</li> <li>Hydrogen</li> <li>Oxidized F</li> <li>Presence</li> <li>Recent Irc</li> <li>Stunted or</li> <li>Other (Exp (8)</li> </ul>	y) ined Leaves 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced on Reductio r Stressed F olain in Ren	s (B9) (ex ad 4B) (B13) or (C1) es along L lron (C4) n in Tilled Plants (D1 harks)	iving Roo Soils (C6 ) (LRR A)	<u>Secon</u> W Dr Dr Sa ts (C3) Ga Sf ) FA ) Fr	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) ituration Visible on Aerial Imagery (C9) ecomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
HYDROLOGY         Wetland Hydrology In         Primary Indicators (min         Surface Water (A1)         High Water Table (         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B3)         Algal Mat or Crust         Iron Deposits (B5)         Surface Soil Crack         Inundation Visible         Sparsely Vegetated         Field Observations:         Surface Water Present?	dicators: imum of on (A2) (B2) (B4) s (B6) on Aerial In d Concave ? Ye	e required hagery (B7 Surface (E	<ul> <li><u>check all that appl</u></li> <li>Water-Sta</li> <li>MLRA</li> <li>Salt Crust</li> <li>Aquatic In</li> <li>Hydrogen</li> <li>Oxidized F</li> <li>Presence</li> <li>Recent Irc</li> <li>Stunted or</li> <li>Other (Exp (8)</li> </ul>	y) ined Leaves 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reductio ' Stressed F olain in Ren ches): ches):	s (B9) (ex Id 4B) (B13) or (C1) es along L lron (C4) n in Tilled Plants (D1 narks)	.iving Roo ) Soils (C6 ) (LRR A)	Secon W Dr Dr Sr ts (C3) Gr Sr ) Fr	dary Indicators (2 or more required) ater-Stained Leaves (B9) ( <b>MLRA 1, 2,</b> <b>4A, and 4B)</b> ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) ( <b>LRR A</b> ) ost-Heave Hummocks (D7)
HYDROLOGY         Wetland Hydrology In         Primary Indicators (min         Surface Water (A1)         High Water Table (         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B3)         Algal Mat or Crust         Iron Deposits (B5)         Surface Soil Crack         Inundation Visible of         Sparsely Vegetated         Field Observations:         Surface Water Present?         Water Table Present?	dicators: imum of on (A2) (B2) (B4) s (B6) on Aerial Im d Concave ? Ye Ye Ye	e required	check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Cresence Recent Irco Stunted or Other (Exp 18)	y) ined Leaves <b>1, 2, 4A, ar</b> (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reductio <sup>r</sup> Stressed F plain in Ren ches): ches): ches):	s (B9) (ex d 4B) (B13) or (C1) s along L lron (C4) n in Tilled Plants (D1 harks)	iving Roo ) Soils (C6 ) (LRR A)	Secon W Dr Sr ts (C3) Gr Sr ) F/ ) Fr Fr	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) ecomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) hised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
HYDROLOGY         Wetland Hydrology In         Primary Indicators (min         Surface Water (A1)         High Water Table (         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B3)         Algal Mat or Crust         Iron Deposits (B5)         Surface Soil Crack:         Inundation Visible         Sparsely Vegetated         Field Observations:         Surface Water Present?         Water Table Present?         Saturation Present?         Saturation Present?	dicators: imum of on (A2) (B2) (B4) s (B6) on Aerial Irr d Concave ? Ye Ye Ye Ye	e required	check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted or Other (Exp 8)	y) ined Leaves <b>1, 2, 4A, ar</b> (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reductio <sup>r</sup> Stressed F olain in Ren ches): ches): ches):	s (B9) (ex ad 4B) (B13) or (C1) es along L lron (C4) n in Tilled Plants (D1 harks)	iving Roo Soils (C6 ) (LRR A)	<u>Secon</u> W Dr Dr Sr ts (C3) Gr Sr ) Fr ) Fr and Hydrology	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) ituration Visible on Aerial Imagery (C9) ecomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) hised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
HYDROLOGY         Wetland Hydrology In         Primary Indicators (min         Surface Water (A1)         High Water Table (         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B3)         Algal Mat or Crust         Iron Deposits (B5)         Surface Soil Cracks         Inundation Visible (         Sparsely Vegetater         Field Observations:         Surface Water Present?         Water Table Present?         Saturation Present?         (includes capillary fring)         Describe Recorded Date	dicators: imum of on (A2) (A2) (B4) s (B6) on Aerial In d Concave ? Ye Ye Ye e) ta (stream (	e required hagery (B7 Surface (E s N s N gauge, mo	check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted or Other (Ex) 8)	y) ined Leaves 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reductio r Stressed F plain in Ren ches): ches): photos, pre	s (B9) (ex Id 4B) (B13) or (C1) es along L lron (C4) in in Tilled Plants (D1 harks) L vious insp	iving Roo ) Soils (C6 ) (LRR A)  Wetla pections),	Secon W Dr Dr Sa ts (C3) Ga Sf ) FA ) Fr and Hydrology if available:	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) ituration Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
HYDROLOGY         Wetland Hydrology In         Primary Indicators (min         Surface Water (A1)         High Water Table (         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B3)         Algal Mat or Crust         Iron Deposits (B5)         Surface Soil Crack         Inundation Visible (         Sparsely Vegetated         Field Observations:         Surface Water Present?         Water Table Present?         Saturation Present?         (includes capillary fring)         Describe Recorded Data	dicators: imum of on (A2) (B2) (B4) s (B6) on Aerial Im d Concave ? Ye Ye Ye Ye a (stream s	e required	check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Ex) Other (Ex) Depth (in Depth (in nitoring well, aerial	y) ined Leaves 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reductio Stressed F olain in Ren ches): ches): ches): photos, pre	s (B9) (ex ad 4B) (B13) or (C1) es along L lron (C4) n in Tilled Plants (D1 harks)	iving Roo Soils (C6 ) (LRR A) Weth pections),	Secon W Dr Dr Sr ts (C3) Gr Sr Fr Fr Fr and Hydrology if available:	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) ecomorphic Position (D2) ecomorphic Position (D2) eallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
HYDROLOGY         Wetland Hydrology In         Primary Indicators (min         Surface Water (A1)         High Water Table (         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B3)         Algal Mat or Crust         Iron Deposits (B5)         Surface Soil Crack         Inundation Visible         Sparsely Vegetater         Field Observations:         Surface Water Present?         Water Table Present?         Saturation Present?         (includes capillary fring)         Describe Recorded Date	dicators: imum of on (A2) (A2) (B2) (B4) s (B6) on Aerial In d Concave ? Ye Ye Ye e) ta (stream ( $\sqrt{S}$ ) ( $\sqrt{3}$	e required	check all that appl	y) ined Leaves 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced on Reductio r Stressed F olain in Ren ches): ches): photos, pre	s (B9) (ex Id 4B) (B13) or (C1) es along L lron (C4) n in Tilled Plants (D1 harks) L vious insp vious insp A L	iving Roo Soils (C6 ) (LRR A) Weth pections),	<u>Secon</u> W Dr Sa Sa Sa Sa Sa Fr Fr Fr favailable: ()	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) ituration Visible on Aerial Imagery (C9) somorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
HYDROLOGY         Wetland Hydrology In         Primary Indicators (min         Surface Water (A1)         High Water Table (         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B3)         Algal Mat or Crust         Iron Deposits (B5)         Surface Soil Crack         Inundation Visible         Sparsely Vegetated         Field Observations:         Surface Water Present?         Water Table Present?         Saturation Present?         (includes capillary fring)         Describe Recorded Date	dicators: imum of on (A2) (B2) (B4) (B4) (B4) (B4) (B4) on Aerial Im d Concave ? Ye Ye Ye Ye Ye Ya (V <sup>3</sup> ) (V <sup>3</sup> ) (V <sup>3</sup> )	e required	check all that appl  Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized F  Presence Recent Irc  Stunted or  No Depth (in Depth (in No Dept	y) ined Leaves 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reductio Stressed F olain in Ren ches): ches): photos, pre	s (B9) (ex ad 4B) (B13) or (C1) es along L lron (C4) n in Tilled Plants (D1 harks)	iving Roo Soils (C6 ) (LRR A) Weth pections),	<u>Secon</u> W Dr Sr Sr Sr Fr Fr and Hydrology if available: 	Adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) ecomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) hised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
HYDROLOGY         Wetland Hydrology In         Primary Indicators (min         Surface Water (A1)         High Water Table (         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B3)         Algal Mat or Crust         Iron Deposits (B5)         Surface Soil Crack         Inundation Visible         Sparsely Vegetated         Field Observations:         Sutration Present?         Saturation Present?         Saturation Present?         Saturation Present?         Mater Table Recorded Data         Remarks:         Amage         Madding	dicators: imum of on (A2) (B2) (B4) (B4) (B4) (B4) (B4) (B4) (Concave Ye Ye Ye Ye Ye (V) (V)	e required	check all that appl	y) ined Leaves 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced on Reductio r Stressed F olain in Ren ches): ches): photos, pre	s (B9) (ex Id 4B) (B13) or (C1) es along L lron (C4) n in Tilled Plants (D1 harks) L vious insp A + U	iving Roo Soils (C6 ) (LRR A) Weth pections),	<u>Secon</u> W Dr Sa _	Adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) tituration Visible on Aerial Imagery (C9) ecomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) hised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)

WETLAND DETERN	IINATION DA		l – Weste	ern Moui	ntains, Valleys, a	nd Coast I	Region
Project/Site: South Roch	Foxel 20a	a d	ity/County:	Pinn	inaton	Sampling	Date: 8/27/13
Applicant/Owner: SD DOT					State: SP	Sampling	Point:
Investigator(s): 1. RUST, T. Tal	bitzer	S	Section, Tow	nship, Rar	nge: TIND ZAL	Pna 31	5, Sec. 28
and form (hillslope terrace etc.): $\frac{1}{100}$	Soul		ocal relief (	concave. c	convex. none): Cevic	and	Slope (%): 1D
Subragian (I BB): $M_{12}A_{12}A_{2}$	<u> </u>	1 at: 44	.09983	, , , . , ,	Lona: ~103, 70	5044	Datum: D.N.A. I
Sold Man Linit Name Pristo la Visit Kula	Rock Arts		Dolov, 1	1-4/1%	SUX25 NWI class	ification:	A
Soli Map Unit Name: Wath And With Bally S		ev ( Z Laak	r2 Vac Va	<u>No</u>	(if no, evolain i	) Domarke )	····
Are climatic / nydrologic conditions on the	site typical for this	s unie or yes	listurbed?	NO	Normal Circumstancou	" procont2 V	No.
Are Vegetation, Soil, or Hy	arology si	ignificantly c		Ale	aded emplois enviore	s presente i	es <u></u> No
Are Vegetation, Soil, or Hy	arology n	aturally pro	plematic?	(ir ne	edeo, explain any ans	weis in Rema	rks.)
SUMMARY OF FINDINGS - Atta	ich site map s	showing	sampling	g point le	ocations, transec	ts, importa	ant features, etc.
Hydrophytic Vegetation Present?	Yes_V No	0	lo the	Samplad	Aroa		
Hydric Soil Present?	Yes No	0	withi	n a Wetlar	nd? Yes	No_	
Wetland Hydrology Present?	Yes V No	<u> </u>					
Remarks: uptiand point	with	SMP	in gu	lich			
52 			Û				
VEGETATION – Use scientific n	ames of plan	ts.					
		Absolute	Dominant	Indicator	Dominance Test w	orksheet:	
Tree Stratum (Plot size:	_)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominan	t Species	5
1. <u>VIUS Gauca</u>		00		PAU	That Are OBL, FAC	N, or FAC:	(A)
2		• •			Total Number of Do	ninant	6
3					Species Across All 3	มาสเส	
4		80	= Total Cov		Percent of Dominan	L Species	83% (AB)
Sapling/Shrub Stratum (Plot size:	)		. /	YX	Prevalence Index w	orksheet:	
1. Jaly discolor	~	<u> 40</u>	<del></del>	$\frac{+A(V)}{EA(V)}$	Total % Cover of	of:	Multiply by:
2. Salix a Mygda lord)	)		<u> </u>	ALW	OBL species	-10 x1	= <u>40</u>
3					FACW species	<u> 5</u> ×2	=0
4					FAC species	<u>50                                    </u>	= <u>390</u>
5		45	= Total Cov	/er	FACU species	× 4	<b>=</b>
Herb Stratum (Plot size:	_)		. 1		UPL species	× 5	=
1. COXEX MIDYOSECLEMISIS		<u>40</u>	<u> </u>	<u>OK</u>	Column Totals: 🖄	(A) <u>(</u> A)	<u>-5 20</u> (B)
2. Ivon pallismes		- 59	<u> </u>	<u>V++(_</u>	Prevalence Inc	lex = B/A = _	2.4
3. KADIAS 'PARVITIOVA		10	_ <u>N</u>	+A(M	Hydrophytic Veget	ation Indicate	ors:
4						or Hydrophytic	C Vegetation
5			<u> </u>		2 - Dominance	lest is $>50\%$	
7		<u> </u>			4 - Morphologia	al Adaptations	<sup>1</sup> (Provide supporting
8			••••		data in Rem	arks or on a se	eparate sheet)
9					5 - Wetland Not	n-Vascular Pla	ints
10					Problematic Hy	drophytic Veg	etation <sup>1</sup> (Explain)
11					<sup>1</sup> Indicators of hydric	soil and wetla	nd hydrology must
	,	700	= Total Cov	/er		notarioca or pr	
vvoody vine Stratum (Plot size:	)				1 houten a bootto		
1 2					Vegetation		
2,			= Total Cov	/er	Present?	Yes	No
% Bare Ground in Herb Stratum							
Remarks:							
Hudric variation	ion orage	Mr. P	rua .	glan co	duminate	s the	COUPY.
	. I		、		V		

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Sampling Point: \_\_\_\_\_

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Profile Description: (Describe to the dep	th needed to document the indicator or confirm	the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	
(inches) Color (moist) %	<u>Color (moist)</u> <u>%</u> <u>Type'</u> <u>Loc</u> <sup>4</sup>	<u> </u>
D.6 10 YR Z/1 100		SIHUAY
		U
Type: C=Concentration, D=Depletion, RM	=Reduced Matrix, CS=Covered or Coated Sand Gra	ains. "Location: PL=Pore Lining, M=Matrix.
Hydric Son indicators. (Appreable to an	Condu Barlow (C5)	Am Musk (A10)
Histosol (A1)	Sandy Redox (S5)	2 Cm Muck (A10) Red Parent Material (TE2)
Ristic Epipedon (A2)	Loamy Mucky Mineral (E1) (excent MLRA 1)	Very Shallow Dark Surface (TE12)
Hydrogen Sulfide (A4)	Loamy Gleved Matrix (E2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Type:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
Hydric soils a	ssumed based on viget	ation & hydrollagy.
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one require	d; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
∖∠_/Ĥigh Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Living Root	s (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent fron Reduction in Tilled Soils (C6)	EAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B	<ul> <li>Other (Explain in Remarks)</li> </ul>	Erost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (	B8)	
Field Observations:		
Surface Water Present? Yes	No Depth (inches):	
Water Table Present? Ves	No Dopth (inches): 12	
Saturation Dresont?	No Depth (inches):	
(includes capillary fringe)	No Depth (incres): wetta	na Hydrology Present? Tes <u>v</u> No
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous inspections), i	f available:
Remarks:		
Hydrology indic	ators present	

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region
Project/Site: South Roch-Ford Road city/County: <u>Pennington Co</u> Sampling Date: <u>8/27/13</u>
Applicant/Owner: <u>SDD0 T</u> State: <u>3D</u> Sampling Point: <u>7</u>
Investigator(s): <u>1. RUST , T. Talbitzev</u> Section, Township, Range: <u>TWIP 2.N., Rng 3E, Sec. 28</u>
Landform (hillslope, terrace, etc.): <u>Stopl</u> Local relief (concave, convex, none): <u>Couraic</u> Slope (%): <u>D</u>
Subregion (LRR): <u>NUCA 62</u> Lat: <u>44.099931</u> Long: <u>103.7460114</u> Datum: <u>D-N_A_1983</u>
Soil Map Unit Name: Partilor-VINULO- Park where complex, 10-40% slopes NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes 🔽 No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes No       No       Is the Sampled Area within a Wetland?       Yes No         Hydrophytic Soil Present?       Yes No       Is the Sampled Area within a Wetland?       Yes No
Remarks: Point taken up slope of wetland on ditch slope.
VEGETATION – Use scientific names of plants.

#### Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: \_\_\_ (A) 2. Total Number of Dominant 3. \_\_\_\_\_ Species Across All Strata: (B) Percent of Dominant Species \_\_\_\_ = Total Cover (A/B) That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: \_\_\_\_\_) Prevalence Index worksheet: 1. \_\_\_\_\_ Total % Cover of: Multiply by: 2.\_\_\_\_\_ OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_ 3.\_\_\_\_\_ FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_ FAC species $100 \times 3 = 180$ 5. FACU species 40 x4= 100\_\_\_\_\_ = Total Cover UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_ Herb Stratum (Plot size: \_\_\_\_ Column Totals: $(O \cup (A) \xrightarrow{3} 4 \bigcirc (B)$ 20\_\_\_ 1. Rosa dy Vansas 2. Solidago canadensis 2.0 Prevalence Index = B/A = \_\_\_\_ PROMS 3. THEBUNN UND TA Hydrophytic Vegetation Indicators: 4. \_\_\_\_ 1 - Rapid Test for Hydrophytic Vegetation 5. \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_ 2 - Dominance Test is >50% 6.\_\_\_\_\_ \_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup> 7. \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ \_\_\_\_ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) 8. \_\_\_\_\_ \_\_\_\_ 5 - Wetland Non-Vascular Plants 9.\_\_\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 10. <sup>1</sup>Indicators of hydric soil and wetland hydrology must 11. be present, unless disturbed or problematic. = Total Cover Woody Vine Stratum (Plot size: \_\_\_\_\_) 1. Hydrophytic Vegetation 2. Yes \_\_\_\_\_ No \_/ Present? \_\_\_\_\_= Total Cover % Bare Ground in Herb Stratum Remarks: taken on vouol ditch slope - up slope Point thorn with not.

Sampling Point:

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I From peopletion. Theorem to the rebuill section to document the indicator of co	ontirm the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type Lo	oc <sup>2</sup> Remarks
0-6 10 VR212	SiltEdam
	<u></u>
	2
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sa	Ind Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Solis :
Histosol (A1) Sandy Redox (S5)	2 cm Muck (A10) Red Decent Material (TE2)
Histic Epipedon (A2) Sinpped Matrix (So)	Red Parent Material (TF2)
Black Histic (A3) Loamy Gleved Matrix (E2)	(TF12) Very Stallow Dark Surface (TF12)
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	
Thick Dark Surface (A12) Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4) Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):	
Type: A TOYA COLA	
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
Cours I aver chile Finally coursed	Soils accument into hudre
Grade avia - Soils thing packed.	JULIS DESERVICED MICH - MICH- MICH
baced on Lidentrous t	Vartations
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check all that apply)	<u>Secondary Indicators (2 or more required)</u> Water-Stained Leaves (B9) (MLRA 1, 2,
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)           ot         Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot       Water-Stained Leaves (B9) (MLRA 1, 2,         4A, and 4B)       Drainage Patterns (B10)
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         Dt
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         Ot       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)         ot

WETLAND DETERMINATION	DATA FORM – Western Mo	untains, Valleys, and Coast Region
reject/site: Sullth Rochford Runc	1 City/County: P/1	Minaton Sampling Date: 8127/13
nnlicant/Owner: SODOT		State: 30 Sampling Point:
Vestigatoria): J. PUST + T. Talkit	7PV Section Township R	anne: TWO 2 N. RAG 3E, Sec 29
ndform (hillolono terrace etc.):	Local relief (concave	(convex none): CONCAND Signe (%): 2
$\frac{1}{2} \frac{1}{2} \frac{1}$	Lot: 44,099,41	$1000 = 103$ $\overline{75h9}$ $\overline{73}$ Datum $D$ $M$ $A$ $B$
bregion (LRR): 101000 Alaudo bu al	Logiane Data the stand .	Chryded Nationalisation N/A
I Map Unit Name: ( <u>DY/USFD71 - [V/USSA//a/3</u>	(DURG 10 0 10 Sales)	<u>(1030014</u> NW) classification: <u>70 p (</u>
e climatic / hydrologic conditions on the site typical for	this time of year? Yes _ Mo	(If no, explain in Remarks.)
Vegetation, Soil, or Hydrology	significantly disturbed? Are	"Normal Circumstances" present? Yes V
Vegetation, Soil, or Hydrology	naturally problematic? (If r	needed, explain any answers in Remarks.)
JMMARY OF FINDINGS – Attach site ma	ap showing sampling point	locations, transects, important features, etc.
lydrophytic Vegetation Present? Yes	No Is the Sample	ad Area
Votland Hydrology Present? Yes V	No within a Wetla	and? Yes No
Remarks		
Wetland prt whin cake	X community. Hur	the age them up strang +
SOM Stepped DW	m independent aved	<u>s</u> <u>u</u>
EGETATION – Use scientific names of p	lants. 🗸 👘	
	Absolute Dominant Indicator	Dominance Test worksheet:
ree Stratum (Plot size:)	<u>% Cover Species? Status</u>	- Number of Dominant Species
	······································	A)
		Total Number of Dominant
	= Total Cover	That Are OBL FACW or FAC:
apling/Shrub Stratum (Plot size:)		Prevalence index worksheet:
Only disculty	<u> </u>	Total % Cover of: Multiply by:
·		$- \frac{1}{OBL \text{ species } 90} \times 1 = 90$
		FACW species () x2 = 20
·		FAC species <u>5</u> x 3 = <u>15</u>
·		FACU species $x4 = 20$
lerb Stratum (Plot size:)	= 10tal Cover	UPL species x 5 =
Caver no braskarnsis	<u> 90 Y ORL</u>	Column Totals: $(10)$ (A) $(45)$ (B)
Cirsium undulatum	-5 N FACU	Prevalence index = B/A =
Aneprovil Cahadonisis	$\underline{-5}$ <u>N</u> FAC	Hydrophytic Vegetation Indicators:
·		_ 1 - Rapid Test for Hydrophytic Vegetation
,		_ ∠_ 2 - Dominance Test is >50%
•		_ V 3 - Prevalence Index is ≤3.0 <sup>1</sup>
		4 - Morphological Adaptations' (Provide supporting
		- 5 - Wetland Nop-Vascular Plants <sup>1</sup>
•		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
4		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	= Total Cover	be present, unless disturbed or problematic.
Voody Vine Stratum (Plot size:)		
I,		_ Hydrophytic
2		Vegetation     Present? Ves No
	= Total Cover	
% Bare Ground in Herb Stratum		1

Profile Description: (Describe to the	e depth needed to document the indicator or confin	n the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	
(inches) Color (moist) 9	<u>6 Color (moist) / % Type<sup>1</sup> Loc<sup>2</sup></u>	Remarks
<u> </u>	2340 416 20	Sittleam
·	· · · · · · · · · · · · · · · · · · ·	
	······································	
······································	······	
		2:
type: C=Concentration, D=Depletion	, RM=Reduced Matrix, CS=Covered or Coated Sand G to all LRRs, unless otherwise noted ).	rains. "Location: PL=Pore Lining, M=Matrix.
tisteed (41)	Condu Dodou (CG)	2 om Muck (A10)
Histosof (AT) Histic Eninedon (A2)	Saluy Redox (SS) Stripped Matrix (S6)	2 cm wack (ATO) Red Parent Material (TE2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1	Very Shallow Dark Surface (TF12)
Hvdrogen Sulfide (A4)	Loamy Gleved Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A1	1) Depleted Matrix (F3)	
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
_, Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Туре:	<u></u>	
Type: Depth (inches): Remarks:		Hydric Soil Present? Yes <u>V</u> No
Type: Depth (inches): Remarks: Hyptic SD	il chteria met.	Hydric Soil Present? Yes <u>V</u> No
Type: Depth (inches): Remarks: Hygliv ( SD YDROLOGY Vetland Hydrology Indicators:	il chteria met.	Hydric Soil Present? Yes <u>V</u> No
Type: Depth (inches): Remarks: Hyghr ( S) YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one re	il chteria met.	Hydric Soil Present? Yes <u>No</u> No Secondary Indicators (2 or more required)
Type: Depth (inches): Remarks: Hypt V & D YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one re Surface Water (A1)	il chteria wit. equired; check all that apply) Water-Stained Leaves (B9) (except	Hydric Soil Present? Yes <u>No</u> <u>No</u> <u>Secondary Indicators (2 or more required)</u> Water-Stained Leaves (B9) (MLRA 1. 2.
Type: Depth (inches): Remarks: Hyplin (SP YDROLOGY YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one re Surface Water (A1) High Water Table (A2)	equired: check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Hydric Soil Present?       Yes       No
Type: Depth (inches): Remarks: Hypli ( S) YDROLOGY Yetland Hydrology Indicators: Primary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3)	equired: check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Hydric Soil Present? Yes <u>No</u> <u>No</u> <u>Secondary Indicators (2 or more required)</u> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Type: Depth (inches): Remarks: Hygli ( SP YDROLOGY YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	equired; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	Hydric Soil Present?       Yes       No
Type: Depth (inches): Remarks: Hygli ( SP YDROLOGY YUROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	equired; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Hydric Soil Present?       Yes       No
Type: Depth (inches): Remarks: Hyghi ( SP YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	Aquatic Invertebrates (B13) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro	Hydric Soil Present?       Yes       No
Type: Depth (inches): Remarks: <b>YDROLOGY</b> Vetland Hydrology Indicators: Primary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	equired: check all that apply) — Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4)	Hydric Soil Present?       Yes       No
Type: Depth (inches): Remarks: Hygh ( P YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Muth equired: check all that apply) — Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres along Living Ro — Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C	Hydric Soil Present?       Yes       No
Type: Depth (inches): Hygh ( ) <b>/DROLOGY</b> Vetland Hydrology Indicators: trimary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	equired: check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR 4	Hydric Soil Present?       Yes       No
Type: Depth (inches): Hygh ( S) YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Image	Muthowski state in the state of	Hydric Soil Present?       Yes       No
Type: Depth (inches): Hygh ( S) YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surf		Hydric Soil Present?       Yes       No
Type: Depth (inches): Remarks: Hygli ( SP YDROLOGY YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surficed Observations: Veland State Soil Cracks (B6)	Advice the second secon	Hydric Soil Present?       Yes       No
Type: Depth (inches): Remarks: <b>YDROLOGY</b> <b>Vetland Hydrology Indicators:</b> Primary Indicators (minimum of one re Surface Water (A1) — High Water Table (A2) Saturation (A3) — Water Marks (B1) _ Sediment Deposits (B2) _ Drift Deposits (B3) _ Algal Mat or Crust (B4) _ Iron Deposits (B5) _ Surface Soil Cracks (B6) _ Inundation Visible on Aerial Image _ Sparsely Vegetated Concave Surf Field Observations: Surface Water Present?	Muired: check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR 4 ery (B7) Other (Explain in Remarks) face (B8)	Hydric Soil Present?       Yes       No
Type: Depth (inches): Remarks: <b>YDROLOGY</b> <b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surf Field Observations: Surface Water Present? Yes 2 Water Table Present? Yes 2		Hydric Soil Present?       Yes       No

 (includes capillary fringe)

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

 Remarks:
 Surface water present is Saymple area. Saturation to Surface

 Surface
 Saturation to Saturatio to Saturatio to Saturation to Saturation to Saturation to Satura

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WETLAND DETERMINATION D	ATA FORM - V	Western Mountains, Val	leys, and Coa	ast Region	
Project/Site: South Rom Rom	<u>⊘</u> City/C	ounty: <u>Rannington</u>	Samp	oling Date: <u>9/27   R</u>	_
Applicant/Owner: SD D6T		State:	<u>SD</u> Samp	pling Point: <u>4</u>	
Investigator(s): T. Talbitzer, J.Rust	Sectio	on, Township, Range: <u>Twp</u>	2, Rug 31	E, Su 28	-
Landform (hillslope, terrace, etc.): Stor of Ali	10h Loca	relief (concave, convex, none)	Concard	Slope (%): <u>//5</u>	_
Subregion (LRR): MLRA- 62	Lat: <u>44.00</u>	19100 Long: -100	3.756831		83
Soil Map Unit Name Ovdeston - Marshorok	loams, D-6	To stores, Flooded N	WI classification:	NA	
Are climatic / hydrologic conditions on the site typical for the	nis time of year? Y	es No (If no, e	explain in Remark	s.)	
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are "Normal Circur	nstances" present	1? Yes / No	_
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (If needed, explain	any answers in R	emarks.)	
SUMMARY OF FINDINGS – Attach site map	showing san	pling point locations, t	ransects, imp	ortant features, etc.	
Hydrophytic Vegetation Present? Yes	No				1
Hydric Soil Present? Yes	No <u> </u>	Is the Sampled Area		/	
Wetland Hydrology Present? Yes	No	within a Wetland?	Yes	No	
Remarks: Upland pit on road si	ide of w	elland. Elrozing	prisint	P pH dr/a	
VEGETATION – Use scientific names of pla	nts.				1
	Absolute Don	ninant Indicator   Dominance	Test worksheet:		1

1.....

Tree Stratum (Plot size:	<u>% Cover</u>	Species? Status	- Number of Dominant Spacing
1			_ That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			_ Species Across All Strata: (B)
4			Percent of Dominant Species
Capling/Chrub Stratum / Plot size:	<u> </u>	= Total Cover	That Are OBL, FACW, or FAC: 100 (A/B)
saping/struct stratum (Flot size,)			Prevalence Index worksheet:
2			Total % Cover of: Multiply by:
2			- OBL species x 1 =
3			FACW species x 2 =
4		······	FAC species $100 \times 3 = 300$
- 5,			FACU species x 4 =
Herb Stratum (Plot size:	·····	= Lotal Cover	UPL species x 5 =
1 (JISHAM) ANIENSE	D	FAC	Column Totals: $(0, 0)$ (A) $(3, 0)$ (B)
2. Poa pratensis	- <u>100</u>	FAC	$= \frac{1}{2}$
3. THEFTIUMA VENEVIS	G	TAC	Hydrophytic Vegetation Indicators:
4. Phileurn profense	20	DAC	1 - Rapid Test for Hydrophytic Vegetation
5.			2 - Dominance Test is >50%
6		······································	$\frac{1}{2} = \frac{1}{2} = \frac{1}$
7		<u> </u>	A Mernhalogical Adaptations <sup>1</sup> (Dravide supporting
8.			data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants <sup>1</sup>
10.		·	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			
1			Hydronhytic
2.			Vegetation
		= Total Cover	Present? Yes V No
% Bare Ground in Herb Stratum			
Remarks: Hydric Vegetation or	oteri o	n wet.	*

US Army Corps of Engineers

Western Mountains, Valleys, and Coast - Version 2.0

Sampling Point:

	cription: (Describe)	ro me neb	th needed to docur	none are	mulcator	01 0011111	n the absenc	e oi maicat	ors.)	
Depth	Matrix		Redo	x Feature	s ,	<u>_</u>				
<u>(inches)</u>	Color (moist)		Color (moist)	%	<u>Type'</u>	<u>    Loc</u>	Texture		Remarks	
D-10,	10/12-417	) 00			. <u></u>		Sitter	Dam		
16-24	10 12 617	.00	SVRUID	10	0	M	SIL			
+* ** *		/ <u></u>			·	- <b>I</b>		•		
			·····		· ·····	<u></u>	<u></u>			
	. <u></u>	<u> </u>								
				•						
					·			• <u> </u>	· · ·	
	oncentration D=Den	letion RM=		S=Covere	d or Coate	d Sand G	rains <sup>2</sup>	ncation: PI =	Pore Lining M=Matrix	
Hydric Soil	Indicators: (Applic)	able to all	LRRs. unless other	rwise not	ed.)	u oanu o	Indica	ors for Pro	blematic Hydric Soils <sup>3</sup> :	
Lästanal	(14)		Condy Doday (	CE)	,			m Muck (A1	0)	
	(A1) ninodon (A9)		Saliuy Recox (	(96)			2 V	d Daroat Ma	viorial /TE2)	
	pipedon (A2)		Supped Wath	(00) Minorol (E	1) /oxoon		INE	n Shallow F	Nork Surface (TE42)	
	istic (AS) on Sulfdo (AA)		Loamy Cloud	VIIDELAS (E Moteix (ES	) (exceh	INCINA 1		ry onanow ∟ hor /Evoloin	in Domarke)	
	d Relow Dark Surface	- (A11)	Loanny Gleyed	1VIGUSX (F2 2 (F2)	-/		Ui	nei (Explain	in Reliars)	
Thick D	ark Surface (A12)	• (mi 1)	Reday Dark Su	rface /도요)	4	6	<sup>3</sup> Indica	tors of hydro	inhytic vegetation and	
Sandy A	Andrew Minoral (S1)		Depleted Dark	Surface (FU)	-7) ~	,	in losca	and hydrolo	ov must be present	
Sandy (	Nocky Milleral (S7)		Depleted Dark	sione (E8)	0 /		unla	asu nyurulu see dieturhad	gy must be present, f or problematic	
Bestrictive	Lavor (if propont):									
Turney	aayer (ii present).									
туре:										est.
Depth (in	ches):						Hydric So	il Present?	Yes No	
Remarks:										
	$\Omega$ $($		(a, M)	11 1			4 -		1	
	Kedoy '	Pelon	5 1L.	HUA	$\wedge C$	SOIL	conteri	a ho	rt mer.	
				<u>۱</u>						
{				$\Box$						
HYDROLO	GY			0						
HYDROLO	GY			J						
HYDROLO Wetland Hy	IGY drology Indicators:			<u> </u>						
HYDROLO Wetland Hy Primary Indi	IGY drology Indicators: cators (minimum of o	ne required	d; check all that appl				<u>Sec</u>	ondary Indica	ators (2 or more required)	
HYDROLO Wetland Hy Primary India Surface	GY drology Indicators: cators (minimum of o Water (A1)	ne required	d; check all that appl Water-Sta	y) ined Leav	res (B9) (e	xcept	<u>Sec</u>	ondary Indica	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2	2,
HYDROLO Wetland Hy Primary Indi Surface High Wa	drology Indicators: cators (minimum of o Water (A1) ater Table (A2)	ne required	d; check all that appl Water-Sta MLRA	y) ined Leav 1, 2, 4A,	res (B9) (e and <b>4B)</b>	xcept	<u>Sec</u>	ondary Indica Water-Staine 4A, and 4	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B)	2,
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3)	ne required	d: check all that appl Water-Sta MLRA Salt Crust	y) ined Leav <b>1, 2, 4A</b> , (B11)	res (B9) (¢ and <b>4B)</b>	xcept	<u>Sec</u>	ondary Indica Water-Staine <b>4A, and</b> 4 Drainage Pa	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) ttterns (B10)	2,
HYDROLO Wetland Hy Primary India Surface High Wa Saturati Water M	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1)	ne required	d <u>; check all that appl</u> Water-Sta <b>MLRA</b> Salt Crust Aquatic In	y) ined Leav 1, 2, 4A, (B11) vertebrate	res (B9) (e and <b>4B)</b> es (B13)	xcept	<u>Sec</u>	ondary Indica Water-Staine <b>4A, and 4</b> Drainage Pa Dry-Season	ators (2 or more required) ed Leaves (B9) ( <b>MLRA 1, 2</b> <b>4B)</b> utterns (B10) Water Table (C2)	2,
HYDROLO Wetland Hy Primary India Surface High Wa Saturati Water M Sedime	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2)	ne required	d <u>; check all that appl</u> Water-Sta Salt Crust Aquatic In Hydrogen	y) ined Leav 1, 2, 4A, (B11) vertebrate Sulfide O	res (B9) (e and <b>4B)</b> es (B13) dor (C1)	xcept	<u>Sec</u> 	ondary Indica Water-Staine <b>4A, and 4</b> Drainage Pa Dry-Season Saturation V	ators (2 or more required) ed Leaves (B9) ( <b>MLRA 1, 2</b> <b>4B)</b> Itterns (B10) Water Table (C2) 'isible on Aerial Imagery (C	<b>2</b> ,
HYDROLO Wetland Hy Primary Indii Surface High Wa Saturati Water M Sedime Drift De	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3)	ne required	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f	y) ined Leav 1, 2, 4A, (B11) vertebrate Sulfide O Rhizosphe	res (B9) (e and <b>4B)</b> es (B13) dor (C1) eres along	xcept	<u>Sec</u>    	ondary Indica Water-Staine <b>4A, and 4</b> Drainage Pa Dry-Season Saturation V Geomorphic	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) tterns (B10) Water Table (C2) 'isible on Aerial Imagery (C Position (D2)	<b>2</b> , 29)
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Vater M Sedime Drift De Algal M	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	ne required	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Presence	y) ined Leav 1, 2, 4A, (B11) vertebrate Sulfide O Rhizosphe of Reduct	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C	xcept	<u>Sec</u>     	ondary Indica Water-Staine <b>4A, and 4</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) tterns (B10) Water Table (C2) 'isible on Aerial Imagery (C : Position (D2) itard (D3)	<b>2</b> , 29)
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Vater M Sedime Algal Ma	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posets (B5)	ne required	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Presence Becent Irr	y) ined Leav 1, 2, 4A, (B11) vertebrate Sulfide O Rhizosphe of Reduct	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C-	Eliving Roo 4)	<u>Sec</u>       	ondary Indica Water-Staine <b>4A, and 4</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) Itterns (B10) Water Table (C2) 'isible on Aerial Imagery (C Position (D2) Itest (D5)	<b>2</b> ,
HYDROLO Wetland Hy Primary Indii Surface High Wa Saturati Vater M Sedime Drift De Algal M Iron Dep	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	ne required	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Presence Recent Irc	(B11) vertebrate Sulfide O Rhizosphe of Reduct	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C- ion in Tille	Living Rod 4) d Soils (Cd	<u>Sec</u>       	ondary Indica Water-Staine <b>4A, and 4</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) Itterns (B10) Water Table (C2) 'isible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5)	<b>2</b> , C9)
HYDROLO Wetland Hy Primary Indii Surface High Wa Saturati Vater M Sedime Drift De Algal Ma Iron De Surface	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	ne required	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Presence Recent Ird Stunted on	(B11) vertebrate Sulfide O Rhizosphe of Reduct r Stressed	res (B9) (e and 4B) dor (C1) eres along ed Iron (C- ion in Tille I Plants (C	Living Rod 4) d Soils (Cf 1) (LRR A	<u>Sec</u>   ots (C3) 0) 0)	ondary Indica Water-Staine <b>4A, and</b> 4 Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant N	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) Itterns (B10) Water Table (C2) fisible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5) Mounds (D6) (LRR A)	<b>2</b> , C9)
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Algal Ma Iron De Surface Inundat	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I	ne required	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted or 7) Other (Exp	(B11) vertebrate Sulfide O Rhizosphe of Reduct r Stressed plain in Re	res (B9) (e and 4B) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks)	Living Rod 4) d Soils (CC 1) (LRR A	Dots (C3)	ondary Indica Water-Staine <b>4A, and</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant N Frost-Heave	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) Itterns (B10) Water Table (C2) 'isible on Aerial Imagery (C Position (D2) Itest (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)	<b>2</b> , C9)
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Algal M Iron Deg Surface Inundati Sparsel	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave	ne required magery (B e Surface (	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted or 7) Other (Exp B8)	(B11) vertebrate Sulfide O Rhizosphe of Reduct r Stressed plain in Re	res (B9) (e and 4B) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks)	Living Rod 4) d Soils (CG 1) (LRR A	<u>Sec</u>   ots (C3) 3) )	ondary Indica Water-Staine <b>4A, and</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant N Frost-Heave	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) itterns (B10) Water Table (C2) 'isible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)	<b>2</b> , (39)
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Algal M Iron Deg Surface Inundat Sparsel Field Obser	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations:	ne required magery (B e Surface (	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Presence Recent Irc Stunted of 7) Other (Exp B8)	(B11) vertebrate Sulfide O Rhizosphe of Reduct r Stressed plain in Re	res (B9) (e and 4B) dor (C1) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks)	Living Rod 4) d Soils (Ct 1) (LRR A	<u>Sec</u>       	ondary Indica Water-Staine <b>4A, and</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant I Frost-Heave	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) itterns (B10) Water Table (C2) 'isible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)	2,
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Algal M Iron Deg Surface Inundat Sparsel Field Obser Surface Wat	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Y	me required magery (B e Surface (	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Presence Recent Irc Stunted ou 7) Other (Exp B8)	(B11) vertebrate Sulfide O Rhizosphe of Reduct r Stressed plain in Re	res (B9) (e and 4B) dor (C1) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks)	Living Rod 4) d Soils (Cd 1) (LRR A	<u>Sec</u>       	ondary Indica Water-Staind <b>4A, and</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant I Frost-Heave	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) itterns (B10) Water Table (C2) 'isible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5) Mounds (D6) (LRR A) e Hummocks (D7)	2,
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Algal M Iron Deg Surface Inundat Sparsel Field Obser Surface Water Water Table	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Y	me required magery (B e Surface ( es	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Presence Recent Irc Stunted or 7) Other (Exp B8) No Depth (in	(B11) vertebrate Sulfide O Rhizosphe of Reduct r Stressed plain in Re uches):	res (B9) (e and 4B) dor (C1) ares along ed Iron (C- ion in Tille I Plants (D emarks)	Living Rod 4) d Soils (Cf 1) (LRR A	<u>Sec</u>   ots (C3) 3) )	ondary Indica Water-Staind <b>4A, and 4</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant I Frost-Heave	ators (2 or more required) ed Leaves (89) (MLRA 1, 2 4B) itterns (B10) Water Table (C2) fisible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)	<b>2</b> , (29)
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel Field Obser Surface Water Table Saturation F	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Y Present? Y	magery (B Surface ( es es	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted or 7) Other (Exp B8) No Depth (in No Depth (in No Depth (in	(B11) vertebrate Sulfide O Rhizosphe of Reduct r Stressed plain in Re uches): uches):	res (B9) (e and 4B) dor (C1) ares along ed Iron (C- ion in Tille I Plants (D emarks)	Living Rod 4) d Soils (Cf 1) (LRR A	<u>Sec</u>       	ondary Indica Water-Staind 4A, and 4 Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant I Frost-Heave	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) water Table (C2) fisible on Aerial Imagery (C Position (D2) witard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)	<b>2</b> , ()
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Algal M Iron Deg Surface Inundat Sparsel Field Obser Surface Wat Water Table Saturation F (includes ca	drology Indicators: <u>cators (minimum of o</u> Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Present? Present? Y pillary fringe)	magery (B es es	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted of 7) Other (Exp B8) No Depth (in No Depth (in	(B11) vertebrate Sulfide O Rhizosphe of Reduct r Stressed plain in Re uches): uches):	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks)	Living Roo 4) d Soils (Ce 1) (LRR A	<u>Sec</u> ots (C3)  b) land Hydrolo	ondary Indica Water-Staine <b>4A</b> , and 4 Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant I Frost-Heave	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) utterns (B10) Water Table (C2) 'isible on Aerial Imagery (C Position (D2) uitard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)	<b>2</b> , () ()
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Algal M Iron Deg Surface Inundat Sparsel Field Obser Sutface Wal Water Table Saturation F (includes ca Describe Ref	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Y Present? Y present? Y pillary fringe) scorded Data (stream	magery (B e Surface ( es es gauge, mo	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted or 7) Other (Exp B8) No Depth (in No Depth (in No Depth (in No Depth (in	(B11) vertebrate Sulfide O Rhizosphe of Reduct r Stressed plain in Re uches): hches): photos, p	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks)	Living Rod 4) d Soils (Cd 1) (LRR A	Sec	ondary Indica Water-Staine <b>4A, and 4</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant I Frost-Heave	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) Water Table (C2) 'isible on Aerial Imagery (C Position (D2) uitard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)	<b>2</b> , () ()
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel Field Obser Surface Wat Water Table Saturation F (includes ca Describe Re	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Y Present? Y pillary fringe) ecorded Data (stream	magery (B e Surface ( es es gauge, mo	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Stunted or 7) Other (Exp B8) No Depth (in No Depth (in No Depth (in No Depth (in	(B11) vertebrate Sulfide O Rhizosphe of Reduct r Stressec plain in Re uches): hches): photos, pl	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (C emarks)	Living Rod 4) d Soils (Cd 1) (LRR A	Sec	ondary Indica Water-Staine <b>4A, and 4</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant I Frost-Heave gy Present?	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) Itterns (B10) Water Table (C2) 'isible on Aerial Imagery (C Position (D2) iitard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)	<b>2</b> , (29)
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re Remarks:	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Y Present? Y pillary fringe) ecorded Data (stream	magery (B e Surface ( es es gauge, mo	d: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized f Presence Recent Irc Stunted or 7) Other (Exp B8) No Depth (in No Depth (in onitoring well, aerial	(y) ined Leav 1, 2, 4A, (B11) vertebrate Sulfide O Rhizosphe of Reduct r Stressec plain in Re- uches): photos, pi	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (C emarks)	Living Rod 4) d Soils (Cd 11) (LRR A	Sec	ondary Indica Water-Staine <b>4A, and 4</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant N Frost-Heave	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) Itterns (B10) Water Table (C2) fisible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)	<b>2</b> , (
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedime Algal M Iron Deg Surface Inundat Sparsel Field Obser Surface Wat Water Table Saturation P (includes ca Describe Ref Remarks:	IGY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Present? Present? Y Present Y Present? Y Present? Y Present Y Present Y Present Y P	magery (B e Surface ( es gauge, mo	d: check all that apple	y) ined Leav 1, 2, 4A, (B11) vertebrate Sulfide O Rhizosphe of Reduct of Reduct r Stressed plain in Re- uches): photos, plain to be the set of the	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks) 22( revious ins	Living Roc 4) d Soils (Cd 11) (LRR A 	<u>Sec</u>        	ondary Indica Water-Staine <b>4A, and 4</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant N Frost-Heave gy Present?	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) Itterns (B10) Water Table (C2) fisible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)	<b>2</b> , (29)
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Vater M Sedime Algal M Iron Deg Surface Inundat: Sparsel Field Obser Surface Wat Water Table Saturation F (includes ca Describe Ref Remarks: C	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Y Present? Stream	magery (B e Surface ( es gauge, mo	d: check all that apple	y) ined Leav 1, 2, 4A, (B11) vertebrate Sulfide O Rhizosphe of Reduct of Reduct r Stressed plain in Re- uches): photos, p	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (C emarks) 22 - 1 revious ins	Living Roc 4) d Soils (Cf 1) (LRR A 	Sec	ondary Indica Water-Staine <b>4A, and 4</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant N Frost-Heave gy Present?	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) Itterns (B10) Water Table (C2) fisible on Aerial Imagery (C Position (D2) titard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)	<b>2</b> , (29)
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Vater M Sedime Algal M Iron Deg Surface Inundat Sparsel Field Obser Surface Water Table Saturation F (includes ca Describe Ref Remarks:	IGY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Y Present? Y Present	magery (B e Surface ( es gauge, mo	d: check all that apple	(B11) vertebrate Sulfide O Rhizosphe of Reduct r Stressed plain in Reduct r Stressed r S	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks) 22 - 1 revious ins	Living Roc 4) d Soils (Ce 1) (LRR A weti spections), d $w^{(0)}$	Sec 	ondary Indica Water-Staine <b>4A, and 4</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant N Frost-Heave	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) itterns (B10) Water Table (C2) fisible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)	<b>2</b> , (29)
HYDROLO Wetland Hy Primary Indi Surface High Wa Saturati Vater M Sedime Algal Ma Iron Deg Surface Inundat Sparsel Field Obser Surface Water Table Saturation P (includes ca Describe Ref Remarks: C	IGY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ter Present? Y Present? Y Present	magery (B e Surface ( es es gauge, mo	d: check all that apple	(B11) vertebrate Sulfide O Rhizosphe of Reduct r Stressed plain in Reduct r Stressed plain in Reduct r Stressed plain in Reduct r Stressed plain in Reduct	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks) 22 × ( revious ins	Living Roc 4) d Soils (Ce 1) (LRR A wet spections), dn (0)	Sec 	ondary Indica Water-Staine <b>4A, and 4</b> Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant N Frost-Heave	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) itterns (B10) Water Table (C2) fisible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)	<b>2</b> , (29)

US Army Corps of Engineers

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WETLAND DETER	RMINATION [	DATA FORM '	Western Mou	ntains, Valleys, and Coast Region	I
Project/Site: South Rochto	<u>rd Roac</u>	City/C	county: <u>Penni</u>	<u>rightern</u> Sampling Date: State: Sampling Paint:	1/27/13
	Talbitzer	Sooti	on Township Day	State. <u>11</u> Sampling Point. <u>10</u>	<u> </u>
Investigator(s).	ndiplaino		Litelief (senerve )	ige top 2// proj	on R
Candiorm (ninsiope, terrace, etc.). <u>ACC</u>	vognas v I	Lot: 44 10	5439	long: -103.75035 Datum	(%). CAIA1982
Subregion (LRR): <u>IVIL-16-4-</u>	uch hur In	Lat	Sloves PL	Long. <u>102. 1300</u> Datum.	<u>AW! 105</u>
Soli Map Unit Name: $(\sqrt{4}/\sqrt{2})/\sqrt{4} > 10/(2)$	<u>//ye-pe-pe</u>	this time of $v = 2 + v$	<u> Migners, The</u>	(If no evaluate in Remarks )	
Are climatic / hydrologic conditions on th	he site typical for	this time of year?	res <u>v                                    </u>		N -
Are Vegetation, Soll, or	Hydrology	_ significantly distur	bed? Are	Normal Circumstances present? Yes	NO
Are Vegetation, Soil, or	Hydrology	_ naturally problem	atic? (if ne	eded, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – A	ttach site ma	p showing san	npling point l	ocations, transects, important feat	ures, etc.
Hydrophytic Vegetation Present?	Yes _/	No	le the Sampled	Aroa	1
Hydric Soil Present?	Yes	No L	within a Wetlan	No	
Vvetland Hydrology Present?	Yes	NO	L		
Point tokin	oh str	edhn han ants	K., Stre o	.m channul incised	2-3 <del>11</del> .
	numbe et pr	Absolute Dor	ninant Indicator	Dominance Test worksheet:	,
<u>Tree Stratum</u> (Plot size: 1	)	<u>% Cover</u> <u>Spe</u>	cies? <u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
2 3				Total Number of Dominant }	(B)
4		= To	otal Cover	Percent of Dominant Species $100$	(A/B)
Sapling/Shrub Stratum (Plot size:	)			Prevalence Index worksheet:	
2				Total % Cover of: Multiply by	<u>v:</u>
3.				OBL species x 1 =	
4.				FACW species $x^2 = \frac{1}{2}$	~
5				FACt species $(-7)$ $x^3 = (-7)^{-1}$	<u>}</u>
		= To	otal Cover	IPI species X4	<del></del>
Herb Stratum (Plot size:	)	acol V	1 EAR	Column Totals: $100$ (A) $305$	<u>ст</u> (В)
2 Artemásia Cara		$-\frac{10}{5\%}$	EACLI	- · · · · · · · · · · · · · · · · · · ·	, (-/
3				Prevalence Index = $B/A = \_\bigcirc_i (f/f)$	
4,				1 - Rapid Test for Hydrophytic Vegetatio	n
5				V 2 - Dominance Test is >50%	
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
8				4 - Morphological Adaptations <sup>1</sup> (Provide data in Remarks or on a separate sh	supporting eet)
9				5 - Wetland Non-Vascular Plants	
10				Problematic Hydrophytic Vegetation <sup>1</sup> (E:	xplain)
11				Indicators of hydric soil and wetland hydrolo	igy must
Woody Vine Stratum (Plot size:	)	= To	tal Cover		
2				Hydrophytic Vegetation	
۲. <u></u>		 = To	tal Cover	Present? Yes No No	_
% Bare Ground in Herb Stratum					
Remarks: Hydvic veg	totob	onteria	met ty	Nough Dominance HS	

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Sampling Point: D

Profile Desc	rintion: (Describe t	o the denti	needed to docum	nent the i	ndicator	or confirm	the absence	of indicators.)
Denth	Matrix	o ino uopi	Redo:	y Features		••••••		
(inches)	Color (moist)	%	Color (moist)	<u>%</u>		Loc <sup>2</sup>	Texture	Remarks
0-18	10 V12 4/3	160					SL	
16.77	1. NR 37						801	
100 0 00	<u></u>	<u> </u>						
<u> </u>		<u> </u>		·	<u></u>	<u></u>		
							<u></u>	
	· · · · · · · · · · · · · · · · · · ·			. <del></del>	<u> </u>		<u></u>	
								······································
				·				
<sup>1</sup> Type: C=Co	oncentration, D=Dept	etion, RM≕l	Reduced Matrix, CS	S=Covered	l or Coate	d Sand Gra	ains. <sup>2</sup> Loc	ation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	able to all L	RRs, unless other	wise note	ed.)		Indicato	rs for Problematic Hydric Soils*:
Histosol	(A1)	-	Sandy Redox (S	35) (00)			2 cm	Muck (A10)
Histic Er	olpedon (A2)	-	Stripped Matrix	(S6) Algoral (E4	Vereent		Kea	Parent Material (TF2)
Black Hi	SUC (A3) on Sulfido (A4)	-	Loamy Wucky N	/ine≀ai (F1 Matrix (E2	) (excepi	MLKA 1)	Very	r Shallow Dark Surface (Tr 12) ar (Evolution in Remarks)
Depleter	t Below Dark Surface	- (A11)	Depleted Matrix	(F3)	)		One	
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)			<sup>3</sup> Indicato	rs of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)	-	Depleted Dark \$	Surface (F	7)		wetlar	nd hydrology must be present,
Sandy C	eved Matrix (S4)	-	Redox Depress	ions (F8)			unles	s disturbed or problematic.
Restrictive	Layer (if present):							
Туре:								
Depth (in	ches):						Hydric Soil	Present? Yes <u>No</u>
Remarks:							1	
. 1	1	,						
H	Advir SO	N	heria no	of M	M.			
	June Com	· · · · · · · · · · · · · · · · · · ·	· · · · · ·	. ,	<b>X</b> <sub>6</sub>			
L		··-						· · · · · · · · · · · · · · · · · · ·
HYDROLO	GY						÷.,	
Wetland Hy	drology Indicators:							
Primary India	cators (minimum of o	ne required	check all that appl	<u>y)</u>			<u>Secon</u>	dary Indicators (2 or more required)
Surface	Water (A1)		Water-Stai	ined Leave	es (89) (e	xcept	<u>∞</u> w	ater-Stained Leaves (B9) (MLRA 1, 2,
High Wa	ater Table (A2)		MLRA	1, 2, 4A, a	ind 4B)			4A, and 4B)
Saturati	on (A3)		Salt Crust	(B11)			Di	rainage Patterns (B10)
Water N	larks (B1)		Aquatic In	vertebrate	s (B13)		Di	ry-Season Water Table (C2)
Sedimer	nt Deposits (B2)		Hydrogen	Sulfide Oc	lor (C1)		Sa	aturation Visible on Aerial Imagery (C9)
Drift De	oosits (B3)		Oxidized F	Rhizosphe	res along	Living Roo	ts (C3) G	eomorphic Position (D2)
Algal Ma	at or Crust (B4)		Presence	of Reduce	d Iron (C4	\$)	SI	hallow Aquitard (D3)
Iron Dep	posits (B5)		Recent Iro	n Reducti	on in Tille	d Soils (C6	) <u> </u>	AC-Neutral Test (D5)
Surface	Soil Cracks (B6)		Stunted or	Stressed	Plants (D	1) (LRR A)	R	aised Ant Mounds (D6) (LRR A)
Inundati	on Visible on Aerial I	magery (B7	) Other (Exp	olain in Re	marks)		Fr	ost-Heave Hummocks (D7)
Sparsel	y Vegetated Concave	e Surface (B	8)					
Field Obser	vations:		./					
Surface Wat	er Present? Y	es N	lo Depth (in	ches):				
Water Table	Present? Y	es N	lo Depth (in	ches):				
Saturation P	resent? Y	es N	lo 🔽 Depth (in	ches):		_ Wetla	and Hydrology	/ Present? Yes No 📈
Describe Re	corded Data (stream	gauge, mo	nitoring well, aerial	photos. nr	evious ins	pections) i	if available:	
		3	in the second					
Remarker								
incinai No.		,		100				
No	hadriations	ind	ricatous v	We Sel	1+			
	J J)	· · · ·	i					
	$\sim$							

WETLAND DETERMINATION DA		M – Western Mou	ntains, Valleys, and Coast Region
Project/Site: Sarth Ruchford Road		City/County: Penn	ington Sampling Date: 8/27/30
Applicant/Owner: SD DUT			State: <u>SD</u> Sampling Point:
Investigator(s): T. Talbitzer 9. J. Rust		Section, Township, Ra	nge: TiAM 2N, RNg3E, Sec 27
Landform (hillslope, terrace, etc.): Plood plain / char	nni	Local relief (concave.	convex none): (DD/CH/L Sione (%): 12
Subregion (IRR): MIPA /az	1 at 4	14,105364	Long - 1/3, 7503 Datum 0414 1985
Sail Man Unit Name: Lay distance - Mark Shiptone K	loano	0-10% 8000	- Ding 1000 - 1000 - 1000 - ALA
So in the point reaction $\frac{1}{10000000000000000000000000000000000$	<u> </u>	- O VIN GINPE -	(If no exercise in Demontro.)
Are cantation mydrologic conditions on the site typical for this	stanie ur ye	disturbed 2 Are 1	
Are Vegetation, Soil, or Hydrologys	significantiy	distuided? Are	
Are vegetation, Soll, or Hydrology n	naturally pro	polematic? (If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing	sampling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes N	lo		
Hydric Soil Present? Yes N	lo	is the Sampled	Area
Wetland Hydrology Present? Yes <u>Ves</u> N	lo	within a would	
Remarks: Point taken whin phan	mil. N	Augh Wa or	n dow of phony I + win
CLARNALL Stars of claring	wil V	ANA CHERT	Witting impared to domand
VEGETATION - Use scientific names of plan	ute	<del>ay sur</del>	Voltansa son (1700) 12 Optima
VEGETATION - Ose scientific names of plan	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	<u>Species?</u> Status	Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2		·	Total Number of Dominant
3.			Species Across All Strata: (B)
4	<u> </u>		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: )		_ = Total Cover	That Are OBL, FACW, or FAC: (A/B)
1.			Prevalence Index worksheet:
2			Total % Cover of: Multiply by:
3		·	OBL species X1 =
4			FACW species $\frac{7}{2}$ $x^2 = \frac{50}{2}$
5			FAC species $2 = 2 = 2 = 2 = 2 = 2 = 2 = 2 = 2 = 2 $
Verb Stratum (Pleteize)	<del></del>	= Total Cover	UPL species x5 =
1 Stidaars looissuviews	75		Column Totals: $35$ (A) $97$ (B)
2 Coving SP	- 40		
3. Trifolarian 100 DeWS		FAC	Prevalence Index = B/A = /
4. Argium arvense	10	EAC	1 - Rapid Test for Hydrophytic Vegetation
5. Paniaum Viraduna	15	FACW	2 - Dominance Test is >50%
6	<u> </u>		$\checkmark$ 3 - Prevalence Index is $\leq 3.0^{1}$
7		·	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8			data in Remarks or on a separate sheet)
9		· · · · · · · · · · · · · · · · · · ·	5 - Wetland Non-Vascular Plants
10			Problematic Hydrophytic Vegetation' (Explain)
11	100	·	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	100	_= Tota: Cover	
1			Hydrophytic
2		·	Vegetation
1/ Data Original in Light Obstation		_≂ Total Cover	Present? Yes V NO
Bare Ground in Herb Stratum	<u>, n n</u>		
LOWILL NOT PROPERTY Ident	nty Ca	an so wa	that wood prisents Scholage m,
hot on 2000 printing the	or an	2 Augron 12	cupe on non-cloning hor
Drivalenci test			

Sampling COnt.	Sampli	ing Po	int:
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SOIL									Sampling Po	oint:
Profile Des	cription: (Describe	to the depth	needed to docu	nent the i	ndicator	or confi	irm the abs	ence of ind	cators.)	
Depth	Matrix		Redo	x Feature	s .				_	
<u>(inches)</u>	Color (moist)	%	Color (moist)	%	<u>[ype]</u>	_Loc*	<u> </u>	1 <u>re</u>	Remar	<u>KS</u>
U.B	PYR211	<u> </u>					_ SILLY	<u>Loam</u>		
	·							·		
	· ·									
				-		<u> </u>				
								<u> </u>		
				<u></u>						
<sup>1</sup> Type: C≂C	Concentration, D=De	pletion, RM≃F	Reduced Matrix, C	S=Covere	d or Coate	ed Sand	Grains.	Location:	PL=Pore Lining	3, M=Matrix.
Hydric Soil	Indicators: (Appli	cable to all L	RRs, unless othe	rwise not	ed.)		inc	licators for	Problematic H	ydric Solis":
Histoso	l (A1)	_	Sandy Redox (	S5)				2 cm Muck	(A10)	
Histic E	pipedon (A2)	<del>~</del>	Stripped Matrix	(S6)				Red Paren	t Material (TF2)	
Black P	listic (A3)	-	Loamy Mucky I	Matrix (E2	1) (excep)		.1)	Very Snask	W Dark Surraci	e (1 = 12)
Hydrog	en Sumde (A4) ad Below Dark Surfa			waux (F2 v /F3)	1			, oulei (≞xp	ann in stemarks	?)
Thick F	su below Dark Suffa Jark Surface (A12)		_ Depleted Wath Redox Dark St	rface (F6)			<sup>3</sup> In	dicators of h	vdrophytic vene	tation and
Sandy	Mucky Mineral (S1)	-	Depleted Dark	Surface (F	7)			wetland hvd	roloav must be	present.
Sandy	Gleved Matrix (S4)		Redox Depress	sions (F8)	.,			unless distu	bed or problem	natic.
Restrictive	Layer (if present):	· ···		· · · ·						
Type:	2 ,									1
Denth (ir	iches).						Hydrid	: Soil Prese	nt? Yes $X$	No
Domorkov										
	MYWY 04024	$\frac{0}{1}$	1 and will	oted	501	5.1	Assura	Solls	Vased o	2Vm
Motland H	vdrology Indicators	<u></u>	a) freedom							
Drimonulind	iontors (minimum of	ono roquirod:	chock all that ann	ha .				Secondary li	ndicators (2 or r	nore required)
Primary mu		one required.	CITECK all ITIAL ADD	inod Loov			. <u></u>	Mater S	tained Leaves	
Surface	e water (A3)				185 (D9) (8 and 412)	xcept			nd AB)	(08) (million 1, 2,
	Vater Lable (AZ)			1,2,444,0 (D14)	ang 46)			HA, d	11 <b>u 46)</b> Dattorna (940	<b>N</b>
V Satura	(ION (A3) Marika (D1)		Salt Crusi	(DII) wortobroto	a (P12)			Draisayi	e Fallenis (DTU	)  a.(C2)
Vvater 1	warks (b1)		Aquatic a		dor (C1)			Saturati	sui wale: Tabi	rial Imagery (C9)
	ent Deposits (D2)		Fiyologen	Dhizoenho		Living 5	Poote (C3)	Geomor	nhic Resition (F	ssarishagery (Ce)
	tot or Cruct (PA)		Oxiuizeu	of Peduce	ad Iron (C	Living r 45	10015 (00)	Sballow	Aquitard (D3)	2)
Iron De			Pecent in	on Reducti	ion in Tilla	ri M Solle i	(CB)		utral Test (D5)	
Surface	spusits (DO) a Soil Cracks (B6)		Necent in	r Stressed	l Plants (E		(οο). RΔ)	Raised	ant Mounds (Df	
Inunda	tion Visible on Aeria	l Imageny (87)	Other (Ex	nlain in Re	emarks)			Erost-He	ave Hummock	s (D7)
Sparse	livit visible off Aeria	ve Surface (B		picai in ro	лпалка)			I / OSI / K		0(07)
Eield Obse	ny vegerated contra		•,			1				
Curfage Mile	ator Propont?		o Dooth (ir	vchoe);	41					
Surface wa			0 Depth (ii	(GHES)	17					1
vvater (ab)	e Present?		o Deptn (ir	icnes):	$\frac{}{1}$					N-
Saturation	Present? apillary fringe)	Yes N	o Depth (ir	icnes):	L.	—   w	retiand Hyd	rology Pres	ent? Yes $\underline{\vee}$	NO
Describe R	ecorded Data (strea	m gauge, mor	nitoring well, aerial	photos, p	revious in:	spection	s), if availab	le:		
	,	• •	•							
Remarks										
0	ha hander	0	N 8					0		
1 3	te men	⇒ MG	tland hi	1 Cikul	OGYA	NN (X	(I cator	L.		
				J	$\sim$ $\sim$					
1										

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rojectisite: South Rochford Road	С	sity/County: Pennin	ration (b Sampling Date: 8/27/13
noticant/Owner: SD D0 T			State: SD Sampling Point: 12
avestigator(s): (T. RUST, T. Talbitzer	s	Section, Township, Ra	nge: TWIP ZN, PING 3E, SC 27
andform (hillslope terrace etc.): YOAD Single		ocal relief (concave.)	convex none): (M(GV) Slope (%): 5%
Subregion (LBB): ML_LA 42	at 44	IValolal	Long: -103, 745187 Datum: DVA_198
Sall Man Linit Nama: (Dr. districo - NAMESADADORE	Inamas	· 0-6 7 800	6. Alland NWI classification: N/A
ion wap one wanter $\frac{1}{2}$ and $\frac{1}{2}$	e of vea	r2 Yes We No	(If no, explain in Remarks )
The Manual of Hydrologic Conditions on the site typical for this issue	Reantly d	listurbod? Are "	"Normal Circumstances" present? Yes V
the Vegetation, Soli, or Hydrology signification	ally nroh	lematic? /If ne	Peded explain any answers in Remarks )
revegeration, or ryunoogy nator			
SUMMARY OF FINDINGS – Attach site map sho	owing	sampling point i	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes V No		Is the Sampled	Area
Hydric Soil Present? Yes No		within a Wetlar	nd? Yes <u>No / </u>
Remarks:	×		ł
uplained pri near rouder	M.	Slopes up	considerably Shown mend.
/EGETATION – Use scientific names of plants.			
Ab	cover	Dominant Indicator Species2 Status	Dominance Test worksheet:
<u>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </u>	00101		Number of Dominant Species (A)
2.			
3			Species Across All Strata:
4			Percent of Dominant Species
		= Total Cover	That Are OBL, FACW, or FAC:(A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
2			Total % Cover of: Multiply by:
3.			OBL species x 1 =
4			FACW species $2^{2}$
5			FACt species $10$ $x_4 = 41$
		= Total Cover	UPL species x5=
1 Dhill Who watersel	(n()	V FAC	Column Totals: $100$ (A) $310$ (B)
2 Disterio Panespens	10	N FAC	Dravalance Index = P(A = -3)
3. Verbascum Mabsus	10	N FACIL	Hydrophytic Vegetation Indicators:
4. Pezz pratinsis	20	FAC	1 - Rapid Test for Hydrophytic Vegetation
5			2 - Dominance Test is >50%
6			3 - Prevalence Index is ≤3.0 <sup>1</sup>
7	<u> </u>		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8			5 - Wetland Non-Vascular Plants <sup>1</sup>
9,			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			
1			Hydrophytic Vogetation
		- Total Course	Present? Yes No
% Bare Ground in Herb Stratum		= Total Cover	
Remarks:			
		,	
Hydric watation criteria	m	et.	

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Sampling Point:

inches) Color (moist)	%	Color (moist)	<u>x reature</u> %	vne <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
$\frac{10 \sqrt{2}}{2}$	100	00107 ((110301)					Hemano
1 20 1010 21	<u> </u>	rale de	- <u>III</u>	<u></u>	<u>.</u>		
1-10 10 412 DI	<u> </u>	10112 4ND		<u> </u>	<u></u>		
			<u>.</u>				
	<u></u>				. <u> </u>	<u> </u>	
······					·	<u> </u>	
						<u> </u>	
Type: C=Concentration, D=Depl	etion, RM	EReduced Matrix, CS	S=Covered	d or Coate	ed Sand Gr	ains. Locati	on: PL=Pore Lining, M=Matrix.
aydric Soil Indicators: (Applica	able to al	I LKKS, Unless othe	rwise not	ea.)		indicators	tor Problematic Hydric Solis :
Histosol (A1)		Sandy Redox (	55) (SE)			2 cm iv	RUCK (A10) aront Material (TE2)
Black Histic (A3)		Loamy Mucky 1	(30) Mineral (F	1) (excen	AMIRA 1)	Verv S	ballow Dark Surface (TF12)
Hydrogen Sulfide (A4)		Loamy Gleved	Matrix (F2	1) (0x00p ])		Other (	Explain in Remarks)
Depleted Below Dark Surface	e (A11)	Depleted Matrix	(F3)	·,			,,
Thick Dark Surface (A12)	. ,	Redox Dark Su	rface (F6)			<sup>3</sup> Indicators	of hydrophytic vegetation and
Sandy Mucky Mineral (S1)		Depleted Dark	Surface (F	-7)		wetland	hydrology must be present,
Sandy Gleyed Matrix (S4)		V Redox Depress	sions (F8)			unless d	listurbed or problematic.
Restrictive Layer (if present):							
Туре:							
Depth (inches):						Hydric Soil Pr	resent? Yes <u>/</u> No
Remarks: Hydric So YDBOLOGY	í (	chtena	ł۸⁄	<u>(</u> †			
Remarks: HYDYIC SO YDROLOGY Netland Hydrology Indicators:	i (	chtena	μ.	<u>(</u>			
Remarks: Hyghin Co YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of o	ne require	Chtch a	γγ	<u>(</u> -		Seconda	ary Indicators (2 or more required)
Remarks: Hydric So YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of o Surface Water (A1)	ne require	ed; check all that app Water-Sta	IV)	(+ 	except	<u>Seconda</u> Wat	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1</b> ,
Remarks: Hyghin C So YDROLOGY Netland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2)	ne require	ed; check all that appl Water-Sta	(Y) ined Leav	( +	except	<u>Seconda</u> Wat	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, -A. and 4B)
Remarks: HUGYC SO YDROLOGY Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3)	ne require	ed: check all that appl Water-Sta MLRA Salt Crust	(B11)	res (B9) (i and 4B)	except	<u>Seconda</u> Wate Vate Drai	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1,</b> <b>.A, and 4B)</b> nage Patterns (B10)
Remarks: Hydric So YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	ne require	ed: check all that app Water-Sta Salt Crust Salt Crust	(B11) vertebrate	res (B9) (r and 4B) es (B13)	эхсерt	<u>Seconda</u> Watı Drai Draj	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1,</b> <b>A, and 4B)</b> nage Patterns (B10) Season Water Table (C2)
Remarks: Hyghi C So YDROLOGY Netland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ne require	ed: check all that app Water-Sta Salt Crust Salt Crust Aquatic In Hydrogen	(B11) vertebrate Sulfide O	res (B9) (i and 4B) es (B13) dor (C1)	except	<u>Seconda</u> Watu Drai Dry- Satu	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1,</b> <b>A, and 4B)</b> nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery ((
Remarks: Hyghi C So YDROLOGY Netland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	ne require	ed; check all that app water-Sta Salt Crust Aquatic In Hydrogen Oxidized I	(B11) vertebrate Sulfide O Rhizosphe	res (B9) (n and 4B) es (B13) dor (C1) eres along	except	<u>Seconda</u> Wate Drai Dry- Satu ots (C3) Geo	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, -A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (( morphic Position (D2)
Remarks: Hygh C So YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	ne require	ed: check all that appl water-Sta Salt Crust Aquatic In Hydrogen Oxidized f Presence	(N) ined Leav 1, 2, 4A, i (B11) vertebrate Sulfide O Rhizosphe of Reduce	res (B9) (r and 4B) es (B13) dor (C1) eres along ed Iron (C	except	<u>Seconda</u> Wate Drai Dry- Satu Satu Statu Shai	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1,</b> <b>A, and 4B)</b> nage Patterns (B10) Season Water Table (C2) iration Visible on Aerial Imagery (( morphic Position (D2) ilow Aquitard (D3)
Remarks: Hygh C So YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	ne require	ed: check all that app Water-Sta Salt Crust Aquatic In Hydrogen Oxidized f Presence Recent Inc	(W) ined Leav <b>1, 2, 4A</b> , i (B11) vertebrate Sulfide O Rhizosphe of Reduce	res (B9) (r and 4B) es (B13) dor (C1) res along ed Iron (C ion in Tille	except I Living Roc 4) ed Soils (C6	<u>Seconda</u> Wate Drai Dry- Satu ots (C3) Geo Shai S) FAC	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1,</b> <b>A, and 4B)</b> nage Patterns (B10) Season Water Table (C2) aration Visible on Aerial Imagery ( morphic Position (D2) ilow Aquitard (D3) 2-Neutral Test (D5)
Remarks: Hydric So YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	ne require	ed; check all that appl water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o	(W) ined Leav 1, 2, 4A, a (B11) vertebrate Sulfide O Rhizosphe of Reduce on Reducti r Stressed	res (B9) (r and 4B) es (B13) dor (C1) eres along ed Iron (C ion in Tille I Plants (I	except Living Roc 4) ed Soils (C6 D1) (LRR A	<u>Seconda</u> Watı 4 Drai Dry- Satu ots (C3) Geo Shai 5) FAC	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C morphic Position (D2) ilow Aquitard (D3) S-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
Remarks: Hydric So YDROLOGY Metland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial In	ne require	ed: check all that app water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Inc Stunted o 37) Other (Ex	(Y) ined Leav (B11) vertebrate Sulfide O Rhizosphe of Reduce on Reducti r Stressed plain in Re	res (B9) (r and 4B) es (B13) dor (C1) eres along ed Iron (C ion in Tille Plants (I emarks)	except ( Living Roc (4) ed Soils (C6 D1) (LRR A	<u>Seconda</u> Watu Drai Dry- Satu ots (C3) Geo Shai 5) FAC ) Rais Fros	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery ( morphic Position (D2) Ilow Aquitard (D3) S-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Remarks: Hydric So YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial In Sparsely Vegetated Concave	ne require	ed: check all that app water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o 37) Other (Ex (B8)	(W) ined Leav 1, 2, 4A, a (B11) vertebrate Sulfide O Rhizosphe of Reduction r Stressed plain in Re	res (B9) (n and 4B) es (B13) dor (C1) eres along ed Iron (C ion in Tille I Plants (C emarks)	except 4) ed Soils (C6 D1) (LRR A	<u>Seconda</u> Wat Drai Dry- Satu ots (C3) Geo Shai 5) FAC ) Rais Fros	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (( morphic Position (D2) Ilow Aquitard (D3) Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
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Remarks: Hygh C So YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial In Sparsely Vegetated Concave Field Observations: Surface Water Present?	magery (E	ed: check all that app ed: check all that app Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o 37) Other (Ex (B8) No Depth (ir	(M) ined Leav <b>1, 2, 4A</b> , i (B11) vertebrate Sulfide O Rhizosphe of Reduce on Reducti r Stressed plain in Re	res (B9) (r and 4B) es (B13) dor (C1) res along ed Iron (C ion in Tille I Plants (C emarks)	except Living Roc 4) ed Soils (C6 D1) (LRR A	<u>Seconda</u> Watu 4 Drai Dry- Satu ots (C3) Geo Shai 5) FAC .) Rais Fros	ary Indicators (2 or more required) er-Stained Leaves (B9) ( <b>MLRA 1,</b> <b>A, and 4B)</b> nage Patterns (B10) Season Water Table (C2) aration Visible on Aerial Imagery ( morphic Position (D2) ilow Aquitard (D3) 2-Neutral Test (D5) sed Ant Mounds (D6) ( <b>LRR A</b> ) st-Heave Hummocks (D7)
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Remarks: Hydric So YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial In Sparsely Vegetated Concave Field Observations: Surface Water Present? Water Table Present? Ye	magery (E s Surface es es	Content of ed: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Inc Stunted o 37) Other (Ex (B8) No Depth (in No Depth (in No Depth (in	(M) ined Leav (B11) vertebrate of Reduce of Reduce of Reduce on Reducti r Stressed plain in Re uches): aches):	res (B9) (r and 4B) es (B13) dor (C1) eres along ed Iron (C ion in Tille Plants (C emarks)	except i Living Roc 4) ed Soils (CE D1) (LRR A   Wetl	<u>Seconda</u> Wate Drai Dry- Satu ots (C3) Geo Shai 5) FAC ) Rais Fros Fros	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C morphic Position (D2) ilow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7) Present? Yes No 1/
Remarks:       Hyght St         YDROLOGY         YDROLOGY         Vetland Hydrology Indicators:         2rimary Indicators (minimum of or	magery (E s Surface es es	Content a ed: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o 37) Other (Ex (B8) No Depth (ir No Depth (ir No Depth (ir No Depth (ir	(Y) ined Leav (B11) vertebrate Sulfide O Rhizosphe of Reduce on Reducti r Stressed plain in Re uches): aches): photos_ pu	res (B9) (i and 4B) as (B13) dor (C1) ares along ed Iron (C ion in Tille Plants (I emarks)	except except ed Soils (C6 D1) (LRR A Wetl spections)	Seconda Wate Drai Dry- Satu ots (C3) Geo Shai 3) FAC ) Rais Fros Fros Fros	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (( morphic Position (D2) ilow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7) Present? Yes No 1/2
Remarks: Hydric Sc YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial In Sparsely Vegetated Concave Field Observations: Surface Water Present? Ye Nater Table Present? Ye Saturation Pr	magery (f	ed: check all that app water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized B Presence Recent Irc Stunted o 37) Other (Ex (B8) No Depth (ir No Depth (ir nonitoring well, aerial	(M) ined Leav 1, 2, 4A, i (B11) vertebrate Sulfide O Rhizosphe of Reduce on Reducti r Stressed plain in Re uches): aches): photos, pr	res (B9) (r and 4B) es (B13) dor (C1) res along ed Iron (C ion in Tille Plants (C emarks) revious in	except Living Roc 4) ed Soils (C6 D1) (LRR A 	Seconda Watu 4 Drai Dry- Satu ots (C3) Geo Shai 3) FAC ) Rais Fros  and Hydrology F if available:	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, A, and 4B) nage Patterns (B10) Season Water Table (C2) aration Visible on Aerial Imagery (C morphic Position (D2) ilow Aquitard (D3) 2-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7) Present? Yes No 1/2
Remarks: Hygh C So YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial II Sparsely Vegetated Concave Field Observations: Surface Water Present? Yo Water Table Present? Yo Saturation Pr	magery (f surface es gauge, m	ed: check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o 37) Other (Ex (B8) No Depth (ir No Depth (ir No Depth (ir nonitoring well, aerial	(M) ined Leav 1, 2, 4A, a (B11) vertebrate of Reduce of Reduce on Reducti r Stressed plain in Re aches): aches): photos, pl	res (B9) (r and 4B) es (B13) dor (C1) eres along ed Iron (C ion in Tille Plants (I emarks) revious in	except Living Roc 4) ed Soils (CE D1) (LRR A Uvetl spections),	Seconda Watu 4 Drai Dry- Satu ots (C3) Geo Shai 5) FAC .) Rais Fros Fros	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C morphic Position (D2) Ilow Aquitard (D3) S-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Remarks: Hydric So YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial In Sparsely Vegetated Concave Field Observations: Surface Water Present? Water Table Present? Water Table Present? Saturation Present? Yet Saturation Present? Saturation Present? Satu	magery (f	ed: check all that app water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Inc Stunted o 37) Other (Ex (B8) No Depth (in No Depth (in No Depth (in nonitoring well, aerial	(Y) ined Leav 1, 2, 4A, a (B11) vertebrate of Reduce of Reduce on Reducti r Stressed plain in Re uches): aches): photos, pl	res (B9) (i and 4B) as (B13) dor (C1) ares along ed Iron (C ion in Tille Plants (I emarks) revious in	except i Living Roc 4) ed Soils (CE D1) (LRR A 	Seconda Watu Drai Dry- Satu ots (C3) Geo Shai 5) FAC b) Rais Fros  and Hydrology F if available:	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (( morphic Position (D2) ilow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7) Present? Yes No 1/

## WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Jourth Ruchford Road city	County: Pennington Sampling Date: 8/27/18
Applicant/Owner: <u>SD DO F</u>	State: Sampling Point: 3
Investigator(s): T. Tal bit 7er + J. Part Sect	ion, Township, Range: <u>TWp 2.N, PMg 3.5, Sc 27</u>
Landform (hillslope, terrace, etc.): 101 d Soft	al relief (concave, convex, none): <u>ConCA (//</u> Slope (%): <u>S</u>
Subregion (LRR): MLIZA 62- Lat: 44,11	16629 Long: -103, 745213 Datum: DVA- 98
Soil Map Unit Name: Coy deston -Marshbrock loams, 0-6	1) Storts, Fladd NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year?	YesNo (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distu	rbed? Are "Normal Circumstances" present? Yes _/ No
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No	Is the Sampled Area within a Wetland? Yes No
Remarks: Point on edge of wetland a	t to a road dope,

## **VEGETATION – Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	<u>Species?</u>	<u>Status</u>	Number of Dominant Species
1.				That Are OBL, FACW, or FAC: (A)
2.				
3				Species Across All Strate: (B)
4	• ••••••			Percent of Dominant Species
Copling/Chrub Stratum (Plot size)		= Total Co	ver	That Are OBL, FACW, or FAC:OO (A/B)
Saping/Shilo Sitatum (Plot size)				Prevalence Index worksheet:
1.				Total % Cover of: Multiply by:
2		·	<u> </u>	OBI species $5 \times 1 = 5$
3				
4				
5.				FAC species $-10$ x 3 = $200$
····	•	- Total Ca	war	FACU species x 4 =
Herb Stratum (Plot size:	· ·· ·· ·	_ = 10tai 00	/VGI	UPL species x 5 =
1. Sumphyothenung encours	10		FAC	Column Totals: $100$ (A) $290$ (B)
2. ATO pecteris animanacia	15		FAC.	Prevalence Index = B/A =
3 <u>Aarostis glanhtea</u>	70	<u> </u>	FAC	Hydrophytic Vegetation Indicators:
4. (Dr.o. ne proskachsis	5		OBL	1 - Rapid Test for Hydrophytic Vegetation
5		<u></u>	<u></u>	2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.				data in Remarks or on a separate sheet)
۹				5 - Wetland Non-Vascular Plants <sup>1</sup>
10		<u></u>		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				Indicators of bydric soil and wetland bydrology must
11	<u> </u>			be present, unless disturbed or problematic.
		_= Total Co	ver	·····
vvoody vine Stratum (Piot size:)				
1				Hydrophytic
2		<u> </u>	<del></del>	Vegetation
		_= Total Co	ver	riesentr tes v No
% Bare Ground in Herb Stratum				
Remarks:				

Sampling Point:

Profile Desc	ription: (Describe	to the dept	th needed to docum	nent the	indicator	or confirm	n the absend	ce of indicators.)
Depth	Matrix		Redox	<u> Feature</u>	s			
(inches)	Color (moist)	%	Color (moist),	%	<u>Type</u> <sup>1</sup>		Texture	Remarks
D-12	10 Y12 5/1	<u>90</u>	<u>540 416.</u>	$\underline{0}$	<u> </u>	$\underline{m}$	<u>32</u>	
12-18	10/123/1	05	2.5 123/6	15	C	M	SL	
1. 1900 - 1. 1900 - 1. 1900 - 1. 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1		- <u> </u>						
					·	•	<u></u>	
							<b></b>	
		+ +						
								•••
'Type: C≃C	oncentration, D=Dep	eletion, RM=	Reduced Matrix, CS	=Covere	d or Coat	ed Sand Gr	rains. "L	ocation: PL=Pore Lining, M=Matrix.
Hyaric Soil	indicators: (Applic	able to all	LKRS, unless other	wise not	ea.)		паса	tors for Problematic Hydric Solis :
Histoso	(A1)		Sandy Redox (S	35) (20)			2 ·	cm Muck (A10)
HISTIC E	pipedon (A2)		Stripped Watrix	(30) lineral (5	1) (02007		Re	eu Parent Watenai (TP2)
	ISUC (AS) on Sulfide (AA)		Loamy Gleved M	ileerar (F Jotriv (F)	) (excer	n mera i)	V	ther (Evaluin in Remarks)
Deplete	d Below Dark Surfac	e (A11)	Depleted Matrix	(F3)	-)		0	and (Explain in Remains)
Thick D	ark Surface (A12)		Redox Dark Sur	face (F6)	)		<sup>3</sup> Indica	ators of hydrophytic vegetation and
Sandy N	Mucky Mineral (S1)		Depleted Dark S	Surface (I	-7)		wet	tland hydrology must be present,
Sandy (	Gleyed Matrix (S4)		Kedox Depressi	ions (F8)			unle	ess disturbed or problematic.
Restrictive	Layer (if present):						[	
Туре:								
Depth (in	ches):						Hydric So	oil Present? Yes <u>/</u> No
Remarks:							3	
	•							
	Hudra s	anil 1	nitoria 1	not.	-			
	nyare .	SON (	TING CONTRACTOR					
	<u> </u>							· · · · · · · · · · · · · · · · · · ·
HYDROLC	GY							
Wetland Hy	drology Indicators:			· · · · · ·				
Primary Indi	cators (minimum of o	one required	i: check all that apply	Ú			<u>Sec</u>	condary Indicators (2 or more required)
Surface	Water (A1)		Water-Stai	ned Leav	/es (89) (	except		Water-Stained Leaves (B9) (MLRA 1, 2,
High W	ater Table (A2)		MLRA 1	1, 2, 4A,	and 4B)			4A, and 4B)
Saturati	ion (A3)		Salt Crust	(B11)				Drainage Patterns (B10)
Water N	/arks (B1)		Aquatic Inv	/ertebrate	es (B13)		_	Dry-Season Water Table (C2)
Sedime	nt Deposits (B2)		Hydrogen 3	Sulfide O	dor (C1)		_	Saturation Visible on Aerial Imagery (C9)
Drift De	posits (B3)		Oxidized R	hizosphe	eres along	Living Roc	ots (C3) 🗹	Geomorphic Position (D2)
Algal M	at or Crust (B4)		Presence of	of Reduce	ed Iron (C	4)		Shallow Aquitard (D3)
Iron De	posits (B5)		Recent Iro	n Reduct	ion in Tille	ed Soils (C6	3)	FAC-Neutral Test (D5)
Surface	Soil Cracks (B6)		Stunted or	Stressed	i Plants (I	01) ( <b>LRR A</b>	) <u> </u>	Raised Ant Mounds (D6) (LRR A)
Inundat	ion Visible on Aerial	Imagery (B	7) Other (Exp	lain in Re	emarks)			Frost-Heave Hummocks (D7)
Sparsel	y Vegetated Concav	e Surface (	B8)					
Field Obse	rvations:		/					· · · · · ·
Surface Wa	ter Present?	/es	No 🟒 Depth (ind	ches):				
Water Table	Present?	/es	No <u> </u>	ches):				1
Saturation F	Present?	res 🗸	No Depth (inc	ches):	$O^n$	Weti	and Hydroic	ogy Present? Yes 🗸 No
(includes ca	pillary fringe)		,	,				
Describe Re	ecorded Data (strean	n gauge, mo	onitoring well, aerial p	photos, p	revious in	spections),	if available:	
Remarks:								
Hud	nhi an in	dimtr	there's a					
	)) vi	$v \sim 10$	~ herester					
WETLAND DETERMINA	TION DATA FOR	M – Western Mou	ntains, Valleys, and Coast Region					
--	--	---	--					
Project/Site: Surth Rightrad	Rixol	City/County: Pann	ivoiton Sampling Date: 0/27/1					
Applicant/Owner: SD DDT			State: Sampling Point: 14					
nvestigator(s): J. RUST, T. Talbi	tzer	Section, Township, Ra	inge: TUP 2'N, Ring 38, Sec 27					
andform (hillslope, terrace, etc.); +0 ( 0	Stope	Local relief (concave,	convex. none): (Or) Caud Slope (%): 2					
Subregion (LRB): MLRA 62	Lat: ¥L	110623	Long: -103, 744/58 Datum DVA-19					
Soil Map Linit Name: Ox distala - Marsh I	max hams. O	-6 % Stores fto	w/an NWI classification: PEMC					
ve climatic / hydrologic conditions on the site t	unical for this time of ve	ar2 Yes V	(If no explain in Remarke)					
	av significantly	disturbod? Are 1	"Normal Circumstances" present2. Yes )					
ve Vegetation, Soil, or Hydrolo	gy significantly	blomatic? (If n	Normal Circumstances present? Tes No					
	gy naturally pro		sever, explain any answers in remains.					
SUMMARY OF FINDINGS - Attach	site map snowing	sampling point i	ocations, transects, important features, etc.					
Hydrophytic Vegetation Present?YesHydric Soil Present?YesWetland Hydrology Present?Yes	No No No	Is the Sampled within a Wetlan	Area nd? Yes <u>No</u> No					
Remarks: Poin-I-lakin in a	small aspen ( Saturated	JOUL. Surpar	age from sumounding orres. The wide high alterns.					
/EGETATION – Use scientific name	es of plants.							
Tree Stratum (Plot size:) 1	Absolute , <u>% Cover</u> 	Dominant Indicator Species? Status FACU	Dominance Test worksheet:           Number of Dominant Species           That Are OBL, FACW, or FAC:					
3	······································	· ······	Total Number of Dominant Species Across All Strata: (B)					
4	, 100	_ = Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)					
1.			Prevalence Index worksheet:					
2			Total % Cover of: Multiply by:					
3	·····		OBL species $10$ $x1 = 10$					
4			FACW species X2 =					
5			FACU species $100$ x4 = 440					
Herb Stratum (Plot size:		_ = Total Cover	UPL species x 5 =					
1 Port COMARSS G.	10%	FACIL	Column Totals: 200 (A) 530 (B)					
2. ( a y LY no hrast ainsis	90%	OBL	Provisional Index - RIA - 2105					
3			Hydrophytic Vegetation Indicators:					
4		·	1 - Rapid Test for Hydrophytic Vegetation					
5			2 - Dominance Test is >50%					
6		·	3 - Prevalence Index is ≤3.01					
7	······	· · · · · · · · · · · · · · · · · · ·	4 - Morphological Adaptations <sup>1</sup> (Provide supporting					
8		- <u></u>	5 - Wettand Non Vascular Planta <sup>1</sup>					
9		• •••••••••••••••••••••••••••••••••••••	Problematic Hydrophytic Venetation <sup>1</sup> (Evolution)					
11	· · · · · · · · · · · · · · · · · · ·	· ······	<sup>1</sup> Indicators of hydric soil and wetland hydroloov must					
····		= Total Cover	be present, unless disturbed or problematic.					
Woody Vine Stratum (Plot size:	)	······································						
1		<u> </u>	Hydrophytic					
2			Vegetation Present? Yes No					
% Bare Ground in Herb Stratum	_	_≃ Total Cover	·····					
Remarks:								
Hydric vibilitation enter	eria nut.							

SOIL						Sampling Point:
Profile Description: (Describe to	o the depth needed	to document the	indicator o	or confirm	the absence	of indicators.)
Depth Matrix		Redox Feature	s			
(inches) Color (moist)	% Color (	moist) %	Type'	Loc <sup>2</sup>	Texture	Remarks
0-2 verelation	<u> </u>					
7-110 10/2211	100			••••••••••••••••••••••••••••••••••••••	SL	
1 20 51 211	97 EVR	1112 2	•	`	$\overline{C(1)}$	<u> </u>
The so of a of the		110 0	· ·····		<i>زيد يعم</i> لين	
	<u> </u>					····
				·······		
<sup>1</sup> Type: C=Concentration D=Deple	tion RM=Reduced	Matrix CS=Covere	d or Coate	 t Sand Gra		ation: PI =Pore   inipg M=Matrix
Hydric Soil Indicators: (Applica	ble to all LRRs, un	less otherwise not	ed.)		Indicato	rs for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sand	y Redox (S5)			2 cm	n Muck (A10)
Histic Epipedon (A2)	Stripp	ed Matrix (S6)			Red	Parent Material (TF2)
Black Histic (A3)	Loam	y Mucky Mineral (F	1) (except	MLRA 1)	Very	Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loan	y Gleyed Matrix (F2	2)		Othe	er (Explain in Remarks)
Depleted Below Dark Surface	(A11) V Deple	eted Matrix (F3)			<sup>3</sup> Indicato	rs of hydronhytic vegetation and
Sandy Mucky Mineral (S1)	Redu	ted Dark Surface (	, =7)		wetlar	nd hydrology must be present
Sandy Gleyed Matrix (S4)	Redo	x Depressions (F8)	.,		unles	s disturbed or problematic.
Restrictive Layer (if present):						
Туре:						1
Depth (inches):					Hydric Soil	Present? Yes 🗹 No
Remarks:			- <del>.</del>			
Hydri (	suil crit	eria n	AIT			
HYDROLOGY						
wetiand Hydrology Indicators:	a servited, sheak a	I that analy			Sacar	den Indicators (2 as more required)
Primary indicators (minimum of or	ie required; check a	(inter Chained Leon			<u>Secon</u>	(dary Indicators (2 or more required)
Surface Water (AT)		Water-Stamed Leav	res (D9) (9) and 48)	cept	VV	AA and AB)
Saturation (A3)		Salt Creet (R11)	anu 40)		D	rainade Patterns (B10)
Water Marks (81)	—	Aquatic Invertebrate	es (B13)		D	ry-Season Water Table (C2)
Sediment Deposits (B2)		Hvdrogen Sulfide C	dor (C1)		\$;	aturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Oxidized Rhizosphe	eres along l	_iving Root	ts (C3) G	eomorphic Position (D2)
Algal Mat or Crust (B4)		Presence of Reduc	ed Iron (C4	)	SI	hallow Aquitard (D3)
Iron Deposits (85)		Recent Iron Reduct	ion in Tilleo	I Soils (C6)	) F/	AC-Neutral Test (D5)
Surface Soil Cracks (B6)		Stunted or Stressed	l Plants (D'	I) (LRR A)	R:	aised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Ir	nagery (B7)	Other (Explain in Re	emarks)		Fr	ost-Heave Hummocks (D7)
Sparsely Vegetated Concave	Surface (B8)					
Field Observations:						
Surface Water Present? Ye	es No	Depth (inches):	2011	-		
Water Table Present? Ye	es 📈 No 🔜	Depth (inches):	RIV R			
Saturation Present? Ye (includes canillary fringe)	es 📈 🛛 No 🔜	Depth (inches):	V	_   Wetla	and Hydrology	/ Present? Yes No
Describe Recorded Data (stream	gauge, monitoring w	ell, aerial photos, p	revious ins	pections), i	if available:	
Remarks: Saturation to	surface	priser W	1 <sub>SH4</sub>	pit o	xwa, bu	it who
Sarry (1	mmunty	typl.				

US Army Corps of Engineers

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WETLAND DETERMINATION		M – Western Mou	ntains, Valleys, a	and Coast Region
Projectusite: South Rochford Roc	a <i>d</i> c	City/County:	inton	Sampling Date: <u>8/27/13</u>
Applicant/Owner: $SDOOT$			State:	Sampling Point: 15
Investigator(s): T. Talbitzer, J. Rus	Ĩ s	Section, Township, Ra	nge: TINO 2N	Phaze Sezz
Landform (hillslone terrace etc.): $\mathcal{D}(2,0,0) = 100-2$	l	l ocal relief (concave	convex none).	Slope (%): 5
Subregion (IRB): MLRA 102-	Lat: 4/4	1025	Long: -102, 73	-7692 Datum: DAIA , 1915
Sail Man Linit Name: Our deshow > Adarsh bid	Villeravas	A-62 dame f	lived of NWA class	sitiantian: NAA
Son wap one name. <u>Coros and provide state</u>	$\mu_{\mu}$			Sincation.
Are climatic / hydrologic conditions on the site typical a	or this time of yea	disturbed 0 And		
Are Vegetation, Soli, or Hydrology	significantly of	disturbed? Ale		ss present? Tes <u>P</u> No
Are vegetation, Soli, or Hydrology	naturatiy pro	prematic? (in the	edeu, explain any an	sweis in Remarks.)
SUMMARY OF FINDINGS – Attach site n	nap showing	sampling point l	ocations, transe	cts, important features, etc.
Hydrophytic Vegetation Present? Yes	No		•	
Hydric Soil Present? Yes	No	within a Wetlar	Area nd? Yes	No /
Wetland Hydrology Present? Yes	<u></u>			
(APLOYOL DO-) OL	unad da	de al unt	lava	
	Y 00.00		e. (	
VEGETATION – Use scientific names of	plants.			
Trac Stratum (Plot cize:	Absolute % Covor	Dominant Indicator	Dominance Test w	vorksheet:
1 P.(10 c AUCA	100	FA(	Number of Dominar	nt Species
2.				
3			Species Across All	Strata: 5 (B)
4,				
		= Total Cover	That Are OBL, FAC	W, or FAC: $40^{-4}$ (A/B)
Sapling/Shrub Stratum (Plot size:)	75	N ENLL	Prevalence Index v	worksheet:
1. Statication Chargeman			Total % Cover	of: Muitiply by:
3	,		OBL species	x1 =
4			FACW species	x2=
5.			FAC species	$\frac{10}{15} \times 3 = \frac{330}{105}$
		= Total Cover	FACU species	$+9$ $\times 4 = 100$
Herb Stratum (Plot size:)	1.05	V TACIA	OPL species	55 x0= 510 m
1. KURDUS DAVINI IDVID	$\frac{10}{20}$			$\frac{0}{2}$ (A) $\frac{0}{2}$ (B)
2. 12050  as  120500  as  120500  as  120500  as  120500 as  120500 as  120500		V FAC	Prevalence In	dex = B/A =
3. THEMAN UNI UNE A CARASES	<u> </u>		Hydrophytic Veget	tation Indicators:
5	·		1 - Rapid Test 1	Toot is > 50%
6			2 - Dominance	lest is $>00\%$
7			4 - Morphologic	cal Adaptations <sup>1</sup> (Provide supporting
8.	<u></u>		data in Rem	arks or on a separate sheet)
9			5 - Wetland No	n-Vascular Plants <sup>1</sup>
10			Problematic Hy	drophytic Vegetation <sup>1</sup> (Explain)
11		· ·	Indicators of hydric	soil and wetland hydrology must disturbed or problematic
Wondy Vine Stratum (Plot size:		= Total Cover	, , , , , , , , , , , , , , , , , , ,	
1.		,	Hydrophytic	
2.			Vegetation	
71.9		= Total Cover	Present?	Yes No
8 Bare Ground in Herb Stratum <u>30 #</u>		-	]	
Remarks:				
Wetland upartation india	CA tors	inat inat		
	n Na hund	A PALI A ROOM	t	

ţ

-

Sampling Point: 15

Profile Description: (Describe to the dept	h needed to document the indicator or con	firm the absence of indicators.)	
Depth <u>Matrix</u>	Redox Features		
(inches) Color (moist) %	<u>Color (moist)</u> <u>%</u> <u>Type<sup>1</sup></u> Loc <sup>2</sup>	<sup>2</sup> <u>Texture</u> <u>Remarks</u>	
12-4_ DYR-212		_ Silty Clark	
		0 - 0	
		<u></u>	
	······································		
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, CS=Covered or Coated Sand	Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators: (Applicable to all L	.RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils':	
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)	
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)	
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA	(TF12)	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)	
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	31	
Thick Dark Surface (A12)	Redox Dark Surface (F6)	Indicators of hydrophytic vegetation and	
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	welland hydrology must be present,	
Bostrictive Laver (if present):	Redux Depressions (Fo)		
Tunar Var V			
Deptn (Incnes):t	······································	Hydric Soli Present? Tes No	
Remarks:		1 3	
Unally to exercise	$1.6$ with $5.4^{\prime\prime}$ Sin	in assumption who - motic	
based on vio	ptothon and his du	10an	
hydrology	etottille and hydrol	lingh	
HYDROLOGY	ptotolik and hydrol	103M	
Wetland Hydrology Indicators:	ptotille and hydro		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required	ptothink and hydro	Secondary Indicators (2 or more required)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required Surface Water (A1)	etothik and hydro check all that apply) Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,	
Most d     M       HYDROLOGY       Wetland Hydrology Indicators:       Primary Indicators (minimum of one required	<u>e tottilka apply)</u> ( <u>check all that apply)</u> ( <u>Water-Stained Leaves (B9) (except</u> (MLRA 1, 2, 4A, and 4B)	Secondary Indicators (2 or more required) — Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
Most d     M       HYDROLOGY       Wetland Hydrology Indicators:       Primary Indicators (minimum of one required	<u>; check all that apply)</u> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)	
Model       Model       Model         HYDROLOGY       HYDROLOGY       Hydrology Indicators:         Primary Indicators (minimum of one required       Surface Water (A1)       High Water Table (A2)         Saturation (A3)       Water Marks (B1)	<u>check all that apply)</u> <u>Water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u>	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)	
Model       Marcel         HYDROLOGY         Hydrology Indicators:         Primary Indicators (minimum of one required         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)	<u>check all that apply)</u> <u>Water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u>	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)	
Methand Hydrology Indicators:         Primary Indicators (minimum of one required	<u>check all that apply)</u> <u>Water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres along Living I</u>	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2)	
Methand Hydrology Indicators:         Primary Indicators (minimum of one required	<u>check all that apply)</u> <u>Water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres along Living I</u> <u>Presence of Reduced Iron (C4)</u>	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)	
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required	<u>check all that apply)</u> <u>water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres along Living I</u> <u>Presence of Reduced Iron (C4)</u> <u>Recent Iron Reduction in Tilled Soils</u>	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     (C6) FAC-Neutral Test (D5)	
Metiand Hydrology Indicators:           Primary Indicators (minimum of one required	<u>check all that apply)</u> <u>water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres along Living I</u> <u>Presence of Reduced Iron (C4)</u> <u>Recent Iron Reduction in Tilled Soils</u> <u>Stunted or Stressed Plants (D1) (LRI</u>	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     (C6) FAC-Neutral Test (D5) R A) Raised Ant Mounds (D6) (LRR A)	
Wetland Hydrology Indicators:           Primary Indicators (minimum of one required	<u>check all that apply)</u> <u>water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres along Living I</u> <u>Presence of Reduced Iron (C4)</u> <u>Recent Iron Reduction in Tilled Soils</u> <u>Stunted or Stressed Plants (D1) (LRI</u> ) <u>Other (Explain in Remarks)</u>	Secondary Indicators (2 or more required)         Water-Stained Leaves (B9) (MLRA 1, 2,         4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Roots (C3)       Geomorphic Position (D2)         Shallow Aquitard (D3)         (C6)       FAC-Neutral Test (D5)         R A)       Raised Ant Mounds (D6) (LRR A)         Frost-Heave Hummocks (D7)	
Methods         Methods           HYDROLOGY         HYDROLOGY           Wetland Hydrology Indicators:         Primary Indicators (minimum of one required	<u>check all that apply)</u> <u>water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living I Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LRI Other (Explain in Remarks) 8)	Secondary Indicators (2 or more required)	
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required	<pre>check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living I Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LRI ) Other (Explain in Remarks) 88)</pre>	Secondary Indicators (2 or more required)         Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Roots (C3)       Geomorphic Position (D2)         Shallow Aquitard (D3)         (C6)       FAC-Neutral Test (D5)         R A)       Raised Ant Mounds (D6) (LRR A)         Frost-Heave Hummocks (D7)	
Methand Hydrology Indicators:         Primary Indicators (minimum of one required         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Surface Soil Cracks (B6)         Inundation Visible on Aerial Imagery (B7         Sparsely Vegetated Concave Surface (E         Field Observations:         Surface Water Present?	Horden Angeler Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)     Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Living I     Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled Soils     Stunted or Stressed Plants (D1) (LRI     Other (Explain in Remarks)     Depth (inches):     Depth (inches):	Secondary Indicators (2 or more required)         Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Roots (C3)       Geomorphic Position (D2)         Shallow Aquitard (D3)         (C6)       FAC-Neutral Test (D5)         R A)       Raised Ant Mounds (D6) (LRR A)         Frost-Heave Hummocks (D7)	
Methand Hydrology Indicators:         Primary Indicators (minimum of one required         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Surface Soil Cracks (B6)         Inundation Visible on Aerial Imagery (B7         Sparsely Vegetated Concave Surface (E         Field Observations:         Surface Water Present?         Yes	<u>check all that apply)</u> <u> <u> <u> </u> <u></u></u></u>	Secondary Indicators (2 or more required)	
Methand Hydrology Indicators:         Primary Indicators (minimum of one required         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Surface Soil Cracks (B6)         Inundation Visible on Aerial Imagery (B7         Sparsely Vegetated Concave Surface (E         Field Observations:         Surface Water Present?         Yes         Nater Table Present?	<u>     check all that apply)     Water-Stained Leaves (B9) (except     MLRA 1, 2, 4A, and 4B)     Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Living I     Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled Soils     Stunted or Stressed Plants (D1) (LRI     Other (Explain in Remarks)     Depth (inches):     Depth (inches):</u>	Secondary Indicators (2 or more required)         Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Roots (C3)       Geomorphic Position (D2)         Shallow Aquitard (D3)         (C6)       FAC-Neutral Test (D5)         R A)       Raised Ant Mounds (D6) (LRR A)         Frost-Heave Hummocks (D7)	
Methand Hydrology Indicators:         Primary Indicators (minimum of one required	g + ch + ch       hight with the second	Secondary Indicators (2 or more required)	
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required	Check all that apply)      Water-Stained Leaves (B9) (except     MLRA 1, 2, 4A, and 4B)      Salt Crust (B11)      Aquatic Invertebrates (B13)      Hydrogen Sulfide Odor (C1)      Oxidized Rhizospheres along Living I      Presence of Reduced Iron (C4)      Recent Iron Reduction in Tilled Soils      Stunted or Stressed Plants (D1) (LRI )     Other (Explain in Remarks)      Depth (inches):     Depth (inches):     Depth (inches):     Depth (inches):     Depth (inches):     Depth (inches):     Sume of the section of the secc	Secondary Indicators (2 or more required)     Geomorphic Position (D2)     Shallow Aquitard (D3)     (C6) FAC-Neutral Test (D5)     RA) Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)	
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required	g + ch + bh       (1)       (1)       (1)	Secondary Indicators (2 or more required)         Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Roots (C3)       Geomorphic Position (D2)         Shallow Aquitard (D3)         (C6)       FAC-Neutral Test (D5)         RA)       Raised Ant Mounds (D6) (LRR A)         Frost-Heave Hummocks (D7)	
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required	g + ch + bh       (1)       (1)       (1)           Water-Stained Leaves (B9) (except          MLRA 1, 2, 4A, and 4B)          Salt Crust (B11)          Aquatic Invertebrates (B13)          Hydrogen Sulfide Odor (C1)          Oxidized Rhizospheres along Living I          Presence of Reduced Iron (C4)          Recent Iron Reduction in Tilled Soils          Stunted or Stressed Plants (D1) (LRI          Other (Explain in Remarks)          Depth (inches):          Depth (inches):          Depth (inches):          Depth (inches):          Depth (inches):	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     (C6) FAC-Neutral Test (D5) R A) Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)  Vetland Hydrology Present? Yes No	
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required	gtothin       Anydrol         gtothin       Anydrol         gtothin       Anydrol         gtothin       Anydrol         gtothin       Mater-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)       MLRA 1, 2, 4A, and 4B)	Secondary Indicators (2 or more required)         Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Roots (C3)       Geomorphic Position (D2)         Shallow Aquitard (D3)         (C6)       FAC-Neutral Test (D5)         R A)       Raised Ant Mounds (D6) (LRR A)         Frost-Heave Hummocks (D7)	
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required	<u>check all that apply</u> <u>water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living I Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LRI Other (Explain in Remarks) B) Depth (inches): N Depth (inches): N nitoring well, aerial photos, previous inspection MALRA 1, 2, 4A, and 4B) <u> Mathematical Stressed Plants</u> Mathematical Stressed Plants (D1) (LRI Mathematical		
Wassed       Model       Model         HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required	get and hydrol         get and hydrol <thg and="" hydro<="" t="" th=""> <th and="" hydr<="" td=""><td>Secondary Indicators (2 or more required)        </td></th></thg>	<td>Secondary Indicators (2 or more required)        </td>	Secondary Indicators (2 or more required)

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# WETLAND DETERMINATION DATA FORM -- Western Mountains, Valleys, and Coast Region

Project/Site: Solath Road Road	City/County: Porr	Sampling Date: 8127/13
Applicant/Owner: SD DOT	, ,	State: SD Sampling Point: 16
Investigator(s); (). RUST, T. Trilbitstol	Section, Township, Ra	nge: TINIO 2N, RMASE, Sec. 27
andform (billslane terrace etc.): Flobd Dain	Local relief (concave	copyex none): COMPANI Slope (%):
Subrasian (IBB): MI D/A 107	Lat: 44, 108,3010	Long: -103, 73, 7544/ Datum: DAIA-198
Sall Man Linit Nama (6rd Bton - Marchamak, 10	allone D-10% slopels. \$	-loud and NNAI classification: ND
Soli Map Unit Name. $\sqrt{D \cdot (X \cup U)} = \frac{1}{10} \sqrt{\frac{1}{1000} - \frac{1}{1000}}$		(If no, explain in Remarke )
Are climatic / hydrologic conditions on the site typical for the	is time of year? Yes No	(Name) Circumstances" necest? Vec
Are Vegetation, Soli, or Hydrology	significantly disturbed? Are	Normal Circumstances present? Yes No
Are Vegetation, Soil, or Hydrology	naturally problematic? (If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No Is the Sampled	Area
Wetland Hydrology Present?	No within a Wetlan	nd? Yes <u>No</u> No
Remarks:	in the during	in latitud la suid an
Point Taken Mar Tu	a oren side o	in Wathing Downdrang.
	MOTO LI	
VEGETATION – Use scientific names of pla	nts.	Dominance Test worksheat
Tree Stratum (Plot size:)	<u>% Cover Species?</u> Status	Number of Dominant Species
1. Prov chilica	15 Y FAC	That Are OBL, FACW, or FAC:
2		Total Number of Dominant
4		Species Across All Strata: (B)
Saoling/Shrub Stratum (Plot size: )	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
1 MV AMAGOUNTS	TOS Y FACW	Prevalence index worksheet:
2. 5/112 1150000	25 $7$ $FACW$	Total % Cover of: Multiply by:
3. Postulo aunila	D N OBL	OBL species $10$ $x_1 = 10$
4	· · · · · · · · · · · · · · · · · · ·	FACW species $10$ $x^2 = 150$
5		FAC species $4 =$
	= Total Cover	UPI species x5=
Herb Stratum (Plot size:)	100 Y	Column Totals: $115$ (A) $135$ (B)
2		Prevalence Index = $B/A = 1, 1-7$
3	·····	Hydrophytic Vegetation Indicators:
4		1 - Rapid Test for Hydrophytic Vegetation
5		2 - Dominance Test is >50%
6		✓ 3 - Prevalence Index is ≤3.01
7		4 - Morphological Adaptations' (Provide supporting
8		5 - Wetland Non-Vascular Plants <sup>1</sup>
¥	······	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		,
1		Hydrophytic
2		Vegetation Present? Yes No
% Bare Ground in Herb Stratum	= Total Cover	
Remarks: (host a des addition)	duation lunarie La	survival. The way was a fair
C THURSDAY TO MOTIONING T	A DURING SUMEUS IN	and the man all a
or mache sheers in a	w mygin an 1	

US Army Corps of Engineers

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Sampling	Point:		V

	eded to document the indicator or confin	m the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) % Co	plor (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
D-6 254R 116		SL
	······································	
······································		<u></u>
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Redu	ced Matrix, CS=Covered or Coated Sand G	Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs	, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) 5	andy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2) S	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3) L	oamy Mucky Mineral (F1) (except MLRA 1	) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4) L	oamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) E	Depleted Matrix (F3)	
Thick Dark Surface (A12) F	Redox Dark Surface (F6)	Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) E	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Type:		
Depth (incres):		Hydric Soil Present? Yes V No No
Remarks:		
time through the million	cove have of all't so	Autobas of soils
Unational and and	(or university and - Ste	$\frac{1}{2}\left( \sum_{i=1}^{n} \left( \sum_{i=1}^{$
Degiver 1	reduce bosen on ivity	$\sqrt{0.0000} + 0.01 - 300 CMS$
HYDROLOGY		<u> </u>
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required: che		
Finally mucators trimantent of one required, che	ok all that anniv)	Secondary Indicators (2 or more required)
Surface Water (Ad)	ck all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	<u>ck all that apply)</u> Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
Surface Water (A1) High Water Table (A2)	<pre>ck all that appiy) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) </pre>	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Surface Water (A1) High Water Table (A2) Saturation (A3)	<u>ck all that apply)</u> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	<u>Secondary Indicators (2 or more required)</u> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	ck all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	<u>Secondary Indicators (2 or more required)</u> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	<u>ck all that apply</u> <u>Water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u>	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> </ul>	<u>ck all that apply</u> <u>Water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres along Living Ro</u>	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) oots (C3) Geomorphic Position (D2)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> </ul>	<u>ck all that apply</u> <u>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) </u>	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) Difference of the set of the se
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	<u>ck all that apply</u> <u>Water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres along Living Ro</u> <u>Presence of Reduced Iron (C4)</u> <u>Recent Iron Reduction in Tilled Soils (C</u>	Secondary Indicators (2 or more required)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	<u>ck all that apply</u> <u>Water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> <u>Salt Crust (B11)</u> <u>Aquatic Invertebrates (B13)</u> <u>Hydrogen Sulfide Odor (C1)</u> <u>Oxidized Rhizospheres along Living Ro</u> <u>Presence of Reduced Iron (C4)</u> <u>Recent Iron Reduction in Tilled Soils (C</u> <u>Stunted or Stressed Plants (D1) (LRR 4</u>	Secondary Indicators (2 or more required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> </ul>	<u>ck all that appiy</u> <u>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR 4 Other (Explain in Remarks) </u>	Secondary Indicators (2 or more required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> </ul>	<u>ck all that apply</u> <u>Water-Stained Leaves (B9) (except</u> <u>MLRA 1, 2, 4A, and 4B)</u> Salt Crust (B11) <u>Aquatic Invertebrates (B13)</u> Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR 4 Other (Explain in Remarks)	Secondary Indicators (2 or more required)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> </ul>	ck all that apply)         Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living Ro         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (C         Stunted or Stressed Plants (D1) (LRR A         Other (Explain in Remarks)	Secondary Indicators (2 or more required)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No	ck all that apply)         Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living Ro         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (C         Stunted or Stressed Plants (D1) (LRR A         Other (Explain in Remarks)	Secondary Indicators (2 or more required)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Water Table Present? Yes No	ck all that apply)         Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living Ro         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (C         Stunted or Stressed Plants (D1) (LRR 4         Other (Explain in Remarks)	Secondary Indicators (2 or more required)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? YesNo Water Table Present? YesNo Saturation Present? YesNo	ck all that apply)         Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living Ro         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (C         Stunted or Stressed Plants (D1) (LRR 4         Other (Explain in Remarks)         Depth (inches):         Depth (inches):         Depth (inches):	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Stallow Aquitard (D3) Shallow Aquitard (D3) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) tland Hydrology Present? Yes No
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? YesNo Water Table Present? YesNo Saturation Present? YesNo Water Table Present? YesNo Uncludes capillary fringe)	ck all that apply)         Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living Ro         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (C         Stunted or Stressed Plants (D1) (LRR A         Other (Explain in Remarks)         Depth (inches):         Depth (inches):         Depth (inches):	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)     Sots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     Shallow Aquitard (D3)     FAC-Neutral Test (D5)     A) Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>Field Observations:</li> <li>Surface Water Present? Yes No</li> <li>Saturation Present? Yes No</li> </ul>	ck all that apply)         Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living Ro         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (C         Stunted or Stressed Plants (D1) (LRR A         Other (Explain in Remarks)         Depth (inches):         Depth (inches):         Depth (inches):         Wet         ng well, aerial photos, previous inspections)	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)     Sots (C3) Geomorphic Position (D2)     Shallow Aquitard (D3)     FAC-Neutral Test (D5)     A) Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)
Surface Water (A1)     High Water Table (A2)     Saturation (A3)     Water Marks (B1)     Sediment Deposits (B2)     Drift Deposits (B3)     Algal Mat or Crust (B4)     Iron Deposits (B5)     Surface Soil Cracks (B6)     Inundation Visible on Aerial Imagery (B7)     Sparsely Vegetated Concave Surface (B8)  Field Observations: Surface Water Present? Yes No Water Table Present? Yes No Saturation Present? Yes No Saturati	ck all that apply)         Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living Ro         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (C         Stunted or Stressed Plants (D1) (LRR 4         Other (Explain in Remarks)         Depth (inches):         Depth (inches):         Depth (inches):         Wet	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) bots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) tland Hydrology Present? Yes No h, if available:
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Water Table Present? Yes No Water Table Present? Yes No Saturation Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, monitori	ck all that apply)         Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living Ro         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (C         Stunted or Stressed Plants (D1) (LRR A         Other (Explain in Remarks)         Depth (inches):         Depth (inches):         Depth (inches):         Wet	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)     Saturation Visible on Aerial Imagery (D9)     Saturation Visible on Aerial Imagery
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Saturation Present? Yes No Saturation Present? Yes No Cincludes capillary fringe) Describe Recorded Data (stream gauge, monitori Remarks: Wetland Mudboloau	ck all that apply)         Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living Ro         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (C         Stunted or Stressed Plants (D1) (LRR A         Other (Explain in Remarks)         Depth (inches):         Depth (inches):         Depth (inches):         Depth (inches):         Network (inches):	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) oots (C3) Shallow Aquitard (D3) Shallow Aquitard (D3) Shallow Aquitard (D3) Shallow Aquitard (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
	ck all that apply)         Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living Ro         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (C         Stunted or Stressed Plants (D1) (LRR 4         Other (Explain in Remarks)         Depth (inches):         Depth (inches):         Depth (inches):         Depth (inches):         Network (inches):         Depth (inches):         Depth (inches):         Other (Explain A photos, previous inspections)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) oots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Surface Water (A1)High Water Table (A2)Saturation (A3)Water Marks (B1)Sediment Deposits (B2)Drift Deposits (B3)Algal Mat or Crust (B4)Iron Deposits (B5)Surface Soil Cracks (B6)Inundation Visible on Aerial Imagery (B7)Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? YesNoNoNaturation Present? YesNoNoNo	ck all that apply)         Water-Stained Leaves (B9) (except         MLRA 1, 2, 4A, and 4B)         Salt Crust (B11)         Aquatic Invertebrates (B13)         Hydrogen Sulfide Odor (C1)         Oxidized Rhizospheres along Living Ro         Presence of Reduced Iron (C4)         Recent Iron Reduction in Tilled Soils (C         Stunted or Stressed Plants (D1) (LRR /         Other (Explain in Remarks)         Depth (inches):	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) oots (C3) Shallow Aquitard (D3) Shallow Aquitard (D3) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

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WETLAND DETERMINATION DA	ATA FORM	M – Western Moui	ntains, Valleys, and Coast Region
Project/Site: South Rochford Roa	<u>d.</u>	City/County: PLNY	1119 ton Sampling Date: 8/27/13
Applicant/Owner: <u>SDDGT</u>			State: <u>SD</u> Sampling Point: <u>17</u>
Investigator(s): J. RUST, T. Talbitzer		Section, Township, Rar	nge: TWD ZNI RNG 3EI SCZ7
Landform (hillslope, terrace, etc.): Floodplain		Local relief (concave, c	convex, none): COMCAUL Slope (%): 2
Subregion (IRR): NALIZA 102	Lat: 44	1031	Long: -103, 7-24/1/23 Datum: ONA-1982
Soil Man Linit Name Or district - A dra KCW 2005K - 1	<u>-</u>	)-10% Storals I	WY/0/ NWI classification: NA
Are climatic / bydrologic conditions on the site typical for th	is time of ve	ar2 Yes I No	(If no, explain in Remarks.)
Are Venetation Soil or Hydrology	eignificently	disturbed? Are "	
Are Vegetation, Soil, or Hydrology	naturally pro	blematic? (If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing	sampling point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes			
Hydric Soil Present? Yes V	No 0/	Is the Sampled	Area
Wetland Hydrology Present? Yes Ves	۰o ٥٧	within a Wetlan	Id? Yes V. No
Remarks: Point taken on edge of a channelizes shorting down	Netlanc Striam	t bourdang. (N) and ber	Wotland homows + Fen characlenstics
VEGETATION – Use scientific names of plan	nts.	Ŷ	
	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum         (Plot size:)           1)	<u>% Cover</u>	<u>Species?</u> <u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
23.			Total Number of Dominant 2 (B)
4		= Total Cover	Percent of Dominant Species 50 1/6 (A/D)
Sapling/Shrub Stratum (Plot size:)			Provalence Index worksheet:
1. Populus the multides	<u>_ 30</u>	FACU	Total % Cover of: Multiply by:
2. Salix dividor		<u> </u>	OBL species x1 =
3			FACW species $70 \times 2 = 140$
4,		<u> </u>	FAC species $10 \times 3 = 30$
5			FACU species $30 \times 4 = 120$
Herb Stratum (Plot size: )		= Total Cover	UPL species x 5 =
1. Junius sp	15	<u> </u>	Column Totals: $1/0$ (A) $290$ (B)
2. Tridolluvn yopens	<u> </u>	$\underline{N}$ FAC	Prevalence index = B/A = $2.6$
3			Hydrophytic Vegetation Indicators:
4			1 - Rapid Test for Hydrophytic Vegetation
5		<u> </u>	2 - Dominance Test is >50%
6			V 3 - Prevalence Index is ≤3.0'
8.			4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants
10			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		= Total Cover	be present, unless disturbed of problematic.
<u>vvoody vine Stratum</u> (Pior Size:)			1 bedravsky sta
2			Vegetation
		Total Cover	Present? Yes <u>V</u> No
% Bare Ground in Herb Stratum5		• ··· ••·•	
Remarks: Small, sapling asp	(W)A	n plot ovac	. Not able to identify
Juneur as no seed	lund	present. L	Kuly FACW or Welter.

US Army Corps of Engineers

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Western Mountains, Valleys, and Coast - Version 2.0

Sa	moli	ina F	Point	:

SOIL			Sampling Point:
Profile Description: (Describe to the de	epth needed to document the indicator or c	onfirm the absence	of indicators.)
Depth <u>Matrix</u>	Redox Features		<b>_</b> /
(inches) Color (moist) %	_ <u>Color (moist) % Type' La</u>	<u>iexture</u>	Remarks
0-4 1V12 416 101	P <u>xxx</u>	<u> </u>	
-16 10 VR3/1 80	<u>BYR 410 20</u>	<u>S1</u>	
10-70 10 VR 2/1 50	EVR416 20	SCL-	
			·····
		2	
Type: C=Concentration, D=Depletion, R	M=Reduced Matrix, US=Covered or Coated Sa	ind Grains. Loo	cation: PL=Pore Lining, M=Matrix.
Hydric Son Indicators. (Applicable to a	Oracle Deday (05)	and acc	- Musk (A40)
HISTOSOL (A1)	Sandy Redox (S5) Strippod Matrix (S6)	Z Cr 2 dr	El Wiuck (ATU) Parent Material (TE2)
Plack Histic (A3)	Loamy Mucky Mineral (E1) (excent MI	<b>RA1</b> ) Ven	/ Spallow Dark Surface (TE12)
Hydrogen Sulfide (A4)	Loamy Gleved Matrix (F2)	Oth	er (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)		
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicato	rs of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetla	nd hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unles	s disturbed or problematic.
Restrictive Layer (if present):			·
Туре:			
Depth (inches):		Hydric Soil	Present? Yes V No
Remarks:			
	,		
Wetland Hydrology Indicators:			
Primary Indicators (minimum of one requi	red: check all that apply)	Seco	ndary Indicators (2 or more required)
Surface Water (A1)	Water-Staiped Leaves (B9) (exce	nt V	Vater-Stained Leaves (B9) (MLRA 1, 2,
High Mater Table (A2)	MI RA 1 2 4A and 4B)	·	4A and 4B)
Saturation (A3)	Salt Crest (B11)	F	prainage Patterns (B10)
Water Marks (81)	Aquatic Invertebrates (B13)	= 	rundge Fullente (BTO)
Sediment Denosits (B2)	Hydrogen Sulfde Odor (C1)	5	aturation Visible on Aerial Imagery (C9)
Drift Denosits (B3)	Ovidized Rhizospheres along Livit	na Roots (C3)	Reamarphic Position (D2)
Algel Mat or Crust (84)	Presence of Reduced Iron (C4)	.g (0000 (000)	hallow Aguitard (D3)
Iron Deposite (B5)	Becent Iron Reduction in Tilled Sc	ils (C6) E	AC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (I	<b>BRA</b> ) F	aised Ant Mounds (D6) (I RR A)
Inundation Visible on Aerial Imagery	(B7) Other (Explain in Remarks)	F	rost-Heave Hummocks (D7)
Sparsely Venetated Concave Surface		·	
Field Observations:	/		
Surface Water Present?	No Depth (inches): 21		
	No Depth (inches):		
Water Table Present? Yes	No Depth (incres):		· Duran 12 Van June Na
(includes canillary fringe)	No Deptn (inches);	wetland Hydrolog	y Present? res <u>v</u> No
Describe Recorded Data (stream gauge,	monitoring well, aerial photos, previous inspec	tions), if available:	
Remarks:			
Mutand hinduite	on relation where At		
MARIANCE INJUNDIC	By unitria participation		
	-		

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region
Project/Site: Burn Row Ford Road City/County: Pennivation Sampling Date: X127/139
Applicant/Owner: <u>SD001</u> State: <u>SD</u> Sampling Point: <u> 8</u>
nvestigator(s): <u>JiRUST, T. TALbitzer</u> Section, Township, Range: <u>Twp DN 12ng3E &amp; 27</u>
andform (hillslope, terrace, etc.): <u>+horuplain</u> Local relief (concave, convex, none): <u>Concau</u> Slope (%): <u>Z</u>
Subregion (LRR): MLRA 62 Lat: 44, 11079 Long: -103.734255 Datum: D-NA 1973
Soil Map Unit Name: Ordiston - Marshprox Wams, D.67. gops, fluxing NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes 📝 No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes 📈 No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes V No No
Hydric Soil Present? Yes No Is the Sampled Area
Welland Hydrology Present? Yes No V
Remarks: Point taken on higher terrace from wetland area.

# **VEGETATION – Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species
1.				That Are OBL, FACW, or FAC: (A)
2.				Tatal March and Dambard
3				Species Across All Strata:
×				
4				Percent of Dominant Species
Santing/Shrub Stratum (Plot size:			iver	That Are OBL, FACW, or FAC:/*(A/B)
		V	FARIN	Prevalence Index worksheet:
1. Saox anappearanter			1 3500 9	Total % Cover of: Multiply by:
2			<u> </u>	OBL species x1 =
3	<b>.</b>		<del></del>	FACW species 10 $x_2 = 20$
4				$FAC masing = \frac{1}{2} + \frac$
5	<u> </u>			$\frac{1}{2} = \frac{1}{2} = \frac{1}$
		= Total Co	ver	FACU species $x 4 = 120$
Herb Stratum (Plot size:)	<u></u>			UPL species x 5 =
1. Phulum protense		_Y	FAC	Column Totals: $(A) = 350$ (B)
2 Sphonast Conordinsis	15	N	FACIA	37
3 Brownik Ikanonic	2,4	$\overline{\checkmark}$	FAL	Prevalence index = B/A =
Charles Market		<u>/</u>	TIM (	Hydrophytic vegetation indicators:
4. 1 <u>V17001200</u> V2012003	- <u></u>		PAC	1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7		<u> </u>	<u></u>	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants <sup>1</sup>
10				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10				Indicators of hydric soil and wetland hydrology must
13				be present, unless disturbed or problematic.
Maadu Vina Stratum (Plat aiza:		= Total Co	ver	
vyoody vine Stratum (Flot size)				
1				Hydrophytic
2.	<u> </u>			Present? Yes No
		_= Total Co	ver	
% Bare Ground in Herb Stratum				<u> </u>
Remarks:	anar	sit in	<i>ava</i> hat	+ disturbed
HEAVING OF MENT	an ar 1 an 1	(J~ 1)		Synthesis and the second second second

SOIL	
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Profile Descriptio	n: (Describe t	o the depth	needed to docu	ment the in	dicator	or confirm	the absence of	of indicators.)
Depth	Matrix		Redo	x Features				
<u>(inches)</u> C	olor (moist)	<u> </u>	Color (moist)		Type'	Loc	<u>Texture</u>	Remarks
<u>0-11/ 101</u>	Juritz-	TÓN -	acra th	- 6×*)				
16-20 10	12 413	<u></u>	10 412 4/10	<u>6 h</u>			<u>SL</u>	
	:							
<u> </u>		<u></u>						· · · · · · · · · · · · · · · · · · ·
					<u> </u>	<u></u>		
			· · ·	•				
<u> </u>								
							<u></u>	
<sup>1</sup> Type: C=Concen	tration, D=Depl	etion, RM=F	Reduced Matrix, C	S=Covered	or Coate	d Sand Gra	ains. <sup>2</sup> Loca	ation: PL=Pore Lining, M=Matrix.
Hydric Soil Indica	ators: (Applica	able to all L	RRs, unless othe	rwise noted	1.)		Indicator	rs for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)			Sandy Redox (	S5)			2 cm	Muck (A10)
Histic Epipedo	on (A2)	-	Stripped Matrix	(S6)			Red I	Parent Material (TF2)
Black Histic (A	43)	_	Loamy Mucky I	Mineral (F1)	(except	t MLRA 1)	Very	Shallow Dark Surface (TF12)
Hydrogen Sul	fide (A4)		Loamy Gleyed	Matrix (F2)			Othe	r (Explain in Remarks)
Depleted Belo	w Dark Surface	e (A11) _	_ Depleted Matrix Redex Dark St	x (F3) uface (E6)			<sup>3</sup> Indicator	a of hydrophydia yspatation and
TRICK Dark St	Mineral (S1)		Redux Dark St	Surface (FO)	<b>`</b>		muicator	s of hydrology must be present
Sandy Mucky	Matrix (S4)		Redox Depress	sions (F8)	,		unless	s disturbed or problematic.
Restrictive Layer	(if present):		· · · · · · · · · · · · · · · · ·		<u> </u>			
Type:								
Depth (inches):							Hydric Soil I	Present? Yes No
Remarks:					<u></u>		l	
Mudic	Oml /	ind prin	$\gamma$ int	VA C				
France	our c	143 S. A. D		9.9 March 1	,			
HYDROLOGY								
Wetland Hydrolo	gy Indicators:							
Primary Indicators	(minimum of o	ne required;	check all that app	ly}			<u>Second</u>	dary Indicators (2 or more required)
Surface Wate	г (A1)		Water-Sta	ined Leave	s (89) ( <b>e</b>	xcept	Wa	ater-Stained Leaves (B9) (MLRA 1, 2,
High Water Tag	able (A2)		MLRA	1, 2, 4A, ar	id 4B)			4A, and 4B)
Saturation (A3	3)		Salt Crust	(B11)			Dr	ainage Patterns (B10)
Water Marks	(B1)		Aquatic In	vertebrates	(B13)		Dr	y-Season Water Table (C2)
Sediment Dep	oosits (B2)		Hydrogen	Sulfide Odd	or (C1)		Sa	aturation Visible on Aerial Imagery (C9)
Drift Deposits	(B3)		Oxidized I	Rhizosphere	es along	Living Root	is (C3) Ge	eomorphic Position (D2)
Algal Mat or C	Crust (B4)		Presence	of Reduced	Iron (C4	4)	Sh	nallow Aquitard (D3)
Iron Deposits	(B5)		Recent Irc	on Reduction	n in Tille	d Soils (C6)	) FA	C-Neutral Test (D5)
Surface Soil C	Cracks (B6)		Stunted o	r Stressed F	Plants (D	1) (LRR A)	Ra	aised Ant Mounds (D6) (LRR A)
Inundation Vis	sible on Aerial li	magery (B7)	Other (Ex	plain in Ren	narks)		Fro	ost-Heave Hummocks (D7)
Sparsely Veg	etated Concave	Surface (B	3)					
Field Observatio	ns:							
Surface Water Pre	esent? Y	es N	o <u>V   </u> Depth (ir	iches):				/
Water Table Pres	ent? Y	es N	o Depth (ir	iches):				
Saturation Presen	t? Yi	es N	o <u> </u>	iches):		Wetla	nd Hydrology	Present? Yes No
Describe Recorde	d Data (stream	gauge, mor	itoring well, aerial	photos, pre-	vious ins	pections), it	f available:	
			<del>-</del> · · · ·					
Remarks:								
N.C.	) huddolu	AN 19	Witchers-	on 2 m				
5 VI	17	J]						

### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Sattly Rochford Roa	City/Co	inty: Penni	nation	Sampling Date: 8/27/13
Applicant/Owper SDD0T	State: SD	Sampling Point		
Investigator(s): L. RUST, T. Tulbitzer	e TUD 2 N. 1	ena 3E Se22		
Landform (hillslong terrace atc.): Flood valai K	Local n	elief (concave, co	ever none): (all or	VIC Slope (%): 2
Cubranian (Innisippe, tenace, etc.). <u>TEXICIPUSACE</u>	Lat UL INE			537 Dotum DAIA 1982
Subregion (LRR): IVILE F. U.S.	$\underline{} Lat. \underline{} A (1,1) \underline{} A$	1 <u>r ro</u>	.ong: <u>(00++00</u> ,	JOI Datum Marine 170
	MM2, 0-0 16	<u>&gt;30712, 500</u>	NVVI Classific	ation: <u>/////</u>
Are climatic / hydrologic conditions on the site typical for thi	s time of year? Yes	s <u> </u>	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbe	id? Are "No	ormal Circumstances" p	present? Yes <u></u> No
Are Vegetation, Soil, or Hydrology r	naturally problemati	c? (If need	led, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing samp	oling point loc	ations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes Veg N		s the Sampled A	rea	
Wetland Hydrology Present?		within a Wetland	? Yes	No
Remarks:		¢		<i>0 11 1</i>
Point taken in open.	forrsta a	rea in	middle o	t withand.
NO VISIBLE CARINAL II	N JUIE V	JAHONA	ana.	
VEGETATION – Use scientific names of plan	its.			
	Absolute Domir	nant Indicator	Dominance Test work	sheet:
Tree Stratum (Plot size:)		EA / 1	Number of Dominant Sp	pecies LL (A)
2 Yun - HOVER	$-\frac{1}{20}$	FAC	That Ale Obc, FAGW, I	(A)
3			Total Number of Domin	ant 5 (B)
4.		`	opecies Across Air otra	
	= = Tota	l Cover	Percent of Dominant Sp That Are OBL, FACW, o	pecies or FAC: <u>807</u> 0 (A/B)
Sapling/Shrub Stratum (Plot size:)	a a	FACINI	Prevalence Index wor	ksheet:
2 Sally discular	$-\frac{10}{10}$ $\overline{}$		Total % Cover of:	Multiply by:
3 Rotala punija	$\frac{1}{20}$	DRL I	OBL species 20	x1=_ <u>20</u>
· Picka alauca	5 · N	FAC	FACW species	$x_2 = 100$
5. Salix omundaloides	16 N	FACW	FAC species <u>70</u>	$\sum x^3 = \frac{w_1^2 O}{v_1 O}$
	 ≂ Tota	I Cover	FACU species	×4=
Herb Stratum (Plot size:)	at V		UPL species	$x_{5} = \frac{x_{5}}{25}$
1. Juncus Sp	$-\frac{90}{5}$		Column Totals: <u>110</u>	(A) (B)
2. FOR PAINSTYLS	<u> </u>	<u>- +-AC</u>	Prevalence Index	= B/A =
3			Hydrophytic Vegetatic	on Indicators:
4		— — —   .	1 - Rapid Test for H	lydrophytic Vegetation
5		)	2 - Dominance Tes	t is >50%
7		<u>  ^</u>	3 - Prévalence Inde	ex is ≤3.0°
8			data in Remarks	s or on a separate sheet)
9.		<u>.</u>	5 - Wetland Non-Va	ascular Plants <sup>1</sup>
10			Problematic Hydroj	phytic Vegetation <sup>1</sup> (Explain)
11			indicators of hydric soil	I and wetland hydrology must
	= Total	Cover	be present, unless distu	irbed or problematic.
Woody Vine Stratum (Plot size:)				
1		[ ]	Hydrophytic Vegetation	
2,	······································		vegetation Present? Yes	s 🔨 No
% Bare Ground in Herb Stratum	= I otal	Cover		
Remarks:		l		
Hudric Vioxtation orese	nt.			
	-			

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SOIL

		:
	,	
N		10
SOIL		Sampling Point: <u>l I</u>
Profile Description: (Describe to the depth needed	d to document the indicator or confirm	the absence of indicators.)
Depth <u>Matrix</u> (inches) Color (moist) % Color	Redox Features	Texture Remarks
<u>Anteries</u> <u>Color (most)</u> <u>v</u> <u>color</u>	<u>(1033)</u>	
$\frac{1}{2}$ $\frac{1}$		<u> </u>
	······	
		······································
Type: C=Concentration, D=Depletion, RM=Reduced	Matrix, CS=Covered or Coated Sand Gra	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Sanc	v Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	ped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3) Loan	ny Mucky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4) Loan	ny Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depl	eted Matrix (F3)	3
Thick Dark Surface (A12) Redo	ox Dark Surface (F6)	"Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Depi	eled Dark Sunace (F7)	unless disturbed or problematic
Restrictive Laver (if present):		
Depth (inches):		Hydric Soil Present? Yes V No
Remarks:	·······	1
Difficult to yet soil (	s-(- invinctate) i	John at e
ASSING. 1	hudre costs have	id on ope sweets +
HYDROLOGY		inna leson
Wetland Hydrology Indicators:	NAC	A CONTRACTOR
Primary Indicators (minimum of one required; check a	ll that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Sait Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Living Root	is (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Filled Solls (C6)	) FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRK A)	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Conceve Surface (B8)	Other (Explain in Remarks)	
Sparsely vegetaled Concave Surface (Bo)		
Surface Water Present? Ves No	Depth (inches):	pt - 14
Mater Table Present? Yes No	Depth (inches):	10 C
Saturation Present? Vac No	Depth (inches):	Ind Hydrology Present? Yes / No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring v	vell, aerial photos, previous inspections), i	f available:
Remarks:		
Wittend hundrident	ongnt	
I inverse interesting	See Construction .	
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#### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Sourth Ruchfor	d Road	city/County: Periningto	Sampling Date: <u>8 27 13</u>
Applicant/Owner: <u>SDDD</u>		State	e: SD Sampling Point:
Investigator(s): J. 124ST, T.	Talbitzer	_ Section, Township, Range: Twy	21/TZng. 3E, Sec 22
Landform (hillslope, terrace, etc.):		_ Local relief (concave, convex, non	e): <u>CONCAUL</u> Slope (%): <u>2</u>
Subregion (LRR): MLKA 42	Lat:	4.116054 Long	<u>3.735901</u> Datum: <u>P_NA_P18</u> 3
Soil Map Unit Name: COV diston -1	Mansh brook loa	ms, 6-6% slopes, final	NWI classification: <u>NA</u>
Are climatic / hydrologic conditions on the	site typical for this time of y	vear? Yes No (If no	o, explain in Remarks.)
Are Vegetation, Soil, or Hy	drology significant	y disturbed? Are "Normal Circ	cumstances" present? Yes <u>//</u> No
Are Vegetation, Soil, or Hy	drology naturally p	roblematic? (If needed, expla	in any answers in Remarks.)
SUMMARY OF FINDINGS - Atta	ach site map showin	g sampling point locations	transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes         No           Yes         No           Yes         No	Is the Sampled Area within a Wetland?	Yes No
Remarks: Puint taken	on edge al	shrub community	toward road

#### **VEGETATION – Use scientific names of plants.**

	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	<u>Species?</u> Status	Number of Dominant Species (
1			That Are OBL, FACW, or FAC: (A)
2.			
3	·	<u> </u>	Species Aeroso All Strata:
	. <u></u>		Species Across An Strata. (B)
4			Percent of Dominant Species 50
		= Total Cover	That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
1,			Total % Cover of: Multiply by:
2.			OBL species x1 =
		•	
4.			FACW species $\underline{\qquad}$ $x = \underline{\qquad}$
5			FAC species $2 - 0$ x 3 = $0 - 0$
		- Total Cavor	FACU species $4 = 300$
Herh Stratum (Plot size: )	•		UPL species x 5 =
1 TRUNY ACUM ASSIMAL	40	V FACLA	Column Totals: $95$ (A) $360$ (B)
n Treas and a car	1	N FACU	20
$= \frac{1}{2} $	20		Prevalence Index = $B/A = \_ O_1 ()$
3. KING WWW THREAKING		TAC	Hydrophytic Vegetation Indicators:
4. Translow prostende	15	N LACU	1 - Rapid Test for Hydrophytic Vegetation
5 VIVDOGUM MAADRUS	5	FACIA	2 - Dominance Test is >50%
6			3 - Prevalence index is ≤3.0 <sup>1</sup>
7.			4 - Morphological Adaptations <sup>1</sup> / Provide supporting
Q		<u> </u>	data in Remarks or on a separate sheet)
0			5 - Wetland Non-Vascular Plants <sup>1</sup>
9		·····	Brohlomatic Hydrophytic Vocatation <sup>1</sup> (Evaluin)
10	. <u></u>	······	
11			Indicators of hydric soil and wetland hydrology must
	-45	= Total Cover	
Woody Vine Stratum (Plot size:)			
1			Hydrophytic
2			Vegetation
		= Total Cover	Present? Yes No V
% Bare Ground in Herb Stratum		-	
Remarks:			
Hudric vealtation only	Via r	10t met.	ι
, J	•• 01 ···	1	

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Sampling	Point:	- L	<u>_</u>

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Profile Description: (Describe to the depth needed to document the indicator or confir	m the absence of indicators.)					
Depth Matrix Redox Features						
(inches) Color (moist) % Color (moist) % Type' Loc <sup>2</sup>	<u>Texture</u> <u>Remarks</u>					
V - 6 = D + 12 - 2/2 - 100 =						
1-212 NOV 3/1 95 5/R-4/10 5	<u>S/1,</u>					
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand (	Grains. <sup>2</sup> Location: PL≃Pore Lining, M=Matrix.					
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :					
Histosol (A1) Sandy Redox (S5)	2 cm Muck (A10)					
Histic Epipedon (A2) Stripped Matrix (S6)	Red Parent Material (TF2)					
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1	<ol> <li>L) Very Shallow Dark Surface (TF12)</li> </ol>					
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)					
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	31. 11. 11. 11. 11. 11. 11.					
Thick Dark Surface (A12) V Redox Dark Surface (F6)	indicators of hydrophytic vegetation and					
Sandy Mucky Willerar (ST) Depleted Dark Sunace (F7)	unless disturbed or problematic					
Restrictive Laver (if present):						
Depth (inches):	Hydric Soil Present? Yes					
Remarks:						
Under spil indicators Das nt						
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)					
Surface Water (A1) Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,					
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A, and 4B)					
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)					
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)					
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3) Oxidized Rhizospheres along Living Ro	oots (C3) Geomorphic Position (D2)					
Algal Mat or Crust (B4) Presence of Reduced iron (C4)	Shallow Aquitard (D3)					
Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C	C6) FAC-Neutral Test (D5)					
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR .	A) Raised Ant Mounds (D6) (LRR A)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)					
Sparsely Vegetated Concave Surface (B8)						
Field Observations:						
Surface water Present? Yes Depth (inches):						
Water Table Present? Yes <u>No</u> Depth (inches):						
Saturation Present? Yes No / Depth (inches): We	tland Hydrology Present? Yes No					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections)	), if available:					
Remarks						
r tomanto.						
No hydroluncy indicators						
No hydrolugy indicators						
No hydrolugy indicators	e "					

WETLAND DETERMINATION D	ATA FORM	1 – Western Mou	ntains, Valleys, and Coast Region
Project/Site: South Rochford Road	1	Sity/County:	inatom Sampling Date: 8/27/13
Applicant/Owner: SDTVJT			State: SD Sampling Point: 21
Investigator(s); J. PUST, T. TOIbitzer		Section, Township, Rar	nge: TWO 2N, RM3E SC23
Landform (hillslope, terrace, etc.): +t x of Sto	02	Local relief (concave, o	convex, none): (CONCAUL Slope (%):5
Subregion (LRR): MLRA 102	، Lat:ل	.121415	Long-103, 732917 Datum: DNA-198-
Soil Map Unit Name: Pactola - Pactola Smills	No mark	outenore com	WW 40 NWI classification: NA
Are climatic / hydrologic conditions on the site typical for the	his time of yea	r? Yes No_	(If no, explain in Remarks.)
Are Vegetation Soil or Hydrology	significantly	listurbed? Are "	Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	_ naturally prol	olematic? (If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing	sampling point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No		
Hydric Soil Present? Yes	No	Is the Sampled	Area
Wetland Hydrology Present? Yes	No	within a Wetlan	
Remarks: Print takin win Fr	maded	aven at	a Man Mousing channel
Hadyland Likolia Cablar	polist	inter al south	-off and anity charact.
VECETATION Use scientific names of pla	<u>tante</u>	10 m 1 × 1	TOTA Contra Spring Scept.
VEGETATION - Use scientific names of pla	Absoluto	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	<u>Species?</u> Status	Number of Dominant Species
1. Populus -tramuloides	$-\frac{20}{0}$	$\underline{-} \underline{-} \underline{+} \underline{+} \underline{+} \underline{+} \underline{+} \underline{+} \underline{+} +$	That Are OBL, FACW, or FAC: (A)
2. V. ( ) A CALLICA		Y YAU	Total Number of Dominant
3			Species Across All Strata: (B)
4	100	= Total Cover	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
1. Salix bebbiana	_ 20_	<u> </u>	Total % Cover of: Multiply by:
2			OBL species x 1 =
3			FACW species $20$ x 2 = $40$
5			FAC species $45 \times 3 = 435$
·····	20	= Total Cover	FACU species $20$ x4 = $30$
Herb Stratum (Plot size:)		• ) * ki	$\begin{array}{c} \text{OPL species} \\ \text{Column Tatala} \\ \begin{array}{c} 1265 \\ 1265 \\ \end{array} \\ \begin{array}{c} x5 = \underline{ 1265} \\ 1265 \\ \end{array} \\ \begin{array}{c} x5 = \underline{ 1265} \\ 1265 \\ \end{array} \\ \begin{array}{c} x5 = \underline{ 1265} \\ 1265 \\ \end{array} \\ \begin{array}{c} x5 = \underline{ 1265} \\ 1265 \\ \end{array} \\ \begin{array}{c} x5 = \underline{ 1265} \\ 1265 \\ \end{array} \\ \begin{array}{c} x5 = \underline{ 1265} \\ 1265 \\ 1265 \\ \end{array} \\ \begin{array}{c} x5 = \underline{ 1265} \\ 1265 \\ 126$
1. Diateria eavesains		P FAC	$\begin{array}{c} \text{Column Fotals.} \\ \hline \end{array} \\ \hline (A) \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline (B) \\ \hline \end{array} \\ \hline \\ \hline$
2. VID DELISTICS	<u> </u>	N FAT	Prevalence Index = $B/A = 3, 00$
4 Aranzen's algaritea	20	Y FA	Autophytic Vegetation Indicators:
5			$\sqrt{2}$ - Dominance Test is >50%
6			✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8			data in Remarks or on a separate sheet)
9			Problematic Hydrophytic Vegetation <sup>1</sup> (Evolain)
10			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
· · ·	65	= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	- 4 <b>6</b> - 46		
1			Hydrophytic
2			Present? Yes No
% Bare Ground in Herb Stratum	••••••	= Total Cover	
Remarks:			•
H. AVY Montachine million a	in at		
Myune and with Charles a	42521 +		

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Sampling Point: 21

Profile Desc	cription: (Descrit	e to the depth n	eeded to docu	nent the in	dicator	or confirm	the absence of i	ndicators.)
Depth	Matrix		Redo	x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>		Texture	Remarks
				· ·			<u></u>	
				. <u></u> .		<u> </u>	······	
						<u> </u>		
	<u> </u>	<u></u>						
								·
<sup>1</sup> Type: C=C	oncentration, D=D	epletion, RM=Re	duced Matrix, CS	S=Covered	or Coate	d Sand Gra	ins. <sup>2</sup> Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (App	licable to all LR	Rs, unless othe	rwise note	đ.)		Indicators for	or Problematic Hydric Soils <sup>3</sup> :
Histosol	I (A1)		Sandy Redox (	S5)			2 cm Mu	ıck (A10)
Histic E	pipedon (A2)		Stripped Matrix	(S6)			Red Par	ent Material (TF2)
Black H	istic (A3)		Loamy Mucky I	Aineral (F1)	(except	MLRA 1)	Very Sh	allow Dark Surface (TF12)
Hydroge	en Sulfide (A4)		Loamy Gleyed	Matrix (F2)			Other (E	xplain in Remarks)
Deplete	d Below Dark Surf	ace (A11)	Depleted Matrix	(F3)				
Thick D	ark Surface (A12)	<u></u>	Redox Dark Su	rface (F6)			<sup>3</sup> Indicators of	f hydrophytic vegetation and
Sandy M	Mucky Mineral (S1)	)	Depleted Dark	Surface (F7	<b>'</b> )		wetland h	ydrology must be present,
Sandy C	Gleyed Matrix (S4)		Redox Depress	ions (F8)			unless dis	sturbed or problematic.
Restrictive	Layer (if present)	:						
Туре:	NOCK		-					
Depth (in	ches):		-				Hydric Soil Pre	sent? Yes 🔽 No
Remarks:								
	1 )	Oute a	and of	Vacad	m	100 4	nudro	
	$V \oplus O \square$	Shirt? Mi	SNIL CO	WY & CA	071			
	, All and a second s	· · ·						······································
HYDROLO	)GY							
Wetland Hy	drology Indicato	rs:						
Primary Indi	cators (minimum c	f one required; cl	neck all that app	<u>v)</u>			Secondar	y Indicators (2 or more required)
Surface	Water (A1)		Water-Sta	ined Leave	s (B9) ( <b>e</b> :	xcept	Water	-Stained Leaves (B9) (MLRA 1, 2,
High W	ater Table (A2)		MLRA	1, 2, 4A, ar	nd 4B)		/ 4A	, and 4B)
🛛 🗹 Saturati	ion (A3)		Salt Crust	(B11)			Draina	age Patterns (B10)
Water M	/arks (B1)		Aquatic In	vertebrates	(813)		Dry-S	eason Water Table (C2)
Sedime	nt Deposits (B2)		Hydrogen	Sulfide Odd	or (C1)		Satura	ation Visible on Aerial Imagery (C9)
Drift De	posits (B3)		Oxidized I	Rhizosphere	es along l	Living Root	s (C3) Geom	orphic Position (D2)
Algal M	at or Crust (B4)		Presence	of Reduced	i Iron (C4	·)	Shallo	w Aquitard (D3)
iron De	posits (B5)		Recent Inc	n Reductio	n in Tilleo	d Soils (C6)	FAC-1	Neutral Test (D5)
Surface	Soil Cracks (B6)		Stunted or	Stressed F	Plants (D	1) (LRR A)	Raise	d Ant Mounds (D6) (LRR A)
Inundat	ion Visible on Aeri	al imagery (B7)	Other (Ex	olain in Ren	narks)	., (,	Frost-	Heave Hummocks (D7)
Sparsel	v Vegetated Conc	ave Surface (B8)			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Field Obser	vations:				. 1			
Surface Min	ter Present?	Yes I No	Danth /in	chee).	2.1			
Mator Taki-	Drocont?		Domin (iii	choch <sup>l</sup>	$\overline{\mathbf{h}}$	-		
vvater rabie	Present		Deptin (in	cries)	<u>v</u>			
Saturation F (includes ca	rresent? pillary fringe}	res <u> </u>	Depth (in	cnes):	2	_   vvetla	na Hyarology Pro	esent? Yes 🗠 NO
Describe Re	ecorded Data (stre	am gauge, monito	oring well, aerial	photos, pre	vious ins	pections), if	f available:	
		_ 1						
Remarks:								
	Dassivu	CYPY Linn of	6.21		. <u>S</u> .	i Alex	indonia.	a Shu tan a
	h a com a me	$\mathcal{N}(\mathcal{M}) \gg$	211 1	AMY TO A	YE	(	V MARCAY	K JAN CANN
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WETLAND DETERMINATION I	DATA FORM	Western Mou	ntains, Valleys, and Coast Region
Project/Site: <u>SW-H_Rochford_Road</u> Applicant/Owner: <u>SDDOT &amp; Road</u> Investigator(s): <u>J. ZMST &amp; T. Ta [bH2</u> Landform (hillslope, terrace, etc.): <u>TOX of Slop</u> Subregion (LRR): <u>MLPA b7</u> Soil Map Unit Name? <u>actola_factula_sWillbw_ri</u> Are climatic / hydrologic conditions on the site typical for Are Vegetation, Soil, or Hydrology <b>SUMMARY OF FINDINGS – Attach site ma</b>	City/ Ci	County: <u>PIAPI</u> ton, Township, Rar al relief (concave, c 21 344 <u>COMPIAX - 40</u> Yes <u>No</u> urbed? Are "I natic? (If new <b>mpling point lo</b>	Mg + D M
Hydrophytic Vegetation Present?       Yes         Hydric Soil Present?       Yes         Wetland Hydrology Present?       Yes         Remarks:       Point taken better	No No No	Is the Sampled within a Wetlan	Area d? Yes No /
from withanol	puint	· · · · · · · · · · · · · · · · · · ·	
Image: Second constraint of the size in the si	Alternative and the second se	ominant Indicator <u>secies?</u> <u>Status</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u> <u>FAC</u>	Dominance Test worksheet:Number of Dominant Species $3$ (A)Total Number of Dominant $5$ (B)Percent of Dominant Species $5$ (B)Percent of Dominant Species $6$ $7_{0}$ (A/B)Prevalence Index worksheet: $6$ $7_{0}$ (A/B)Total % Cover of:Multiply by:OBL species $3$ $2$ $2$ $0$ $2$ $0$ FAC species $15$ $x 3 = 3 + 5$ FACU species $55$ $x 4 = 220$ UPL species $x 5 =$ Column Totals: $200$ (A)Prevalence Index = B/A = $3$ .Hydrophytic Vegetation Indicators:1 - Rapid Test for Hydrophytic Vegetation2 - Dominance Test is >50%3 - Prevalence Index is $\leq 3.0^{1}$ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)5 - Wetland Non-Vascular Plants <sup>1</sup> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Bare Ground in Herb Stratum Remarks:	= T	otal Cover	Present? Yes No
Hydric Vegetation	n chiten	on yriget	

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Sampling Point: 22

Donth	Motrix	me de	v Easterne					
(inches) Color	matrix (moist) %	Color (moist)	<u>x ⊢eatures x x</u> %	j Tvpe <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
<u> </u>				<del></del>				
				<u></u>				·
			· ·····					
······································	·				<u> </u>	······		
<u> </u>								
			<b>.</b>					
<sup>1</sup> Type: C=Concentrati	ion, D=Depletion, R	M=Reduced Matrix, C	S=Covered	or Coate	d Sand Gra	ains. <sup>2</sup> Locati	on: PL=Pore Lining, M	=Matrix.
Hydric Soil Indicator	s: (Applicable to a	II LRRs, unless othe	rwise not	əd.)		Indicators	for Problematic Hydri	c Soils <sup>3</sup> :
Histosol (A1)		Sandy Redox (	S5)			2 cm N	fuck (A10)	
Histic Epipedon (/	42)	Stripped Matrix	(S6)			Red Pa	arent Material (TF2)	
Black Histic (A3)		Loamy Mucky	Mineral (F	) (except	MLRA 1)	Very S	hallow Dark Surface (T	F12)
Hydrogen Sulfide	(A4)	Loamy Gleyed	Matrix (F2	)		Other (	(Explain in Remarks)	
Depleted Below D	Dark Surface (A11)	Depleted Matri	x (F3)			3	- 6	
I NICK Dark Surfac	20 (A12)	Redox Dark SL	Surface (F6)	7)		Indicators	of hydrophytic vegetation	on and
Sandy Gleved Ma	ierai (S ) atriv (SA)	Depieted Dark	Surface (F	0		wettand	listurbed or problematic	
Restrictive Laver (if	present):						isturbed of problemate	*-
Type: Rock								
Depth (inches):	<u>ר וו</u>	·····				Hydric Soil Pr	acont? Vac	No
Depart (increa):								<u> </u>
Remarks.			· · \	• 1	۸ Å	in the la	undric run.	to a s
UNIVE	U TO I	excallette .	11 CG	prt.	Mar	-girai <b>r</b>	yanc vigi	TO TOY)
owd	No 1			1		$\checkmark$		ι.
NUMUK	in hydr	UDOXX IN	oN Cox	See 100			Annual Ali	- 1
				TOVS.	<u></u>	<u>pataony</u>	DAMONZIN	night
HYDROLOGY	than	wetlan	oit.	TOVS	<u></u>	igtaphy_	Deviousily	night
HYDROLOGY Wetland Hydrology I	than	wittan	pit.	TOVS.	<u>, 100</u>	ngtaphy	Deviousily	night
HYDROLOGY Wetland Hydrology I Primary Indicators (mi	HOCH ndicators: inimum of one requir	WEHLan	φ <i>i+</i> ,	<u> </u>	<u>, 19</u> 0	<u>Seconda</u>		required)
HYDROLOGY Wetland Hydrology I Primary Indicators (mi Surface Water (A	Hhan ndicators: inimum of one requir	with an red; check all that app Water-Sta	$p_{i}$ + ,	es (B9) (e	xcept	<u>Seconda</u> <u>Seconda</u> 	Inv Indicators (2 or more	<u>     required)</u> (MLRA 1, 2,
HYDROLOGY Wetland Hydrology I Primary Indicators (mi Surface Water (A Higb Water Table	Hhan ndicators: inimum of one requir 1) (A2)	wEtlan red; check all that app Water-Sta MLRA	IV)	es (B9) (e	xcept	<u>Seconda</u> <u>Seconda</u> Watu	ry Indicators (2 or more er-Stained Leaves (B9)	<u>mighor</u> <u>required)</u> (MLRA 1, 2,
HYDROLOGY Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3)	Hhan ndicators: inimum of one requir 1) : (A2)	wIHan red; check all that app Water-Sta MLRA Salt Crus	ly) ained Leav 1, 2, 4A, a	es (B9) (e and 4B)	xcept	<u>Seconda</u> <u>Seconda</u> <u>Watu</u> 4 Drai	ary Indicators (2 or more er-Stained Leaves (B9) A, and 4B) nage Patterns (B10)	<u>9 required)</u> (MLRA 1, 2,
HYDROLOGY Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1)	Hhan ndicators: inimum of one requir 1) ; (A2)	wEHan red: check all that app Water-Sta MLRA Salt Crusi Aquatic Ir	ly) ined Leav 1, 2, 4A, a (B11) ivertebrate	es (B9) (e ind 4B) s (B13)	xcept	<u>Seconda</u> <u>Seconda</u> Watu Drai Drv-	ery Indicators (2 or more er-Stained Leaves (B9) A, and 4B) nage Patterns (B10) Season Water Table (C	<u>Mighar</u> <u>a required)</u> (MLRA 1, 2,
HYDROLOGY Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposi	Hhan ndicators: inimum of one requir 1) : (A2) is (B2)	wEHam red; check all that app Water-Sta MLRA Salt Crusi Aquatic Ir Hydrogen	ly) ined Leav 1, 2, 4A, a (B11) ivertebrate Sulfide Oo	es (B9) (e ind 4B) s (B13) dor (C1)	xcept	<u>Seconda</u> Watı Watı Drai DrySatu	ary Indicators (2 or more er-Stained Leaves (B9) A, and 4B) nage Patterns (B10) Season Water Table (C gration Visible on Aerial	<u>MIGN (</u>
HYDROLOGY Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3)	Hhan ndicators: inimum of one requir 1) : (A2) its (B2) 3)	wIHam red; check all that app Water-Sta MLRA Salt Crust Aquatic Ir Hydrogen Oxidized	ly) ined Leave 1, 2, 4A, a (B11) ivertebrate Sulfide Of Rhizosphe	es (B9) (e ind 4B) s (B13) dor (C1) res along	xcept	<u>Seconda</u> <u>Seconda</u> <u>Wata</u> <u>Drai</u> <u>Drai</u> <u>Satu</u> ts (C3) Geo	ary Indicators (2 or more er-Stained Leaves (B9) A, and 4B) nage Patterns (B10) Season Water Table (C iration Visible on Aerial morphic Position (D2)	<u>Pigna-</u> <u>e required)</u> (MLRA 1, 2, (2) Imagery (C9)
HYDROLOGY Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Algal Mat or Crus	Hhan         inimum of one requir         1)         4 (A2)         1	wIttan red: check all that app water-Sta MLRA Salt Crust Aquatic Ir Hydrogen Oxidized Presence	ly) ined Leav 1, 2, 4A, a (B11) ivertebrate Sulfide Oc Rhizosphe of Reduce	es (B9) (e ind 4B) s (B13) dor (C1) res along d Iron (C4	xcept	<u>Seconda</u> <u>Seconda</u> <u>Wate</u> <u>A</u> Drai <u>Dry-</u> Satu ts (C3) <u>Geo</u>	Inv Indicators (2 or more er-Stained Leaves (B9) A, and 4B) mage Patterns (B10) Season Water Table (C iration Visible on Aerial morphic Position (D2) llow Aquitard (D3)	<u>MIGN (</u>
HYDROLOGY Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Algal Mat or Crus Iron Deposits (B5	Hhan         inimum of one requir         1)         2 (A2)         )         ts (B2)         3)         tt (B4)         a)	wEHam red; check all that app water-Sta MLRA Salt Crusi Aquatic Ir Hydrogen Oxidized Presence Recent in	IV) ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oo Rhizosphe of Reduce on Reducti	es (B9) (e and 4B) s (B13) dor (C1) res along d Iron (C4 on in Tiller	xcept	<u>Seconda</u> Watı Drai Dry- Satu ts (C3) Geo Shal ) FAC	The providence of the providen	<u>MIGN (</u>
HYDROLOGY Wetland Hydrology I Primary Indicators (mi 	Hhan         ndicators:         inimum of one requir         1)         + (A2)         is (B2)         >)         ts (B2)         >)         ts (B4)         >)         ts (B4)         >)	wEHam red; check all that app Water-Sta MLRA Salt Crusi Aquatic Ir Hydrogen Oxidized Presence Recent int Stunted o	LV) ined Leave 1, 2, 4A, a (B11) ivertebrate of Reluce of Reduce on Reducti r Stressed	es (B9) (e and 4B) s (B13) dor (C1) res along d Iron (C4 on in Tilled Plants (D	xcept	<u>Seconda</u> Watı Drai Dry- Satu ts (C3) Geo Shal ) FAC Rais	ry Indicators (2 or more er-Stained Leaves (B9) <b>A, and 4B)</b> nage Patterns (B10) Season Water Table (C iration Visible on Aerial morphic Position (D2) llow Aquitard (D3) i-Neutral Test (D5) sed Ant Mounds (D6) (L	<u>MIGN (</u>
HYDROLOGY Wetland Hydrology I Primary Indicators (mi 	Hhan         ndicators:         inimum of one requir         1)         4 (A2)         1 <t< td=""><td>wEHam red; check ali that app  Water-Sta MLRA  Salt Crusi  Aquatic Ir  Hydrogen  Oxidized  Presence  Recent Iro  Stunted o B7) Other (Ex</td><td>LV ined Leave 1, 2, 4A, a L(B11) invertebrate Sulfide Oc Rhizosphe of Reduce on Reducet r Stressed plain in Re</td><td>es (B9) (e ind 4B) s (B13) dor (C1) res along d Iron (C4 on in Tilled Plants (D marks)</td><td>xcept Living Roo ) J Soils (C6 1) (LRR A)</td><td><u>Seconda</u> </td><td>ary Indicators (2 or more er-Stained Leaves (B9) <b>A, and 4B)</b> nage Patterns (B10) Season Water Table (C iration Visible on Aerial morphic Position (D2) llow Aquitard (D3) i-Neutral Test (D5) ted Ant Mounds (D6) (<b>L</b> at-Heave Hummocks (D</td><td><u>MIGN (</u></td></t<>	wEHam red; check ali that app Water-Sta MLRA Salt Crusi Aquatic Ir Hydrogen Oxidized Presence Recent Iro Stunted o B7) Other (Ex	LV ined Leave 1, 2, 4A, a L(B11) invertebrate Sulfide Oc Rhizosphe of Reduce on Reducet r Stressed plain in Re	es (B9) (e ind 4B) s (B13) dor (C1) res along d Iron (C4 on in Tilled Plants (D marks)	xcept Living Roo ) J Soils (C6 1) (LRR A)	<u>Seconda</u> 	ary Indicators (2 or more er-Stained Leaves (B9) <b>A, and 4B)</b> nage Patterns (B10) Season Water Table (C iration Visible on Aerial morphic Position (D2) llow Aquitard (D3) i-Neutral Test (D5) ted Ant Mounds (D6) ( <b>L</b> at-Heave Hummocks (D	<u>MIGN (</u>
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HYDROLOGY Wetland Hydrology I Primary Indicators (mi 	HOUM ndicators: inimum of one requir 1) (A2) its (B2) its (B2) its (B4) its (B4) its (B6) its on Aerial Imagery ( ed Concave Surface it? Yes Yes Yes Yes	WEHLOW red; check all that app — Water-Sta MLRA — Salt Crusi — Aquatic Ir — Hydrogen — Oxidized — Presence — Recent Irr — Stunted o (B7) — Other (Ex (B8) — No _ Depth (ir — No _ Depth (ir	(P) + , ined Leave 1, 2, 4A, a (B11) ivertebrate Sulfide Oo Rhizosphe of Reduce on Reducti r Stressed plain in Re inches): nches):	es (B9) (e ind 4B) s (B13) dor (C1) res along d Iron (C4 on in Tilled Plants (D marks)	xcept	<u>Seconda</u> Watu Drai Drai Satu ts (C3)Geo Shal )Shal )Shal )FAC Rais Fros	ery Indicators (2 or more er-Stained Leaves (B9) <b>A, and 4B)</b> nage Patterns (B10) Season Water Table (C iration Visible on Aerial morphic Position (D2) llow Aquitard (D3) -Neutral Test (D5) ted Ant Mounds (D6) (L it-Heave Hummocks (D et-Heave Hummocks (D	<u>MIGN (</u>
HYDROLOGY Wetland Hydrology I Primary Indicators (mi 	HOUM ndicators: inimum of one requir 1) 4 (A2) 1 (B2) 1 (B4) 2 (B4) 3 on Aerial Imagery ( ed Concave Surface 1 (Stream gauge, r	WEHLOW red; check all that app — Water-Sta MLRA — Salt Crusi — Aquatic Ir — Hydrogen — Oxidized — Presence — Recent irr — Stunted o (B7) _ Other (Ex (B8) _ No _ Depth (ir _ No _ Depth (ir _ no _ Depth (ir _ no _ Depth (ir _ no _ Depth (ir	(p) + ,     (p) + ,     (p) + ,     (ined Leave     (B11)     (Invertebrate     Sulfide Or     Rhizosphe     of Reduce     on Reducti     r Stressed     plain in Re     (ches):     nches):     photos, pr	es (B9) (e ind 4B) s (B13) dor (C1) res along d Iron (C4 on in Tilled Plants (D marks) evious ins	xcept	<u>Seconda</u> 	ary Indicators (2 or more er-Stained Leaves (B9) <b>A, and 4B)</b> mage Patterns (B10) Season Water Table (C iration Visible on Aerial morphic Position (D2) llow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D6) (L it-Heave Hummocks (D resent? Yes	<u>Prequired</u> ) (MLRA 1, 2, (MLRA 1, 2, (MLRA 1, 2, (MLRA 1, 2, (MLRA
HYDROLOGY Wetland Hydrology I Primary Indicators (mi 	HOUM ndicators: inimum of one requir 1) 4 (A2) 1 1 1 1 1 1 1 1 2 4 (A2) 1 1 2 3 1 2 3 3 4 (B4) 3 3 4 (B4) 3 3 4 4 4 4 4 5 4 4 5 5 5 6 6 6 6 6 6 7 7 8 7 8 9 7 1 1 1 1 1 1 1 1 1 1 1 1 1	WETLOM  red; check all that app  red; check all that app  Water-Sta MLRA  Salt Crusi Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o  B7) Other (Ex (B8)  No Depth (ir No Depth (ir No Depth (ir nonitoring well, aerial	(p) + ,     (p) + ,     (p) + ,     (ined Leave,     1, 2, 4A, a     (B11)     (vertebrate     Sulfide Or     Rhizosphe     of Reduce     of Reduce     of Reduce     of Reduce     (plain in Re     (plain i	es (B9) (e and 4B) s (B13) dor (C1) res along d Iron (C4 on in Tiller Plants (D marks) evious ins	xcept	<u>Seconda</u> <u>Seconda</u> <u>Urai</u> <u>Drai</u> <u>Drai</u> <u>Dry-</u> Satu ts (C3) <u>Geo</u> <u>Shal</u> Mathematic <u>Shal</u> <u>Shal</u> Mathematic <u>Shal</u> Shal <u>Shal</u> Fros <u>Carrier</u> Shal <u>Shal</u> Shal <u>Shal</u> Shal <u>Shal</u> Shal <u>Shal</u> Shal <u>Shal</u> Shal <u>Shal</u> Shal Shal Shal Shal Shal Shal Shal Shal	ary Indicators (2 or more er-Stained Leaves (B9) <b>A, and 4B)</b> mage Patterns (B10) Season Water Table (C iration Visible on Aerial morphic Position (D2) llow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D6) (L it-Heave Hummocks (D	<u>Migha</u> <u>a required)</u> (MLRA 1, 2, (MLRA 1
HYDROLOGY Wetland Hydrology I Primary Indicators (mi 	HOUM ndicators: inimum of one requir 1) 4 (A2) 1 1 1 1 1 1 2 (A2) 1 1 2 (A2) 1 2 (A2) 2 3 3 4 (B4) 3 3 4 (B4) 3 3 4 (B4) 3 3 4 (B4) 3 4 4 5 4 4 5 5 7 7 8 9 7 8 9 7 9 1 1 1 1 1 1 1 1 1 1 1 1 1	WILLAM  red: check all that app  Water-Sta MLRA  Salt Crust Aquatic Ir Aquatic Ir Oxidized Presence Recent Ire Stunted o B7) Other (Ex B7) No Depth (ir No Depth (ir nonitoring well, aerial	(p) + ,     (p) + ,     (p) + ,     (ined Leave,     1, 2, 4A, a     (B11)     (vertebrate     Sulfide Or     Rhizosphe     of Reduce     of Reduce     of Reduce     of Reduce     plain in Re     (ches):     photos, pr	es (B9) (e ind 4B) s (B13) dor (C1) res along d Iron (C4 on in Tilled Plants (D marks) evious ins	xcept	<u>Seconda</u> Watu Drai Dry- Satu ts (C3) Geo Shal ) FAC Rais Fros	ary Indicators (2 or more er-Stained Leaves (B9) <b>A, and 4B)</b> nage Patterns (B10) Season Water Table (C iration Visible on Aerial morphic Position (D2) llow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D6) (L it-Heave Hummocks (D	<u>Mignar</u> <u>a required)</u> (MLRA 1, 2, (MLRA 1, 2, (MLRA 1, 2, No
HYDROLOGY Wetland Hydrology I Primary Indicators (mi 	HOW ndicators: inimum of one requir 1) (A2) (A2) (b) (A2) (b) (A2) (b) (A2) (A	WILLAM  red: check all that app  Water-Sta MLRA  Salt Crust Aquatic Ir Aquatic Ir Oxidized Presence Recent Ir Stunted o B7) Other (Ex (B8) No No Depth (ir No Depth (ir nonitoring well, aerial	(p) + ,     (	es (B9) (e ind 4B) s (B13) dor (C1) res along d Iron (C4 on in Tilled Plants (D marks) evious ins	Living Roo A Soils (C6 1) (LRR A) Wetla pections), i	<u>Seconda</u> Watu Drai Dry- Satu ts (C3) Geo Shal ) FAC Rais Fros	ary Indicators (2 or more er-Stained Leaves (B9) <b>A, and 4B)</b> nage Patterns (B10) Season Water Table (C iration Visible on Aerial morphic Position (D2) llow Aquitard (D3) i-Neutral Test (D5) sed Ant Mounds (D6) (L it-Heave Hummocks (D	<u>MIGN (</u> <u>a required)</u> (MLRA 1, 2, (MLRA 1, 2, Imagery (C9) RR A) 7) No <u>/</u>
HYDROLOGY Wetland Hydrology I Primary Indicators (mi 	Hown ndicators: inimum of one requir 1) (A2)	WITTOM red: check all that app Water-Sta MLRA Salt Crusi Aquatic Ir Hydrogen Oxidized Presence Recent Ird Stunted o (B7) Other (Ex (B8) No Depth (ir No Depth (ir nonitoring well, aerial	(p) + ,     (	es (B9) (e ind 4B) s (B13) dor (C1) res along d Iron (C4 on in Tilled Plants (D marks) evious ins	Living Roo Soils (C6 1) (LRR A) Wetla pections), i	Seconda Vatu Drai Dry- Satu ts (C3) Geo Shal ) FAC Rais Fros and Hydrology P f available:	ary Indicators (2 or more er-Stained Leaves (B9) <b>A, and 4B)</b> mage Patterns (B10) Season Water Table (C irration Visible on Aerial morphic Position (D2) llow Aquitard (D3) -Neutral Test (D5) red Ant Mounds (D6) (L it-Heave Hummocks (D Present? Yes	<u>MIGN (</u>
HYDROLOGY Wetland Hydrology I Primary Indicators (mi Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Algal Mat or Crus Iron Deposits (B5 Surface Soil Crac Inundation Visible Sparsely Vegetat Field Observations: Surface Water Present? Saturation Present? (includes capillary frin Describe Recorded D Remarks:	Hown ndicators: inimum of one requir 1) 4 (A2) ts (B2) b) t (B4) b) ts (B6) 2 on Aerial Imagery ( ed Concave Surface nt? Yes Yes ge) ata (stream gauge, r	WETLAM	(p) + ,     (p) + ,     (p) + ,     (p) + ,     (ined Leave,     (B11)     (vertebrate     Sulfide Oc Rhizosphe     of Reduce     on Reducti     r Stressed     plain in Re     (ches):     photos, pr     ()	es (B9) (e ind 4B) s (B13) dor (C1) res along d Iron (C4 on in Tilled Plants (D marks) evious Ins	Living Roo Living Roo J Soils (C6 1) (LRR A) Wetla pections), i	Seconda 	ary Indicators (2 or more er-Stained Leaves (B9) <b>A, and 4B)</b> nage Patterns (B10) Season Water Table (C aration Visible on Aerial morphic Position (D2) llow Aquitard (D3) -Neutral Test (D5) red Ant Mounds (D6) (L t-Heave Hummocks (D Present? Yes	<u>MIGN (</u> <u>e required)</u> (MLRA 1, 2, (MLRA 1, 2, (MLRA 1, 2, No

WETLAND DETER	MINATION DATA	FORM	– West	ern Mou	ntains, Valleys, and Coast Region
Project/Site: South Roch	Ford Ropal	Cit	y/County	Pinni	ination Sampling Date: 8/28/1
Applicant/Owner: SDDUT					State: SD Sampling Point:
nvestigator(s); T. Talbitzer	, J RAST	Se	ction, To	wnship, Ra	nge: TWID IN, RUGZE SUZZ
andform (hillslope, terrace, etc.): (by )	YIMAGA ditch		cal relief	(concave.)	convex.none); (0)/a/4 Slope (%); 5
Subregion (LRR): MLRA 62	Uray	at: 44.	0259	13	Long: -163.838885 Datum: DNA-1
Soil Man Lipit Name Helin Clark	any loding. 10-	-40%	Simo	7	NWI classification: N.A.
Are climatic / bydrologic conditions on th	e site typical for this fir	ne of vear	Vos V	No	(If no, evolution in Remarks )
	e one typical for this inf	ficantly dis	turbed?	No	Normal Circumstances" present? Yes
Vegetation Soil or l	Hydrologysigna	rally proble	matic?	/if no	reded explain any answers in Pomarks )
, 308, 01	nydrology hatdi	any proble		(ar n <del>e</del>	ecced, explain any answers in remains.
SUMMARY OF FINDINGS - A	tach site map sho	owing s	amplin	g point le	ocations, transects, important features, et
Hydrophytic Vegetation Present?	Yes V No		le th	a Samnlad	Area
Hydric Soil Present?	Yes No No		with	in a Wetlan	nd? Yes No
Remarks:					
Namow droin 00	1 that chigh	nates	the m	1 Sprin	g upstroom. Howing water.
Point area dis	sturbed In	om or	ve zive	2 Anoe	ars met placed in diada has
VEGETATION – Use scientific	names of plants.	J	e V	ANNA.	evosion. No defined but or bank
	Ał	bsolute [	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:	) <u>%</u>	Cover S	Species?	<u>Status</u>	Number of Dominant Species
1 2					That Are OBL, FACVV, or FAC: (A)
3		<u> </u>		<u> </u>	Total Number of Dominant Z (P)
4.					
		=	Total Co	ver	That Are OBL, FACW, or FAC:
Sapling/Shrub Stratum (Plot size:	)				Prevalence Index worksheet:
1					Total % Cover of: Multiply by:
3		<u> </u>	<u>_</u>	·	OBL species $\underline{70}$ x1 = $\underline{70}$
4.					FACW species x 2 =
5					FAC species $30 \times 3 = 40$
	_	=	Total Co	ver	FACU species x 4 =
Herb Stratum (Plot size:	) ic ~	1174	SI.	012 I	$\begin{array}{c c} \text{OPL species} & \underline{x} \text{ 5} = \underline{x} \text{ 0} \\ \text{Column Totals:} & \underline{x} \text{ 0} & \underline{W} \text{ 0} \\ \end{array}$
2 Agustis Statistical	133	2010	$\overline{\mathbf{n}}$	EAC	$\begin{array}{c} \text{Column rotals.} \underline{-100} (A) & \underline{-100} \\ \underline{-100} & \underline{-100} \end{array} (B) \\ \underline{-100} & \underline{-100} \\ \underline{-100} & \underline{-100} \end{array}$
	<u> </u>			<u>irc</u>	Prevalence Index = 8/A = <u>Vi V</u>
4.		······································		<del></del>	Average and the set for Hydrophytic Vegetation
5					$\sim$ 2 - Dominance Test is >50%
6					√ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
7					4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8					data in Remarks or on a separate sheet)
9					D - Wetland Non-Vascular Plants'
10					<sup>1</sup> Indicators of hydric soil and wetland hydrology must
\$1, <u> </u>	<u> </u>		Total Co		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:	>		i otar OOV		
1					Hydrophytic
2					Vegetation Present? Ves No
% Bare Ground in Herb Stratum			Total Cov	/er	
Remarks:	······································				1
Hydric via	totoh ph	iznt.			

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Sampling Point: 23

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth	Matrix	Redo	x Features				
(inches) Color (r	<u>noist) % (</u>	<u>Color (moist)</u>	%	<u>Type'</u>	Loc	Texture	Remarks
U-Z ORAN	<u>n Carvary ria</u>	<u>k</u>	· ·				
<u></u>			· ····································	······································			
			· ·				
			· · ·			<del></del>	
			. <u></u> .		<u> </u>		
<sup>1</sup> Type: C=Concentration	, D=Depletion, RM=Re	duced Matrix, CS	S=Covered	or Coated	sand Gra	ains. <sup>2</sup> Loca	ition: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	(Applicable to all LRF	Rs, unless othe	rwise note	d.)		Indicator	s for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	<del></del>	Sandy Redox (	S5)			2 cm	Muck (A10)
Histic Epipedon (A2	)	Stripped Matrix	(S6)			Red F	Parent Material (TF2)
Black Histic (A3)		Loamy Mucky	Aineral (F1)	(except	MLRA 1)	Very	Shallow Dark Surface (TF12)
Hydrogen Suffide (A Depleted Releva Dep	(4) *k Surface (A11)	Loamy Gleyed	Matrix (F2)			Other	(Explain in Remarks)
Thick Dark Surface	(A12)	Redox Dark Su	rface (F6)			<sup>3</sup> Indicators	s of hydrophytic vegetation and
Sandy Mucky Miner	al (S1)	Depleted Dark	Surface (F7	<b>'</b> )		wetlan	d hydrology must be present,
Sandy Gleyed Matri	x (S4)	Redox Depress	ions (F8)			unless	disturbed or problematic.
Restrictive Layer (if pr	esent):						
Type: <u>1004</u>		_					
Depth (inches):	))	-				Hydric Soil F	Present? Yes <u>V</u> No
Remarks:			1				an train
Dogly Chu	E VALIMY - St	its as	NM IC	bose	d or	n odstri	c of OPL
K& JUL CON	( there is			5 (7 M		, Prop	
SOLCIOS	" SIVIO W	ater.					
HYDROLOGY						1	
Wetland Hydrology inc	licatore:						
Primary Indicators (mini	mum of one required: ch	neck all that and	v)			Second	tary Indicators (2 or more required)
Curface Water (A1)	mant of one required, of	Mater-Sta	ined Leave	s (89) (av	cont	<u>00000000</u>	ater-Stained Leaves (B9) (MI RA 1 2
With Water Table (	12)	Water-Oa	1 2 4A a	ori 413) 111 413)	loopt	<	4A  and  4B
Saturation (A3)	~ <b>∠</b> }	Salt Crust	(B11)	14 40)		Dra	aipage Patterns (B10)
Water Marks (B1)		Aquatic In	vertebrates	(B13)		Dn	-Season Water Table (C2)
Sediment Denosits	(82)	Hydrogen	Sulfide Od	or (C1)		Sa	turation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	( <i>i</i> )	Oxidized I	Rhizospher	es along L	iving Root	ts (C3) 🗹 Ge	omorphic Position (D2)
Algal Mat or Crust (	84)	Presence	of Reduced	Iron (C4)	)	Sh	allow Aquitard (D3)
Iron Deposits (B5)		Recent Iro	n Reductio	n in Tilled	l Soils (C6)	) FA	C-Neutral Test (D5)
Surface Soil Cracks	; (B6)	Stunted o	Stressed I	Plants (D1	) (LRR A)	Ra	ised Ant Mounds (D6) (LRR A)
Inundation Visible o	n Aerial Imagery (B7)	Other (Ex	olain in Rer	narks)		Fro	ost-Heave Hummocks (D7)
Sparsely Vegetated	Concave Surface (B8)						
Field Observations:				1 12			
Surface Water Present?	Yes Yes No	Depth (in	ches):		-		
Water Table Present?	Yes <u>V</u> No	Depth (in	ches):(	>	-		
Saturation Present?	Yes <u>V</u> No	Depth (ir	ches):	0	_ Wetla	ind Hydrology	Present? Yes V
Describe Recorded Dat	;) a (stream gauge, monito	oring well, aerial	photos, pre	vious insp	pections), i	f available:	
			, ,	· · · · · · · · · · · · · · · · · · ·			
Remarks:	······						
FLUIDO	mber Mauri	h dran	001				
I IDUINY	NOVACA LIANONA	) · · · · · · · · · · · · · · · · · · ·	nage .				
}							

WETLAND DETERMINATION DATA FORM – V	Nestern Mountains, Valleys, and Coast Region
Project/Site: South Rochford Road city/C	county: PRINTINGTON Sampling Date: 8/28/13
Applicant/Owner: <u>SDDUI</u>	State: Sampling Point: 24
Investigator(s): J. RUST, T. Talbitzev Section	on, Township, Range: Twp IN, RAG 25 Se23
Landform (hillslope, terrace, etc.): Stora 100 Loca	I relief (concave, convex, none): CONCAVE Slope (%):
Subregion (LRR): MLPA 62 Lat: 44,02	<u>5961</u> Long: <u>103,838892</u> Datum: <u>0NA_1983</u>
Soil Map Unit Name: Heely channeng loam, 10-40%	Stope S NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Y	ies // No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distur	bed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing san	ppling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks: Point taken upslope from oli	airog channel.

**VEGETATION – Use scientific names of plants.** 

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1	% Cover	Species?	<u>Status</u>	Number of Dominant Species (A)
23				Total Number of Dominant Species Across All Strata: (B)
4	<u>.</u>	= Total Co	ver	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
<u>oapini@oinus oirutan</u> (Fioroize)				Prevalence index worksheet:
		·····	·······	Total % Cover of: Multiply by:
2			<u> </u>	OBL species x 1 =
3.			<u> </u>	FACW species x 2 =
4				FAC species $\frac{6}{200}$ x 3 = $\frac{240}{240}$
5		,		
		= Total Co	ver	
Herb Stratum (Plot size:)			NA D	OFL species $20$ x $3 = 100$
1. KNOWINS WALVALL	<u>40</u>		HAC.	Column Lotais: $\underline{OO}$ (A) $\underline{D-TO}$ (B)
2 Thingarum WHEN MURLUM	20	<u> </u>	NI(U14	Prevalence Index = $B/A = -3$ , 4
3. Phildren protense	<u>    lo                                </u>	<u>N</u>	FAC_	Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5.				2 - Dominance Test is >50%
6				$\frac{1}{2} = \frac{1}{2} = \frac{1}$
7				A Marphological Adaptations <sup>1</sup> (Dravide supporting
8.				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants
10				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
14				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		_= rotarCov	ver	
1				Hydrophytic
2				Vegetation Present2 Ves No
		= Total Cov	/er	
% Bare Ground in Herb Stratum				l
Remarks:				
Wetland Vegelation criteri	ο γ	ist p	insent	

Sampling Point: 24

Profile Desc	ription: (Describe t	o the depth n	eeded to docur	nent the i	ndicator	or confirm	the abser	nce of indicators.)
Depth	Matrix		Redo	x Features	<u> </u>			
(inches)	Color (moist)	%(	Color (moist)	%	Type'	Loc	Texture	Remarks
		<del></del>		<u> </u>	<u></u>	<u></u>	<u></u>	······
		<u> </u>						
······								
<u></u>								
				·	·····			
1			1				2	
Hydric Soil	indicators: (Applica	etion, RM≂Ree	duced Matrix, Ca	s≃Covered wise note	or Coate	d Sand Gra	ains. Indic	ators for Problematic Hydric Solls <sup>3</sup>
Listanal	(A1)		Sondy Doday //					and store robismatic rights const.
Histosol	(AT) pipedon (A2)		Strinned Matrix	(SE)			ک F	2 CITE MOCK (A 10) Red Parent Material (TE2)
Black H	istic (A3)		Loamy Mucky M	(50) Aineral (F1	) (except	MLRA 1)	'	Very Shallow Dark Surface (TF12)
Hydroge	en Sulfide (A4)		Loamy Gleved	Matrix (F2)	) )	,		Other (Explain in Remarks)
Deplete	d Below Dark Surface	e (A11)	Depleted Matrix	(F3)				
Thick Da	ark Surface (A12)	<del></del>	Redox Dark Su	rface (F6)			<sup>3</sup> Indic	cators of hydrophytic vegetation and
Sandy M	/lucky Mineral (S1)		Depleted Dark	Surface (F	7)		W	etland hydrology must be present,
Sandy C	Gleyed Matrix (S4)		Redox Depress	ions (F8)			ur	nless disturbed or problematic.
Restrictive	Layer (if present):							
Туре:	KOCK		-				ł	
Depth (in	ches):		-				Hydric S	Soil Present? Yes No V
Remarks:		<u></u>	0.1				,	
Restric	Gtill lawr	(a) 2".	. Spils	01S	SUMI	of vit	on- ny	and ward
	Mad in		1 had	ashnour			)	F
OV	MARTONIUM	CAINC	ii ingca	Bailt				
Madaud Lbr								
wettand ny	urology mulcators.		مريده فمعله ما				0.	
Primary Indi	cators (minimum of o	ne requirea; cr	eck all that appl	<u>Y)</u>	(20) (		<u>56</u>	econdary indicators (2 or more required)
Surface	Water (A1)		Water-Sta	Ined Leave	es (B9) (e	xcept		_ Vvater-Stained Leaves (B9) (MLRA 1, 2,
High Wa	ater Table (A2)		MLRA	1, 2, 4A, a	nd 4B)			4A, and 4B)
Saturati	on (A3)		Salt Crust	(B11)	(040)			_ Drainage Patterns (B10)
Water N	Aarks (B1)		Aquatic in	vertebrate	s (B13)			_ Dry-Season Water Table (C2)
Seaime	nt Deposits (B2)		Hydrogen	Sunde Od	ior (C1)			Saturation Visible on Aerial Imagery (C9)
	posits (B3)		Oxidized r	thizosphere of Doduce	d Iron (Cr	rtaulă kron N	18 (03)	_ Geomorphic Position (D2)
Algarivi	at of Crust (D4)		Presence	n Reducti	u iioii (C4 an in Tillo	1) 1 Colle (CG		_ Shahow Adultard (DS)
IIUII De	Posits (BD)		Receive ino	r Strongod	Diante (D		")	Paired Ant Mounds (D6) (LPP A)
Sunace	ion Visible on Assista	magan(/87)	Stunted of	oliesseu	marke)	1) (ERR A)		Frost Heave Hummerks (D7)
inunual Sparsel	v Vegetated Concave	Surface (B8)		Jannin Ke	anarko)			
Eield Obser	y vegetated concave							
Surface Mai	tor Procent? V		Donth (in	choel				
Matas Tabia	Brocont?	es No _	Depth (in	ches).				
				ches)		-	المساميرة المسم	
(includes ca	pillary fringe)	Co 1N0 _	Depts (In	uies)			anu riyaro	NO V
Describe Re	ecorded Data (stream	gauge, monito	ring well, aerial	photos, pr	evious ins	pections) i	if available	;
Remarks:			· ····					· · · · · ·
x	1 1 4	- JACA IA	India	.L. 0	22	and I		
l l	us nyan	$\langle v \left( v \left( v \left( v \right) \right) \right) \rangle$	PPU(0)	IT OVJ	- pres	₹¶++,		
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WETLAND	DETERMINATION	DATA FORM -	Western Mountains.	Valleys.	and Coast Region
			mootorir mountaino,	• • • • • • • • • • • • • • • • • • • •	and ovust negion

Project/Site: Durth RuchFord Road city/county: Pannington Sampling Date: 8/28/13
Applicant/Owner: <u>SDD0T</u> State: <u>SD</u> Sampling Point: <u>25</u> State: <u>SD</u> Sampling Point: <u>25</u>
Investigator(s): J. CUST, J. Talbitzer Section, Township, Range: Twp IN/ Rug 3E, Sec 18
Landform (hillslope, terrace, etc.): <u>dYdinagi</u> Local relief (concave, convex, none): <u>(dMCa'u</u> Slope (%): <u>3</u>
Subregion (LRR): MURAUZ Lat: 44,052289 Long: 103.90/232 Datum DNA_PISS
Soil Map Unit Name: Covaliston light, high mica, 2-10% Stopes, Flowded NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes 📈 No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes V. No No
Hydric Soil Present? Yes V No Is the Sampled Area
Wetland Hydrology Present? Yes V No Within a Wetland P res V No
Remarks: Drainogiway travels under road. No defined bud or bank.

# **VEGETATION – Use scientific names of plants.**

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum         (Plot size:)           1)        )	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species ( That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant     /       Species Across All Strata:
4	<u> </u>	= Total Co	ver	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Saping/Snub Stratum (Plot size:)				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2	•			OBL species x 1 =
3				FACW species $100 \times 2 = 200$
4				FAC species x 3 =
5				FACU species x 4 =
Lloch Checkum (Dick sizer		= Total Co	ver	UPL species x 5 =
1. Phalans abundinoida	100%	100	FACH	Column Totals: 100 (A) 200 (B)
2				Prevalence Index = $B/A = 2.0$
3		<del> </del>		Hydrophytic Vegetation Indicators:
4		<u> </u>		1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 <sup>1</sup>
7				4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8				5 - Wetland Non-Vascular Plants <sup>1</sup>
9				Problematic Hydrophytic Vogetation <sup>1</sup> (Evplain)
10.	<b>.</b>			<sup>1</sup> Indicators of budric soil and wotland budralogu must
11.				be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		= Total Cov	/er	
1				Hydrophytic
2				Vegetation
% Bare Ground in Herb Stratum		= Total Cov	ver	Present? Yes <u>V</u> No
Remarks:		c		
Wutland Vegitation pr	esent			

SOI	L
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		$\frown$	
mpling	Point:		

Denth	Matrix		Redox Features		
inches)	Color (moist)	%	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
) }	AVDAN) (	materio			
	<u></u>	<u> </u>	······································		
	······			- <u></u>	
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				J-)-	
	·····			<u> </u>	
<b></b>				·	
vne: C=C	oncentration D=De	oletion RM=	Reduced Matrix CS=Covered or Coated Sand G	rains. <sup>2</sup> L	ocation: PL=Pore Lining, M=Matrix.
vdric Soil	Indicators: (Appli	cable to all L	.RRs, unless otherwise noted.)	Indica	tors for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy Redox (S5)	2 (	cm Muck (A10)
Histic E	oipedon (A2)	-	Stripped Matrix (S6)	Re	ed Parent Material (TF2)
Black H	istic (A3)	-	Loamy Mucky Mineral (F1) (except MLRA 1)	Ve	ery Shallow Dark Surface (TF12)
 Hydroge	en Sulfide (A4)	-	Loamy Gleyed Matrix (F2)	Ot	her (Explain in Remarks)
Deplete	d Below Dark Surfa	ce (A11)	Depleted Matrix (F3)		
Thick D	ark Surface (A12)	-	Redox Dark Surface (F6)	<sup>3</sup> Indica	tors of hydrophytic vegetation and
_ Sandy M	Aucky Mineral (S1)		Depleted Dark Surface (F7)	wet	land hydrology must be present,
		-			
Sandy (	Gleyed Matrix (S4)		Redox Depressions (F8)	unie	ess disturbed or problematic.
Sandy ( lestrictive	Gleyed Matrix (S4) Layer (if present):		Redox Depressions (F8)	unie	ess disturbed or problematic.
Sandy ( cestrictive Type:	Gleyed Matrix (S4) Layer (if present): Rack		Redox Depressions (F8)	unie	ess disturbed or problematic.
Sandy ( Restrictive Type: Depth (in	Gleyed Matrix (S4) Layer (if present): T2 cc V. ches):		Redox Depressions (F8)	unie Hydric So	ess disturbed or problematic.
<u>Sandy C</u> Restrictive Type: <u></u> Depth (in Remarks:	Gleyed Matrix (S4) Layer (if present): T2-cc V. ches):		Redox Depressions (F8)	unie Hydric So	ess disturbed or problematic.
Sandy C Restrictive Type: Depth (in Remarks:	Bleyed Matrix (S4) Layer (if present): 72.cc.ll. ches):		A an was t SUMad with	unk Hydric So CV (Db.)	ess disturbed or problematic. il Present? Yes <u>No</u> No 12 MC( -
Sandy C Restrictive Type: Depth (in Remarks:	Bleyed Matrix (S4) Layer (if present): 72-cc.V. ches): & & SU WU	* 10091	d on vig + SUMace with	unk Hydric So CV PV (	ess disturbed or problematic. hil Present? Yes <u>No</u> No NC
Sandy C estrictive Type: Depth (in eemarks:	Bleyed Matrix (S4) Layer (if present): Pacel. ches):	t basi	d on vg + SUMaci with	unie Hydric So CV (21-6	ess disturbed or problematic.
Sandy Constructive	Bleyed Matrix (S4) Layer (if present): T_ccll ches):	* 10091	d on vig t SUMace with	unie Hydric So CV (Db.6	ess disturbed or problematic.
Sandy C estrictive Type: Depth (in emarks: Colline (DROLC	Bleyed Matrix (S4) Layer (if present): T2ccV. ches): 0 CSU WIC	* basi	d on vig t SUMace with	unie Hydric So CV ()V (	ess disturbed or problematic.
Sandy C testrictive Type: Depth (in temarks: Coll Coll Coll Coll Coll Coll Coll Col	Bleyed Matrix (S4) Layer (if present): T2ccV. ches):	* \argo	d on vg + SUMace with	unie Hydric So CV DV (	ess disturbed or problematic.
Sandy C testrictive Type: Depth (in temarks:  Colls YDROLC Vetland Hy trimary Indi	Sleyed Matrix (S4) Layer (if present): 72.cc.l. ches): \$ \$\alpha \lefter SU \WLC GY drology Indicators cators (minimum of	t Vary i	Redox Depressions (F8)	Unite Hydric So CV (24)	ess disturbed or problematic.
Sandy C estrictive Type: Depth (in emarks:    	Bleyed Matrix (S4) Layer (if present): 72.cc.l. ches): 0 GY drology Indicators cators (minimum of Water (A1)	t (219)	<pre> Redox Depressions (F8)  d on vg + SUWau with  : check all that apply)  Water-Stained Leaves (B9) (except</pre>	Unite Hydric So CV () U ( 	ess disturbed or problematic.         nil Present?       Yes         No         NUC(
Sandy C estrictive Type: Depth (in emarks:  	Bleyed Matrix (S4) Layer (if present): T2-cc/L ches): Che	t (219) s: one required	<pre> Redox Depressions (F8)</pre>	Unite Hydric So CY (24-6	ess disturbed or problematic.         wil Present?       Yes         Yes       No         YUU(         ondary Indicators (2 or more required)         Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Sandy C estrictive Type: Depth (in emarks:  Construction / DROLC / Vetland Hy / Vetland Hy / Surface / High Wa Saturati	Bleyed Matrix (S4) Layer (if present): <u>ZCCL</u> ches): <i>C</i> SUM/ <i>C</i> CSUM/ <i>C</i> C	t Vary	<pre> Redox Depressions (F8)</pre>	Unite Hydric So CV (DU) CV (Sec 	ess disturbed or problematic.         nil Present?       Yes         V       No         IQUIC(         ondary Indicators (2 or more required)         Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)
Sandy C estrictive Type: Depth (in emarks:  Content for the second for the secon	Bleyed Matrix (S4) Layer (if present): <u>ZCCU</u> ches): <i>C</i> SUWU <i>C</i> CCU <i>C</i> CCU	t (22)	<pre> Redox Depressions (F8) </pre>	Unite Hydric So CY DH ( Sec 	ess disturbed or problematic.         nil Present?       Yes         No
Sandy C estrictive Type: Depth (in emarks:  Outer /DROLC / Vetland Hy / / Vetland Hy / / / / / / / / / / / / / / / / / / /	Bleyed Matrix (S4) Layer (if present): Ches): C	t Vasu	Redox Depressions (F8) A ON VG + SUMACL WATCH : check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Unle Hydric So CY (24 ( Sec 	ess disturbed or problematic.         bil Present?       Yes       No         DUMU       Model       Model         ondary Indicators (2 or more required)       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)       Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)
Sandy C estrictive Type: Depth (in emarks: COLC Vetland Hy rimary Indi Surface High W: Saturati Saturati Water M Sedime Drift De	Bleyed Matrix (S4) Layer (if present): <u>72 ccll</u> ches): def SU Wild GY drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)	t Vasu	Redox Depressions (F8)	unk Hydric So CV (24 ( Sec 	ess disturbed or problematic.         bil Present?       Yes       No         DUMC(       No       Intervention         Ondary Indicators (2 or more required)       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)       Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         Geomorphic Position (D2)
Sandy C estrictive Type: Depth (in emarks: COLC (Vetland Hy rimary Indi Surface High Wa Saturati Saturati Water M Sedime Drift De Algal M	Bleyed Matrix (S4) Layer (if present): <u>72.ccl</u> . ches): def SU Mile GY drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	t (29)	Redox Depressions (F8)	unie Hydric So CV () () 	ess disturbed or problematic.         bil Present?       Yes         Yes       No         No       No         Drainage       No         Yes       No         Jos       No         No       No
Sandy C estrictive Type: Depth (in emarks: COLC Vetland Hy rimary Indi Surface High Wa Surface High Wa Surface Drift De Algal M Iron De	Bleyed Matrix (S4) Layer (if present): <u>72.ccll.</u> ches): def SU Mile <b>GY</b> drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	t (209)	Redox Depressions (F8) A M VG + SUMACL WAR : check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6)	Unle Hydric So CV (24) Sec 	ess disturbed or problematic.         wil Present?       Yes       No         WC(       No       Image Patterns (2 or more required)         Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)       MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)       Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9       Geomorphic Position (D2)         Shallow Aquitard (D3)       FAC-Neutral Test (D5)
Sandy C estrictive Type: Depth (in emarks: COLO (DROLCO Vetland Hy rimary Indi Surface High Wa Surface Drift De Algal M Iron De Surface	Bleyed Matrix (S4) Layer (if present): <u>ZCCU</u> ches): <i>G</i> SU MU <b>GY</b> <b>drology Indicators</b> cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	the required	Redox Depressions (F8) Redox Depressions (F8) d of VG + SUMACL WAR : check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A)	Unite Hydric So CV (24 ( 	ess disturbed or problematic.         iil Present?       Yes       No         iiil Present?       Yes       No         iiii Present?       Yes       No         iiiii Present?       Yes       No         iiiii Present?       Yes       No         iiiii Present?       Yes       No         iiiiii Present?       Yes       No         iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii
Sandy C estrictive Type: Depth (in emarks: CONS C	Bleyed Matrix (S4) Layer (if present): <u>ZCCU</u> ches): <i>G</i> SUMU <b>G</b> <b>G</b> <b>G</b> <b>G</b> <b>G</b> <b>G</b> <b>G</b> <b>G</b>	t Imagery (B7	Redox Depressions (F8) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)	Unite Hydric So CY (24 ( 	ass disturbed or problematic.  il Present? Yes No  Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Sandy C estrictive Type: Depth (in emarks: CDCC /otland Hy rimary Indi / Surface / High Wi Saturati _ Saturati _ Saturati _ Saturati _ Drift De _ Algal M _ Iron De _ Surface _ Inundat Sparsel	Bleyed Matrix (S4) Layer (if present): <u>ZCCU</u> ches): <i>G</i> SUMU <b>G</b> <b>G</b> <b>G</b> <b>G</b> <b>G</b> <b>G</b> <b>G</b> <b>G</b>	t Imagery (B7	Redox Depressions (F8)	Unite Hydric So CY (24 ( 	ess disturbed or problematic.         iil Present?       Yes       No         iii Present?       Yes       No         iii Widd       No       Iiii No         iii Widd       No       Iiiii No         iii Widd       No       Iiiii No         iii Widd       No       Iiiii No         iii Nigd       No       Iiiii No         iii Nigd       No       Iiiii No         iii Nigd       No       Iiiii No         Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)       No         Drainage Patterns (B10)       Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9       Geomorphic Position (D2)         Shallow Aquitard (D3)       FAC-Neutral Test (D5)         Raised Ant Mounds (D6) (LRR A)       Frost-Heave Hummocks (D7)
Sandy C Type: Depth (in temarks: Color temarks:	Bleyed Matrix (S4) Layer (if present): <u>Zeck</u> ches): <i>G</i> SUMU <b>GGY</b> <b>drology Indicators</b> cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations:	I Imagery (B7 ve Surface (E	Redox Depressions (F8) d of Vg + SUMacl Wth check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6 Stunted or Stressed Plants (D1) (LRR A ) Other (Explain in Remarks) 88)	Unite Hydric So CV (24 ( 	ess disturbed or problematic.         iil Present?       Yes       No         iii Present?       Yes       No         iii Widd       No       Iiii No         iii Widd       No       Iiiii No         iii Widd       No       Iiiiii No         iii Widd       No       Iiiiiii No         iii Nigd       No       Iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii
Sandy C Type: Depth (in temarks: // DROLC // DROLC	Bleyed Matrix (S4) Layer (if present): <u>Zeck</u> ches):	I Imagery (B7 ve Surface (E	Redox Depressions (F8)	unle           Hydric So           CY         Ob (C)           Sec	ess disturbed or problematic.         iil Present?       Yes       No         iii Present?       Yes       No         iii Widd       No       Iiii No         iii Widd       No       Iiiii No         iii Widd       No       Iiiiii No         iii Widd       No       Iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii
Sandy C Restrictive Type: Depth (in Remarks: PDPTH Primary Indi Primary I	Bleyed Matrix (S4) Layer (if present): <u>Zeck</u> ches): <i>G</i> SUMU GGY drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present? Breaont2	I Imagery (B7 ve Surface (E Yes	Redox Depressions (F8)	unk           Hydric So           CY         Ob (C)           Sec	ess disturbed or problematic.         iil Present?       Yes       No         iii Present?       Yes       No         ondary Indicators (2 or more required)       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)       Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9       Geomorphic Position (D2)         Shallow Aquitard (D3)       FAC-Neutral Test (D5)         Raised Ant Mounds (D6) (LRR A)       Frost-Heave Hummocks (D7)
Sandy C Restrictive Type: Depth (in Remarks: YDROLC YDROLC YUROLC Vetland Hy Primary Indi Surface High W: Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel Field Obset Surface Wa Nater Table	Bleyed Matrix (S4) Layer (if present): <u>Zeck</u> ches): <i>G</i> SUMU GGY drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present? Present?	I Imagery (B7 ve Surface (E Yes	Redox Depressions (F8)	Unit           Hydric So           CY         Ob (           Sec           Ob (C3)         Ob (           Ob (C3)         Ob (           Ob (C3)         Ob (           Ob (         Ob (           Ob (         Ob (	ess disturbed or problematic.         iil Present?       Yes       No         iii Present?       Yes       No         iii Widd       Iiii Widd       Iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii

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

Remarks:

WETLAND DETERM	INATION DATA FOR	RM – Western Mou	intains, Valleys, and Coast Region
WETLAND DETERMIN Project/Site: South Rachel Applicant/Owner: SDDOT nvestigator(s): T. Talbitzer, andform (hillslope, terrace, etc.): Slope Subregion (LRR): ML 12A (22) Soil Map Unit Name Ordestop Locity Are climatic / hydrologic conditions on the si Are Vegetation , Soil , or Hyd Are Vegetation , Soil , or Hyd SUMMARY OF FINDINGS – Attac	INATION DATA FOR A Road 	RM – Western Mou         City/County:       Pthy         . Section, Township, Ra         _ Local relief (concave,         4,052224         2-10% dapes, -         ear? Yes       No_         v disturbed?       Are         roblematic?       (If ne         g sampling point I	Intains, Valleys, and Coast Region         Intains, Valleys, and Coast Region         Sampling Date:       8/28/13         State:       Sampling Point:         Inge:       State:         State:       Sampling Point:         Inge:       INP         Inge:       INP         State:       Sampling Point:         Inge:       INP         Inge:       INP
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	is the Sampled within a Wetlan	I Area nd? Yes No
Remains. Point taken just	upslop of p	wint 25 by	n slop of drainny
Tree Stratum (Plot size:	) Absolute $\frac{\% \text{ Cover}}{\% \text{ Cover}}$	Dominant Indicator <u>Species? Status</u> = Total Cover       = Total Cover       = Total Cover <u></u>	Dominance Test worksheet:Number of Dominant Species(A)Total Number of Dominant2Species Across All Strata:2Percent of Dominant Species $50\%$ (A/B)Prevalence Index worksheet: $50\%$ (A/B)Total % Cover of:Multiply by:OBL species $x 1 =$ FACW species $x 2 = -$ FACW species $x 3 = -45$ FACW species $x 3 = -45$ FACU species $x 3 = -45$ FACU species $x 5 = -25$ Column Totals: $100$ (A) $-335$ (B)Prevalence Index = B/A = -2, 4Hydrophytic Vegetation Indicators:1 - Rapid Test for Hydrophytic Vegetation2 - Dominance Test is >50%3 - Prevalence Index is $\leq 3.0^1$ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)5 - Wetland Non-Vascular Plants <sup>1</sup> Problematic Hydrophytic Vegetation 1 (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum         (Plot size:	)	= Total Cover	Hydrophytic Vegetation Present? Yes No V
Remarks: Wetland Voogtation	criteria vot	met.	

Sampling Point: \_26

Profile Description: (Describe to the depth needed to document the indicator or co	onfirm the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type <sup>1</sup> Lo	oc <sup>2</sup> <u>Texture</u> <u>Remarks</u>
0-1 Ovoranc Malenal	
. )	
	********
	nd Groing <sup>2</sup> Lagotion: PL-Bara Lining MaMatrix
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Sandy Reday (S5)	2 cm Milck (A10)
Histic Epipedon (A2) Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLF	RA 1) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	
Thick Dark Surface (A12) Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4) Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):	
Type: <u>V.(2) (X</u>	
Depth (inches):	Hydric Soil Present? Yes No <u>\</u>
Remarks:	
Kosh till lower O. C. Assunce no	m-hydric basion on
VIOD traction and hundrolog	NA J
HYDROLOGY	00
Wetland Hydrology Indicators:	· · · · · · · · · · · · · · · · · · ·
Primary Indicators (minimum of one required: check all that apoly)	Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Leaves (B9) (excep	t Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A. and 4B)
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Oxidized Rhizospheres along Living	g Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (85)	Is (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LI	RR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No V Depth (inches):	
Saturation Present? Yes No V Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	, , ,
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspecti	ions), if available:
	· · · · · · · · · · · · · · · · · · ·
Remarks:	
No hydrology made cators	
J J J	

WETLAND DETERMINATION DA	TA FORM – Western Mou	ntains, Valleys, and Coast Region
Project/Site: South Rochford Roud	City/County: Revou	intration Sampling Date: 8/28/13
Applicant/Owner: SD DDT		State: SD Sampling Point: 27
Investigator(s): 1. PLAST, T. Talbitzer	Section, Township, Rar	DOB: TWID IN, RNA 3E, SUF
Landform (billslone, terrace, etc.): Stand	Local relief (concave, o	(a) = (a) + (a)
Subregion (LRB): MIL 2.4 62	Lat: 44.058985	Long: -103.9/12/159 Datum: DNA_198
Soil Map Unit Name: Cordistan land hido m	ina. 210% stods, fla	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this	s time of year? Yes V No	(If no, explain in Remarks.)
Are Vegetation Soil or Hydrology s	significantly disturbed? Are "	Normal Circumstances" present? Yes Vo
Are Vegetation, Soil, or Hydrology n	naturally problematic? (If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site man	showing sampling point lo	ocations transects important features etc
Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N Wetland Hydrology Present? Yes N Remarks: Uggladed wasterway th	Is the Sampled within a Wetlan wough prairie, Sta	Area d? Yes <u>No</u> Inding Water.
VEGETATION - Use scientific names of plan	its.	
Tree Stratum         (Plot size:)           1)	Absolute Dominant Indicator <u>% Cover Species? Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2		Total Number of Dominant Species Across All Strata: (B)
4	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:ししごう (A/B)
1.		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		
4		FAC species $\sqrt{00}$ x 3 = 180
5		FACU species x 4 =
Herb Stratum (Plot size:	= Total Cover	UPL species $10 \times 5 = 50$
1. Aarosta stabnice va	30 Y FAC	Column Totals: (A) (B) (B)
2. Carrier no braskdensis	ZO Y OBL	Prevalence Index = $B/A = 2, 8$
3 Solidago missouriensis	<u> </u>	Hydrophytic Vegetation Indicators:
4. Mentrea sp		1 - Rapid Test for Hydrophytic Vegetation
5. ranicum capillari	$-\frac{y}{Y}$ +AC	∠ 2 - Dominance Test is >50%
6		✓ 3 - Prevalence Index is ≤3.0'
8	······································	4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)

6		Year S - Prevalence Index is ≤3.0 <sup>1</sup>
8.	······································	4 - Morphological Adaptations <sup>1</sup> (Provide supportin data in Remarks or on a separate sheet)
9.		5 - Wetland Non-Vascular Plants <sup>1</sup>
10		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11	Total Cover	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		
1		Hydrophytic
2		Vegetation
	= Total Cover	Present? Tes No
% Bare Ground in Herb Stratum		

Remarks:

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SO	IL
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		~1
Sampling	Point:	2t

Profile Desc	ription: (Describe	to the dept	h needed to docu	ment the ir	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redo	x Features	<b>T</b>	1 2	Terduce	Demeric
(inches)	$\frac{\text{Color (moist)}}{10 \sqrt{10} \sim 1}$	12 ID	TO IO II II	<u>%</u>	_iype_			Remarks
<u>V-U</u>	1041661	<u> </u>	3412 - 1/0		<u> </u>	<u>N.</u>	<u> </u>	
					<u></u>			
<u></u>								<u></u>
		· ·						
		· ·						
							<del></del>	· · · · · · · · · · · · · · · · · · ·
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM≂	Reduced Matrix, C	S=Covered	or Coate	ed Sand Gr	ains. <sup>2</sup> Lo	cation: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applic	able to all i	.RRs, unless othe	rwise note	d.)		Indicato	ors for Problematic Hydric Soils':
Histosol	(A1)		Sandy Redox (	S5)			2 cr	m Muck (A10)
Histic Ep	pipedon (A2)		Stripped Matrix	: (S6)			Rec	Parent Material (TF2)
Black His	stic (A3) n Sulfide (A4)		Loamy Mucky	Mineral (F1 Matrix (F2)	) (excep	( MLRA 1)	Ver	y Shallow Dark Surface (TF12)
Hyuroge	n Sunde (A4) I Below Dark Surfac	e (A11)	Loamy Gleyed Depleted Matri	waus (⊏∠) x (E3)			00	
Thick Da	ark Surface (A12)	G ((11)) .	Redox Dark Su	Inface (F6)			<sup>3</sup> Indicate	ors of hydrophytic vegetation and
Sandy N	lucky Mineral (S1)		 Depleted Dark	Surface (F	7)		wetla	and hydrology must be present,
Sandy G	ileyed Matrix (S4)	V	Redox Depres	sions (F8)			unles	ss disturbed or problematic.
Restrictive I	ayer (if present):							
Type:								
Depth (ind	ches):		<u> </u>				Hydric Soil	Present? Yes <u>/</u> No
Remarks:								
	ydric soi	l ind	icators p	rdsqu	<del>,</del>			
Primary India	arology indicators:	no roquirod	, shock all that ann	KA.			Saca	ndanu Indicatore (2 or more required)
Pomary Indic		ne required	Viotos Str	iv)		veent	<u>3eco</u>	Notar Stained Leaves (R0) (81 DA 4 2
Surface	vvater (AT)				35 (D9) (6 nd 40)	xcept	V	(MERA 1, 2,
Soturotia			Salt Crue	:), 44, 44 A1, 44 E/D, 511 \	nu 40)		г	rainage Batterns (B10)
Mater M	arke (B1)		Gait Grus	wertebrates	s (B13)		F	Dry-Season Water Table (C2)
Sedimer	at Denosits (82)		Hydrogen	Sulfide Od	lor(C1)			Saturation Visible on Aerial Imagery (C9)
Drift Der	nosits (83)		Oxidized	Rhizospher	es along	Livina Roo	ts (C3)	Geomorphic Position (D2)
Algal Ma	at or Crust (B4)		Presence	of Reduce	d Iron (C	4)	s	Shallow Aguitard (D3)
Iron Der	oosits (B5)		Recent In	on Reductio	on in Tille	, d Soils (C6	i) F	AC-Neutral Test (D5)
Surface	Soil Cracks (B6)		Stunted o	r Stressed	Plants (D	1) (LRR A)	)F	Raised Ant Mounds (D6) (LRR A)
Inundati	on Visible on Aerial	Imagery (B7	) Other (Ex	plain in Re	marks)		F	rost-Heave Hummocks (D7)
Sparsely	y Vegetated Concav	e Surface (8	38)					
Field Obser	vations:	/						
Surface Wat	er Present? Y	′es <u>//</u> I	No Depth (ir	nches):	<u>l                                     </u>	_		
Water Table	Present? Y	′es I	No Depth (ir	nches):	<u>ó</u>	<u> </u>		
Saturation P	resent? Y	′es <u> </u>	vo Depth (ir	nches):	J	Wetla	and Hydrolog	y Present? Yes 🔽 No
(includes car	pillary fringe)	a aure mo	nitoring well seried	photos pr	avioue in	spections)	if available.	
	ovided Data (origan	, gaage, me	tationing went delia	hunno, hu	enous ni	, soonona),	a ayunabig.	
Remarks	<u>,                                </u>							
<		orber		NOCUM	d	M/SUM	a slov	OIM _
	autall w	.2K** •	Q AND S V. I		KC22-	94.21	J	r
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### WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/site: South Rochford Road	City/County:	Rennington	Sampling Date: 8/28/18
Applicant/Owner: <u>SDDOT</u>		State: <u>31)</u>	Sampling Point: <u>28</u>
Investigator(s): T.T. I. bitzer, J. RUST	Section, Towns!	hip, Range: TWP 1, Phg	3E & 7
Landform (hillslope, terrace, etc.):	_ Local relief (cor	icave, convex, none): <u>(ance</u>	(// Slope (%):
Subregion (LRR): MLR-A 62 Lat: 44	1.658900	1 Long:-103. 90015	<u>5</u> Datum: <u>DVA 198</u> 3
Soil Map Unit Name: Or destan 1 00 MA, high Whice	1 2-10%	<u>slopes, flo</u> tWi classific	ation: <u>NA</u>
Are climatic / hydrologic conditions on the site typical for this time of ye	ear?Yes 🗹	No (If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significantly	/ disturbed?	Are "Normal Circumstances" p	resent? Yes 💆 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic?	(If needed, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling p	oint locations, transects	, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes		is the Sampled Area within a Wetland?	Yes No	
Remarks: Point tallen	on sldr	धन्त्र ह	grass draining	Vac	

#### **VEGETATION – Use scientific names of plants.**

	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	<u>Species?</u> <u>Status</u>	Number of Dominant Species /
1	<u></u>		That Are OBL, FACW, or FAC: (A)
2.			
3		<u></u>	Total Number of Dominant
· · · · · · · · · · · · · · · · · · ·	<u></u>		Species Across All Strata. (B)
4		<u> </u>	Percent of Dominant Species
	<u></u>	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
Saping/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
1	<u></u>		Total % Cover of: Multiply by:
2	<u></u>		OBL species x1=
3	<u></u>		$FACW/species x^2 =$
4.			$P_{1} = \frac{P_{1}}{P_{1}}$
5			FAC species $-10$ $x_3 = 270$
		= Total Cover	FACU species $10 \times 4 = 90$
Herb Stratum (Plot size:)	· · · ·	, , , l , a , a	UPL species x 5 =
1. BYDWILLIS MORINUS	<u>BO</u>	Y FAC	Column Totals: <u>100</u> (A) <u><math>310</math></u> (B)
2. PITSUMMA ANNOS	Т.О	N FAC	Brouplance Index - B/A - 31
3 Salado avaduras	io.	N FACU	Hudrophytic Vocatation Indicators
A	i	f	A David Task for Undershelfs Manual first
			- T - Rapid Test for Hydrophytic Vegetation
0			∠ 2 - Dominance Test is >50%
6		<u> </u>	3 - Prevalence Index is ≤3.0 <sup>1</sup>
7	<u> </u>		4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
o			5 - Wetland Non-Vascular Plants <sup>1</sup>
			Broblematic Hydrophytic Venetation <sup>1</sup> (Evaluit)
10	<del></del>		
11			indicators of hydric soil and wetland hydrology must
		= Total Cover	
Woody Vine Stratum (Plot size:)			
1			Hydrophytic
2			Vegetation
		= Total Cover	Present? Yes V No
% Bare Ground in Herb Stratum			
Remarks:			
Marginal hydric vegetation	pras	sent.	

US Army Corps of Engineers

# SOII

Sami	olina	Point:

rofile Description: (Describe to the	e depth needed to document the indicator or confirm	the absence o	f indicators.)
epth <u>Matrix</u>	Redox Features		
nches) Color (moist) 9	6 Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>		Remarks
-20 10/12 3/2 1	00	<u> </u>	
······	······································		
me: Concentration Doplation			tion: PL=Pore Liping M=Matrix
dric Soil Indicators: (Applicable	to all LRRs, unless otherwise noted.)	Indicator	s for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	2 cm	Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red f	Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1)	Verv	Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other	(Explain in Remarks)
Depleted Below Dark Surface (A1	1) Depleted Matrix (F3)		
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicator:	of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetlan	hydrology must be present,
_ Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless	disturbed or problematic.
strictive Layer (if present):			
Туре:			/
Depth (inches): emarks: Hyphic wit	indicators not present.	Hydric Soil F	resent? Yes <u>No </u> No <u>V</u>
Depth (inches): emarks: Hypthic Will	indicators not present.	Hydric Soil F	resent? Yes <u>No</u>
Depth (inches): emarks: Hyphic will 'DROLOGY retland Hydrology Indicators:	indicators not present.	Hydric Soil F	resent? Yes <u>No </u>
Depth (inches): emarks:	indicators not present.	Hydric Soil F	ary Indicators (2 or more required)
Depth (inches): emarks: Hyphic Will DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re Surface Water (A1)	indicators not present.	Hydric Soil F	ary Indicators (2 or more required)
Depth (inches): emarks:	indicators not present.	Hydric Soil F	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2,
Depth (inches): emarks:	indicators not present. equired: check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Soli Count (B11)	Hydric Soil F	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Depth (inches): marks:	indicators not present. equired: check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Agric la preschatate (B12)	Hydric Soil F	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10)
Depth (inches): marks:	indicators not present. equired: check all that apply) — Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Undergan Sulfate Odds (C1)	Hydric Soil F <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u>Seconc</u> <u></u>	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2)
Depth (inches): emarks: DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re 	indicators not present. equired: check all that apply) — Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) — Ordinard Disconterentiation Data	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) tinage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9
Depth (inches): emarks: DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits (B2) _ Drift Deposits (B3)	indicators not present. equired: check all that apply) — Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres along Living Roo	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) tinage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2)
Depth (inches): emarks: JAMATIC DUIL DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re 	indicators not presence of Reduced Iron (C4)	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) tinage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3)
Depth (inches): marks: DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re 	indicators not presence of Reduced Iron (C4) — Vater-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres along Living Roo — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soils (C6)	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) tinage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
Depth (inches): marks: DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one re 	indicators not presence of Reduced Iron (C4) — Vater-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres along Living Roo — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soils (C6 — Stunted or Stressed Plants (D1) (LRR A)	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) tinage Patterns (B10) -Season Water Table (C2) turation Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
Depth (inches): marks:	indicators not presence of Reduced Iron (C4) — Vater-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres along Living Roo — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soils (C6 — Stunted or Stressed Plants (D1) (LRR A) ery (B7) — Other (Explain in Remarks)	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Depth (inches): emarks:	indicators not presence of Reduced Iron (C4) — Vater-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres along Living Roo — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soils (C6) — Stunted or Stressed Plants (D1) (LRR A) prey (B7) — Other (Explain in Remarks) face (B8)	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Depth (inches): emarks:	indicators not presented in Recent Iron Reduction in Tilled Soils (Ce — Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres along Living Roo — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soils (Ce — Stunted or Stressed Plants (D1) (LRR A) face (B8)	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) tinage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Depth (inches): emarks:	indicators inder presence of Reduced Iron (C4) — Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres along Living Roo — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soils (C6 — Stunted or Stressed Plants (D1) (LRR A) face (B8) — No Depth (inches):	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) tinage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Depth (inches): emarks:	indicators hot present.	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) tinage Patterns (B10) P-Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Depth (inches): emarks:	indicators	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) tinage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7) Present? Yes No
Depth (inches): emarks:	indicators	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7) Present? Yes No
Depth (inches): emarks:	iwdicators       Not       puscht.         equired: check all that apply)	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7) Present? Yes No
Depth (inches):	indicators inder present.	Hydric Soil F 	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) tinage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7) Present? Yes No

# WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/site: South Roch Pord Road	Citv/C	ounty: PANN	WATON Sampling Date: 8/29/12
Applicant/Owner SVDDT	Only/0	ounty	State: SD Sampling Point: 29
Investigator(s): T PUST T Talkitory	Section	n Townshin Ra	me Thank 2 N. RAG 3E Sc 1
Landform (hillslope terrace etc.): drafi haar aha		relief (concave	(0) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2
Subracion (LPD): MIN 4 107-	1 44.0%	NUD65	1 and: 103. 202752 Datum: DA/A #83
Soll Man Hait Nama: Candidana Advisa horar la	auro, D-10%	Stores Que	All ARAM alagailage ALA
Son wap one name. <u>Cyrus one maa yn name in</u>		x 4 2 + 10	(Kara aurilaisin Danadas)
Are climatic / hydrologic conditions on the site typical for thi	stime of year? Y	esNo	(a no, explain in Remarks.)
Are vegetation, Soll, or Hydrology s	significantiy disturi	oed? Are	Normal Circumstances' present? Yes V No
Are vegetation, Soil, or Hydrology r	showing sam	ntic? (if ne	eded, explain any answers in Remarks.)
Hydrophytic Vegetation Present? Yes V	lo		······································
Hydric Soil Present? Yes 🔨 N	lo	is the Sampled	Area
Wetland Hydrology Present? Yes Ves N	lo	within a Wetlar	nd? Yes <u>/ No</u>
Remarks: Shallow drainage throu	gh prair	R- Aou	wing Water.
VEGETATION – Use scientific names of plan	its.		· · · · · ·
Tree Stratum (Plot size:	Absolute Dom % Cover Spe	ninant Indicator	Dominance Test worksheet:
1			Number of Dominant Species           That Are OBL, FACW, or FAC:         (A)
2			Total Number of Dominant
3 4.			Species Across All Strata: (B)
Sapling/Shrub Stratum (Plot size: )	= To	tal Cover	Percent of Dominant Species $100$ (A/B) That Are OBL., FACW, or FAC:
1.			Prevalence Index worksheet:
2.		······	Total % Cover of: Multiply by:
3			OBL species $\underline{-00}$ x1 = $\underline{90}$
4.			FACW species x 2 =
5	<u> </u>		FAC species $x 3 = $
Ligh Chrohum (Distaine)	= To	tal Cover	$\frac{1}{100} \text{ species } \frac{1}{10} \text{ species } \frac{1}{50}  species$
1 (1014a secondaria ta	16 N	OBL	Column Totals: $90$ (A) $130$ (B)
2. Solidado missourias		NI(W)	Prevalence Index = B/A = 14
3. Court Mobraskaphsis	70 1	<u>or</u>	Hydrophytic Vegetation Indicators:
4. JUNING Sp.	<u>    10                                </u>		1 - Rapid Test for Hydrophytic Vegetation
5	<u> </u>		2 - Dominance Test is >50%
6			3 - Prevalence Index is ≤3.0 <sup>1</sup>
7			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
- 8			5 - Wetland Non-Vascular Plants <sup>1</sup>
			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11.			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	= Tot	al Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			
1			Hydrophytic Versettion
Z			Present? Yes No
% Bare Ground in Herb Stratum	=   ot		
Remarks;			
Hydric regitation presen	fre .		

SO	L
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Sampling Point: \_\_\_

	the absolute of maleatoroly
Depth Matrix Redox Features	Tautus
(inches) Color (moist) % Color (moist) % Loc"	(T) Remarks
$\frac{10-8}{10-8} = \frac{10-942}{10-942} = \frac{90}{10-9} = \frac{3972}{10-976} = \frac{10}{10-976} = \frac{10}{10$	-1
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Gra Hudria Sail Indicators: (Applicable to all LBPs, unless otherwise noted.)	ains. "Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
(Seteral (A4)	2 cm Muck (A10)
Histic Enjandon (A2) Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	
Thick Dark Surface (A12) Redox Dark Surface (F6)	Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)	wettand hydrology must be present,
Restrictive Laver (if present):	
Depth (inches):	Hydric Soil Present? Yes No
Bemarks:	
Undric soil chteria mot.	
HYDROLOGY	
HYDROLOGY           Wetland Hydrology Indicators:           Remove Indicators (minimum of one required) check all that apply)	Secondary Indicators (2 or more required)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Volter Stained Leaves (B0) (except	Secondary Indicators (2 or more required)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A and 4B)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)	<ul> <li><u>Secondary Indicators (2 or more required)</u></li> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)	<u>Secondary Indicators (2 or more required)</u> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roo	<ul> <li><u>Secondary Indicators (2 or more required)</u></li> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>ts (C3)</li> <li>Geomorphic Position (D2)</li> </ul>
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HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roo         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)	Secondary Indicators (2 or more required)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roo         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)	Secondary Indicators (2 or more required)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roo         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Stunted or Stressed Plants (D1) (LRR A)	Secondary Indicators (2 or more required)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roo         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Field Observations:	Secondary Indicators (2 or more required)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roo         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Field Observations:         Surface Water Present?       Yes       No       Depth (inches):         Water Charle Present?       Yes       No       Depth (inches):	Secondary Indicators (2 or more required)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roo         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Fleid Observations:         Surface Water Present?       Yes       No       Depth (inches):         Water Table Present?       Yes       No       Depth (inches):       Depth (inches):	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ts (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ts (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) and Hydrology Present? Yes No
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roo         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Pepth (inches):         Field Observations:       No       Depth (inches):         Saturation Present?       Yes       No       Depth (inches):         Saturation Present?       Yes       No       Depth (inches):       Wetlater         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections),       Wetlater	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)     Saturation Visible on Aerial Imagery (C9)     Shallow Aquitard (D3)     FAC-Neutral Test (D5)     Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roo         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Pepth (inches):         Field Observations:       Yes       No       Depth (inches):         Water Table Present?       Yes       No       Depth (inches):       Wetlate (includes capillary fringe)         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections),       Interface Stream gauge, monitoring well, aerial photos, previous inspections),	Secondary Indicators (2 or more required)     Water-Stained Leaves (B9) (MLRA 1, 2,     4A, and 4B)     Drainage Patterns (B10)     Dry-Season Water Table (C2)     Saturation Visible on Aerial Imagery (C9)     Saturation Visible on Aerial Imagery (C9)     Shallow Aquitard (D3)     FAC-Neutral Test (D5)     Raised Ant Mounds (D6) (LRR A)     Frost-Heave Hummocks (D7)  and Hydrology Present? Yes No if available:
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required: check all that apply)         Surface Water (A1)       Water-Stained Leaves (B9) (except         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)         Saturation (A3)       Salt Crust (B11)         Water Marks (B1)       Aquatic Invertebrates (B13)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roo         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Field Observations:         Surface Water Present?       Yes       No       Depth (inches):       Wether Concave Surface (B8)         Field Observations:       Saturation Present?       Yes       No       Depth (inches):       Wether Concave Surface (B8)         Field Observations:       Saturation Present?       Yes       No       Depth (inches):       Wether Concave Surface (B8)         Field Observations:       Yes       No       Depth (inches):       W	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ts (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) and Hydrology Present? Yes No if available:
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WETLAND DETERMINATION D	ATA FORM	1 – Western I	Mountains, Val	leys, and Coast Region
Project/Site: South Rochford Road	1	ity/County:	univator	Sampling Date: 8/28/13
Applicant/Owner: SDD/2T		, , , , , , , , , , , , , , , , , , , ,	State:	SD Sampling Point: 30
Investigator(s): T. Tulbitzer, J. Pust		Section Townshi	n Range TWID	2N. Dm3E. Sect
Landform (hillsione terrace atc.):	· ·	ocal relief (corr		· CONVALUEL Slope (%): ()
Candidon (Inisiope, terrace, etc.). <u>1121 - 1010 C</u>	1 44	nounces	ave, convex, none)	(007 7-1) Stope (76). 17
Subregion (LRR): <u>MILEAL O C</u>	Lat: <u>7-1</u>	P/ Cards	Due Ad	$\frac{1}{1}$ Datum: $\frac{1}{2}$
Soil Map Unit Name1 (W////////////////////////////////////	pong and	<u>aures</u>	<i>†{(k⊭∆ *6A</i> N	
Are climatic / hydrologic conditions on the site typical for t	his time of yea	r? Yes	No (If no, e	explain in Remarks.)
Are Vegetation, Soil, or Hydrology	_significantly of	listurbed?	Are "Normal Circur	nstances" present? Yes V
Are Vegetation, Soil, or Hydrology	_ naturally proi	plematic?	(If needed, explain	any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	p showing	sampling po	int locations, t	ransects, important features, etc.
Hydrophytic Vegetation Present? Yes	No			
Hydric Soil Present? Yes	No	is the San	npled Area	Var Na hand
Wetland Hydrology Present? Yes	<u>No</u>	within a v	/etiand?	YesNo
Remarks: Two draw agis Mutg	( UNER	oom ol	point. En	anos throughout.
Lydends well autsid	<u>u shu</u>	dy Arda.	POINT 4a	le upsope or sen amor
VEGETATION – Use scientific names of pla	ants.			
Tree Stratum (Plot size: )	Absolute % Cover	Dominant Indic Species? Stat	ator Dominance	Test worksheet:
1.			That Are OE	Dominant Species 2 (A)
2				
3			Species Acr	oss All Strata: (B)
4				Cominant Engaine
		= Total Cover	That Are OE	SL, FACW, or FAC: $(200)$ (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence	Index worksheet:
1,			Total %	Cover of: Multiply by:
2			OBL species	s x 1 =
4			FACW spec	ies x2 =
5.			FAC species	$s = \frac{60}{290} \times 3 = \frac{290}{290}$
		= Total Cover	FACU speci	es x4 =
Herb Stratum (Plot size:)	~~~	V NOC	UPL species	$x_{5} = 100$ $x_{5} = 100$
1. Solidago Missorini Ensis	$-\frac{10}{10}$		Column Tota	als: $100$ (A) $340$ (B)
2. Dromus Mermin	$-\frac{\omega}{2\omega}$	<u> </u>	Preval	ence Index = B/A =
3. <u>appropriations actionments</u>	20		🖵 🛛 Hydrophyti	c Vegetation Indicators:
4. <u>**</u>		·····	<sup>1 - Rapi</sup>	id Test for Hydrophytic Vegetation
5		<u> </u>	2 - Dom	inance Test is >50%
б			3 - Prev	valence Index is ≤3.0'
0	<u> </u>		4 - Morj data	phological Adaptations' (Provide supporting in Remarks or on a separate sheet)
0			5 - Wetl	land Non-Vascular Plants <sup>1</sup>
10		····	   Problem	natic Hydrophytic Vegetation <sup>1</sup> (Explain)
11.			<sup>1</sup> Indicators of	of hydric soil and wetland hydrology must
		= Total Cover	be present,	unless disturbed or problematic.
Woody Vine Stratum (Plot size:)				
1			Hydrophyti	c
2				Yes No
% Bare Ground in Herb Stratum		= Total Cover		····
Remarks:			I	
	s Ögint			
HUDIVIC Voogtation pre	" SCMT			

Sampling Point: 30

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Profile Description: (	Describe to	the depth n	eeded to docur	nent the indic	cator or co	nfirm the	e absence (	of indicato	ors.)	
Depth	Matrix		Redo	x Features					-	
(inches) Color	<u>(moist)</u>	<u>%</u>	Color (moist)	(	<u>vpe' Lo</u>	<u>c</u>	<u>Texture</u>		Remarks	
<u>D-D VYY</u>	<u>- 344</u>	<u> </u>				(	JL_			
SIV 10 10 V12	3/1	DO					SL			
	1			• • • • • • • • • • • • • • • • • • • •						
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	· · · · · · · · · · · · · · · · ·			· ······			<u> </u>			
<u>i</u>			durand Matrix Of		Cooled Co		21.00	ation: Dia	Dero Lining	Manadatrix
Hudric Soil Indicator	on, D≖Depiet s: (Applicat	ion, KM=Ke	duced Matrix, Ca	s=Covered or	Coated Sal	no Grains	s. LOG	s for Prob	Pore Lining, Iematic Hyd	ric Soils <sup>3</sup>
Balaasi (A1)	a. (Whineen		Sondy Podoy /				2	Muck (A1)	n)	
HIStOSOL(AT)	2)		Stripped Matrix	(S6)			Z UN Red	Parent Ma	v) toriał (TE2)	
Black Histic (A3)	~2)		Loamy Mucky M	(00) Mineral (E1) (e	vcent MLE	RΔ 1)	Neu Verv	Shallow D	ark Surface (	TF12)
Hydrogen Sulfide	(A4)		Loamy Gleved	Matrix (F2)	Acche mei	<b>5</b> (1)	Othe	r (Exolain i	n Remarks)	
Depleted Below D	ark Surface (	(A11)	Depleted Matrix	(F3)				. (	,	
Thick Dark Surfac	e (A12)		Redox Dark Su	rface (F6)			<sup>3</sup> Indicator	s of hydro	phytic vegeta	tion and
Sandy Mucky Min	eral (S1)		Depleted Dark	Surface (F7)			wetlar	nd hydrolog	ly must be pr	esent,
Sandy Gleyed Ma	trix (S4)		Redox Depress	sions (F8)			unless	s disturbed	or problemat	tic.
Restrictive Layer (if p	present):									
Туре:// `'			_							/
Depth (inches):	Jail		-			H	lydric Soil I	Present?	Yes	No
Remarks:	<del>}</del>				·····	i				
(bous gi	oret (o	<i>]</i> Ο <sup>ν</sup>	No hyd	vic soil	l ind	icata	vs pr	esent		
	ndicators:		·····							
Primary Indicators (mi	nimum of on	a required: c	back all that ann	64)			Secon	dary Indica	itors (2 or mo	ore required)
Curface Mater (A)		s leguneu, o	Mater Sta	ipod Loovos (I				ator Stains	d Leaver /B	
Surface water (A	?) (AO)			A 2 44 and		FL	**	AA and A	0 Leaves (D.	5) (INELOA 1, 2,
High water Table	(AZ)			1, 2, 4A, anu ( (D14)	40)		D,	anu a	Horne (R10)	
Saturation (A3)			Sait Clust	(DII) wortobratos (R	12)		D	alliage ra	Mator Table	(02)
Valer Warks (D)	· (D2)		Aquatic in		(01)		Di	y-Season sturation Vi	icible on Aori	(UZ)
Drift Demonito (D2	.ə (D∠) \			Dunide Outif {	(⊂1) alona Livín	a Roote /	(C3) 0	nuralius Vi	Position /D2	ar muagery (09)
Alcol Motor Orac	/ F(RA)			of Reduced In	aiving Livilly on (C4)	g noots (	<u>, , , , , , , , , , , , , , , , , , , </u>	somorphic Sallow Ann	i usition (D2) itard (D2)	,
Aigar Wat of Ofus	(04) \		Flesence	or Reduction in	n Tillad Sai	Is (C6)	SI		Test (DS)	
Iron Deposits (85	) ka (DC)		Recent in	r Streeged Blo	ete (D1) (I				Acuada (D6)	
Surrace Soll Crac	ns (DD) 	2221 (27)		n oulessed Ma	1113 (UT) (L 140)	RR A)	Ki	aiseu Ant N ost Boaus	iliunus (D0) Hummooko /	( <b>=rrr H)</b> (D7)
	on Aenarim	agery (D7) Surface (D8)		plain is Reina	143)		FI	USI-meave	nummours	(07)
Sparsely vegetate	su Concave :	Surrace (B8)			r					
Field Observations:										
Surface Water Preser	it? Ye	s No	Depth (ir	icnes):	<u> </u>					
Water Table Present?	Ye	s No	Depth (ir	iches):						. /
Saturation Present?	Ye	s No	Depth (ir	nches):		Wetland	I Hydrology	Present?	Yes	No _/
Describe Recorded D	ge) ata (stream o	lauge, monit	oring well. aeria!	photos, previo	us inspecti	ions), if a	vailable:			
				· · · · · · · · · · · · · · · · · · ·		,, ··· w				
Remarks			·····							
	historila	a ikili	rators va	erint.						
	ngurun (	Ŋ	CNON-2 h	( N. YII)						

WETLAND DETERM	INATION DA	TA FOR	M – West	ern Mou	ntains, Valle	ys, and Coast	Region	1
roject/Site: South Rochf	ford 20a		City/County:	Pin	inaton	Samplin	g Date: <u>8/28</u>	$ \mathcal{B} $
oplicant/Owner:					State:		g Point: 3	7
vestigator(s): J. RUST, T. Tal	1bitzer		Section, To	wnship, Ra	inge: TWO 2	N. 2na 3	E. SUC31	
andform (hillslope, terrace, etc.): The	adain		Local relief	(concave,	convex, none): (	concaut	Slope (%); (	Ċ
ubregion (LRR): MLPA (02-		Lat: 44	. OBLolo	97	Long: -103.	800368	Datum: ONA.	19
oil Map Unit Name: Oveliston-Mars	chorook lust	WG, D-1	on stope	- Flore	ud NW	/I classification: へ	)A	<u> </u>
re climatic / hydrologic conditions on the s	site typical for this	s time of ve	ar?Yes ∿	No	(If no. ex	plain in Remarks.)		
re Vegetation Soil or Hyd	drology s	ignificantly	disturbed?	Are '	"Normal Circums	stances" present?	Yes V No	
re Vegetation Soil or Hyd	trology r	aturally pro	blematic?	(If ne	eded, explain a	ny answers in Rem	arks.)	
	ah aita man	abouing	complin	a naint 1	contiona tra	nacata imnor	tant faaturaa	
SUMIWART OF FINDINGS - Alla	ch site map	snowing	sampini	g point i		insects, impor	tant reatures, o	etc
Hydrophytic Vegetation Present?	Yes N	o	. Is th	e Sampled	l Area	/		
Wetland Hydrology Present?	Yes V N	0	with	in a Wetla	nd?	Yes <u>No</u> No		
Remarks: Point taken alow	g small	l cria	invul 'i	in fl	oodad a	rla i Aria	i kely f	? 
EGETATION – Use scientific na	ames of plan	ts.	Deminant	Indiantar	Dominanaa T	ant works hast		
Tree Stratum (Plot size:	_)	<u>% Cover</u>	Species?	Status	Number of Do	minant Species	3	
1					That Are OBL	, FACW, or FAC:	(A	•)
2		- <u> </u>		<u> </u>	Total Number	of Dominant	١	
3,	<u>.</u>	. <u></u>			Species Acros	ss All Strata:	(B	6)
4	<del>.</del>	<u> </u>			Percent of Do	minant Species	Inn	
Sapling/Shrub Stratum (Plot size:	)		, ≃ iotai Co	ver	That Are OBL	, FACW, or FAC:	(A	JB)
1					Prevalence Ir	idex worksneet:	Multinha baa	
2					OBL species		1 = <sup>(</sup> )()	
3	<u></u>				FACW species	s x2	2 =	
4					FAC species	<u> </u>	3=15	
5					FACU species	s x4	4 =	
Herb.Stratum (Plot size:	_)			ver	UPL species	x	5 =	
1. COM 10 Maskarness		<u> </u>	<u> </u>	OBL	Column Totals	s: <u>95</u> (A)	) <u>105</u> (	B)
2 Cicuta maculata		<u> </u>	N	OBL	Prevaler	nce Index = B/A =		
3. Rumax ChSpus			<u>N</u>	FAC	Hydrophytic	Vegetation Indicat	tors:	·····
4 <u>Mentros Sp</u> .					1 - Rapid	Test for Hydrophyt	ic Vegetation	
5					2 - Domin	ance Test is >50%		
6					3 - Preval	ence Index is ≤3.0'	1	
۲			<u></u>	<u></u>	4 - Morph data in	ological Adaptation Remarks or on a s	is' (Provide support separate sheet)	ting
9.					5 - Wetlar	nd Non-Vascular Pl	ants <sup>1</sup>	
10					Problema	tic Hydrophytic Veo	getation <sup>1</sup> (Explain)	
11					Indicators of	hydric soil and wetl	and hydrology mus	t
			= Total Cov	/er	be present, ur	nless disturbed or p	roblematic.	
Woody Vine Stratum (Plot size:	)							
1					Hydrophytic Vegetation			
۷	<del></del>		= Total Car		Present?	Yes	No	
% Bare Ground in Herb Stratum			_ + + 0.(a) UO\	/51				
Remarks:	<u></u>				-			*****
Hidric undetaction	OKISEINT	Ĩ.						
. Mourie Asid raction	re axig t	-						

#### S

OIL									Samp	ling Point:	<u>``</u>
Profile Desc	cription: (Describe	to the dep	oth needed	I to docur	ment the	indicator	or confirm	n the absence	of indicators.)	I	
Depth	Matrix			Redo	x Feature	S					
(inches)	Color (moist)	%	Color (	(moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	<u>,</u>	Remarks	
0-u	10 YR 2/1			,					_ Muc K		
	10VP 3/1	90	101/2	4110	10	C	1/1	SI			
<u>4 iV</u>									<u></u>		
		. <u> </u>	·	<u></u>		·	, <u></u>				
					<del></del>	. <u></u>					
						•	·	·			
									······································		
<sup>1</sup> Type: C=C	Concentration, D=Dep	letion, RM	=Reduced	Matrix, C	S=Covere	d or Coat	ed Sand G	rains. <sup>2</sup> Loc	cation: PL=Pore	e Lining, M≕l	Matrix.
Hydric Soil	Indicators: (Applic	able to all	l LRRs, un	less othe	rwise not	ted.)		Indicato	ors for Problem	atic Hydric	Soils':
Histoso	il (A1)		Sand	y Redox (	S5)			2 cn	n Muck (A10)		
Histic E	pipedon (A2)		Strip	oed Matrix	(S6)			Red	l Parent Materia	d (TF2)	
Black H	listic (A3)		Loam	iy Mucky	Mineral (F	1) (excep	ot MLRA 1)	Ver	y Shallow Dark	Surface (TF	12)
Hydroge	en Sulfide (A4)		Loam	iy Gleyed	Matrix (F2	2}		Oth	er (Explain in R	emarks)	
Deplete	ed Below Dark Surfac	e (A11)	Øeple	eted Matri:	x (F3)			31			
Thick D	Park Surface (A12)		V Read	IX Dark SU	Inace (Fo	) = <del>7</del> )		indicate	nd budrology m	ic vegetation	rano
Sandy (	Gloved Matrix (S4)		Depi	v Denres	sions (F8)	r <i>')</i>		unles	ind frydrology fil is disturbed or r	vohiematic	51 K,
Restrictive	Laver (if present):			x Depres	3,0113 (1 0)			0			
Tune	aayor (ii proociii):										
Denth /ir	ches):		<u> </u>					Hydric Soil	Present? Ye	es\	No
Depin (ii	iciies).							injune con		<u>~</u>	
Remarks:											
		ad	ada		N. Aster	n					
Hup!	N'C SOLL	OUL	the PER	V	M.L.I						
2											
	DGY										
Wotland H	vdrology Indicatore:										
Orimonu Indi	iostors (minimum of (	no roquir	d chock o	ll that ann	hà			Seco	ndanı Indicatore	2 or more	required)
		ne reguie		Mator Ch	inod Loo	IRA (RO) (	avaant	<u>0000</u>	Votor Stainad L		
	e vvater (AT)			vvater-Sta		/es (D9) (i and 40)	except	v		saves (D9) (I	MLKA 1, 2,
- High W	ater Table (A2)			MLRA	(1, <b>2, 4A</b> )	anu 45)		<del>/-</del>	4A, anu 4D)	- (040)	
V Saturat	tion (A3)			Salt Crusi	t (B11)	(5.40)		L	rainage Patterr	IS (BTU)	
Water N	Marks (B1)			Aquatic In	ivertebrati	es (B13)		0	ry-Season Wat	er i able (C2	i)

|--|

\_ Saturation Visible on Aerial Imagery (C9)

21

- Oxidized Rhizospheres along Living Roots (C3) \_\_\_\_ Geomorphic Position (D2)
  - \_\_\_\_ Shallow Aquitard (D3)
  - FAC-Neutral Test (D5)
  - Raised Ant Mounds (D6) (LRR A)
- \_\_\_\_ Other (Explain in Remarks) \_\_\_\_ Frost-Heave Hummocks (D7) Inundation Visible on Aerial Imagery (87) Sparsely Vegetated Concave Surface (B8) Field Observations: Depth (inches): No\_ Yes Surface Water Present? No \_\_\_\_\_ Depth (inches): Water Table Present? Yes 🛝 D Saturation Present? \_ Depth (inches): Wetland Hydrology Present? Yes No \_ No \_\_\_ Yes 🔽 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks Water flowing year point.

\_\_\_\_ Hydrogen Sulfide Odor (C1)

Presence of Reduced Iron (C4)

Recent Iron Reduction in Tilled Solls (C6)

\_\_\_\_ Stunted or Stressed Plants (D1) (LRR A)

\_ Sediment Deposits (B2)

Algal Mat or Crust (B4)

Surface Soil Cracks (B6)

Drift Deposits (B3)

Iron Deposits (B5)
WETLAND DETERMINATIO	N DATA FORM – We	stern Mountains,	, Valleys, and Coast Region
Project/Site: Sounth Rachford Roa	ر City/Cour	ny: Penninato	
Applicant/Owner: <u>SDD0T</u>	-	s	itate: <u>SD</u> Sampling Point: <u>32</u>
nvestigator(s): J. Rust, T. Talpitze	Section,	Township, Range: Tw	DP2N, Png 3E, Sec 31
andform (hillslope, terrace, etc.): <u></u>	Local rel	ief (concave, convex, r	none): <u>(ONCAP1</u> Slope (%):
Subregion (LRR): MLRA (02	Lat: <u>44. 096</u>	012 Long:	<u>-103, 800, 392</u> Datum: <u>12NA_198</u>
ioil Map Unit Name: <u>Cor distan – Marshba</u>	15K loam, 0-6% s	ners, flooded	NWI classification: <u>A) A</u>
re climatic / hydrologic conditions on the site typical	for this time of year? Yes	No (i	f no, explain in Remarks.)
re Vegetation, Soil, or Hydrology	significantly disturbed	? Are "Normal (	Circumstances" present? Yes <u>\</u> No
re Vegetation, Soil, or Hydrology	naturally problematic	? (If needed, ex	kplain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing sampl	ing point location	ns, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No	the Compled Area	
Hydric Soil Present? Yes		ithin a Wetland?	Yes No
Remarks:			
Puive taken pulsible Willand	paint (paint 31	as, gighty	1 apl op from
/EGETATION Use scientific names of	plants.		
<u>Tree Stratum</u> (Plot size:) 1.	Absolute Domina <u>% Cover</u> Species	Int Indicator Domin <u>s? Status</u> Number That A	nance Test worksheet:           er of Dominant Species         /           vre OBL, FACW, or FAC:
2			Number of Dominant
3		Specie	es Across All Strata: (B)
4		- Percer	at of Dominant Species $5/37$ .
Sapling/Shrub Stratum (Plot size:	= Total	Cover That A	ire OBL, FACW, or FAC: (A/B)
1	······································	Preval	lence Index worksheet:
2			necies x 1 =
3		FACW	/ species x 2 =
4		— — — FAC s	pecies <u>55</u> x3= <u>105</u>
5		FACU	species x 4 =
Herb Stratum (Plot size:)	= + otai	UPL s	pecies <u>30</u> x 5 = <u>50</u>
1. Thinopynon intermedium	<u> </u>		n Totals: <u>05</u> (A) <u>315</u> (B)
2. Philippi praiting	<u> </u>	- <u>FAC</u> F	Prevalence index = $B/A = \frac{3}{7}$
3. <u>Arsum, Jonallice</u>		_ FAC_ Hydro	phytic Vegetation Indicators:
4. Broissico Spi		_ <u>_</u> 1.	- Rapid Test for Hydrophytic Vegetation
5		2·	- Dominance Test is >50%
7		<u> </u>	- Prevalence Index is ≤3.0'
P		4·	<ul> <li>Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)</li> </ul>
Q		5	- Wetland Non-Vascular Plants <sup>1</sup>
10.		Pr	roblematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11		<sup>1</sup> Indica	ators of hydric soil and wetland hydrology must
	= Total (	Cover	sern, unless disturbed of problematic.
vvoody vine Stratum (Plot size:)		· · ·	
2		— — Hydro Veget	ation
	= Total 0	Cover Prese	nt? Yes No ∕∕
% Bare Ground in Herb Stratum			
rteinains.			
Hydric Vigitation not	present,		

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Sampling Point: <u>32</u>

Profile Description: (Describe to the depth needed to document the indicator or confi	rm the absence of indicators.)				
Depth Matrix Redox Features	~~				
<u>(inches)</u> <u>Color (moist)</u> <u>%</u> <u>Color (moist)</u> <u>%</u> <u>Type</u> <sup>1</sup> <u>Loc</u> <sup>2</sup>	Remarks				
<u>D-8_1047_47_100</u>	<u> </u>	<u> </u>			
		<u> </u>			
<sup>1</sup> Type: C=Concentration D=Depletion RM=Reduced Matrix CS=Covered or Coated Sand (	Grains. <sup>2</sup> Location: PL=Pore Lining, M=	Matrix.			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric	Soils <sup>3</sup> :			
Histosol (A1) Sandy Redox (S5)	2 cm Muck (A10)				
Histic Epipedon (A2) Stripped Matrix (S6)	Red Parent Material (TF2)				
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA	<ol> <li>Very Shallow Dark Surface (TF1</li> </ol>	2)			
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)				
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	3				
Inick Dark Surface (A32) Redox Dark Surface (F5)	indicators of hydrophytic vegetation	and			
Sandy Mucky Milleral (ST) Depleted Dark Sunace (F7)	unless disturbed or problematic	ra,			
Restrictive Laver (if present):					
Type: ROCL					
Depth (inches): B <sup>(1)</sup>	Hydric Soil Present? Yes	No			
Remarks:		·····			
Lestinctive lawr p 8". Soils assumed r	ion hydric based of				
maltabing & budglan	J				
HYDROLOCK THICH THICH THE					
HTDROLOGT					
Wetland Hydrology Indicators:					
Primary indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more r	equired)			
Surface Water (A1) Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (	/ILRA 1, 2,			
High Water Table (A2) MLRA 1, 2, 4A, and 4B	4A, and 4B)				
Saturation (A3) Sati Crust (B11)	Drainage Patterns (B10)				
Water Marks (B1) Aquatic invertebrates (B13)	Dry-Season Water Lable (C2	)			
Sediment Deposits (B2)     Hydrogen Suilde Odor (C1)     Ovidized Deixechecon plans Living P	acta (C2) Coomorphia Regittion (D2)	hagery (C9)			
Diff Deposits (DS)     Oxidized Ritzospheres along Elving Rit     Algal Mat or Cruet (P4)     Presence of Reduced Iron (C4)	Shallow Aquitard (D3)				
Iron Denosits (B5) Recent Iron Reduction in Tilled Soils (	C6) EAC-Neutral Test (D5)				
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR	A) Raised Ant Mounds (D6) (LR	R A)			
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)				
Sparsely Vegetated Concave Surface (B8)	(),				
Field Observations:					
Surface Water Present? Yes No / Depth (inches):					
Water Table Present? Yes No / Depth (inches);					
Saturation Present? Yes No Depth (inches): We	etland Hydrology Present? Yes	No L			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					
Hubulan indirators not ongent.					

WETLAND DETERMINATION D	ATA FORM – Western Mo	untains, Valleys, and Coast Region
roject/site: South Rochford Roar	City/County: Pak	niraton Samoling Date: 8128/18
nplicant/Owner: \$0.000	<u></u> Only County	State: SD Sampling Point: 33
vestigator(s): T. Talbitzer, J. RUST	Section Township 8	ange: TWO 2 No DVA 3E, Sec 32
andform (hillslane terrace atc): Flood what w	Local relief (concave	(ODVer pone): (DM (D))(C) = (Slope (%));
ubrasian (I PP): NAL D A. (0)	1 44 085654	Jona - 103.797 4910 Datum: ONIA 1
ait Man Linit Name: Cord state - Alder ch harver log	MC Odam aloon floral on	Long. 100-1 12 11/10 Datum. 10 Mer 201
Sir Map Unit Name: (UTLOSIDA - TVK) SA UTURE (1997)	1 Jun of R 124723, 100MU	
e climatic / hydrologic conditions on the site typical for tr	lis time of year? Yes No	(If no, explain in Remarks.)
e Vegetation, Soil, or Hydrology	significantly disturbed? Are	"Normal Circumstances" present? Yes No
e vegetation, soil, or Hydrology	naturally problematic? (If r	leeded, explain any answers in Remarks.)
Winiart OF FINDINGS - Attach site map		locations, transects, important features, etc
Hydrophylic Vegetation Present? res V	No Is the Sample	d Area
Wetland Hydrology Present? Yes	No within a Wetla	and? Yes <u>/ No</u>
Remarks: Pound takens which wash	A Dund days all	at plana Moulth Fark
Marks Muser 16. Asolasi	likely anoschalant	Low in flimmand.
EGETATION - Use scientific names of pla	nts	
	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Free Stratum</u> (Plot size:)	<u>% Cover Species? Status</u>	- Number of Dominant Species
·		That Are OBL, FACW, or FAC: (A)
·	<u> </u>	Total Number of Dominant
		B) Species Across All Strata:
·	=	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		That Are OBL, FACW, or FAC: (A/B)
1. Salar discolor	<u> </u>	Tetal 0/ Cause of Multiply hu
2		- ORI species SID x 1 - BO
3		$\frac{1}{1} = \frac{1}{1} = \frac{1}$
ŀ		FAC species $x_3 =$
		FACU species x4 =
Herb Stratum (Plot size:	= Total Cover	UPL species x 5 =
Could Webaskaling 3	80 Y OBL	Column Totals: $05$ (A) $10$ (B)
Christian Waldhaton	5 N OBL	Brovelence Index = P/A =
B. WANNING CVINCUS	5 N FAC	Hydrophytic Vegetation Indicators:
1. <u>"Ajmyina '312</u>	<u>5</u> N -	1 - Rapid Test for Hydrophytic Vegetation
5 Juncus sp	<u> </u>	2 - Dominance Test is >50%
)		- V 3 - Prevalence Index is ≤3.01
7		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
B		data in Remarks or on a separate sheet)
9		5 - Wetland Non-Vascular Plants'
10		- Problematic Hydrophytic Vegetation' (Explain)
11		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	= Total Cover	
1	·····	- Hydrophytic
2		Vegetation Proceeding
	= Total Cover	Presentr tes No
% Bare Ground in Herb Stratum		

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SOIL

		~~	$\geq$
Sampling P	oint:	$\overline{\bigcirc}$	<u>ر</u>

			aloutoi	or commit	the absence	of indicators.)
Depth <u>Matrix</u>	Redo	x Features		1 - 2	<b>**</b>	Demedia
(inches) <u>Color (moist)</u> %	Color (moist)		Type'	<u>Loç</u> ~	l exture	<u>Remarks</u>
0-2 012 21	at here will			<u>, 1</u> 3	-) ment	-W(C(A))
<u>2-8 10/12 3/1 60</u>	<u>- 9772 446</u>	<u></u>	<u> </u>	<u>M</u>	<u>SL</u>	
· · · · · · · · · · · · · · · · · · ·	y y we			• •		
	-					
		· ·				
		· ·				
		,			······	
		·				
<sup>1</sup> Type: C=Concentration, D=Depletion, R	M=Reduced Matrix, CS	S=Covered	or Coate	d Sand Gr	ains. <sup>2</sup> Loc	cation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to a	III LRRS, Unless other	rwise note	a.)		indicato	In the (A40)
Histosol (A1)	Sandy Redox (S	55) (Se)			2 cn	n Muck (A10) I Barant Material (TE2)
HISTIC Epipedon (A2) Black Histic (A3)	Loamy Mucky M	(30) Aigeral (E1)	(excep	MIRA 1)	Ven	v Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleved	Matrix (F2)	(creep		Othe	er (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix	(F3)				. (
Thick Dark Surface (A12)	Redox Dark Su	rface (F6)			<sup>3</sup> Indicato	ors of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark :	Surface (F7	')		wetla	nd hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depress	ions (F8)			unles	s disturbed or problematic.
Restrictive Layer (if present):						
Type:					Lindata O all	Branning Van Ma
Depth (inches):					Hydric Soll	Present? Yes No
Remarks:						
1 Lite out	and a constant					
HYCU C SUR	Inclicators	pres	nt			
V	········					
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of one requi	red: check all that appl	γ)			<u>Seco</u>	ndary Indicators (2 or more required)
Surface Water (A1)	Water-Sta	ined Leave	s (B9) (e	xcept	v	Vater-Stained Leaves (B9) (MLRA 1, 2,
✓ High Water Table (A2)	MLRA	1, 2, 4A, ai	nd 4B)			4A, and 4B)
Saturation (A3)	Salt Crust	(B11)			D	orainage Patterns (B10)
Water Marks (B1)	Aquatic In	vertebrates	(B13)		D	Pry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen	Sulfide Od	or (C1)		s	aturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized F	Rhizospher	es along	Living Roc	ots (C3) G	Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence	of Reduced	l Iron (C	4)	s	ihallow Aquitard (D3)
		- D - d ft -				
Iron Deposits (B5)	Recent Irc	n Reductio	n in Tille	d Soils (Ce	S)F	AC-Neutral Test (D5)
Iron Deposits (B5) Surface Soil Cracks (B6)	Recent Irc	r Stressed f	n in Tille Plants (E	d Soils (C6 1) ( <b>LRR A</b>	5)F )R	AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Iron Deposits (B5)     Surface Soil Cracks (B6)     Inundation Visible on Aerial Imagery	Recent Irc Stunted of (87) Other (Ex	n Reduction r Stressed f plain in Rer	n in Tille Plants (E narks)	d Soils (C6 1) ( <b>LRR A</b>	5)F )R F	AC-Neutral Test (D5) Raised Ant Mounds (D6) ( <b>LRR A)</b> irost-Heave Hummocks (D7)
Iron Deposits (B5)     Surface Soil Cracks (B6)     Inundation Visible on Aerial Imagery     Sparsely Vegetated Concave Surface	Recent Irc Stunted of (87) Other (Ex e (B8)	n Reduction r Stressed f plain in Rer	n in Tille Plants (E narks)	d Soils (C6 1) (LRR A	>) F > R F	AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Trost-Heave Hummocks (D7)
Iron Deposits (B5)     Surface Soil Cracks (B6)     Inundation Visible on Aerial Imagery     Sparsely Vegetated Concave Surface Field Observations:	Recent Irc Stunted of (B7) Other (Ex e (B8)	r Stressed f	n in Tille Plants (E narks) /	d Soils (C6 1) (LRR A	3) F ) R F	AC-Neutral Test (D5) Raised Ant Mounds (D6) ( <b>LRR A</b> ) rost-Heave Hummocks (D7)
Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes	Recent Irc Stunted of (87) Other (Ex e (88)	r Stressed I plain in Rer	n in Tille Plants (E narks)	d Soils (C6 1) (LRR A	3) F ) R F	AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes Water Table Present? Yes	Recent Irc Stunted or (87) Other (Ex) e (88) No Depth (in No Depth (in	r Stressed f plain in Rer ches): ches):	n in Tille Plants (E narks)	d Soils (C6 1) (LRR A	3) F ) R F	AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Trost-Heave Hummocks (D7)
Iron Deposits (B5)     Surface Soil Cracks (B6)     Inundation Visible on Aerial Imagery     Sparsely Vegetated Concave Surface     Field Observations:     Surface Water Present? Yes     Water Table Present? Yes     Saturation Present? Yes	Recent Irc Stunted or (87) Other (Ex e (B8) No Depth (in No Depth (in	r Stressed f plain in Rer ches): ches):	n in Tille Plants (D narks) ) )	d Soils (C6 1) (LRR A	3) F ) R F and Hydrolog	AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Trost-Heave Hummocks (D7)
Iron Deposits (B5)     Surface Soil Cracks (B6)     Inundation Visible on Aerial Imagery     Sparsely Vegetated Concave Surface     Field Observations:     Surface Water Present? Yes     Water Table Present? Yes     Saturation Present? Yes     (includes capillary fringe)     Describe Recorded Data (stream gauge,	Recent Irc Stunted of (B7) Other (Ex e (B8) No Depth (in No Depth (in No Depth (in monitoring well, aerial	r Stressed f plain in Rer iches): iches): photos, pre	n in Tille Plants (C narks) ) ) ) vious in:	d Soils (C6 1) (LRR A	i) F ) R F and Hydrolog if available:	AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Trost-Heave Hummocks (D7)
Iron Deposits (B5)     Surface Soil Cracks (B6)     Inundation Visible on Aerial Imagery     Sparsely Vegetated Concave Surface     Field Observations:     Surface Water Present? Yes     Water Table Present? Yes     Saturation Present? Yes     (includes capillary fringe)     Describe Recorded Data (stream gauge,	Recent Irc Stunted of (87) Other (Ex e (B8) No Depth (in No Depth (in No Depth (in No Depth (in monitoring well, aerial	r Stressed f plain in Rer iches): iches): photos, pre	n in Tille Plants (E narks) ) ) ) ) ) vious ins	d Soils (C6 1) (LRR A 	3) F ) R F and Hydrolog	AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Trost-Heave Hummocks (D7)
Iron Deposits (B5)     Surface Soil Cracks (B6)     Inundation Visible on Aerial Imagery     Sparsely Vegetated Concave Surface     Field Observations:     Surface Water Present? Yes     Water Table Present? Yes     Saturation Present? Yes     (includes capillary fringe)     Describe Recorded Data (stream gauge,     Remarks:	Recent Irc Stunted or (B7) Other (Ex e (B8) No Depth (in No Depth (in No Depth (in no Depth (in	r Stressed f plain in Rer iches): iches): iches): photos, pre	n in Tille Plants (E narks) ) ) 	d Soils (C6 1) (LRR A 	i) F ) F and Hydrolog	AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Trost-Heave Hummocks (D7) y Present? Yes No
Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, Remarks:	Recent Irc Stunted or (B7) Other (Ex e (B8) No Depth (in No Depth (in No Depth (in monitoring well, aerial	n Reductio r Stressed f plain in Rer 	n in Tille Plants (E narks) ) ) ) evious int	d Soils (C6 1) (LRR A 	3) F ) R F and Hydrolog if available: /// C	AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Trost-Heave Hummocks (D7) y Present? Yes No
Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Cincludes capillary fringe) Describe Recorded Data (stream gauge, Remarks:	Recent Irc Stunted of (B7) Other (Ex) e (B8) No Depth (in No Depth (in No Depth (in monitoring well, aerial	r Stressed f plain in Rer iches): iches): photos, pre	n in Tille Plants (E narks) ) ) ) ) ) ) vious ins	Wetl v o d	and Hydrolog	AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Trost-Heave Hummocks (D7) y Present? Yes No
Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes Cincludes capillary fringe) Describe Recorded Data (stream gauge, Remarks: FLOWING WOLLY	Recent Irc Stunted of (B7) Other (Ex e (B8) No Depth (in No Depth (in No Depth (in monitoring well, aerial	r Stressed f plain in Rer ches): ches): photos, pre	n in Tille Plants (E narks) ) ) ) vious in:	Wetl	and Hydrolog	AC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Trost-Heave Hummocks (D7) y Present? Yes No

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## WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/site: South Rochford Road city/c	ounty: <u>Petrivi rator</u> Sampling Date: 8/28/13
Applicant/Owner: SD/DUTT	State: <u>\$D</u> Sampling Point: <u>34</u>
Investigator(s): J. BURT, T. Talkitzer Section	n, Township, Range: Twp 2-N, 2ng 3E, Sc 32
Landform (hillslope, terrace, etc.): Slixal	relief (concave, convex, none): <u>(OMOU</u> Slope (%): <u>2</u>
Subregion (LRR): MUDA 62 Lat: 44, 04	1576 Long: <u>103, 792, 57</u> Datum: <u>DVA 1983</u>
Soil Map Unit Name: Cov deston - Marshbook loams, 2-6 %	Slopes, flowled NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Y	es No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distur	bed? Are "Normal Circumstances" present? Yes 1/ No
Are Vegetation, Soii, or Hydrology naturally problems	tic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks: Poind taken upsloud from with	lard yit (33)

## **VEGETATION – Use scientific names of plants.**

	Aosolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum         (Plot size:)           1)	<u>% Cover</u>	<u>Species?</u> <u>Status</u>	Number of Dominant Species (A)
2 3			Total Number of Dominant Species Across All Strata: (B)
4		= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: $50\%$ (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
1			Total % Cover of:Multiply by:
2			OBL species x 1 =
3			FACW species x2 =
4			FAC species $\frac{15}{15}$ x 3 = $\frac{725}{15}$
5			FACU species $25 \times 4 = 100$
		= Total Cover	UPL species x 5 =
Do Muno cale St	60	Y EAR	Column Totals: $10(7)$ (A) $325$ (B)
- Ontonin Marchee	<u> </u>	T FACU	
	- <u></u>	NEAL	Prevalence Index = B/A =
3. TH SHOW AND A		N EAC	Hydrophytic Vegetation Indicators:
4. DROWNER ORALOHOR		N TALL	1 - Rapid Test for Hydrophytic Vegetation
5. INHOLOUNI PRAHABE		PAUL	2 - Dominance Test is >50%
6			3 - Prevalence Index is ≤3.0'
8.			4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
9.			5 - Wetland Non-Vascular Plants <sup>1</sup>
10			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11		·	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			
1.			Hydronbytic
2.			Vegetation
% Bare Ground in Herb Stratum		_= Total Cover	Present? Yes No
Remarks:			<b>.</b>
Wetlow vogetation Not	presiv	rt.	

SOIL

Sampling	Point: _

34

Profile Description: (Describe to the depth	needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	<u>Color (moist)</u> <u>%</u> <u>Type'</u> <u>Loc</u> <sup>2</sup>	Texture Remarks
<u>1)-16 1/12 95 .</u>	072410 <u>0 C M 8</u>	
	•	
	······································	······································
	·······	
	······································	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=F	educed Matrix, CS=Covered or Coated Sand Gr	ains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L	RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils':
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	_ Loamy Mucky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	_ Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	_ Depleted Matrix (F3)	3)
Thick Dark Surrace (A12)		indicators of hydrophytic vegetation and
Sandy Gleved Matrix (S4)	Depressions (F8)	uniese disturbed or problematic
Restrictive Laver (if present):		
Two:		
Dopth (inches):		Hudria Sail Present? Vas
Meets highric su	l enteria	
Wetland Hydrology Indicators:	chack all that apply)	Secondary Indicators (2 or more required)
Curface Mater (44)	Motor Steined Leaves (PO) (event	Motor Steined Leaves (20) (NI DA 1 2
Surface water (AT)		Water-Stanled Leaves (D9) (WILRA 1, 2,
Fligh Water Table (A2)	NERA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (AS)	Sali Crust (D IT) Aquatia Invariabratas (B12)	Drainage Falleris (BT0)
Water Warks (D1) Sodimont Doposite (P2)	Aquatic Invested ales (BT3)	Saturation Visible on Aprial Imagory (CQ)
Sediment Deposits (B2)	Availagen Suilide Odor (CT)	te (C2) Coomerchie Resition (D2)
Drat Deposits (B3)	Dreagnes of Reduced Iren (C4)	Shallow Aguitard (D2)
Algar Mat of Crust (B4)	Presence of Reduced from (C4)	EAC Noutral Test (D5)
Itoli Deposits (B0)	Stunted or Stressed Plants (D4) (LPP A)	D Deised Apt Mounds (D6) (LPD A)
Surface Soli Cracks (Bo)	Other (Explain in Remarke)	Frost-Heave Hummocks (D7)
Sparsely Veretated Copcave Surface (B		
Field Observations:	5/	
Surface Mater Propert? Vog N	Danth (inches):	
Mater Table Dresent?	Depth (inches).	
Water Table Present? Yes N	Depin (incres):	
Saturation Present? Yes N	o <u>Veti</u>	and Hydrology Present? Yes No
Describe Recorded Data (stream gauge, mor	itoring well, aerial photos, previous inspections),	if available:
Remarks:		
Remarks: NU hydrawgy	instructors preserve	, form

WETLAND DETERMINATION DA	TA FORM -	- Western Mou	ntains, Valleys, and Coast Region
Project/Site: Stanth Dochford Rhad	City	County: Pern'	inaton Sampling Date: 8 28 13
	0.19	, county: <u>- 1971 11 1</u>	State: SD Sampling Point: 25
Investigator(s): T Dust TTal piterr	Sec	tion Townshin Rar	me Two 2 N. Dra 3E, Sr 32
I and form (billion to the to b) Out of ( ) (1) (1)	0et	nol relief (concover o	notion another COMPACING Stone (20) 5
a human a por MILOA (2017)	pa lo	AGU2U	Silver, Holle). COVICATE Slope (%). C
Subregion (LRR): 19 12 19 10 10 10 10 10 10 10 10 10 10 10 10 10	Lat. <u></u>	Jimes Grante	Long. 1427 1117 Get Man Datum: 1441 - 110
Soil Map Unit Name: COLOR SI OFT - TOTOTSI MICON		ALANT MURESUR	
Are climatic / hydrologic conditions on the site typical for this	s time of year?	Yes <u>V</u> NO	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology s	significantly dist	urbed? Are "	Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology r	naturally proble	matic? (If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sa	mpling point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes N	10_ <u></u>	Is the Sampled	Area
Hydric Soil Present? Yes N		within a Wetlan	ad? Yes No
Remarks:	<u></u>		
upland pit.			
F			
VEGETATION – Use scientific names of plan	nts.		
Tree Stratum (Plot size:	Absolute D % Cover S	ominant Indicator necies? Status	Dominance Test worksheet:
1	<u>_/// 00101 _0</u>		That Are OBL, FACW, or FAC:
2			Totat Number of Dominant
3		······	Species Across All Strata: (B)
4		<u> </u>	Percent of Dominant Species
	=	Total Cover	That Are OBL, FACW, or FAC:(A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
2		·	Total % Cover of:Multiply by:
3			OBL species x 1 =
4.		·······	FACW species x 2 =
5			FAC species $170 \times 3 = 210$
		Total Cover	FACU species $\underline{\underline{X}}$ $\underline{X}$
Herb-Stratum (Plot size:)	20	V ENCL	Column Totals: $\mu(3/2)$ (A) $\frac{3}{2}$ (B)
2 Busalle internal		T FAC	
2 Shochus arunnais	- <u></u>	J EA/IA	Prevalence index = B/A =
4 Achilles millerolum		V FACU	A Rapid Test for Hydrophytic Vegetation
5.			2 - Dominance Test is >50%
6			3 - Prevalence Index is ≤3.0 <sup>1</sup>
7			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8			data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants
10			Problematic Hydrophytic Vegetation' (Explain)
11			be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: )	= ]	otal Cover	
1			Hydrophytic
2			Vegetation
	=	Fotal Cover	Present? Yes No 🔽
% Bare Ground in Herb Stratum  Remarks:			<u> </u>
Wetland vegetation crite	na ne	+ met.	
U		· ·	

Sam	nlina	Pni
Jan	pang	2 01

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Data       Color. Construction of the depinition of the depinit depinit depinition of the depinition of the depiniti	Profile Description: Describe to the depth n	eded to document the indicator or co	onfirm the absence of indicators )
Image       Color (model)       %       Type       Loc       Type       C       A       S       1         Yet       VIA       <	Denth Matrix	Redox Features	man the absence of mulcators.
1.1       10 ML V Z       93       10 ML V Z       M       S1         2-17       bx/LL S12       93       10 ML V Z       M       S1         2-17       bx/LL S12       93       10 ML V Z       M       S1         2-17       bx/LL S12       93       10 ML V Z       M       S1         2-17       bx/LL S12       93       10 ML V Z       M       S1         2-17       bx/LL S12       93       10 ML V Z       M       S1         2-17       bx/LL S12       93       10 ML V Z       M       S1         2-17       bx/LL S12       93       10 ML V Z       M       S1         2-17       bx/LL S12       94       10 ML V Z       M       S1         2-17       bx/LL S12       94       10 ML V Z       M       S1       2       C       MA       S1         2-17       bx/LL S12       51       51       51       2       C       MA       S1       2       C       MA       S1       2       C       MA       S1       2       C       M       S1       2       C       M       S1       2       C       M       S1       S1	(inches) Color (moist) % (	Color (moist)%Type <sup>1</sup> Lc	c <sup>2</sup> Remarks
2:14       UNL: 14/2       49       ID NI2: 44/2       N       S1         Type: C-Concentration. D=Depletion. PM-Reduced Matrix, CS-Covered or Coated Sand Grains.       Totation. PL=Pore Lining, M=Matrix, S1         typic: Solit Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Solit?:         Halsos (A)       Sandy Nedox (S5)       Indicators for Problematic Hydric Solit?:         Phates Eppedion (A2)       Sintped Matrix (S2)       Other (Explain In Remarks)         Depleted Edoc Dark Surface (A11)       Depleted Edoc Matrix (F2)       Other (Explain In Remarks)         Sandy Mucky Mineral (S1)       Depleted Edoc Dark Surface (A12)       Red or problematic.         Sandy Mucky Mineral (S1)       Depleted Edoc Dark Surface (F7)       unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Edoc Dark Surface (F7)       unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Edoc Dark Surface (F7)       unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       VMetric Soil Present? Yes Not       Not         YPFCILOGY       Water Statiant Lawas (B1)       Muck 1, 2, 4, and 4B)       4, and 4B)       Garmany Indicators (2 or more required)         Statistic Numbers (B11)       A and 4B       Darage Fatteres (130)       Dory Sasaon Water Table (C2) <td< td=""><td>1-12 10/12/13 9B 10</td><td>40.416 2 C N</td><td>S1.</td></td<>	1-12 10/12/13 9B 10	40.416 2 C N	S1.
Procession       Description         Type:       Construction         Depleted Eleventiation       Depleted Eleventiation (F1)         Stripped Matrix (S3)       Parent Materiat Elydric Solie':         Helacosi (A1)       Sandy Redox (S3)         Depleted Eleventiation (A2)       Sandy Redox (S4)         Sandy Morei (S1)       Depleted Matrix (F2)         Depleted Eleventiation (A3)       Learny Matrix (F2)         Sandy Morei (S1)       Depleted Eleventiation (F6)         Sandy Morei (S1)       Depleted Eleventiation (F6)         Trick Dark Surface (A12)       Red Ararch Matrix (F2)         Depleted Eleventiation (S4)       Red Dark Surface (F7)         Sandy Moley Morei (S1)       Depleted Eleventiation (F6)         Trinck Dark Surface (A12)       Redox Depressions (F8)         Water Stande Laves (B4) (Micrael (S1)       Upper eleventiation (F7)         Sandy Moley Morei (S1)       Water Stande Laves (B4) (Micrael (S1)         Stripped Watrix (S4)       Redox Depressions (F8)         Water Marks (S1)       Water Stande Laves (S4) (Micrael (S1)         Stripped Watrix (S1)       Water Stande Laves (S4) (Micrael (S1)         Stripped Watrix (S1)       Advater Stande Laves (S4) (Micrael (S1)         Stripped Watrix (S1)       Advatelevent (S1)         Stripped	7-14 101/1-3/2 00 10	Vn 4/6 2 ( N	$n = \frac{1}{8}$
Type:	<u>K IA IVIE ME - IA</u>	$\frac{1}{10} \frac{1}{10} \frac$	
Type:	······································		
Type:       C-Concentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains. <sup>1</sup> Location: PL=Pore Lining, M-Matrix, Pytric Soil Indicators (Applicable to all LRRs, unless otherwise noted.)          Histic Epipedon (A2)       Singhed Matrix (S5)			
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains, <sup>1</sup> Location; PL=Pore Lining, M=Matrix, Yafric Soil Indicators (Applicable to all LRRs, unless of therwise noted.)          Histool (A1)       Stripped Matrix (S5)       2 cm Muck (A10)         Histool (A1)       Stripped Matrix (F2)       Red Parent Material (TF2)         Black Histo (A3)       Loamy Gleyed Matrix (F3)       Other (Explain in Remarks)         Depleted Boto Dark Surface (A11)       Depleted Matrix (F3)       Other (Explain in Remarks)         Sandy Mucky Mineral (S1)       Depleted Matrix (F3)       Indicators in (Mytophytic) vegetation and wetland hytopolytic vegetati		······································	
Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.       *Location: PL=Pore Lining, M=Matrix, type Coated Sand Grains.         Type:       C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.       *Location: PL=Pore Lining, M=Matrix, type Coated Sand Grains.         Histic Epipedon (A2)       Stripped Matrix, (S6)			
Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains.       Acation, PL-Pore Lining, M-Matrix, Microson total, Indicators for Problematic Hydric Soils':         Histosol (A1)       Sandy Redox (S5)       Indicators for Problematic Hydric Soils':         Histosol (A2)       Sandy Redox (S5)       Red Parent Material (TF2)         Black Histo (A3)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         Depleted Boto Dark Surface (A1)       Depleted Matrix (F3)       Other (Explain in Remarks)         Sandy Mucky Mineral (S1)       Depleted Matrix (S4)       Other (Explain in Remarks)         Sandy Mucky Mineral (S1)       Depleted Matrix (S4)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1)       Depleted Matrix (F3)       'Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sarticitive Layer (If present):       Type:       Hydric Soil Present? Yes No/       No/         YDROLOGY       Wetland Hydrology Indicators:       Water-Stained Leaves (B9) (except Hydrophytic vegetation and wetland hydrology must be present; unless disturbed or problematic.       A and 4B)         Saturation (A3)       Saturation Leaves (B9) (except Hydrophytic Vegetation (A1)       Water-Stained Leaves (B9) (except Hydrophytic Vegetation (C3)       DorySeason Water Table (C2)         Saturation (Fase (B1)<			
Type:       C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coaled Sand Grains.       *Location: PL=Pore Lining, M=Matrix, Ydric Soils':         Hatsocl (A1)			
tydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators (Applicable to all LRRs, unless otherwise noted.)       Indicators of Problematic Hydric Soils":         Histic Eppedon (A2)       Stripped Mark (S6)       Red Parent Material (TF2)         Black Histic (A3)       Learny Mucky Mineral (F1) (except MLRA 1)       Very Shalow Dark Surface (TF12)         Depleted Below Dark Surface (A11)       Depleted Mark (F2)       Other (Explain in Remarks)         Depleted Solw Dark Surface (A11)       Depleted Mark (F2)       Other (Explain in Remarks)         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       welland hydriophytic vegetation and welland hydriogy musb to present, unless disturbed or problematic.         Sestrictive Layer (If present):       Type:       Hydric Soil Present? Yes       No/         YPRE       Depleted Mark (S4)       Redox Dark Surface (F8)       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Surface VHARK (B1)       Satt Crust (B11)       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Surface VHARK (B1)       Satt Crust (B11)       Dry-Season Water Table (C2)       Sature VHART (S1)         Settiment Deposite (B2)       Hydrogen Sulfide Odor (C1)       Saturation VHART (S2)       Saturation VHART (S1)         Surface VHARK (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)	Type: C=Concentration, D=Depletion, RM=Rec	luced Matrix, CS=Covered or Coated Sa	nd Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Histic Spiped Matrix (Sa)	lydric Soil Indicators: (Applicable to all LRR	s, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histic Epipedon (A2)       Stripped Matrix (S6)	Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Black Histic (A3)      Lamy Gleyed Matrix (F3)      Other Shallow Dark Surface (F12)         Hydrogen Sulfde (A4)      Damy Gleyed Matrix (F3)      Other (Explain in Remarks)	Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Hydrogen Sullide (A4)	Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLI	RA 1) Very Shallow Dark Surface (TF12)
□ bepleted below Surface (A1)       □ bepleted bank Surface (F6)       *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed mark (S4)         Sandy Gleyed Matrix (S4)	Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
	Depleted below Dark Surface (A11) Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
	Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Restrictive Layer (if present):       Type:	Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Type:	Restrictive Layer (if present):		
Depth (inches):       Hydric Soil Present?       Yes       No         Remarks:       Hydric Soil Present?       Yes       No         Hydric Soil Present?       Yes       No         YDROLOGY       Wetland Hydrology Indicators:       Secondary Indicators (2 or more required)        Surface Water (A1)	Туре:		
Remarks:       Hydric Soil chteina Not Mutt.         YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (2 or more required)	Depth (inches):		Hydric Soil Present? Yes No
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)       Secondary Indicators (2 or more required)         Surface Water (A1)       Water-Stained Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)       4A, and 4B)         Saturation (A3)       Sait Crust (B11)       Drainage Patterns (B10)         Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9)         Orifi Deposits (B3)       Oxidized Rhizospheres along Living Roots (C3)       Geomorphic Position (D2)         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Intundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Depth (inches):       Wetland Hydrology Present? Yes       No         Saturation Present?       Yes       No       Depth (inches):       No       Saturation Present? Yes <td< th=""><th>3</th><th></th><th></th></td<>	3		
Crimary Indicators (minimum of one required; check all that apply)       Secondary Indicators (2 or more required)         Surface Water (A1)       Water-Stained Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B)         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)       Water-Stained Leaves (B1)       4A, and 4B)         Saturation (A3)       Saturation (A3)       Saturation Investment       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9)         Otif Deposits (B3)       Oxidized Rhizospheres along Living Roots (C3)       Geomorphic Position (D2)         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Sufface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Depth (inches):       Motor (Explain in Remarks)       Frost-Heave Hummocks (D7)         Saturation Present?       Yes       No       Depth (inches):       Motor (Explain In available:         Secorded Data (stream gauge, monitoring well, aerial photos, previous Inspections), if available:			
Surface Water (A1)       Water-Stained Leaves (B9) (except       Water-Stained Leaves (B9) (MLRA 1, 2, 4, 4, and 4B)         High Water Table (A2)       MLRA 1, 2, 4A, and 4B)       4A, and 4B)         Saturation (A3)       Salt Crust (B11)       Drainage Patterns (B10)         Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Satist Crust (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Drift Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Solis (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Saturation Present?       Yes       No       Depth (inches):       Wetland Hydrology Present? Yes       No         Saturation Present?       Yes       No       Depth (inches):       Wetland Hydrology Present? Yes       No         Saturation Present?       Yes       No       Depth (inches):       No       Saturation Present? Yes       No	YDROLOGY Netland Hydrology Indicators:		
High Water Table (A2)       MLRA 1, 2, 4A, and 4B)       4A, and 4B)         Saturation (A3)       Salt Crust (B11)       Drainage Patterns (B10)         Water Marks (B1)       Aquatic Invertebrates (B13)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Hydrogen Sulfide Odor (C1)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Oxidized Rhizospheres along Living Roots (C3)       Geomorphic Position (D2)         Algal Mat or Crust (B4)       Presence of Reduced Iron (C4)       Shallow Aquitard (D3)         Iron Deposits (B5)       Recent Iron Reduction in Tilled Soils (C6)       FAC-Neutral Test (D5)         Surface Soil Cracks (B6)       Stunted or Stressed Plants (D1) (LRR A)       Raised Ant Mounds (D6) (LRR A)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       Frost-Heave Hummocks (D7)         Sparsely Vegetated Concave Surface (B8)       Depth (inches):       Water Table Present?       Yes       No         Saturation Present?       Yes       No       Depth (inches):       Wetland Hydrology Present? Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; ch	eck all that apply)	Secondary Indicators (2 or more required)
Saturation (A3)	YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; ch Surface Water (A1)	eck all that apply) Water-Stained Leaves (B9) (excep	Secondary Indicators (2 or more required) t Water-Stained Leaves (B9) (MLRA 1, 2,
	YDROLOGY Netland Hydrology Indicators: Primary Indicators (minimum of one required; ch Surface Water (A1) High Water Table (A2)	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B)	<u>Secondary Indicators (2 or more required)</u> t Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
	YDROLOGY Netland Hydrology Indicators: <u>Primary Indicators (minimum of one required; ch</u> Surface Water (A1) High Water Table (A2) Saturation (A3)	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Secondary Indicators (2 or more required) t Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2)     Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3)     Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5)     Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)     Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7)     Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Mater Table Present? Yes No Depth (inches): Depth (inches): Depth (inches): Saturation Present? Yes No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; ch Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Sait Crust (B11) Aquatic Invertebrates (B13)	Secondary Indicators (2 or more required) t Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
	YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; ch Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more required)         it       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)
Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Sturface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): No No No Depth (inches): No No Depth (inches): No No No	YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; ch Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin	Secondary Indicators (2 or more required)         ot
Surface Soil Cracks (B6) Stunted or Stressed Plans (D1) (LRR A) Raised Ant Mounds (D6) (D6) (D6) (D6) (D6) (D6) (D6) (D6)	YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; ch Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4)	Secondary Indicators (2 or more required)         it
	YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; ch Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Sati Crusta (B2)	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sol	Secondary Indicators (2 or more required)         it
	YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; ch Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Invertice Visible on Accial Imagent (87)	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L	Secondary Indicators (2 or more required)         it
Surface Water Present?       YesNoDepth (inches):         Water Table Present?       YesNoDepth (inches):         Saturation Present?       YesNoDepth (inches):         Saturation Present?       YesNoDepth (inches):         Wetland Hydrology Present?       YesNo         Depth (inches):       Wetland Hydrology Present? YesNo         Depth (inches):       Wetland Hydrology Present? YesNo         Depth Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:         Remarks:       No	YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; ch	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L Other (Explain in Remarks)	Secondary Indicators (2 or more required)         it       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Water Table Present?       Yes       No       Depth (inches):       Wetland Hydrology Present? Yes       No         Saturation Present?       Yes       No       Depth (inches):       Wetland Hydrology Present? Yes       No         Cincludes capillary fringe)       Depth (inches):       Wetland Hydrology Present? Yes       No       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       No       Model Cafors       present?         No       Model Cafors       present?       No       Model Cafors       present?	YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; ch	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L Other (Explain in Remarks)	Secondary Indicators (2 or more required)         ot
Saturation Present?       Yes       No       Wetland Hydrology Present? Yes       No         Cincludes capillary fringe)       Depth (inches):       Wetland Hydrology Present? Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:         No       Mydnology       Indi (G fors prize)	YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; ch	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L Other (Explain in Remarks)	Secondary Indicators (2 or more required)         ot
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No Wydwlogy Indl (Gfors prize).	YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; ch	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sol Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches):	Secondary Indicators (2 or more required)         it
Remarks: No hydrology indicators priznt.	YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; ch         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Surface Soil Cracks (B6)         Inundation Visible on Aerial Imagery (B7)         Sparsely Vegetated Concave Surface (B8)         Field Observations:         Surface Water Present?       Yes         No 1         Xater Table Present?       Yes         Saturation Present?       Yes	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches):	Secondary Indicators (2 or more required)         it
Remarks: No hydrology inclicators present.	YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; ch	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches):	Secondary Indicators (2 or more required)         it       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
No hydrology indicators prizerit.	YDROLOGY         Wetiand Hydrology Indicators:         Primary Indicators (minimum of one required; ch	eck all that apply)	Secondary Indicators (2 or more required)         it       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)         Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         g Roots (C3)       Geomorphic Position (D2)         Shallow Aquitard (D3)         is (C6)       FAC-Neutral Test (D5)         RR A)       Raised Ant Mounds (D6) (LRR A)         Frost-Heave Hummocks (D7)         Wetland Hydrology Present?       Yes         No
	YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; ch	eck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sol Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches):	Secondary Indicators (2 or more required)         it
	YDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; ch         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Surface Soil Cracks (B6)         Inundation Visible on Aerial Imagery (B7)         Sparsely Vegetated Concave Surface (B8)         Field Observations:         Surface Water Present?       Yes         Water Table Present?       Yes         No Saturation Present?       Yes         Describe Recorded Data (stream gauge, monito         Remarks:       Mud Mud Mud	eck all that apply)	Secondary Indicators (2 or more required)         it       Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)         Drainage Patterns (B10)       Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (C9)         g Roots (C3)       Geomorphic Position (D2)         Shallow Aquitard (D3)         Is (C6)       FAC-Neutral Test (D5)         RR A)       Raised Ant Mounds (D6) (LRR A)         Frost-Heave Hummocks (D7)         Wetland Hydrology Present?       Yes       No

WETLAND DETERMINATION	ON DATA FORM – West	tern Mountains, Valleys, and Coast Region
Project/Site: South Ranford	2001 City/County	r. Penni mton sampling Date: 5/ 28/13
Applicant/Owner: <u>SDD0T</u>		State: 80 Sampling Point: 36
Investigator(s): J. PUST, T. Talbit	7CIC Section, To	winship, Range: Tung 2 N, 1249 3E, St 32
Landform (hillslope, terrace, etc.): <u>Flotvik pl</u>	DUN Local relief	f (concave, convex, none): <u>COMC aV-(</u> Slope (%): 1
Subregion (LRR): MLPA 02	Lat: <u>44.0854</u>	13 Long: -103, 785259 Datum: DVA_198
Soil Map Unit Name: (ord19ton - Marshb)	101K WAMS, 0-6%	Stop S, Flobald NWI classification: N/A
Are climatic / hydrologic conditions on the site typic	al for this time of year? Yes	No (If no, explain in Remarks.)
Are Vegetation, Soit, or Hydrology _	significantly disturbed?	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology _	naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site	a man showing samplin	a point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No Is th	ne Sampled Area
Wetland Hydrology Present? Yes	No with	nin a Wetland? Yes
Remarks:		photo 57
$\sim 100$		
<u> </u>	ANDVA LUPIANOS	pri-aistinal vig Makge
VEGETATION – Use scientific names of	of plants.	
Tree Stratum (Plot size:)	Absolute Dominant <u>% Cover</u> Species?	Status
1		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3	······································	Species Across All Strata: (B)
4		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:	= 10tai Co	That Are OBL, FACW, or FAC: (A/B)
1		Prevälence index worksheet:
2		$- \qquad \qquad$
3		FACW species x 2 =
4		FAC species <u>5</u> x 3 = <u>15</u>
5		FACU species x 4 =
Herb Stratum (Plot size:)	= 10tai 00	UPL species $x5 =$
1. CALOV NU PRACKAGNSIS	45 1	$\frac{OPL}{EAC}$ Column Totals: (A) (B)
2. Sympty which um enco	$as _{5/} N$	Prevalence index = B/A =, ]
3		Hydrophytic Vegetation Indicators:
- 4 5		V_1 - Rapid 1 est for Hydrophytic Vegetation
6.		$\frac{1}{\sqrt{3}} = \frac{1}{\sqrt{3}} = 1$
7		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8		data in Remarks or on a separate sheet)
9		5 - Wetland Non-Vascular Plants'
10		Problematic Hydrophytic Vegetation" (Explain)
1		be present, unless disturbed or problematic.
/ Woody Vine Stratum (Plot size:	= 10tal COV	VCI
1		Hydrophytic
2		Vegetation
% Bare Ground in Herb Stratum	= Total Cov	Ver
Remarks:		
Wollowd Woodration	onteria with	
A A CONTRACTOR A CASE OF THE		

SOIL	
------	--

	-					
Depth <u>Matrix</u>	%Colo	Redox Feature	S Tupol	1.002	Toyturo	Demortes
$\bigcirc$ $\mathbb{N}_{\bullet}$ $(a)(a) > (b)$	25 miles		. <u>. vpe</u> . (	<u></u>		Remarks
$\frac{1}{1} \frac{1}{10} $	<u>91 1016</u>	9110 3		<u> </u>	<u> </u>	· · · · · · · · · · · · · · · · · · ·
16×18 1076 31 1		<u> 97107 - 2</u>		<u>}//</u>	<u> </u>	
		· · ·			,,	
			-			
		·····				
······						
	·	·				
'Type: C=Concentration, D=Deple	tion, RM≕Reduce	ed Matrix, CS=Covere	d or Coated	Sand Gra	ins. <sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soli Indicators: (Applicat	Die to all LRRS, u	iniess otnerwise no	tea.)		Indicators for	Problematic Hydric Solls :
Histosol (A1)	Sar	ndy Redox (S5)			2 cm Mucl	( (A1U) Nt Material (TE2)
Black Histic (A3)		ppeu Mainx (56) my Mucky Mineral /P	1) (excent)			n wateria: (TF2) ow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loa	amy Gleved Matrix (F)	2)		Other (Exc	plain in Remarks)
Depleted Below Dark Surface	(A11) Dep	pleted Matrix (F3)	-,			······,
Thick Dark Surface (A12)	Rec	dox Dark Surface (F6	)		<sup>3</sup> Indicators of h	ydrophytic vegetation and
Sandy Mucky Mineral (S1)	Det	pleted Dark Surface (	F7)		wetland hyd	Irology must be present,
Sandy Gleyed Matrix (S4)	<u> </u>	dox Depressions (F8)			unless distu	irbed or problematic.
Restrictive Layer (if present):						
Туре:						
Depth (inches):					Hydric Soil Prese	nt? Yes // No
Remarks:						
	all and a	in mant.				
H Myanc s	DIT CVI-AC	and much.				
<u>`````````````````````````````````````</u>						
				· · ·		
HYDROLOGY				· .		<b></b>
HYDROLOGY Wetland Hydrology Indicators:						
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of on-	e required; check	ali that apply)			Secondary I	ndicators (2 or more required)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1)	e required; check	all that apply) Water-Stained Leav	/es (B9) (ex	cept	Secondary I Water-S	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2,
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of on Surface Water (A1) High Water Table (A2)	e required; check	all that apply) _ Water-Stained Leav MLRA 1, 2, 4A,	/es (B9) (ex and 4B)	cept	<u>Secondary I</u> Water-S <b>4A</b> , a	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of on- Surface Water (A1) High Water Table (A2) Saturation (A3)	e required; check	all that apply) _ Water-Stained Leav MLRA 1, 2, 4A, _ Salt Crust (B11)	ves (B9) (ex and 4B)	cept	<u>Secondary I</u> Water-S <b>4A</b> , a Drainag	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	e required: check 	all that apply) Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate	ves (B9) (ex and <b>4B)</b> es (B13)	cept	<u>Secondary I</u> Water-S <b>4A, a</b> Drainag Dry-Sea	ndicators (2 or more required) Stained Leaves (B9) ( <b>MLRA 1, 2,</b> and 4B) e Patterns (B10) ason Water Table (C2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	<u>e required: check</u> 	all that apply) _ Water-Stained Lean MLRA 1, 2, 4A, _ Salt Crust (B11) _ Aquatic Invertebrate _ Hydrogen Sulfide C	ves (B9) ( <b>ex</b> and <b>4B)</b> es (B13) idor (C1)	cept	<u>Secondary I</u> Water-S <b>4A</b> , a Drainag Dry-Sea Saturati	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	e required; check 	all that apply) Water-Stained Leav <b>MLRA 1, 2, 4A,</b> Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe	/es (B9) (ex and 4B) es (B13) edor (C1) eres along L	ccept iving Root:	Secondary I Water-S 4A, a Drainag Dry-Sea Saturati s (C3)	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2)
HYDROLOGY Wetiand Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	e required; check 	all that apply) Water-Stained Lean MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduc	ves (B9) (ex and 4B) es (B13) edor (C1) eres along L ed Iron (C4)	cept iving Root:	Secondary I Water-S 4A, a Drainag Dry-Sea Saturati s (C3) Geomon Shallow	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	<u>e required: check</u> 	all that apply) Water-Stained Lean MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduc Recent fron Reduct	ves (B9) (ex and 4B) es (B13) idor (C1) eres along L ed Iron (C4) ion in Tilled	iving Root: Soils (C6)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturati s (C3) Geomol Shallow FAC-Ne	ndicators (2 or more required) Stained Leaves (B9) ( <b>MLRA 1, 2,</b> and <b>4B)</b> e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) eutral Test (D5)
HYDROLOGY           Wetland Hydrology Indicators:           Primary Indicators (minimum of on	<u>e required: check</u> 	all that apply) Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Stunted or Stressed	ves (B9) (ex and 4B) es (B13) edor (C1) eres along L ed Iron (C4) ion in Tilled i Plants (D1	iving Root Soils (C6) ) (LRR A)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturati s (C3) Geomol Shallow FAC-Ne Raised	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) sutral Test (D5) Ant Mounds (D6) (LRR A)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Im	<u>e required: check</u> 	all that apply) Water-Stained Lear <b>MLRA 1, 2, 4A,</b> Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduc Recent fron Reducd Stunted or Stressee Other (Explain in R	ves (B9) (ex and 4B) es (B13) edor (C1) eres along L ed Iron (C4) ion in Tilled i Plants (D1 emarks)	iving Root Soils (C6) ) (LRR A)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturati s (C3) Geomol Shallow FAC-Ne Raised Frost-Ho	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7)
HYDROLOGY           Wetland Hydrology Indicators:           Primary Indicators (minimum of one	e required: check 	all that apply) Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Stunted or Stressed Other (Explain in R	ves (B9) (ex and 4B) es (B13) edor (C1) eres along L ed Iron (C4) ion in Tilled i Plants (D1 emarks)	iving Root: Soils (C6) ) (LRR A)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturati s (C3) FAC-Ne Raised Frost-He	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) autral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7)
HYDROLOGY           Wetland Hydrology Indicators:           Primary Indicators (minimum of one	e required; check 	all that apply) Water-Stained Lean MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduc Recent Iron Reducl Stunted or Stressed Other (Explain in R	ves (B9) (ex and 4B) es (B13) edor (C1) eres along L ed Iron (C4) ion in Tilled i Plants (D1 emarks)	iving Root: Soils (C6) ) (LRR A)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturati s (C3) FAC-Ne Raised , Frost-He	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7)
HYDROLOGY           Wetland Hydrology Indicators:           Primary Indicators (minimum of one	e required; check	all that apply) Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Stunted or Stressed Other (Explain in R	ves (B9) (ex and 4B) es (B13) edor (C1) eres along L ed Iron (C4) ion in Tilled i Plants (D1 emarks)	iving Root: Soils (C6) ) (LRR A)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturati s (C3) Geomol Shallow FAC-Ne Raised , Frost-He	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7)
HYDROLOGY           Wetland Hydrology Indicators:           Primary Indicators (minimum of on	e required: check	all that apply) Water-Stained Lean MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduct Recent fron Reduct Other (Explain in R Depth (inches): Depth (inches):	ves (B9) (ex and 4B) es (B13) edor (C1) eres along L ed Iron (C4) ion in Tilled i Plants (D1 emarks)	iving Root Soils (C6) ) (LRR A)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturati s (C3) Geomol Shallow FAC-Ne Raised Frost-He	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) autral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7)
HYDROLOGY           Wetland Hydrology Indicators:           Primary Indicators (minimum of on-           Surface Water (A1)           High Water Table (A2)           Saturation (A3)           Water Marks (B1)           Sediment Deposits (B2)           Drift Deposits (B3)           Algal Mat or Crust (B4)           Iron Deposits (B5)           Surface Soil Cracks (B6)           Inundation Visible on Aerial Im           Sparsely Vegetated Concave I           Field Observations:           Surface Water Present?           Yee:           Saturation Present?           Yee:           Saturation Present?	e required: check	all that apply) Water-Stained Lear MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Recent fron Reduce Recent fron Reduce Other (Explain in R Depth (inches): Depth (inches):	ves (B9) (ex and 4B) es (B13) edor (C1) eres along L ed Iron (C4) ion in Tilled i Plants (D1 emarks)	iving Root: Soils (C6) ) (LRR A)	<u>Secondary I</u> Water-S <b>4A</b> , a Drainag Dry-Sea Saturati s (C3) FAC-Ne Raised Frost-He	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) autral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7)
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one	e required; check	all that apply) Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduc Recent fron Reduct Stunted or Stressed Other (Explain in R Depth (inches): Depth (inches): well, aerial photos, p	ves (B9) (ex and 4B) es (B13) edor (C1) eres along L ed Iron (C4) ion in Tilled i Plants (D1 emarks) revious insp	iving Root: Soils (C6) ) (LRR A) Wetlan	Secondary I	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7) ent? Yes No
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one         Surface Water (A1)         High Water Table (A2)         Saturation (A3)         Water Marks (B1)         Sediment Deposits (B2)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Iron Deposits (B5)         Surface Soil Cracks (B6)         Inundation Visible on Aerial Im         Sparsely Vegetated Concave I         Field Observations:         Surface Water Present?         Yei         Water Table Present?         Yei         Includes capillary fringe)         Describe Recorded Data (stream generic stream	e required; check	all that apply) Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduc Recent fron Reduct Stunted or Stressed Other (Explain in R Depth (inches): Depth (inches): well, aerial photos, p	ves (B9) (ex and 4B) es (B13) bdor (C1) eres along L ed Iron (C4) ion in Tilled i Plants (D1 emarks) revious insp	iving Root: Soils (C6) ) (LRR A) Wetla pections), if	Secondary I	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7) ent? Yes No
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one	e required: check	all that apply) Water-Stained Lean MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduce Recent fron Reducel Other (Explain in R Depth (inches): Depth (inches): Depth (inches): well, aerial photos, p	ves (B9) (ex and 4B) es (B13) idor (C1) eres along L ed Iron (C4) ion in Tilled i Plants (D1 emarks) revious insp	iving Roots Soils (C6) ) (LRR A) Wetlan	Secondary I          Vater-S         4A, a         Drainag         Dry-Sea         Saturati         Saturati         s (C3)       Geomol         Shallow         FAC-Ne         Raised         Frost-He         favailable:	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) sutral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7) ent? Yes No
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of on	e required: check	all that apply) Water-Stained Lear MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduce Recent fron Reduced Stunted or Stresseed Other (Explain in R Depth (inches): Depth (inches): Depth (inches): well, aerial photos, p	ves (B9) (ex and 4B) es (B13) edor (C1) eres along L ed Iron (C4) ion in Tilled i Plants (D1 emarks) revious insp	iving Root: Soils (C6) ) (LRR A) Wetlan	Secondary I          Water-S         4A, a         Drainag         Dry-Sea         Saturati         s (C3)       Geomol         Shallow         FAC-Ne         Raised         Frost-He         favailable:	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) autral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7) ent? Yes No
HYDROLOGY           Wetland Hydrology Indicators:           Primary Indicators (minimum of one	e required; check	all that apply) Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduc Recent fron Reduct Stunted or Stressed Other (Explain in R Depth (inches): Depth (inches): Depth (inches): Well, aerial photos, p	ves (B9) (ex and 4B) es (B13) edor (C1) eres along L ed Iron (C4) ion in Tilled i Plants (D1 emarks) revious insp	iving Root: Soils (C6) ) (LRR A) Wetlan	Secondary I	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7) ent? Yes No
HYDROLOGY           Wetland Hydrology Indicators:           Primary Indicators (minimum of one	e required; check	all that apply) Water-Stained Lean MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide C Oxidized Rhizosphe Presence of Reduc Recent fron Reduct Stunted or Stressed Other (Explain in R Depth (inches): Depth (inches): Depth (inches): Well, aerial photos, p	ves (B9) (ex and 4B) es (B13) odor (C1) eres along L ed Iron (C4) ion in Tilled d Plants (D1 emarks) revious insp	iving Root: Soils (C6) ) (LRR A) Wetlan pections), if	Secondary I	ndicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) e Patterns (B10) ason Water Table (C2) on Visible on Aerial Imagery (C9) rphic Position (D2) Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7) ent? Yes No

WETLAND DETERMINATION DA		M – Western Mou	intains, Valleys, and Coast Region
Project/Site: South Rachford Road		City/County: Penni	Sampling Date: 8/27/13
Applicant/Owner: SDDD1		ony, oounty: <u> t t</u>	State: 30 Sampling Point: 27-W/17
Investigator(s): 1. DIRt. T. Talkitzer		Section Township Pa	TWO ZN. QUA ZE Ser 22
Landform (hillsland terrace ato): Start		Local raliof (conceve	
Submation (IDD) NIL 2 A 107	104 (14	12 Tallola	Convex, none). <u>Correction</u> Slope (%). <u>100</u>
Subregion (LRR): -1L1CAT 02		108/ DENDAC	Long: 100, 161 FF1 Datum: MAL
Soli Map Unit Name: (1)(7/2/5) (1) - 7/2/2/ DAVI (1)/2- 11/2	i WK LS / L	-0 10 300183/ T	<u>TRAILCRAF</u> NWI classification: <u>////</u>
Are climatic / hydrologic conditions on the site typical for this	time of ye	ar? Yes 💇 No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology si Are Vegetation, Soil, or Hydrology	gnificantly aturally pro	disturbed? Are blematic? (If ne	"Normal Circumstances" present? Yes <u>~</u> No eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	showing	sampling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Demoderation       Yes       No	> >	Is the Sampled within a Wetlar	I Area nd? Yes <u>V</u> No
riponian Slups VI	ery 3	H Slope Leap to M	alorg Rapid Creek
VEGETATION – Use scientific names of plant	ts.		
<u>Tree Stratum</u> (Plot size:) 1	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:           Number of Dominant Species           That Are OBL, FACW, or FAC:
2		<u></u>	Total Number of Dominant
3			Species Across All Strata:
4			Percent of Dominant Species
Sapling/Shrub Stratum (Plot size)		_ = Total Cover	That Are OBL, FACW, or FAC:(0'/ (A/B)
1 CORNUS OLDA	70	EACIN	Prevalence Index worksheet:
2 PALMAS ORMIFLORA	20	FAVIA	Total % Cover of:Multiply by:
3			OBL species $10$ $x = 10$
4			FACW species $140 \times 2 = 200$
5			FAC species x 3 =
		= Total Cover	FACU species $10 \times 4 = 100$
Herb Stratum (Plot size:)	1D	N SAVIA	Column Totals: $191$ (A) $45$ (B)
1. Paralanta planting of the	10	$-\frac{1}{1}$ $-\frac{1}{1}$ $-\frac{1}{1}$	
2 Cicuta maculata	10		Prevalence index = B/A =U
1 CARADO SO	<u> </u>		Hydrophytic Vegetation Indicators:
5			Comparison Test for Hydrophytic Vegetation
6.			$\sqrt{3}$ - Prevalence Index is $\leq 3.0^{1}$
7			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8			data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants <sup>1</sup>
10			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11,	,		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)	<u></u>	_= Total Cover	
2			Hydrophytic Vegetation
		= Total Cover	Present? Yes V No
% Bare Ground in Herb Stratum			
Remarks: Hydric Vlgtation	r (	prusent.	

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SOIL

Profile Desc	ription: (Describe 1	to the depth	needed to docu	ment the in	ndicator	or confirm	the absence	of indicators.)		
Depth	Matrix		Redo	x Features				•		
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>		Remarks		
		١								
				•						
<del></del>		<u> </u>			<u></u>			· · · · · · · · · · · · · · · · · · ·		
		<u></u>				<u> </u>				
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				~ <del>~</del>			<b>.</b>			
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			aduaad Matrix, O		ar Coate	d Sand Gra	2	action: RI - Roro Liping M-Matrix		
Hydric Soil	ndicators: (Application)	able to all LE	RRs. unless othe	rwise note	d.)	u Sanu Gra	Indicato	ors for Problematic Hydric Soils <sup>3</sup> :		
Histosol	(A1)		Sandy Redox (	S5)	,		2 cr	m Muck (A10)		
Histic Er	pipedon (A2)		Stripped Matrix	(S6)			Red	Parent Material (TF2)		
Black Hi	stic (A3)		Loamy Mucky	Mineral (F1	) (except	MLRA 1)	Ver	y Shallow Dark Surface (TF12)		
Hydroge	n Sulfide (A4)		_ Loamy Gleyed	Matrix (F2)	)		Oth	er (Explain in Remarks)		
Depleted	Below Dark Surface	e (A11) 🛛	_ Depleted Matri:	x (F3)			2			
Thick Da	ark Surface (A12)		_ Redox Dark Su	Irface (F6)	-,		Indicato	ors of hydrophytic vegetation and		
Sandy M	lucky Mineral (S1)	_	<ul> <li>Depleted Dark</li> <li>Boday Dapros</li> </ul>	Surface (F	()		wetta	and hydrology must be present,		
Sanuy C	aver (if present):		_ Redux Depless	50115 (FO)			Unies	s distribed of problematic.		
Type:	Layer (ir present).									
Depth (in			_				Hydric Soil	Present? Yes No		
Remarke:										
Nelliains.							<u> </u>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Nb	Sp/ 012	A111	to the	0 10	ora O	vehi-	Soils	assurver		
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	MAAN	ann	()	<u>con a</u>	- ny	Ready-	Th CALL	OTOK_		
HYDROLO	GY Ĵ				1	v J				
Wetland Hy	drology Indicators:									
Primary India	cators (minimum of o	ne required;	check all that app	ly)			Seco	ndary Indicators (2 or more required)		
Surface	Water (A1)		Water-Sta	ined Leave	es (B9) (e	xcept	V	Vater-Stained Leaves (89) (MLRA 1, 2,		
High Wa	iter Table (A2)		MLRA	1, 2, 4A, a	nd 4B)			_4A, and 4B)		
Saturati	on (A3)		Salt Crust	(B11)			Drainage Patterns (B10)			
Water N	Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2)						Dry-Season Water Table (C2)			
Sedimer	nt Deposits (B2)		Hydrogen	Sulfide Oc	lor (C1)		— <sup>9</sup>	aturation Visible on Aerial Imagery (C9)		
Drift De	posits (B3)		Oxidized	Rhizosphei	res along	Living Root	ls (C3)∕ G	Geomorphic Position (D2)		
Algal Ma	at or Crust (B4)		Presence	of Reduce	d Iron (C4	+) -  0-  - (00)	, S	Shallow Aquitard (D3)		
Iron Dep	Osits (B5)		Recent In	n Reductio	Dianta (D		) <sup>r</sup>	AC-Neutral Test (D5)		
Surrace	Soll Cracks (Bo)	magaari (87)	Stunted o	r Stresseu	Plants (D	1) (ERR A)	۳ 	rast Haava Hummaaka (D7)		
inunoau Sparseli	Vegetated Concave	Surface (B8		plaininine	marks)		r	Tost-heave hummocks (D7)		
Field Obser	vations:		·/							
Surface Wat	or Present? V	es Nr	N / Depth (ir	iches).						
Mater Table	Present? V		Depth (ir	ochee):				/		
Saturation D	resent: V	ioe Nr	V Depth (ir	(chos):			und Hydrolog	W Present? Yes No		
(includes ca	pillary fringe)	es IV		iones)		TTCUA	and Hydrolog	y reserver res <u>y</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:										
Remarks:	********									
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## Appendix B

## Site Photographs



Photo #1.Looking east downSmith Gulch Fen. Standing at spring<br/>where stream/fen begins. Near<br/>sampling point 1 & 2.



Photo #3.At edge of forestedarea in Smith Gulch. Photo facingeast. Near sampling point 4



Photo #4.Within forested areaof Smith Gulch, facing downstream(east). Between sampling point 4 & 5.

Photo #5. <u>Within forested area,</u> facing upstream (west). Between sampling point 4 & 5.

Photo #6. <u>Facing south at seep</u> within forested area. Near sampling point 5. Seep is at the toe of hillslope.



Photo #7. Photo taken within a scrub-shrub portion of the wetland near sampling point 6. Facing south.

Photo #8. <u>Facing downstream</u> (east) toward emergent and scrub shrub community transition toward sampling point 8.

Photo #9. <u>Facing upstream</u> (west) toward scrub-shrub wetland just west of sampling point 8.



Photo #10.Facing upstream(east) toward scrub-shrub wetland.Near sampling point 8.



Photo #12. <u>Looking at aspen</u> <u>fringed wetland near sampling point</u> <u>8.</u>



Photo #13. <u>Photo taken within</u> wetland 22b where fen areas transition to channel. Little to no groundwater influence. Facing North between sampling point 9 and 10.

Photo #14. <u>Photo taken near</u> sampling point 11. Wetland is in narrow, incised channel through brome-dominated prairie. Looking west.

Photo #15. Photo taken near sampling point 11. Wetland is in narrow, incised channel through brome-dominated prairie. Looking east.



Photo #16.Photo taken nearsampling points 12 and 13. Wetlandtransitions to fen and takes up muchof the valley bottom. Looking west.



Photo #18. Looking upstream toward fen/wetland areas. Looking toward Wetland 17a and a portion of wetland 21. Near sampling point 13.



Photo #19.Looking downstream(east) from at Wetland 17b andWetland 20. Near sampling point 14.

Photo #20. Looking upstream (west) at transition from emergent wetland to scrub-shrub wetland within Smith Gulch Fen. Near sampling point 16.

Photo #21.Photo taken withinscrub-shrub wetland near SouthRochford Road looking southeast.Near sampling point 16 (Wetland 16).





Photo #22.Photo lookingupstream (southwest) where SmithGulch has become eroded and incised(Wetland 19, between point 16 & 17)

Photo #23. Looking upstream (southwest) at sampling point 17.

Photo #24. <u>Looking downstream</u> (northeast) at sampling point 17.



Photo #25. Looking upstream (north) where Smith Gulch again becomes channelized. Photo within Wetland 12 between sampling points 17 and 19.

Photo #26. Looking downstream (south) where Smith Gulch again becomes channelized. Photo within Wetland 12 between sampling points 17 and 19.

Photo #27. Looking on east side of South Rochford Road (opposite side of road from Rochford Cemetery Fen at scrub shrub community. Near sampling point 20.



Photo #28.Looking south atscrub-shrub community withinRochford Cemetery Fen (Wetland 11a)near sampling point 19).

Photo #29. Looking downstream (north) of Smith Gulch as it becomes channelized and flows through spruce/ponderosa forest (Wetland 8d near sampling point 19)

Photo #30. Looking upstream (south) of Smith Gulch as it becomes channelized and flows through spruce/ponderosa forest (Wetland 8d near sampling point 19)



Photo #31. <u>Facing downstream</u> (north) of Smith Gulch (Wetland 8a (north of sampling point 19 within forested area)

Photo #32. <u>Facing upstream</u> (south) of Smith Gulch (Wetland 8a and north of sampling point 19 within forested area)

Photo #33. <u>Wetland on opposite</u> side of Smith Gulch (Photo 32) and opposite side of South Rochford Road facing east. Near sampling point 21.



Photo #34. Photo facing upstream (west) as Smith Gulch flows alongside South Rochford Road (Wetland 8a, no sampling point at this location)

Photo #35. <u>Photo facing</u> <u>downstream (east) as Smith Gulch</u> <u>flows alongside roadway (Wetland</u> <u>8a, no sampling point at this location</u>

Photo #36. Photo of Rapid Creek Riparian Area (facing south, downstream). Photo taken at sampling point 37.





Photo #37. Photo taken within road ditch facing upslope (northeast) of drainageway that flows through the road ditch. (Wetland 35, sampling point 23)

Photo #38. Photo taken within road ditch facing downslope (southwest) of drainageway that flows through the road ditch. (Wetland 35, sampling point 23)

Photo #39. Looking up drainageway (west) of grassed waterway that flows under roadway. Near sampling points 25 and 26)



Photo #40.Looking down (east)drainageway of grassed waterwaythat flows under roadway. Nearsampling points 25 and 26)











Photo #43.Looking down(northeast) vegetated drainage nearsampling point 29. Drainage is narrowthroughout pasture.

Photo #44. <u>Looking upstream</u> (northwest) of North Fork Castle Creek near sampling point 31. Narrow channel has formed within fen area.

Photo #45. Looking downstream (northeast) toward Rochford Road near sampling point 31. South Rochford Road Wetland Delineation

August 28, 2013



| HDR Engineering, Inc.



Photo #48. Photo taken near sampling point 33 at North Fork Castle Creek and associated wetlands (facing northeast).

Photo #46. Photo taken from South Rochford Road toward desktop delineated wetland (Wetland 40), facing northwest. No access to this property at time of field delineation.

South Rochford Road Wetland Delineation

August 28, 2013



Photo #49.Photo taken nearsampling point 36 at North ForkCastle Creek and associated wetlands(facing east).