WETLAND DETERMINATION DATA FORMS



APPENDIX B

#### PRELIMINARY JURISDICTIONAL DETERMINATION FORM

This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

District Office File/ORM #		PJD Date:
State City/County	Name/	
Nearest Waterbody:	Address of	Jaime Moreno Sapphire Energy Company
Location: TRS. LatLong or UTM:	Person Requesting PJD	3115 Merryffeld Row San Diego, CA 92121
Identify (Estimate) Amount of Waters in the Review Area:  Non-Wetland Waters:  Stream Flow:  N/A	Name of Any Water Bodies on the Site Identified as Section 10 Waters: No	Tidal:
Wetlands: aere(s) Cowardin Class: Palustrine, emergent	Office (Desk) Determin  Field Determination:	Date of Field Trip: June, Sept 2009
Maps, plans, plots or plat submitted by or on behalf Data sheets prepared/submitted by or on behalf of th Office concurs with data sheets/delineation Office does not concur with data sheets/delineation Usa sheets prepared by the Corps Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite quad name: USDA Natural Resources Conservation Service Soil National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: Photographs: Aerial (Name & Date): Vother (Name & Date): See attached Previous determination(s). File no. and date of respo	e applicant/consultant. report. neation report.  Survey. Citation:  biological resources and wetlands ase letter:	
IMPORTANT NOTE: The information recorded on this form has not necessarily	been verified by the Corps and should	d not be relied upon for later jurisdictional determinations.
Signature and Date of Regulatory Project Manager (REQUIRED)	(REQUIRED, unless o	Person Requesting Preliminary JD btaining the signature is impracticable)
EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DI	TERMINATIONS:	

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD. has declined to exercise the option to obtain an approved JD in this instance and at this time

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN). or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters, (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization, (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary, (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable, (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary ID constitutes agreement that all wetlands and other water bodies on the site affected in any way by at activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative speal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved ID to accomplish that result, as soon as is practicable

### PRELIMINARY JURISDICTIONAL DETERMINATION FORM

This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

trict Of	fice Albu	iquerque District	File/ORM #			PJD Date:
e ID	City	County Luna Cou	ınty	Pe	rson Requesting PJI	Jaime Moreno, Sapphire Energy
	Site Number	Latitude	Longitude	Cowardin Class	Est. Amount of Aquatic Resource in Review Area	e Class of Aquatic Resource
	Section of the sectio	the state of the s		n/a	grade in American distribution of a state of physical pages and the second state of the state of	Non-Section 10 non-wetland
	SP- 2			Palustrine, emergent		Non-Section 10 non-wetland
	SP-3	APP - Months all and respect of positive durant out in American durant.		Palustrine, emergent	of the transferred production and description of advances and an array or designation	Non-Section 10 non-wetland
	# Delar de Carlos de Carlo	And the second activate of the second control of the second contro		CONTROL OF THE PROPERTY OF THE	And the state of t	
	The figure of the second of the first of the second				7 A A A	
	philipsolution that also are paying	The second of th	eren til tenskalationelle milet oppså forskalation op de som om om	ATTREBUTE OF THE CONTROL OF CONTR		
I	Notes:					
	Notes:					
		d Biological Resou	urces and Wetla	nds Report		
		d Biological Resou	urces and Wetlan	nds Report		
		d Biological Resou	urces and Wetla	nds Report		
		d Biological Resou	urces and Wetlan	nds Report		
		d Biological Resou	urces and Wetla	nds Report		

## WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 1 A 8 9 Con 3 2 8 C A A St. 1	919109
Project/Site: 1 ABR - COOPER RANCH City/County: LU	
Applicant/Owner:	State: NM Sampling Point: 3P-1
Investigator(s): J ELLIOTT Section, Township, Ra	
Landform (hillslope, terrace, etc.): 5WALE Local relief (concave,	
Subregion (LRR): Lat:	Long: Datum:
Soil Map Unit Name:	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _	(If no, explain in Remarks.)
Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> significantly disturbed?	"Normal Circumstances" present? Yes No
	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sampling point	
Hydrophytic Vegetation Present? Yes No	
Hydrophytic Vegetation Present?  Yes No Is the Sampled  Hydric Soil Present?  Yes No Is the Sampled	
Wetland Hydrology Present? Yes No within a Wetla	nd? Yes No
Remarks: SITE IS IN BROAD SWALE DOWNSLOPE	
IN THE ABANDONED RAILROAD EMBANKME	
HIGH FLOW, WATER SPREADS OUT ACRO-	SS THIS BRUAD SWALE
VEGETATION - Use scientific names of plants.	ENO DEFINED CHANNELS
Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum         (Plot size:)         % Cover Species? Status           1         ハェルラ	Number of Dominant Species
2	That Are OBL, FACW, or FAC:(A)
3	Total Number of Dominant
4	Species Across All Strata: (B)
Sapling/Shrub Stratum (Plot size: 0 - 1 ACR F	Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
1. YUCCA ELATA I NE UPL	Prevalence Index worksheet:
2. CHONAU CHRYSOTHAMNUS NAU   NO UPL	Total % Cover of: Multiply by:
3. OPUNTIA IMPRICATA I NO UPL	OBL species x 1 =
4. OPYNTIA POLYCANTHA I NO UPL	FACW species x 2 =
5	FAC species x 3 =
Herb Stratum (Plot size:)	FACU species x 4 =
1. HILABIA MUTICA 80 YES UPL	UPL species x 5 =
2. ASCLEBIAS ENGELMANNI I NO UPL	Column Totals: (A) (B)
3.	Prevalence Index = B/A =
4	Hydrophytic Vegetation Indicators:
5	Dominance Test is >50%
6	Prevalence Index is ≤3.01
7	Morphological Adaptations <sup>1</sup> (Provide supporting
8	data in Remarks or on a separate sheet)
85 = Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. NONE	be present, unless disturbed or problematic.
2 = Total Cover	Hydrophytic
	Vegetation
% Bare Ground in Herb Stratum % Cover of Biotic Crust	Present? Yes No No
Remarks: THIO IS NATIVE, UDDISTURBED VEGET	ATION

	oth needed to document the indicator or o	confirm the absence of indicators.)
Depth Matrix Inches) Color (moist) %	Redox Features Color (moist) % Type <sup>1</sup> I	
	Color (Holst) % Type	_oc <sup>2</sup> Texture Remarks
7-20+ 7-5YR 3/4		CLAY LEAM
<u> </u>		
ydric Soil Indicators: (Applicable to all	=Reduced Matrix, CS=Covered or Coated S	
		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Dark Surface (F7)	
	Redox Depressions (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Vernal Pools (F9)	wetland hydrology must be present,
Salidy Gleyed Matrix (S4)		unless disturbed or problematic.
strictive   aver lif present):		
Type:		
estrictive Layer (if present):  Type:  Depth (inches):  emarks:		Hydric Soil Present? Yes No
Type: Depth (inches): emarks:		Hydric Soil Present? Yes No
Type:		Hydric Soil Present? Yes No
Depth (inches): emarks:  DROLOGY etland Hydrology Indicators:		
Type: Depth (inches): marks:  DROLOGY etland Hydrology Indicators: mary Indicators (minimum of one required		Hydric Soil Present? Yes No
Type:	Salt Crust (B11)	
Type:		Secondary Indicators (2 or more required)
Type:	Salt Crust (B11)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
Type:	Salt Crust (B11) Biotic Crust (B12)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
Type:	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
Type:	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  g Roots (C3) Dry-Season Water Table (C2)
Type:	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  pry-Season Water Table (C2)  Crayfish Burrows (C8)
Type:	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  ills (C6)  Saturation Visible on Aerial Imagery (C5)
Type:	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C3)  Shallow Aquitard (D3)
Type:	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  ills (C6)  Saturation Visible on Aerial Imagery (C5)
Type:	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  ills (C6) Saturation Visible on Aerial Imagery (C5)  Shallow Aquitard (D3)
Type:	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  ills (C6) Saturation Visible on Aerial Imagery (CS)  Shallow Aquitard (D3)
DROLOGY etland Hydrology Indicators: mary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7 Water-Stained Leaves (B9) eld Observations: rface Water Present? Yes	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  No Depth (inches): No Depth (inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (CS)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  ills (C6) Saturation Visible on Aerial Imagery (C5)  Shallow Aquitard (D3)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  No Depth (inches):  Depth (inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C8)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  No Depth (inches): No Depth (inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (CS)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  No Depth (inches):  Depth (inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (CS)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Type:	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  No Depth (inches):  Depth (inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (CS)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  No Depth (inches):  Depth (inches):	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (CS)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

# WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: JABR - COOPER RANCH	City/County: L7	NA Sampling Day 9/8/20
Applicant/Owner:		0 41.44
Investigator(s): J. ELLIOTT	Section Township (	Pages: Sec. 0 Tags 1 8 8 h.
Landform (hillslope, terrace, etc.): DEPRESSION	Local relief (concern	Name: SEC 4-124N KIN
Subregion (LRR): Lat:	_ Local Teller (Concave	Slope (%): O
Soil Map Unit Name:		
Are climatic / hydrologic conditions on the site typical for this time of ye		NWI classification:
Are Vegetation YES Soil YES, or Hydrology YES significantly		
Are Vegetation, Soil, or Hydrology naturally pr		e "Normal Circumstances" present? Yes No
		needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing		t locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sample	od Aras
Hydric Soil Present? Yes No		and? Yes No
Wetland Hydrology Present? Yes No		
Remarks: SITE IS IN DEPRESSION WITH	no outlet	UPSLOPE FROM RAILROAD
EMBANKMENT. JULLS ARE PROBLEM	n Joils" bed	cause at PAST DISTURBANCE
AND RED PARENT MATERIAL AND	Law CHRON	na <del>(3/3).</del> 7.54R3.3
VEGETATION – Use scientific names of plants.		
Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: % Cover	Species? Status	
1. NONE		That Are OBL, FACW, or FAC:(A)
2	·	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: 66.6 (A/B)
1NONE		Prevalence Index worksheet:
2		Total % Cover of:Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5		FAC species x 3 =
Herb Stratum (Plot size: _O. 1 ACC 5	= Total Cover	FACU species x 4 =
21	YES FAC	UPL species x 5 =
	YES UPL	
3. SOLANUM ELEAGNIFOLIUM 10	NO UPL	Prevalence Index = B/A =
4 AMARANTHS POWELLIN 5	NO YPL	Hydrophytic Vegetation Indicators:
5. ASCLEPIAS ENGELMANNIL 2	NO UPL	Dominance Test is >50%
6. ERIOCHLOA ACUMINATA 15	YES FACW	Prevalence Index is ≤3.01
7	<u> </u>	Morphological Adaptations <sup>1</sup> (Provide supporting
8		data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation (Explain)
Woody Vine Stratum (Plot size:)	Total Cover	Problematic Hydrophytic Vegetation (Explain)
1. NONG		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2		be present, unless disturbed or problematic.
	= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum  % Cover of Biotic Cri		Vegetation
Remarks:	191	Present? Yes No

Profile Description: (Describe to the dep		confirm the absence	of marcators.)
Depth Matrix (inches) Color (moist) %	Redox Features Color (moist) % Type	Loc <sup>2</sup> Texture	Remarks
0-2 7.5YR 3/3			LY CLAY LOAM
2-30 5 KR 4/4		11	il core
500 500 171			
¹Type: C=Concentration, D=Depletion, RM	Reduced Matrix CS=Covered or Coated	Sand Grains 21 o	cation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all			s for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)		Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)		Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)		ced Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red F	Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other	(Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)		
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)		
Thick Dark Surface (A12)	Redox Depressions (F8)		of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Vernal Pools (F9)		hydrology must be present,
Restrictive Layer (if present):		uniess	disturbed or problematic.
received anyer (in present).		1	
Type			
Type:		Hudrin Co.	Dropont3 Von No V
Depth (inches):	<del></del>		Present? Yes No
Depth (inches):	ARES AND BRIGHT CH		
Depth (inches):  Remarks: NO REPOX FEATURE	•		
Depth (inches):	•		
Depth (inches):  Remarks: NO REPOX FEATURE	•		
Depth (inches):  Remarks: NO REPOX FEATURE	•		
Depth (inches):	•		
Depth (inches):	•	ROMA INDI	
Depth (inches):	•	Seco	CATIVE OF
Depth (inches):  Remarks: NOREDOX FEATURE PROBLEM SOLL"  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one require	ed; check all that apply)	Second Second	endary Indicators (2 or more required)
Depth (inches):  Remarks: NOREDOX FEATURE PROBLEM SOLL"  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required purpose)  Surface Water (A1)	ed; check all that apply) Salt Crust (B11)	Seco	endary Indicators (2 or more required)  Water Marks (B1) (Riverine)
Depth (inches):  Remarks: NOREPOX FEATURE PROBLEM JOIL!!  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12)	Seco	endary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Depth (inches):  Remarks: NOREPOX FEATURE PROBLEM JOIL"  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Seco	endary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
Depth (inches):  Remarks: NOREPOX FEATURE PROBLEM SOLL"  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required primary Indicators (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Second IN De	endary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
Depth (inches):  Remarks: NOREPOX FFATURE PROBLEM SOLL"  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Primary Ind	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li	Second IN De	endary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)
Depth (inches):  Remarks: NOREPOX FFATURE PROBLEM JOIL"  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required primary Indicators)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Titled	Second INDO	endary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)
Depth (inches):  Remarks: NOREPOX FFATURE PROBLEM JOIL"  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required primary Indicators)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Titled	Second IND	endary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Depth (inches):  Remarks: NOREPOX FFATU  PROBLEM JOIL"  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled B7) Thin Muck Surface (C7)	Second IND	endary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (inches):  Remarks: NOREPOX FFATU  PROBLEM JOIL**  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one require)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B4)  Water-Stained Leaves (B9)  Field Observations:	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled B7) Thin Muck Surface (C7)	Second IND	endary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (inches):  Remarks: NOREPOX FGATE  PROBLEM JOIL**  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one require)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Baser)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled B7) Thin Muck Surface (C7) Other (Explain in Remarks)	Second IND	endary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):  Remarks: NOREPOX FGATE  LI PROBLEM JOIL  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (E  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)	Second IND	endary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (inches):  Remarks: NOREPOX FGATL  PROBLEM JOIL**  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  Saturation Present?  Yes  [includes capillary frince)	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)  No Depth (inches): No Depth (inches):	Second IN De	endary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):  Remarks: NOREPOX FGATL  PROBLEM JOIL**  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  Saturation Present?  Yes  [includes capillary frince)	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled B7) Thin Muck Surface (C7) Other (Explain in Remarks)  No Depth (inches):	Second IN De	endary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):  Remarks: NOREPOX FGATE  PROBLEM JOIL**  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (E  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  [includes capillary fringe)  Describe Recorded Data (stream gauge, manual contents)	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)  No Depth (inches): No Depth (inches):	Second IN De	endary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
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Depth (inches):  Remarks: NOREPOX FGATE  PROBLEM JOIL**  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (E  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  [includes capillary fringe)  Describe Recorded Data (stream gauge, manual contents)	ed; check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Thin Muck Surface (C7) Other (Explain in Remarks)  No Depth (inches): No Depth (inches):	Second IND Of Se	endary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)

# WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: IABR-COOPER RANCH		City/County: La	NA	Samula D. 0/c/ac
- FP. Same Civilei.				
Investigator(s): J. ELLIOTT  Landform (hillslope terrace etc.): ALLIUNA		Section Township	Panno: See 9 to 3	Sampling Point: 3P-3
Landform (hillslope, terrace, etc.): ALLUVIAL		Local relief (cones:	Nange	WPHIAPS
Subregion (LRR):	l at:	_ Local relief (concavi	e, convex, none): CONC	Slope (%): 0
Subregion (LRR):Soil Map Unit Name:	Lat		Long;	Datum:
Are climatic / hydrologic conditions on the site typical for the			NWI classifi	cation:
Are Venetation VES Sail VES	nis time of ye	ear? Yes No	(If no, explain in I	Remarks.)
Are Vegetation YES, Soil YES, or Hydrology YES	significantly	/ disturbed? Ar	e "Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology			needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	sampling point	locations, transects	important features etc
Hydrophytic Vegetation Present?				,po. ant readines, etc.
Hydric Soil Present? Yes	No	is the Sample	ed Area	
Wetland Hydrology Present? Yes	No	within a Wetl	and? Yes	No
Remarks: 51 TE 16 IN SWALE DOWNS! A	DE EDA	MA I PAIGATED		<u> </u>
TOTAL TITLE TOTAL TOTAL	D 10 (0 1 ct	KBGUBY KK	CONSTRUCTION	I AND NECON TUNA
VEGETATION - Use scientific names of the	E Soul	RCES (CROP	FIELD AND RA	NGELAND)
VEGETATION – Use scientific names of plan	nts.			
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Indicator Species? Status	The state of the s	
1. NONE		Opecies: Status	Number of Dominant St	pecies
2			That Are OBL, FACW, o	
3	1		Total Number of Domina	ant 3
4				,-,
Sapling/Shrub Stratum (Plot size:)		= Total Cover	Percent of Dominant Sp	ecies or FAC: <b></b>
1. Alonie				
			Prevalence Index work	1
23			Total % Cover of:	Multiply by:
4				x 1 =
5.				x 2 =
		= Total Cover	FACU species	x 3 =
Herb Stratum (Plot size: Of ACRE)			UPL species	
1. PANICUM OSTUDUM	30	YES FAC	Column Totals:	(A)(B)
2. SOLANUM ELEAGNIFOLIUM	_10_	NO UPL		
3. SORGHUM HALEPBNOG 4. ECHINOCHLOA COLONA				= B/A =
5. XANTHUM STRUMARIUM	20	YES FACE	Hydrophytic Vegetation	
6. AMARANTHUS POWELLI	<del>-d</del>	NO FACH	Dominance Test is >	I
7. HILARIA MUTICA	<u>a</u> .	NO UPL	Prevalence Index is:	
8. ASCLEPIAS ENGELMANII	10	NO UPL	data in Remarks	ations <sup>1</sup> (Provide supporting or on a separate sheet)
		= Total Cover		sytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)				
1None			Indicators of hydric soil a	and wetland hydrology must
2.			be present, unless disturb	ed or problematic.
	101 =	= Total Cover	Hydrophytic Vegetation	
	of Biotic Cru	st	Present? Yes	✓ No
Remarks:				
				· · · · · · · · · · · · · · · · · · ·

Profile Description: (Describe to the de Depth Matrix (inches) Color (moist) %	Redox Features		
	Calas (see )	Type Loc2	Texture Remarks
0-20° 7.54R 3/3 100			CLAYLDAM
			-
Type: C=Concentration, D=Depletion, RM	=Reduced Matrix CS=Covered as	C	
Trippincable to all	LRRs, unless otherwise noted	Coated Sand Gr	
_ HISTOSOI (A1)	Sandy Redox (S5)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histic Epipedon (A2)	Stripped Matrix (S6)		1 cm Muck (A9) (LRR C)
_ Black Histic (A3)	Loamy Mucky Mineral (F1	1)	2 cm Muck (A10) (LRR B)
_ Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	)	Reduced Vertic (F18) Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)  1 cm Muck (A9) (LRR D)	Depleted Matrix (F3)		Other (Explain in Remarks)
_ Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)		— (Corporation at Normal Roy)
Thick Dark Surface (A12)	Depleted Dark Surface (F	7)	
Sandy Mucky Mineral (S1)	Redox Depressions (F8)		<sup>3</sup> Indicators of hydrophytic vegetation and
_ Sandy Gleyed Matrix (S4)	Vernal Pools (F9)		wetland hydrology must be present.
estrictive Layer (if present):			unless disturbed or problematic.
Type:			
•			1
Depth (inches): emarks: No Horlzon Obuble THE SAME AS ADJACE	LOPMENT OR REDO	X FEATUR HID is A	Hydric Soil Present? Yes No V RES. SOIL COLOR AWD CHRO PROBLEM SOIL"
emarks: No Horizon Obubl THE SAME AS ADJACE	LOPMENT OR REDO NT UPLANDS. TO	X FEATUR HIS is A	
emarks: No Horizon Deuel He same As Adjaced DROLOGY	LOPMENI OR REDO NT UPLANDS_ TI	X FEATUR HIS is A	
PROLOGY		X FEATUR HID is A	
PROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required)	check all that apply)	X FEATUR HID is A	RES. SOIL COLOR AWDCHRO "PROBLEM SOIL".
DROLOGY etland Hydrology Indicators: mary Indicators (minimum of one required; Surface Water (A1)	check all that apply) Salt Crust (B11)	X FEATUR HID is A	Secondary Indicators (2 or more required)
DROLOGY etland Hydrology Indicators: mary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2)	check all that apply)  Salt Crust (B11)  Biotic Crust (B12)		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
PROLOGY  etland Hydrology Indicators:  imary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	check all that apply)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)	3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C	3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
PROLOGY  etland Hydrology Indicators:  imary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ale	3) :1) ong Living Roots	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
Emarks: No Horlzon Obuga THE SAME AS ADJACE  DROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one required;  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron	3) :1) ong Living Roots	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)
PROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T	3) :1) ong Living Roots	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  CC3)  Crayfish Burrows (C8)
DROLOGY  etland Hydrology Indicators:  imary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T Thin Muck Surface (C7)	3) ong Living Roots (C4) Tilled Soils (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  (C3) Dry-Season Water Table (C2)
DROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T	3) ong Living Roots (C4) Tilled Soils (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  CC3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C
DROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Id Observations:	Check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T Thin Muck Surface (C7) Other (Explain in Remarks	3) ong Living Roots (C4) Tilled Soils (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  CC3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)
Emarks: No Horlzon Obuga  THE SAME AS ADJACE  DROLOGY  etland Hydrology Indicators:  imary Indicators (minimum of one required)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  et d Observations:  fface Water Present?  Yes No	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C  Oxidized Rhizospheres ald  Presence of Reduced Iron  Recent Iron Reduction in T  Thin Muck Surface (C7)  Other (Explain in Remarks	3) c1) ong Living Roots o (C4) Tilled Soils (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  CC3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)
DROLOGY etland Hydrology Indicators: mary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Id Observations: face Water Present?  Yes No	Check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T Thin Muck Surface (C7) Other (Explain in Remarks  Depth (inches):	3) c1) ong Living Roots (C4) Tilled Soils (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Emarks: No Horlzon Obuer  THE SAME AS ADJACE  DROLOGY  etland Hydrology Indicators:  imary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  et of Observations:  rface Water Present?  ther Table Present?  Yes Notes the present?  Ves Notes the present?  Iter Table Present?  Ves Notes the present?  Water Capillary fringe)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T Thin Muck Surface (C7) Other (Explain in Remarks Depth (inches): Depth (inches):	3) ong Living Roots (C4) Tilled Soils (C6) s) Wetland	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Emarks: No Horlzon Obuga  THE SAME AS ADJACE  DROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one required)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  et Observations:  fface Water Present?  Yes Noter Table Present?	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T Thin Muck Surface (C7) Other (Explain in Remarks Depth (inches): Depth (inches):	3) ong Living Roots (C4) Tilled Soils (C6) s) Wetland	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Emarks: No Horlzon Obuga  THE SAME AS ADJACE  DROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one required)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Ind Observations: Inface Water Present?  Yes No  Surface Water Present? Yes	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in Thin Muck Surface (C7) Other (Explain in Remarks Depth (inches): Depth (inches): Depth (inches):	3) c1) ong Living Roots n (C4) Tilled Soils (C6) s) Wetland inspections), if a	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Emarks: No Horizon Obuga  THE SAME AS ADJACE  DROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one required;  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Id Observations: Iface Water Present?  Yes No  Inter Table Present? Yes No  In	Check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T Thin Muck Surface (C7) Other (Explain in Remarks Depth (inches): Depth (inches): Depth (inches):	3) it) ong Living Roots it(C4) Tilled Soils (C6) it) Wetland inspections), if a	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)  FAC-Neutral Test (D5)
PROLOGY  etland Hydrology Indicators:  mary Indicators (minimum of one required)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Id Observations:  face Water Present?  ter Table Present?  yes No  surface Capillary fringe)  scribe Recorded Data (stream gauge, moni-	Check all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C Oxidized Rhizospheres ald Presence of Reduced Iron Recent Iron Reduction in T Thin Muck Surface (C7) Other (Explain in Remarks Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches):	3) (1) ong Living Roots (C4) Tilled Soils (C6) (S)  Wetland inspections), if a	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C Shallow Aquitard (D3)  FAC-Neutral Test (D5)

### WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 1ABR - CCOPER RANG	CH City/County: Ly	NA Sampling Date: 9/9/09
		State: NM Sampling Point: 3P-4
Investigator(s): J ELLIOTT	Section Township R	Canner SEC S T 29 1) R9 W
Landform (hillslope terrace etc.): TERARE	Local rolled (concesses	e, convex, none): NONE Slope (%): 0
		Long: Datum:
		NVVI classification:
Are climatic / hydrologic conditions on the site typical for the		(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology		"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	p showing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No.	
Hydrophytic Vegetation Present? Yes  Hydric Soil Present? Yes	No Is the Sample	
Wetland Hydrology Present? Yes	No within a Wetl	and? Yes No
Remarks: 5,78 15 DOWNSLOPE F	FROM ADJACENT	IRRIGATED CROPLAND AND
		DE THAT BLOCKS OVERLAND
WATER FLOW		, , , , , , , , , , , , , , , , , , , ,
VEGETATION - Use scientific names of pla	ints.	
	Absolute Dominant Indicator	
Tree Stratum (Plot size:	% Cover Species? Status	Number of Dominant Species
1. NENE		That Are OBL, FACW, or FAC: (A)
2.		Total Number of Dominant
4		Species Across All Strata:(B)
4		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
1. NONG		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5		FAC species x 3 =
0.0025	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: 0 - 1 ACRE	n- v	UPL species x 5 =
1. AMARANTHUS POWELLI		
	5 NO UPL	Prevalence Index = B/A =
	2 NO UPL	Hydrophytic Vegetation Indicators:
4.		Dominance Test is >50%
5		Prevalence Index is ≤3.0¹
6. 7.		Morphological Adaptations¹ (Provide supporting
8.		data in Remarks or on a separate sheet)
6.	92 = Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)	= Total Cover	
1. NONE		Indicators of hydric soil and wetland hydrology must
2		be present, unless disturbed or problematic.
	92 = Total Cover	Hydrophytic
% Bare Ground in Herb Stratum % Cove	er of Biotic Crust	Vegetation Present? Yes No
Remarks:		

Sampling Point: 5P-4

Depth Matrix	eeded to document the indicator or	or marcators.
	Redox Features	
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup> Texture Remarks
0-20+ 75YR 3/3		CLAY LCAM
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Rec	duced Matrix, CS=Covered or Coated S	Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRR	Rs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	
Thick Dark Surface (A12)	Redox Depressions (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Vernal Pools (F9)	wetland hydrology must be present,
Restrictive Layer (if present):		unless disturbed or problematic.
Type:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks: NO HORIZON DEVEL	CPMENT NOREDO	X FEATURES
CCLOR AND CHROMA	THE SAME AS	50-3
COURT AND CHILDINA	THE SHARE THE	31-3
HYDROLOGY		
HYDROLOGY  Wetland Hydrology Indicators		
Wetland Hydrology Indicators:		
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; ch.		Secondary Indicators (2 or more required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; ch.  Surface Water (A1)	Salt Crust (B11)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; ch.  Surface Water (A1)  High Water Table (A2)	Salt Crust (B11) Biotic Crust (B12)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; che Surface Water (A1) High Water Table (A2) Saturation (A3)	Salt Crust (B11)	Water Marks (B1) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; ch.  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; che Surface Water (A1) High Water Table (A2) Saturation (A3)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
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Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; ch.  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ng Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; che Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi Presence of Reduced Iron (C4)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ng Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; ch.  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ng Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; ch.  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ng Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; ch.  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ng Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; ch.  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Yes No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) ng Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; ch.  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No  Water Table Present? Yes No  Saturation Present? Yes No  (includes capillary fringe)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livi Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled St. Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)  ng Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
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