#### VEGETATION (Four Strata) – Use scientific names of plants.

'EGETATION (Four Strata) – Use scientific	names of pr	anis.		Sampling Point: PL-6
001		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30' ) 1. none		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:   (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: $\frac{33}{2}$ (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		= Total Cov	er	OBL species x 1 =
50% of total cover:	20% of	total cover	:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30' )				FAC species <u>40</u> x 3 = <u>120</u>
1. Prosopis glandulosa		Yes	UPL	FACU species 60 x 4 = 240
2				UPL species 60 x 5 = 300
				Column Totals: 160 (A) 660 (B)
3				
4				Prevalence Index = B/A = 4.1
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
20		= Total Cov		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: <u>30</u>	20% of	total cover	: 12	
Herb Stratum (Plot size: 30' )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Eragrostis spectabilis	60	Yes	FACU	be present, unless disturbed or problematic.
2. Unknown	10	No		Definitions of Four Vegetation Strata:
3. Setaria pumila	10	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Andropogon gerardii	30	Yes	FAC	more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10.				
11.				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
12.				noight.
12.		= Total Cov		
50% of total cover: 40				
	20% 01	total cover		
Woody Vine Stratum (Plot size: 30' )				
1. none				
2			-	
3				
4				
5				Hydrophytic
		= Total Cov	er er	Vegetation No. X
50% of total cover:	20% of	total cover	:	Present? Yes No _X
Remarks: (If observed, list morphological adaptations I	below).			

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirm	n the absence	of indicate	ors.)	
Depth	Matrix	%		x Feature		Loc <sup>2</sup>	Toyturo		Domarka	
(inches) 0-4	Color (moist) 10YR 3/1	100	Color (moist)	%	Type <sup>1</sup>	LOC	Texture sandy loam		Remarks	
	-		40VD 7/4	45				0 E ana h	la alca a a a a a a	
<u>4-15</u>	10YR 4/1	85	10YR 7/1	15	_ <u>D</u>	<u>M</u>	clay loam	0.5 cm b	lack concret	lions
			_							
										_
¹Type: C=Cd	ncentration D=De	nletion RM	=Reduced Matrix, M	S=Masko	d Sand Gr	-aine	<sup>2</sup> Location	PI =Pore I	ining, M=Matr	-iv
			LRRs, unless othe			ullio.			matic Hydric	
☐ Histosol			Polyvalue Be		-	LRR S, T,	U) 1 cm l	Muck (A9) (I	LRR O)	
_	pipedon (A2)		Thin Dark Su				. —	Muck (A10)	-	
Black Hi	, ,		Loamy Muck	-		R O)		•	, .	MLRA 150A,B)
= .	n Sulfide (A4)		Loamy Gleye		(F2)					(LRR P, S, T)
	Layers (A5)	. T IIV	_✓ Depleted Ma Redox Dark		E6)				Loamy Soils	(F20)
=	Bodies (A6) (LRR I cky Mineral (A7) (L	-	=	•	,			<b>RA 153B)</b> arent Mater	ial (TF2)	
	esence (A8) <b>(LRR I</b>		Redox Depre		,				k Surface (TF	12)
	ck (A9) (LRR P, T)	,	Marl (F10) <b>(L</b>	_RR U) `	,			(Explain in l		,
=	d Below Dark Surfac	ce (A11)	Depleted Oc		-	-	0			
=	ark Surface (A12)		Iron-Mangar			-	•	-	drophytic vege	
=	airie Redox (A16) <b>(</b> lucky Mineral (S1) (		A) Umbric Surfa		-	-		-	ogy must be p ed or problema	
	ileyed Matrix (S4)	LKK 0, 3)	Reduced Ve					ess distuibe	ed of problems	auc.
	edox (S5)		Piedmont Flo		-					
	Matrix (S6)			-		•	RA 149A, 153C	;, 153D)		
	face (S7) (LRR P,									
	_ayer (if observed)	):								
Type:			<del></del>						Y	
	ches):		<u></u>				Hydric Soil	Present?	Yes /\	No
Remarks:										
Depth (ind	ches):						Hydric Soil	Present?	Yes X	



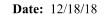




Photo 41 – Soil Sample at Plot PL-6



Photo 42 – Vegetation at Plot PL-6 looking southerly.



Project/Site: Axis - Redfish Facility	City/County: San	Patricio Co.	Sampling Date: 11/28/2018
Applicant/Owner: Axis Midstream Partners, LLC		State: TX	Sampling Point: PL-7
	, Range: NA		
	Local relief (concav		Slope (%). 0
Subregion (LRR or MLRA): LRRT/150A	27.910996°	Long: -97.232554°	
Soil Map Unit Name: Ec - Banquete clay, 0-1% slopes	S	NWI classific	cation: NA
Are climatic / hydrologic conditions on the site typical for thi		lo ( <b>I</b> f no. explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology			
Are Vegetation, Soil, or Hydrology		If needed, explain any answe	
SUMMARY OF FINDINGS – Attach site map			·
-			,, p = 1 ca. ca. ca. ca. ca.
Hydrophytic Vegetation Present? Yes N	ls the Sam		
Hydric Soil Present?         Yes	within a We	etland? Yes	No X
Remarks:	NO		
HADBOLOCA			
HYDROLOGY Westland Hydrology Indicators		Cocondant India	ators (minimum of two required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all	that apply)		<del></del>
	: Fauna (B13)	Sparsoly Vo	getated Concave Surface (B8)
in the same of the	eposits (B15) (LRR U)	Drainage Pa	-
	en Sulfide Odor (C1)	Moss Trim L	
	ed Rhizospheres along Living R	_	Water Table (C2)
Sediment Deposits (B2)	ce of Reduced Iron (C4)	🔲 Crayfish Bur	rows (C8)
Drift Deposits (B3)	Iron Reduction in Tilled Soils (	C6) 🔽 Saturation V	isible on Aerial Imagery (C9)
	uck Surface (C7)	= '	Position (D2)
	Explain in Remarks)	☐ Shallow Aqu	` '
Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)		FAC-Neutral	,
Field Observations:		<u>п</u> эрпаунин г	moss (D8) <b>(LRR T, U)</b>
Surface Water Present? Yes X No De	enth (inches): 1		
Water Table Present?   Yes X   No De			
Saturation Present? Yes X No De		Wetland Hydrology Preser	nt? Yes <sup>X</sup> No
(includes capillary fringe)	. ,		
Describe Recorded Data (stream gauge, monitoring well, NRCS Soil Survey Data, Aerial Photo		ions), if available:	
Remarks:			
Plot meets the hydrology criteria with the	hree primary (A1, A2	& A3) and one sec	ondary indicator (C9).
, 3,	, ,	,	, ,

#### VEGETATION (Four Strata) – Use scientific names of plants.

<b>/EGETATION (Four Strata)</b> – Use scientific r	names of pl	ants.		Sampling Point: PL-7
001		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30' ) 1. none		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
2.				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Descent of Descinant Coopies
5				Percent of Dominant Species That Are OBL, FACW, or FAC:  0 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		= Total Cov	er	OBL species x 1 =
50% of total cover:	20% of	total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30' )				FAC species x 3 =
1. Unknown	60	Yes		FACU species x 4 =
2.				UPL species x 5 =
3.				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5.				
6.				Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation
7				
8.				2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0 <sup>1</sup>
<u> </u>	00	= Total Cov	er	1 <del>=</del>
50% of total cover: 30				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size: 30' )	2070 01	total oover		1
1. Eragrostis spectabilis	40	Yes	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Andrgopogon gerardii	40	Yes	FAC	Definitions of Four Vegetation Strata:
3				Definitions of Four Vegetation Ottata.
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
50% (4.4.1		= Total Cov		
50% of total cover: 40	20% of	total cover		
Woody Vine Stratum (Plot size: 30' )				
1. none				
2				
3				
4				
5				Hydrophytic
		= Total Cov		Vegetation Present? Yes No
50% of total cover:		total cover		
Remarks: (If observed, list morphological adaptations b	elow).			

SOIL

Profile Des	cription: (Describe Matrix	e to the depti	n needed to document the indicator or confi Redox Features	rm the absence of	indicators.)
(inches)	Color (moist)	%	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
0-15	10YR 2/1	100		loamy clay	
			<del></del>		
<sup>1</sup> Type: C=C	oncentration D=De	enletion RM=I	Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: Pl	L=Pore Lining, M=Matrix.
			RRs, unless otherwise noted.)		r Problematic Hydric Soils <sup>3</sup> :
☐ Histoso			Polyvalue Below Surface (S8) (LRR S, T		ck (A9) <b>(LRR O)</b>
=	pipedon (A2)		Thin Dark Surface (S9) (LRR S, T, U)		ck (A10) <b>(LRR S)</b>
=	istic (A3)		Loamy Mucky Mineral (F1) (LRR O)		Vertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleyed Matrix (F2)	Piedmon	t Floodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Matrix (F3)	Anomalo	us Bright Loamy Soils (F20)
_	Bodies (A6) (LRR	-	Redox Dark Surface (F6)	┌ (MLRA	•
	ucky Mineral (A7) (I		Depleted Dark Surface (F7)		ent Material (TF2)
	resence (A8) (LRR		Redox Depressions (F8)		Illow Dark Surface (TF12)
	uck (A9) <b>(LRR P, T</b> ) d Below Dark Surfa		Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151)	Uther (E)	kplain in Remarks)
=	d Беюw Багк Зипа ark Surface (А12)	ice (ATT)	Iron-Manganese Masses (F12) (LRR O, I	P T) <sup>3</sup> Indicate	ors of hydrophytic vegetation and
=	rairie Redox (A16)	(MLRA 150A)			nd hydrology must be present,
=	Mucky Mineral (S1)		Delta Ochric (F17) (MLRA 151)		s disturbed or problematic.
=	Gleyed Matrix (S4)	,	Reduced Vertic (F18) (MLRA 150A, 150I	В)	·
Sandy F	Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA	149A)	
☐ Stripped	d Matrix (S6)		Anomalous Bright Loamy Soils (F20) (ML	.RA 149A, 153C, 1	53D)
	ırface (S7) (LRR P,				
	Layer (if observed	l):			
Type:			<u> </u>		<b>V</b>
Depth (in	ches):		<u> </u>	Hydric Soil Pr	resent? Yes No X
Remarks:	Plat door not	moot by	Iric soil criteria.		
Г	Flot does flot	meet nyc	inc son cinena.		



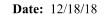




Photo 43 – Soil Sample at Plot PL-7



Photo 44 – Vegetation at Plot PL-7 looking southerly.



Project/Site: Axis - Redfish Facility	City/Co	<sub>untv:</sub> San Patricio C	Co.	Sampling Date: 11/28/2018
Applicant/Owner: Axis Midstream Partners, LLC				Sampling Point: PL-8
	Section			
				Slope (%): 0
Subregion (LRR or MLRA): LRRT/150A	Lat: 27.912432°	Lona:	-97.233990°	Datum: WGS 84
Soil Map Unit Name: PaA - Papalote fine sandy loa	 am		NWI classific	cation: NA
Are climatic / hydrologic conditions on the site typical fo		s X No	(If no. explain in R	Remarks.)
Are Vegetation, Soil, or Hydrology				
Are Vegetation, Soil, or Hydrology			explain any answe	
SUMMARY OF FINDINGS – Attach site m				ŕ
	<u> </u>	<u> </u>	<u> </u>	· · ·
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes	No X	Is the Sampled Area		V
Wetland Hydrology Present? Yes	No X	within a Wetland?	Yes	No X
Remarks:				
LIVEROLOGY.				
HYDROLOGY			Casandan Indias	atora (minimum of turo vocuired)
Wetland Hydrology Indicators:	( all that apply)			ators (minimum of two required)
Primary Indicators (minimum of one is required; check Surface Water (A1)	ıatic Fauna (B13)			Cracks (B6) getated Concave Surface (B8)
	rl Deposits (B15) <b>(LRR</b>	II)	Drainage Pa	=
	drogen Sulfide Odor (C		Moss Trim L	
	dized Rhizospheres alc	•	_	Water Table (C2)
	sence of Reduced Iron		Crayfish Bur	
Drift Deposits (B3)	cent Iron Reduction in T	illed Soils (C6)	✓ Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	n Muck Surface (C7)		Geomorphic	Position (D2)
	er (Explain in Remarks	)	Shallow Aqu	, ,
Inundation Visible on Aerial Imagery (B7)			FAC-Neutral	` '
Water-Stained Leaves (B9)			□ Sphagnum n	moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No X	Depth (inches):			
	Depth (inches):			
	Depth (inches):		Hydrology Preser	nt? Yes No X
(includes capillary fringe)	, ,			
Describe Recorded Data (stream gauge, monitoring w NRCS Soil Survey Data, Aerial Pho			ailable:	
Remarks:				
Plot does not meet the hydrology cri	teria.			

# **VEGETATION** (Four Strata) – Use scientific names of plants. Sampling Point: PL-8 Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: 30' % Cover Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: \_\_\_ (A) Total Number of Dominant Species Across All Strata:

5				Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		= Total Co	ver	OBL species x 1 =
50% of total cover:		_		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30' )	2070 0	or total cover		FAC species x 3 =
1. Prosopis glandulosa	85	Yes	UPL	FACU species x 4 =
- Vachallia rigidula		No	NI	UPL species x 5 =
				Column Totals: (A) (B)
3			-	(2)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	00	_ = Total Co	ver	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 30	20% c	- of total cove	. <sub>:</sub> 12	Troblematic rivuropriytic vegetation (Explain)
Herb Stratum (Plot size: 30' )				1 Indicators of budgie call and watered budgeton words
1. Paspalum notatum	60	Yes	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Unknown	15	No		Definitions of Four Vegetation Strata:
3 Unknown	15	No		Deminions of Four Vegetation Strata.
		-		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				•
6				
7			-	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10		_		Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	80	= Total Co	ver	
50% of total cover: 40	20% (	_		
Woody Vine Stratum (Plot size: 30' )	2070 C	or total cover		•
1. none				
		-		
2				
3		-		
4				
5		_		Hydrophytic
		_ = Total Co	ver	Vegetation Present? Yes No _X
50% of total cover:	20% c	of total cover	:	Present? Yes No ^
Remarks: (If observed, list morphological adaptations bel	ow).			
Plot does not meet the hydrophytic veg	etation	criteria		
The door not most the fly dropfly to vog	jotation	oritoria.		

SOIL

Profile Deso	cription: (Describ Matrix	-	n needed to document the indicator or confirm Redox Features	the absence of	indicators.)
(inches)	Color (moist)	%	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 2/2	100		clay loam	
3-15	10YR 2/1	100		clay loam	
					_
	_				
					_
			Reduced Matrix, MS=Masked Sand Grains.  RRs, unless otherwise noted.)		_=Pore Lining, M=Matrix. r Problematic Hydric Soils³:
Histosol		icable to all L	Polyvalue Below Surface (S8) (LRR S, T, U		k (A9) (LRR O)
=	pipedon (A2)		Thin Dark Surface (S9) (LRR S, T, U)		k (A10) (LRR S)
=	istic (A3)		Loamy Mucky Mineral (F1) (LRR O)		Vertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleyed Matrix (F2)	Piedmont	Floodplain Soils (F19) (LRR P, S, T)
=	d Layers (A5)		Depleted Matrix (F3)		us Bright Loamy Soils (F20)
=	Bodies (A6) (LRR	-	Redox Dark Surface (F6)	(MLRA	<b>153B)</b> nt Material (TF2)
	ucky Mineral (A7) <b>(</b> resence (A8) <b>(LRR</b>		Depleted Dark Surface (F7) Redox Depressions (F8)		nt Material (1F2) llow Dark Surface (TF12)
	uck (A9) <b>(LRR P, T</b>		Mari (F10) (LRR U)		plain in Remarks)
	d Below Dark Surfa		Depleted Ochric (F11) (MLRA 151)		,
=	ark Surface (A12)		Iron-Manganese Masses (F12) (LRR O, P,	-	ors of hydrophytic vegetation and
=	rairie Redox (A16)				d hydrology must be present,
=	Mucky Mineral (S1) ∃leyed Matrix (S4)	(LKK U, 3)	Delta Ochric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, 150B)	uniess	disturbed or problematic.
_	Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA 14	9A)	
	Matrix (S6)		Anomalous Bright Loamy Soils (F20) (MLRA	•	53D)
	ırface (S7) <b>(LRR P</b>				
	Layer (if observed	d):			
Type:			<u> </u>		. Y
Depth (in	ches):		<del>_</del>	Hydric Soil Pro	esent? Yes No X
Remarks:	Plot does not	meet hyd	Iric soil criteria.		
	101 4000 1101	mootnye			



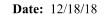




Photo 45 – Soil Sample at Plot PL-8



Photo 46 – Vegetation at Plot PL-8 looking northwesterly.



Project/Site: Axis - Redfish Facility	City/Cour	<sub>ntv:</sub> San Patricio Co	0.	Sampling Date: 11/28/2018
Applicant/Owner: Axis Midstream Partners, LLC			State: TX	Sampling Point: PL-9
	Section, <sup>-</sup>			
				Slope (%): <u>0</u>
Subregion (LRR or MLRA): LRRT/150A	Lat: 27.927101°	Long: =	97.247712°	Datum: WGS 84
Soil Map Unit Name: VCA - Victoria clay, 0-1% slope		25.1g	NWI classifica	ation: NA
Are climatic / hydrologic conditions on the site typical for		X No	(If no explain in Re	emarks )
Are Vegetation X , Soil X , or Hydrology X				
Are Vegetation, Soil, or Hydrology				
SUMMARY OF FINDINGS – Attach site ma				
	· · ·	<u> </u>		•
Hydrophytic Vegetation Present? Yes	$\frac{No}{X}$ Is	the Sampled Area		V
Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No X No X	thin a Wetland?	Yes	No X
Remarks:				
fallow cotton field				
lanew detterrinera				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum of two required)
Primary Indicators (minimum of one is required; check a	all that apply)		Surface Soil 0	Cracks (B6)
	itic Fauna (B13)		Sparsely Veg	etated Concave Surface (B8)
	Deposits (B15) (LRR U)		Drainage Pati	
	ogen Sulfide Odor (C1)		Moss Trim Lir	` '
	zed Rhizospheres along			Vater Table (C2)
	ence of Reduced Iron (C	•	Crayfish Burro	, ,
	ent Iron Reduction in Tille	ed Soils (C6)	$\overline{}$	sible on Aerial Imagery (C9)
	Muck Surface (C7) r (Explain in Remarks)		Geomorphic F Shallow Aquit	` '
Inundation Visible on Aerial Imagery (B7)	(Explain in Remarks)		FAC-Neutral	` '
Water-Stained Leaves (B9)			=	oss (D8) <b>(LRR T, U)</b>
Field Observations:				
Surface Water Present? Yes No X I	Depth (inches):			
Water Table Present? Yes No X I				
Saturation Present? Yes No X	Depth (inches):	Wetland F	lydrology Present	t? Yes No X
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring we	ell. aerial photos, previou	 us inspections), if ava	ilable:	
NRCS Soil Survey Data, Aerial Pho				
Remarks:	<u> </u>			
Plot does not meet the hydrology crite	eria.			

#### VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: PL-9 Absolute Dominant Indicator **Dominance Test worksheet:** <u>Tree Stratum</u> (Plot size: 30' % Cover Species? Status Number of Dominant Species 1. NA That Are OBL, FACW, or FAC: \_\_\_\_\_ (A) Total Number of Dominant Species Across All Strata: Percent of Dominant Species 5. \_\_\_\_\_ \_\_ \_\_ \_\_ \_\_\_ \_\_\_ \_\_\_\_ That Are OBL, FACW, or FAC: \_\_\_\_ (A/B) 6. \_\_\_\_\_\_ \_\_\_\_ \_\_\_\_ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30' ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_ 1. NA UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B) Prevalence Index = B/A = \_\_\_\_\_ Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0<sup>1</sup> \_\_\_\_\_ = Total Cover Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_ Herb Stratum (Plot size: 30') <sup>1</sup>Indicators of hydric soil and wetland hydrology must 1. NA be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata:** Tree - Woody plants, excluding vines, 3 in, (7.6 cm) or 4. \_\_\_\_\_\_ \_\_\_ \_\_\_\_ \_\_\_\_\_\_ more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. 8. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in height. = Total Cover 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_ Woody Vine Stratum (Plot size: 30') 1. NA 2. Hydrophytic \_\_\_\_\_ = Total Cover Vegetation Present? Yes \_\_\_\_ No \_\_\_ 50% of total cover: \_\_\_ 20% of total cover: Remarks: (If observed, list morphological adaptations below). fallow cotton field

Depth	Matrix	pth needed to document the indicator or confirence  Redox Features	in the about to	· maioatorol,
(inches)	Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
			<u> </u>	
			· <del></del> -	
			· <u> </u>	
1= 0.0			2	
		I=Reduced Matrix, MS=Masked Sand Grains.  I LRRs, unless otherwise noted.)		L=Pore Lining, M=Matrix.  or Problematic Hydric Soils <sup>3</sup> :
Histosol	oipedon (A2)	☐ Polyvalue Below Surface (S8) (LRR S, T, ☐ Thin Dark Surface (S9) (LRR S, T, U)		ck (A9) <b>(LRR O)</b> ck (A10) <b>(LRR S)</b>
	stic (A3)	Loamy Mucky Mineral (F1) (LRR O)		Vertic (F18) (outside MLRA 150A,B)
=	en Sulfide (A4)	Loamy Gleyed Matrix (F2)		at Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	Depleted Matrix (F3)		ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		( 153B)
	ucky Mineral (A7) <b>(LRR P, T, U</b>	) Depleted Dark Surface (F7)	☐ Red Pare	ent Material (TF2)
	resence (A8) (LRR U)	Redox Depressions (F8)		allow Dark Surface (TF12)
	uck (A9) (LRR P, T)	<u> </u>	U Other (E	xplain in Remarks)
=	d Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	3	
	ark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P		ors of hydrophytic vegetation and
	rairie Redox (A16) <b>(MLRA 150</b> ⁄lucky Mineral (S1) <b>(LRR O, S</b> )			nd hydrology must be present, s disturbed or problematic.
_	Bleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B		s disturbed of problematic.
_	Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 1		
	Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLI		53D)
=	rface (S7) (LRR P, S, T, U)			,
Restrictive	Layer (if observed):			
Type:				
Depth (in	ches):		Hydric Soil P	resent? Yes No
Remarks:			I	
fa	allow cotton field, no	data collected		

SOIL



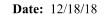




Photo 47 – Soil Sample at Plot PL-9



Photo 48 – Vegetation at Plot PL-9 looking southeasterly.



Project/Site: Axis - Redfish Facility	City/Co	<sub>untv:</sub> San Patricio C	o.	Sampling Date: 11/28/2018
Applicant/Owner: Axis Midstream Partners, LLC				Sampling Point: PL-10
	Section			
				Slope (%): 0
Subregion (LRR or MLRA): LRRT/150A	 Lat: 27.934528°	Lona:	-97.265310°	Datum: WGS 84
Soil Map Unit Name: Ec - Banquete clay, 0-1% slo	opes		NWI classific	cation: NA
Are climatic / hydrologic conditions on the site typical for		s X No	(If no. explain in R	Remarks.)
Are Vegetation, Soil, or Hydrology				
Are Vegetation, Soil, or Hydrology			explain any answe	
SUMMARY OF FINDINGS – Attach site m				·
			<u> </u>	<u>, , , , , , , , , , , , , , , , , , , </u>
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes	No X	s the Sampled Area		V
Wetland Hydrology Present? Yes		within a Wetland?	Yes	No X
Remarks:	<u> </u>			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; chec	k all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	uatic Fauna (B13)		Sparsely Ve	getated Concave Surface (B8)
	arl Deposits (B15) <b>(LRR</b>		Drainage Pa	tterns (B10)
	drogen Sulfide Odor (C1	•	Moss Trim L	, ,
	idized Rhizospheres alo			Water Table (C2)
	esence of Reduced Iron	, ,	☐ Crayfish Bur	, ,
	cent Iron Reduction in T	illed Soils (C6)	$\overline{}$	isible on Aerial Imagery (C9)
	in Muck Surface (C7)		=	Position (D2)
	her (Explain in Remarks)	)	Shallow Aqu	, ,
Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)			FAC-Neutral	ກoss (D8) <b>(LRR T, U)</b>
Field Observations:			Spriagnum	1055 (D0) (LIKK 1, 0)
	_ Depth (inches):			
	Depth (inches):			
	Depth (inches):		Hydrology Preser	nt? Yes No X
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring v	well aerial photos previ	ous inspections) if ava	ailahla:	
NRCS Soil Survey Data, Aerial Ph			allable.	
Remarks:				
Plot does not meet the hydrology cr	iteria.			

# VEGETATION (Four Strata) – Use scientific names of plants.

201			nt Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' )	% Cover	Species	s? Status	Number of Dominant Species
1. none	-			That Are OBL, FACW, or FAC: 0 (A)
2	_			Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Description of Description of Control
5				Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
6				(113)
7				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
·	_	= Total C		OBL species x 1 =
EOO/ of total powers	20%	-		FACW species x 2 =
50% of total cover:	20% 0	n total cove	er	FAC species 30 x 3 = 90
Sapling/Shrub Stratum (Plot size: 30' )				FACU species 70 x 4 = 280
1. none				UPL species x 5 =
2				Column Totals: 100 (A) 370 (B)
3				Column Totals (A)
4				Prevalence Index = B/A = 3.7
5				Hydrophytic Vegetation Indicators:
6		-		1 - Rapid Test for Hydrophytic Vegetation
7	_			2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total C	over	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% c	of total cove	er:	
Herb Stratum (Plot size: 30' )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Ambrosia artemisiifolia	15	No	FACU	be present, unless disturbed or problematic.
2. Paspalum notatum	40	Yes	FACU	Definitions of Four Vegetation Strata:
3. Andropogon gerardii	30	Yes	FAC	
4. Eragrostis spectabilis	15	No	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of height.
5				noight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	100	= Total C	over	
50% of total cover: 50	20% c	- of total cove	er: 20	
Woody Vine Stratum (Plot size: 30' )				
1. none				
	_	-		
2.				
3				
4				
5	_			Hydrophytic
		= Total C	over	Vegetation Present? Yes No X
50% of total cover:	20% c	of total cove	er:	Present? Yes No _X
Remarks: (If observed, list morphological adaptations bel	ow).			
Plot does not meet the hydrophytic veg	noitetar	critoria	1	
Flot does not meet the hydrophytic veg	jetation	Cillella	l.	

Sampling Point: PL-10

Profile Desc	cription: (Describe	to the depth	needed to docu	ment the ir	ndicator	or confirm	n the absence of	f indicators.)	
Depth	Matrix	<u></u>	Redo	ox Features		12	T4	Damanda	
(inches) 0-15	Color (moist) 10YR 2/2	_ <u> </u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u> _sandy loam	Remarks	<u> </u>
<del>0-</del> 15	1011 2/2						Sandy Idaini		
	oncentration, D=De					ains.		L=Pore Lining, M=Ma	
Hydric Soil	Indicators: (Appli	cable to all LI	RRs, unless othe	rwise note	ed.)		Indicators fo	or Problematic Hydri	c Soils³:
☐ Histosol	(A1)		Polyvalue B	elow Surfac	ce (S8) <b>(L</b>	.RR S, T, L	. —	ck (A9) <b>(LRR O)</b>	
	oipedon (A2)		Thin Dark S		-	-		ck (A10) <b>(LRR S)</b>	
_	stic (A3)		Loamy Muck	-		R O)		Vertic (F18) (outside	•
	en Sulfide (A4)		Loamy Gley	•	-2)			t Floodplain Soils (F1	
_	d Layers (A5) Bodies (A6) <b>(LRR I</b>	D T III	Depleted Ma		6)			ous Bright Loamy Soil: • <b>153B)</b>	S (F2U)
	ucky Mineral (A7) (L		Depleted Da		,			ent Material (TF2)	
=	resence (A8) (LRR		Redox Depr					allow Dark Surface (T	F12)
	uck (A9) (LRR P, T)		Marl (F10) (I		,			xplain in Remarks) `	,
Deplete	d Below Dark Surfa	ce (A11)	Depleted Oc	hric (F11) <b>(</b>	MLRA 1	51)			
	ark Surface (A12)		Iron-Mangar				•	ors of hydrophytic ve	
	rairie Redox (A16) (		_			, U)		nd hydrology must be	
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric			OA 450D\		s disturbed or probler	natic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve						
	Matrix (S6)			-		•	RA 149A, 153C, 1	53D)	
=	rface (S7) (LRR P,	S, T, U)		Drigitt Loan	1, 00.10 (	. 20) <b>(2.</b> )	., , , , , , , , , , , , , , , , , , ,	,	
	Layer (if observed)								
Type:									
Depth (in	ches):						Hydric Soil P	resent? Yes	No X
Remarks:									
F	Plot does mee	et hydric s	soil criteria.						



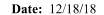




Photo 49 – Soil Sample at Plot PL-10



Photo 50 – Vegetation at Plot PL-10 looking westerly towards Hwy. 136.



Project/Site: Axis - Redfish Facility	City/County: S	an Patricio Co.	Sampling Date:
Applicant/Owner: Axis Midstream Partners, LLC		State: TX	
	ship, Range: NA		
		ncave, convex, none): flat	Slope (%): 0
Subregion (LRR or MLRA): LRRT/150A	27.931496°	Long: -97.264847°	Datum: WGS 84
Soil Map Unit Name: PaA - Papalote fine sandy loar	n	NWI classit	fication: NA
Are climatic / hydrologic conditions on the site typical for		No (If no explain in	Remarks )
Are Vegetation $\frac{X}{X}$ , Soil $\frac{X}{X}$ , or Hydrology $\frac{X}{X}$			
Are Vegetation, Soil, or Hydrology		(If needed, explain any answ	
SUMMARY OF FINDINGS – Attach site ma	p showing sampling p	ooint locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes	No X	ampled Area	
Hydric Soil Present? Yes	No X		No X
Wetland Hydrology Present? Yes	No X	Wetland: Tes	
Remarks:			
fallow agricultural field			
LIVEROLOGY			
HYDROLOGY Western Hydrology Indicators		Cocondan/ Indi	cators (minimum of two required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check a	all that apply)		il Cracks (B6)
	tic Fauna (B13)		egetated Concave Surface (B8)
	Deposits (B15) (LRR U)		Patterns (B10)
	ogen Sulfide Odor (C1)		Lines (B16)
	zed Rhizospheres along Livir	=	n Water Table (C2)
	ence of Reduced Iron (C4)		urrows (C8)
	nt Iron Reduction in Tilled So	<del></del>	Visible on Aerial Imagery (C9)
	Muck Surface (C7)		ic Position (D2)
	r (Explain in Remarks)	Shallow Ac	` ,
Inundation Visible on Aerial Imagery (B7)	,	=	al Test (D5)
Water-Stained Leaves (B9)		Sphagnum	moss (D8) (LRR T, U)
Field Observations:			
	Depth (inches):		
	Depth (inches):		
	Depth (inches):	Wetland Hydrology Pres	ent? Yes No X
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring we	II, aerial photos, previous ins	 pections), if available:	
NRCS Soil Survey Data, Aerial Pho			
Remarks:			
No data collected			

#### VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: PL-11 Absolute Dominant Indicator **Dominance Test worksheet:** <u>Tree Stratum</u> (Plot size: 30' % Cover Species? Status Number of Dominant Species 1. NA That Are OBL, FACW, or FAC: \_\_\_\_\_(A) Total Number of Dominant Species Across All Strata: Percent of Dominant Species 5. \_\_\_\_\_ \_\_ \_\_ \_\_ \_\_\_ \_\_\_ \_\_\_\_ That Are OBL, FACW, or FAC: \_\_\_\_ (A/B) 6. \_\_\_\_\_\_ \_\_\_\_ \_\_\_\_ Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30' ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_ 1. NA UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B) Prevalence Index = B/A = \_\_\_\_\_ Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0<sup>1</sup> \_\_\_\_\_ = Total Cover Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_ Herb Stratum (Plot size: 30') <sup>1</sup>Indicators of hydric soil and wetland hydrology must 1. NA be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata:** Tree - Woody plants, excluding vines, 3 in, (7.6 cm) or 4. \_\_\_\_\_\_ \_\_\_ \_\_\_\_ \_\_\_\_\_\_ more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. 8. \_\_\_\_\_ \_\_\_ \_\_\_ \_\_\_\_ Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in 11. height. = Total Cover 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_ Woody Vine Stratum (Plot size: 30') 1. NA 2. Hydrophytic \_\_\_\_\_ = Total Cover Vegetation Present? Yes \_\_\_\_ No \_\_\_ 50% of total cover: \_\_\_ 20% of total cover:

Remarks: (If observed, list morphological adaptations below).

fallow agricultural field

Depth	Matrix	pth needed to document the indicator or confined Redox Features		maioators.,
(inches)	Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
			<del>-</del>	
1- 0.0			21	
		M=Reduced Matrix, MS=Masked Sand Grains. II LRRs, unless otherwise noted.)		L=Pore Lining, M=Matrix.  r Problematic Hydric Soils <sup>3</sup> :
	* * * *			
Histosol	oipedon (A2)	Polyvalue Below Surface (S8) (LRR S, T, ) Thin Dark Surface (S9) (LRR S, T, U)		ck (A9) <b>(LRR O)</b> ck (A10) <b>(LRR S)</b>
<b>=</b>	stic (A3)	Loamy Mucky Mineral (F1) (LRR O)		Vertic (F18) <b>(outside MLRA 150A,B)</b>
=	en Sulfide (A4)	Loamy Gleyed Matrix (F2)		t Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	Depleted Matrix (F3)		us Bright Loamy Soils (F20)
	Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA	
	ucky Mineral (A7) <b>(LRR P, T, l</b>	J) Depleted Dark Surface (F7)	☐ Red Pare	ent Material (TF2)
	resence (A8) (LRR U)	Redox Depressions (F8)		llow Dark Surface (TF12)
	uck (A9) (LRR P, T)	∐ Marl (F10) <b>(LRR U)</b>	U Other (E)	xplain in Remarks)
=	d Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	3	
=	ark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, I	•	ors of hydrophytic vegetation and
	rairie Redox (A16) <b>(MLRA 15</b> 0 ⁄lucky Mineral (S1) <b>(LRR O, S</b>			nd hydrology must be present, s disturbed or problematic.
_	Bleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150I		s disturbed or problematic.
_	Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA		
	Matrix (S6)	Anomalous Bright Loamy Soils (F20) (ML		53D)
	rface (S7) (LRR P, S, T, U)		, ,	,
	Layer (if observed):			
Type:				
Depth (in	ches):		Hydric Soil Pr	resent? Yes No
Remarks:				
fa	allow agricultural field	d, no data collected		



**Date:** 12/18/18



Photo 51 – Soil Sample at Plot PL-11



Photo 52 – Vegetation at Plot PL-11 looking easterly.



Project/Site: Axis - Redfish Facility	_ City/County: San F	atricio Co.	Sampling Date: 11/28/2018
Applicant/Owner: Axis Midstream Partners, LLC		State: TX	
• •	Section, Township,		
		e, convex, none): flat	Slope (%): 0
Subregion (LRR or MLRA): LRRT/150A Lat: 27.9	<u> </u>	Long: -97.269115°	Datum: WGS 84
Soil Map Unit Name: Ec - Banquete clay, 0-1% slopes		NWI classifi	cation: NA
Are climatic / hydrologic conditions on the site typical for this time of	vear? Yes X	(If no explain in F	Remarks )
Are Vegetation, Soil, or Hydrology significan			
Are Vegetation, Soil, or Hydrology naturally		needed, explain any answe	
SUMMARY OF FINDINGS – Attach site map showing		•	•
Libertonic Control Processor No. X			
Hydrophytic Vegetation Present?  Yes No  Hydric Soil Present?  Yes X No	Is the Samp		V
Hydric Soil Present?         Yes X         No           Wetland Hydrology Present?         Yes	within a Wet	tland? Yes	No X
Remarks:	_		
Plot taken near historic land fill			
HYDROLOGY			
Wetland Hydrology Indicators:	,		ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that appl			Cracks (B6)
Surface Water (A1) Aquatic Fauna (I	•		getated Concave Surface (B8)
High Water Table (A2)  Set wration (A2)  High Water Table (A2)  High Water Table (A2)			atterns (B10)
Saturation (A3)  Hydrogen Sulfide	e Odor (CT) pheres along Living Ro	☐ Moss Trim L	` '
☐ Water Marks (B1)       ☐ Oxidized Rhizos         ☐ Sediment Deposits (B2)       ☐ Presence of Rec		Crayfish Bu	Water Table (C2)
	luction in Tilled Soils (C	<del>=</del> '	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)  Thin Muck Surfa	•	_	Position (D2)
Iron Deposits (B5)  Other (Explain in	, ,	Shallow Agu	, ,
Inundation Visible on Aerial Imagery (B7)	, ,	FAC-Neutra	` '
Water-Stained Leaves (B9)		Sphagnum r	moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No X Depth (inch			
Water Table Present? Yes No X Depth (inch			V
Saturation Present? Yes No _X Depth (inch (includes capillary fringe)	es):	Wetland Hydrology Prese	nt? Yes No X
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspection	ons), if available:	
NRCS Soil Survey Data, Aerial Photograph	ny, NHD Data		
Remarks:			
Plot does not meet the hydrology criteria.			

#### **VEGETATION** (Four Strata) – Use scientific names of plants.

<b>/EGETATION (Four Strata) –</b> Use scientific na	ames of pl	ants.		Sampling Point: PL-12
		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30' ) 1. none		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
2				
3.				Total Number of Dominant Species Across All Strata: 2 (B)
4.				Openies / toross / tir ettata.
5.				Percent of Dominant Species That Are OBL_FACW_or_FAC:  (A/B)
6				That Are OBL, FACW, or FAC: 0 (A/B)
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
F00/ -ft-t-l		= Total Cov		FACW species x 2 =
50% of total cover:	20% 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30' )				FACU species 80 x 4 = 320
1. none				UPL species x 5 =
2				Column Totals: 80 (A) 320 (B)
3				Goldmin Totals (71)
4				Prevalence Index = B/A = $4.0$
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cov	/er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cover	: <u></u>	
Herb Stratum (Plot size: 30' )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Paspalum notatum	40	Yes	FACU	be present, unless disturbed or problematic.
2. Digitaria ciliaris (?)	40	Yes	FACU	Definitions of Four Vegetation Strata:
3.				
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 5 m. bbit and greater than 5.25 it (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
		= Total Co		
50% of total cover: 40	20% of	total cover	: 16	
Woody Vine Stratum (Plot size: 30' )				
1. none				
2				
3				
4				
5				Hydrophytic
		= Total Cov	/er	Vegetation
50% of total cover:	· · · · · · · · · · · · · · · · · · ·			Present? Yes No X
Remarks: (If observed, list morphological adaptations bel			·	
Plot does not meet hydrophytic vegeta	tion crite	ria.		

SOIL

Profile Desc Depth	ription: (Describe Matrix	to the dep	oth needed to docur	<b>nent the</b> x Featur		or confirr	n the absence	of indicators.)
(inches)	Color (moist)	%	Color (moist)	% realur	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-2	10YR 4/1	100					loamy clay	
2-8	10YR 2/1	75	10YR 4/1	25	C	M	loamy clay	
8-15	10YR 3/1	60	10YR 7/2	40		M	loamy clay	lime visible in soil matrix
					_			
				-		·		
1						. <u></u>	2	
			=Reduced Matrix, Matri			ains.		PL=Pore Lining, M=Matrix.  For Problematic Hydric Soils <sup>3</sup> :
Histosol		cable to all	Polyvalue Be		=	PPST		Muck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					Muck (A10) (LRR S)
Black Hi			Loamy Muck					ced Vertic (F18) (outside MLRA 150A,B)
=	n Sulfide (A4)		Loamy Gleye		(F2)			nont Floodplain Soils (F19) (LRR P, S, T)
=	d Layers (A5)	. T II)	Depleted Ma	` '	(FC)		·	alous Bright Loamy Soils (F20)
=	Bodies (A6) (LRR I cky Mineral (A7) (L	-			` '			RA 153B) Parent Material (TF2)
	esence (A8) <b>(LRR I</b>		Redox Depre		` '			Shallow Dark Surface (TF12)
=	ıck (A9) <b>(LRR P, T)</b>	-	Marl (F10) <b>(L</b>		•		Other	(Explain in Remarks)
= '	d Below Dark Surfac	ce (A11)	Depleted Oc	-		-	3	
=	ark Surface (A12) rairie Redox (A16) <b>(</b>	MI DA 150	☐ Iron-Mangan A) ☐ Umbric Surfa		, ,	•		cators of hydrophytic vegetation and tland hydrology must be present,
=	lucky Mineral (S1) (		· =		-	, 0)		ess disturbed or problematic.
=	Gleyed Matrix (S4)	,,	Reduced Ve			50A, 150B		
Sandy R	tedox (S5)		Piedmont Flo	-	, ,	•		
=	Matrix (S6)	o =		Bright Loa	amy Soils (	(F20) <b>(MLF</b>	RA 149A, 153C	C, 153D)
	rface (S7) (LRR P, _ayer (if observed)						1	
Type:	Layer (II observed)	,-						
Depth (inc	ches):						Hydric Soil	I Present? Yes X No
Remarks:							, , , , , ,	
F	Plot meets hy	dric soil	criteria (F6).					



**Date:** 12/18/18



Photo 53 – Soil Sample at Plot PL-12



Photo 54 – Vegetation at Plot PL-12 looking westerly.



Project/Site: Axis - Redfish Facility	City/County: San	Patricio Co.	_ Sampling Date: 11/28/2018
Applicant/Owner: Axis Midstream Partners, LLC		State: TX	
	Section, Township		- ' 0
	Local relief (conca		Slope (%): 0
Subregion (LRR or MLRA): LRRT/150A	 Lat: 27.933508°	Long: -97.268950°	Datum: WGS 84
Soil Map Unit Name: Ec - Banquete clay, 0-1% slop	es	NWI classifi	cation: NA
Are climatic / hydrologic conditions on the site typical for			
Are Vegetation, Soil, or Hydrology			
Are Vegetation, Soil, or Hydrology		(If needed, explain any answe	
SUMMARY OF FINDINGS – Attach site ma			·
Hydrophytic Vegetation Present? Yes	No X		
Hydric Soil Present? Yes	No X		Y
Wetland Hydrology Present? Yes	No X within a W	etland? Yes	No X
Remarks:			
Plot taken in pipeline right-of-way			
Drainage ditch is located north of the	plot.		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check a	all that apply)	Surface Soi	l Cracks (B6)
Surface Water (A1)	atic Fauna (B13)	☐ Sparsely V∈	egetated Concave Surface (B8)
High Water Table (A2)	Deposits (B15) (LRR U)	☐ Drainage Pa	atterns (B10)
	ogen Sulfide Odor (C1)		_ines (B16)
☐ Water Marks (B1) ☐ Oxidi	ized Rhizospheres along Living R	toots (C3) 📙 Dry-Season	Water Table (C2)
	ence of Reduced Iron (C4)	<u></u> Crayfish Bu	
	ent Iron Reduction in Tilled Soils (	_	/isible on Aerial Imagery (C9)
	Muck Surface (C7)	=	c Position (D2)
Iron Deposits (B5) Uothe Inundation Visible on Aerial Imagery (B7)	r (Explain in Remarks)	☐ Shallow Aqu	,
Water-Stained Leaves (B9)		FAC-Neutra	moss (D8) <b>(LRR T, U)</b>
Field Observations:		Opilagilaili	
	Depth (inches):		
	Depth (inches):		
	Depth (inches):	Wetland Hydrology Prese	nt? Yes No X
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring we	 ell. aerial photos, previous inspec	tions), if available:	
NRCS Soil Survey Data, Aerial Pho		ene), ii available:	
Remarks:			
Plot does not meet the hydrology crite	eria.		

#### VEGETATION (Four Strata) – Use scientific names of plants.

<b>/EGETATION (Four Strata)</b> – Use scientific na	ames of pl	ants.		Sampling Point: PL-13
001		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30' ) 1none		Species?		Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2.				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		= Total Cov	/er	OBL species x 1 =
50% of total cover:	20% of	total cover	:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30' )	<u>_</u>			FAC species 20 x 3 = 60
1. none				FACU species $80$ $x 4 = 320$
2.				UPL species x 5 =
3.				Column Totals: 100 (A) 380 (B)
4.				Prevalence Index = B/A = 3.8
5.				
6.				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
				☐ 2 - Dominance Test is >50%
8		= Total Cov		☐ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
20'	20 /6 01	total cover	·	
Herb Stratum (Plot size: 30 )  1. Paspalum notatum	80	Yes	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Andropogon gerardii	20	Yes	FAC	
				Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
50		= Total Cov		
50% of total cover: 50	20% of	total cover	: 20	
Woody Vine Stratum (Plot size: 30' )				
1. none				
2				
3				!
4				
5				Hydrophytic
		= Total Cov	/er	Vegetation Present?  Yes No X
50% of total cover:	20% of	total cover	:	Present? Yes No _^
Remarks: (If observed, list morphological adaptations be	low).			

SOIL

Profile Desc	ription: (Describe	to the depti	n needed to docum	nent the ir	ndicator c	r confirn	n the absence	of indicate	ors.)	
Depth Matrix (inches) Color (moist) %		Redo:	Loc <sup>2</sup>	Taytura		Domonic				
(inches) 0-16	Color (moist) 10YR 2/1	_ <u>%</u> _ 100	Color (moist)	%	Type <sup>1</sup>	LOC	Texture clay loam	wood de	Remark	ent at 10" - 12"
<del>0-10</del>	1011(2/1						Clay Ioani	- WOOG GC	bris prese	- TE
1= 0.0			D. J		010	•	21		1.1. NA NA	-12
			Reduced Matrix, MS RRs, unless other			ins.			ining, M=Ma matic Hydr	
Histosol		cable to all L	Polyvalue Be		-	DD S T I		/luck (A9) <b>(I</b>	•	
_	pipedon (A2)		Thin Dark Su				_	/luck (A3) <b>(.</b> /luck (A10)		
Black Hi			Loamy Mucky		-	-				le MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (F	-2)		Piedm	ont Floodpla	ain Soils (F	19) <b>(LRR P, S, T)</b>
=	d Layers (A5)		Depleted Mat					_	Loamy Soil	ls (F20)
=	Bodies (A6) (LRR I	-	Redox Dark S		,			RA 153B)	:-I (TEO)	
	ıcky Mineral (A7) <b>(L</b> esence (A8) <b>(LRR</b> <sup>(</sup>		Depleted Dar		` '			arent Mater	iai (TF2) k Surface (T	F12)
	ick (A9) <b>(LRR P, T)</b>		Marl (F10) (L	•	")			Explain in I		1 12)
=	d Below Dark Surfa		Depleted Och	-	MLRA 15	1)	_		,	
	ark Surface (A12)		Iron-Mangan		. , .		•	-		getation and
=			_			U)		-		
		(LRR O, S)				A 150B)		ess disturbe	ed or proble	matic.
						-				
	Matrix (S6)			-			A 149A, 153C	, 153D)		
	rface (S7) (LRR P,									
Restrictive I	_ayer (if observed	):								
Type:			<u> </u>							
Depth (in	ches):						Hydric Soil	Present?	Yes	No X
Remarks:	Plot doos not	moot by	tric soil critori	2						
Г	Tot does not	meet nyc	inc son cinen	a.						
Coast P Sandy M Sandy G Sandy G Sandy G Stripped Dark Su Restrictive I Type: Depth (inc	rairie Redox (A16) (Mucky Mineral (S1) (Mucky Mineral (S1) (Mucky Matrix (S4) (Mucky (S5) (Mucky (S6) (Mucky (S6) (LRR P, Layer (if observed (Ches)):	(LRR O, S) S, T, U)	Umbric Surfa Delta Ochric Reduced Ver Piedmont Flo	ce (F13) <b>(I</b> (F17) <b>(M</b> L) tic (F18) <b>(I</b> odplain So right Loan	LRR P, T, RA 151) MLRA 150 pils (F19) (	U) A, 150B) MLRA 14	wet unle	land hydrol ess disturbe , 153D)	ogy must be	e present, matic.



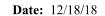




Photo 55 – Soil Sample at Plot PL-13



Photo 56 – Vegetation at Plot PL-13 looking westerly.



Project/Site: Axis - Redfish Facility	City/County: Sar	າ Patricio Co.	Sampling Date: 11/28/2018
Applicant/Owner: Axis Midstream Partners, LLC		State: TX	
	ip, Range: NA		
		ave, convex, none): flat	Slope (%): 0
Subregion (LRR or MLRA): LRRT/150A	Lat: 27.937721°	Long: -97.279166°	Datum: WGS 84
Soil Map Unit Name: VcA - Victoria clay, 0-1% slope	·s	NWI classific	cation: NA
Are climatic / hydrologic conditions on the site typical for t		No (If no explain in F	Remarks )
Are Vegetation X, Soil X, or Hydrology X			
Are Vegetation, Soil, or Hydrology		(If needed, explain any answe	
SUMMARY OF FINDINGS – Attach site map			
Liberton herita Manada fina Rossa (10	N. X		
Hydrophytic Vegetation Present? Yes  Hydric Soil Present? Yes	No X	npled Area	V
Wetland Hydrology Present? Yes	No X within a V	Vetland? Yes	No X
Remarks:			
fallow agricultural field			
l same at algune and an increa			
HYDROLOGY			
Wetland Hydrology Indicators:		_	ators (minimum of two required)
Primary Indicators (minimum of one is required; check a			Cracks (B6)
	tic Fauna (B13)		getated Concave Surface (B8)
	Deposits (B15) (LRR U)	☐ Mana Trimate	
	ogen Sulfide Odor (C1)	☐ Moss Trim L	` '
	zed Rhizospheres along Living		Water Table (C2)
	ence of Reduced Iron (C4)	☐ Crayfish Bur	, ,
	nt Iron Reduction in Tilled Soils	_	isible on Aerial Imagery (C9)
	Muck Surface (C7)	= :	Position (D2)
	(Explain in Remarks)	☐ Shallow Aqu	` '
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral	· /
Water-Stained Leaves (B9) Field Observations:		Spnagnum n	moss (D8) (LRR T, U)
	Depth (inches):		
	Depth (inches):		
	Depth (inches):		nt? Yes No <sup>X</sup>
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring wel	, , ,		
NRCS Soil Survey Data, Aerial Phot			
Remarks:	ography, Mib bate		
Agricultural field.			
, ignocatarar notar			

# **VEGETATION** (Four Strata) – Use scientific names of plants. Sampling Point: PL-14 Absolute Dominant Indicator **Dominance Test worksheet:** % Cover Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: \_\_\_\_\_(A) Total Number of Dominant \_\_\_\_\_(B) Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)

6			
7			Prevalence Index worksheet:
8			Total % Cover of: Multiply by:
		= Total Cover	OBL species x 1 =
	50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size	ze: <u>30'</u> )		FAC species x 3 =
1. <u>NA</u>			FACU species x 4 =
2			UPL species x 5 =
3			Column Totals: (A) (B)
			Prevalence Index = B/A =
			- 1 - Rapid Test for Hydrophytic Vegetation
7.			- 2 - Dominance Test is >50%
8.			3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	50% of total cover:	20% of total cover:	Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 30'	)		
, NIA	,		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2.			Definitions of Four Vegetation Strata:
			Tree Woody plants, excluding vines, 5 in (7.5 cm) or
5			height.
6			Continue (Charaba Wasaka alamba sasakadian adiasa lasa
			Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7 8			•
			<ul> <li>Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</li> </ul>
			- Or 5/26, and woody plants less than 6.26 it tall.
10			Woody vine – All woody vines greater than 3.28 ft in
11			height.
12			-
	500/ -ft-t-l	= Total Cover	
W 1 1 1 C 1 (D) 1 :		20% of total cover:	-
Woody Vine Stratum (Plot size			
			-
2			-
3			-
4			-
5			- Hydrophytic
		= Total Cover	Vegetation Present? Yes No
	50% of total cover:		-   110001111
Remarks: (If observed, list mor	phological adaptations belo	w).	
Agricultural field, no o	data collected.		

US Army Corps of Engineers

SOIL

Profile Desc Depth	ription: (Describe Matrix	e to the dept	n needed to document the indicator or conf Redox Features	irm the absence of	indicators.)
(inches)	Color (moist)	%	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
0-15	10YR 4/1	100		loamy clay	
					_
	-				<u> </u>
	-				
<sup>1</sup> Type: C=C	oncentration D=De	enletion RM=	Reduced Matrix, MS=Masked Sand Grains.	2l ocation: Pl	
			RRs, unless otherwise noted.)		r Problematic Hydric Soils <sup>3</sup> :
☐ Histosol			Polyvalue Below Surface (S8) (LRR S, 1		k (A9) <b>(LRR O)</b>
_	pipedon (A2)		Thin Dark Surface (S9) (LRR S, T, U)		k (A10) <b>(LRR S)</b>
_	stic (A3)		Loamy Mucky Mineral (F1) (LRR O)		Vertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleyed Matrix (F2)	Piedmont	Floodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Matrix (F3)	<u> </u> Anomalou	us Bright Loamy Soils (F20)
=	Bodies (A6) (LRR	-	Redox Dark Surface (F6)	□ (MLRA	•
	ıcky Mineral (A7) (I		Depleted Dark Surface (F7)		nt Material (TF2)
	esence (A8) (LRR		Redox Depressions (F8)		llow Dark Surface (TF12) plain in Remarks)
	ick (A9) <b>(LRR P, T</b> ) d Below Dark Surfa		Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151)	U Other (Ex	piairi iri Remarks)
=	ark Surface (A12)	ice (ATT)	Iron-Manganese Masses (F12) (LRR O,	P. T) <sup>3</sup> Indicate	ors of hydrophytic vegetation and
	rairie Redox (A16)	(MLRA 150A		•	d hydrology must be present,
=	lucky Mineral (S1)	-	Delta Ochric (F17) (MLRA 151)		disturbed or problematic.
Sandy C	Gleyed Matrix (S4)		Reduced Vertic (F18) (MLRA 150A, 150	)B)	
Sandy F	Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA	149A)	
=	Matrix (S6)		L Anomalous Bright Loamy Soils (F20) (M	LRA 149A, 153C, 1	53D)
	rface (S7) (LRR P,				
	Layer (if observed	I):			
Type:			<del></del>		x
Depth (in	ches):		<del></del>	Hydric Soil Pr	esent? Yes No X
Remarks:	oricultural fie	ald Plot o	loes not meet hydric soil criteria	a	
, ,	grioditarariio	ia. i ioc c	ioco not most riyano son onton	۵.	



**Date:** 12/18/18



Photo 57 – Soil Sample at Plot PL-14



Photo 58 – Vegetation at Plot PL-14 looking southerly.



Project/Site: Axis - Redfish Facility	City/Coun	<sub>ntv:</sub> San Patricio C	0.	Sampling Date:	11/28/2018
				Sampling Point: PL-15	
Investigator(s): R. Ganczak & A. Snellgrove Section, Township, Range: NA					
Landform (hillslope, terrace, etc.): Ag.field Local relief (concave, convex, none): flat Slope (%): 0					
Subregion (LRR or MLRA): LRRT/150A	27.943994°	Long:	97.297882°	Dat	um. WGS 84
Soil Map Unit Name: VCA - Victoria clay, 0-1% slope	 es	Long	NWI classific	ation: NA	um
Soil Map Unit Name: VcA - Victoria clay, 0-1% slopes NWI classification: NA  Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)					
Are Vegetation $\frac{X}{X}$ , Soil $\frac{X}{X}$ , or Hydrology $\frac{X}{X}$ significantly disturbed? Are "Normal Circumstances" present? Yes No $\frac{X}{X}$					
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 X Is wi	the Sampled Area			
Hydric Soil Present? Yes X	No wi	thin a Wetland?	Yes	No X	
	No X				
Remarks:					
fallow agricultural field					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of t	two required)
Primary Indicators (minimum of one is required; check all that apply)			Surface Soil Cracks (B6)		
Surface Water (A1)			getated Concave S	Surface (B8)	
High Water Table (A2)  Marl Deposits (B15) (LRR U)  Drainage Patterns (B10)					,
Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)					
☐ Water Marks (B1) ☐ Oxidized Rhizospheres along Living Roots (C3) ☐ Dry-Season Water Table (C2)					
Sediment Deposits (B2)	24)	Crayfish Burrows (C8)			
Drift Deposits (B3)  Recent Iron Reduction in Tilled Soils (C			C6) Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)  Thin Muck Surface (C7)			Geomorphic Position (D2)		
☐ Iron Deposits (B5) ☐ Other (Explain in Remarks)			Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)			FAC-Neutral Test (D5)		
☐ Water-Stained Leaves (B9) ☐ Sphagnum moss (D8) (LRR T, U)					
Field Observations:	Donth (inches)				
Surface Water Present? Yes No X	Depth (inches): Depth (inches):				
	Depth (inches): Depth (inches):		lydrology Presen	+2 Voc	No
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  NRCS Soil Survey Data, Aerial Photography, NHD Data					
Remarks:	lography, NHD	Data			
Agricultural field.					

## **VEGETATION (Four Strata)** – Use scientific names of plants.

ance Test worksheet:  r of Dominant Species e OBL, FACW, or FAC:
e OBL, FACW, or FAC:
## Across All Strata:
## Across All Strata:
e OBL, FACW, or FAC: (A/B)  ence Index worksheet:  al % Cover of: Multiply by:  ecies x 1 =  species x 2 =  ecies x 4 =  ecies x 5 =  i Totals: (A) (B)  revalence Index = B/A =  bhytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation  Dominance Test is >50%  Prevalence Index is ≤3.01
e OBL, FACW, or FAC: (A/B)  ence Index worksheet:  al % Cover of: Multiply by:  ecies x 1 =  species x 2 =  ecies x 4 =  ecies x 5 =  i Totals: (A) (B)  revalence Index = B/A =  bhytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation  Dominance Test is >50%  Prevalence Index is ≤3.01
ence Index worksheet:
Multiply by:   ecies
ecies
x 2 =
ecies
species $x 4 = $ species $x 5 = $ species $x 6 = $ speci
ecies x 5 = (B)  revalence Index = $B/A$ = $PA$ Provided Test for Hydrophytic Vegetation  Dominance Test is >50%  Prevalence Index is $\leq 3.0^{1}$
revalence Index = B/A =
revalence Index = B/A =
Phytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation  Dominance Test is >50%  Prevalence Index is ≤3.0¹
Phytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation  Dominance Test is >50%  Prevalence Index is ≤3.0 <sup>1</sup>
Rapid Test for Hydrophytic Vegetation  Dominance Test is >50%  Prevalence Index is ≤3.0 <sup>1</sup>
Dominance Test is >50% Prevalence Index is ≤3.0¹
Prevalence Index is ≤3.0 <sup>1</sup>
blamatic Undrank, tip Variation (Cyplain)
bblematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3 , , ,
ors of hydric soil and wetland hydrology must ent, unless disturbed or problematic.
ons of Four Vegetation Strata:
ons of rour vegetation strata.
Woody plants, excluding vines, 3 in. (7.6 cm) or
diameter at breast height (DBH), regardless or
g/Shrub – Woody plants, excluding vines, less
n. DBH and greater than 3.28 ft (1 m) tall.
All herbaceous (non-woody) plants, regardless
and woody plants less than 3.28 ft tall.
vine – All woody vines greater than 3.28 ft in
VINE – All woody vines greater than 5.20 ft in
phytic
tion
t? Yes X No
וו

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirm	n the absence of	indicators.)		
Depth	Matrix Color (moist)	%	Color (moist)	x Feature	es Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rema	rko	
(inches) 0-4	10YR 2/1	100	COIOI (IIIOISI)	%	туре	LUC	clay loam	Keilla	U 100	
4/15	10YR 2/1	80	10YR 5/2	20			clay loam			
4/13	1011(2/1		10110 3/2			IVI	Clay Idam			
				_						
				_						
					_					
¹Type: C=Co	ncentration, D=De	oletion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location: Pl	L=Pore Lining, M=	Matrix.	
			LRRs, unless othe					r Problematic Hy		s <sup>3</sup> :
Histosol			Polyvalue Be				· —	ck (A9) <b>(LRR O)</b>		
	ipedon (A2)		Thin Dark Su			-		ck (A10) (LRR S)		
Black His	stic (A3) n Sulfide (A4)		Loamy Muck	-		R O)		Vertic (F18) <b>(outs</b> t Floodplain Soils (		
= ' '	Layers (A5)		Depleted Ma		(Г2)			us Bright Loamy S	, ,	
=	Bodies (A6) <b>(LRR F</b>	P, T, U)	Redox Dark		F6)		(MLRA		0110 (1 20)	
5 cm Mu	cky Mineral (A7) <b>(L</b>	RR P, T, U	Depleted Da	rk Surfac	e (F7)		Red Pare	ent Material (TF2)		
	esence (A8) <b>(LRR I</b>	J)	Redox Depre		<del>-</del> 8)			llow Dark Surface		
=	ck (A9) (LRR P, T)	(Δ44)	Marl (F10) (L		(MI DA 4	E4\	<u> </u>	(plain in Remarks)		
=	l Below Dark Surfac rk Surface (A12)	e (ATT)	☐ Depleted Oc ☐ Iron-Mangar			-	T) <sup>3</sup> Indicate	ors of hydrophytic	vegetation	n and
=	airie Redox (A16) <b>(</b>	MLRA 150.				-	•	nd hydrology must	-	
	ucky Mineral (S1)	LRR O, S)	Delta Ochric	(F17) <b>(M</b>	LRA 151)	•	unless	disturbed or prob	lematic.	
	leyed Matrix (S4)		Reduced Ve							
	edox (S5)		Piedmont Flo					52D)		
=	Matrix (S6) face (S7) <b>(LRR P,</b> :	S. T. U)	Anomaious i	Brignt Loa	imy Solis (	(FZU) <b>(WILF</b>	RA 149A, 153C, 1	330)		
	ayer (if observed)									
Type:										
Depth (inc	ches):						Hydric Soil Pr	esent? Yes X	No	
Remarks:										
Ą	gricultural fiel	d.								



#### Wetland Delineation Midway to Harbor Island Pipeline Project PCS Project # 18087

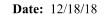




Photo 59 – Soil Sample at Plot PL-15



Photo 60 – Vegetation at Plot PL-15 looking westerly.



## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Axis - Redfish Facility	City/County: S	an Patricio Co.	Sampling Date:11/28/2018
Applicant/Owner: Axis Midstream Partners, LLC		State: TX	
	Section, Towns		
		ncave, convex, none): flat	Slope (%): 0
Subregion (LRR or MLRA): LRRT/150A	Lat: 27.944511°	Long: -97.330271°	Datum: WGS 84
Soil Map Unit Name: Vd - Victoria clay, depressiona	.l	NWI classit	fication. NA
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes X	No (If no, explain in	Remarks.)
Are Vegetation X , Soil X , or Hydrology X			
Are Vegetation, Soil, or Hydrology		(If needed, explain any answ	
SUMMARY OF FINDINGS – Attach site ma			
		<u>,                                      </u>	
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes	No X	Sampled Area	V
Wetland Hydrology Present? Yes	No X within a	a Wetland? Yes	No X
Remarks:			
fallow agricultural field			
3			
HYDROLOGY			
Wetland Hydrology Indicators:			cators (minimum of two required)
Primary Indicators (minimum of one is required; check a			oil Cracks (B6)
	tic Fauna (B13)		regetated Concave Surface (B8)
	Deposits (B15) <b>(LRR U)</b> ogen Sulfide Odor (C1)		Patterns (B10)
	zed Rhizospheres along Livir	=	Lines (B16) n Water Table (C2)
	ence of Reduced Iron (C4)		urrows (C8)
	nt Iron Reduction in Tilled So	<del></del>	Visible on Aerial Imagery (C9)
	Muck Surface (C7)		ic Position (D2)
	r (Explain in Remarks)	= '	quitard (D3)
Inundation Visible on Aerial Imagery (B7)	,	FAC-Neutr	ral Test (D5)
Water-Stained Leaves (B9)		Sphagnum	moss (D8) (LRR T, U)
Field Observations:			
	Depth (inches):		
	Depth (inches):		<b>y</b>
Saturation Present? Yes No X [ (includes capillary fringe)	Depth (inches):	Wetland Hydrology Pres	ent? Yes No X
Describe Recorded Data (stream gauge, monitoring we			
NRCS Soil Survey Data, Aerial Pho	tography, NHD Da	ta	
Agricultural field located west of drainage feature off Hwy 181.			
High bank to high bank (width - feet) (Top of bank)50' 5" (Feet) ActualX Estimate Other (define)			
Water Depth (feet)         2         (Feet)           Actual         Estimate         X         Other         (define)			
Ordinary high-water mark (width – feet) (OH/MM)28' 10" (Feet) ActualX			
Depth of OHWM (feet)4' 6" (Feet) ActualX			
Substrate Composition (check all that apply) Silts _X_ Sands _X_ Conc Gravel Muck Bedrock	rete Cobbles		
Vegetation Type/% cover	í		
Method of CrossingHDDXBoreOpen CutUnknown	own		

# VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: PL-16 Absolute Dominant Indicator Dominance Test worksheet:

	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30' ) 1. NA		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant Species Across All Strata: (B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		
	= Total Cover	OBL species x 1 =
50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30' )		FAC species x 3 =
1. <u>NA</u>		FACU species x 4 =
2		UPL species x 5 =
3		Column Totals: (A) (B)
4		Prevalence Index = B/A =
5.		
6.		
7.		1 <del>=</del>
8.		2 - Dominance Test is >50%
U	= Total Cover	3 - Prevalence Index is ≤3.0¹
50% of total cover	20% of total cover:	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size: 30' )		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		Definitions of Four Vegetation Strata:
2		_ Definitions of Four Vegetation Strata.
3		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		more in diameter at breast height (DBH), regardless of height.
5		- Height.
6		Sapling/Shrub – Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		Herb – All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10		Woody vine – All woody vines greater than 3.28 ft in
11		height.
12		
	= Total Cover	
50% of total cover:	20% of total cover:	
Woody Vine Stratum (Plot size: 30' )		
1. <u>NA</u>		
2		
3		
4		
5.		Hudranhutia
	= Total Cover	- Hydrophytic Vegetation
50% of total cover	20% of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations bel		•
Agricultural field, no data collected.		

SOIL

Profile Desc	ription: (Describe	to the depth	needed to docui	ment the in	dicator	or confirm	the absence of in	dicators.)	
Depth	Matrix	0/		x Features		Loc <sup>2</sup>	Toytura	D	ko
(inches) 0-15	Color (moist) 10YR 3/1	<u>%</u> _	Color (moist)	%	Type <sup>1</sup>	LOC	Texture clay loam	Remar	KS
<del>0-</del> 15	10113/1						Clay Idaili		
				<del></del>					
	oncentration, D=Dep					ains.		Pore Lining, M=N	
	ndicators: (Applic	able to all L			-			Problematic Hyd	ric Soils*:
Histosol			Polyvalue Be				. —		
_	ipedon (A2)		Thin Dark Su					(A10) (LRR S)	
Black His			Loamy Muck			(O)			de MLRA 150A,B)
= -	n Sulfide (A4) I Layers (A5)		Loamy Gleye		-2)			Bright Loamy So	F19) (LRR P, S, T)
=	Bodies (A6) <b>(LRR P</b>	P. T. U)	Redox Dark	` '	3)		(MLRA 1		113 (1 20)
	cky Mineral (A7) <b>(Ll</b>		Depleted Da	`	,			Material (TF2)	
_	esence (A8) (LRR L		Redox Depre		. ,			w Dark Surface (	TF12)
_	ck (A9) (LRR P, T)	•	Marl (F10) <b>(L</b>	RR U)	•		Other (Expl	ain in Remarks) `	,
Depleted	l Below Dark Surfac	e (A11)	Depleted Oc	hric (F11) <b>(</b>	MLRA 1	51)			
=	ırk Surface (A12)		Iron-Mangan				•	of hydrophytic v	-
=	airie Redox (A16) (I	-	_			, U)		hydrology must b	•
=	lucky Mineral (S1) (I	LRR O, S)	Delta Ochric			0 A 450D)		isturbed or proble	ematic.
	leyed Matrix (S4) edox (S5)		Reduced Ve			-			
	Matrix (S6)			-		•	A 149A, 153C, 153	וח	
	face (S7) <b>(LRR P, \$</b>	S. T. U)	Anomalous I	origini Loan	ly Colla (I	20) (INILIX	A 143A, 1300, 130	υ,	
	ayer (if observed)								
Type:									
Depth (inc	ches):						Hydric Soil Pres	ent? Yes	No X
Remarks:		_							
A	gricultural fiel	d.							



#### Wetland Delineation Midway to Harbor Island Pipeline Project PCS Project # 18087

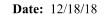




Photo 61 – Soil Sample at Plot PL-16



Photo 62 – Vegetation at Plot PL-16 looking easterly towards drainage feature.



## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Axis - Redfish Facility	City/County	San Patricio Co.	Sampling Date: 11/28/2018
Applicant/Owner: Axis Midstream Partners, LLC			X Sampling Point: PL-17
	Section, To		
			flat Slope (%): 0
Subregion (LRR or MLRA): LRRT/150A	Lat: 27.944179°	Long: -97.329	638° Datum: WGS 84
Soil Map Unit Name: PaA - Papalote fine sandy loar	n	Long	VI classification: NA
Are climatic / hydrologic conditions on the site typical for the site ty		No (If no ex	volain in Remarks )
Are Vegetation $\frac{X}{X}$ , Soil $\frac{X}{X}$ , or Hydrology $\frac{X}{X}$			
Are Vegetation, Soil, or Hydrology		(If needed, explain a	
SUMMARY OF FINDINGS – Attach site ma		g point locations, tra	ansects, important features, etc.
Hydrophytic Vegetation Present?         Yes           Hydric Soil Present?         Yes           Wetland Hydrology Present?         Yes	No X	e Sampled Area	
Hydric Soil Present? Yes X	No with		Yes No X
	No X		
Remarks:			
fallow agricultural field			
HYDROLOGY			
Wetland Hydrology Indicators:		Second	dary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check a	all that apply)		rface Soil Cracks (B6)
	tic Fauna (B13)		arsely Vegetated Concave Surface (B8)
	Deposits (B15) (LRR U)		ainage Patterns (B10)
	ogen Sulfide Odor (C1)		oss Trim Lines (B16)
	zed Rhizospheres along L	iving Roots (C3) 🔲 Dr	y-Season Water Table (C2)
Sediment Deposits (B2)	ence of Reduced Iron (C4)	) 🔲 Cra	ayfish Burrows (C8)
Drift Deposits (B3)	nt Iron Reduction in Tilled	Soils (C6)	turation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Muck Surface (C7)	☐ Ge	eomorphic Position (D2)
Iron Deposits (B5)	(Explain in Remarks)	☐ Sh	allow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		☐ FA	.C-Neutral Test (D5)
☐ Water-Stained Leaves (B9)		☐ Sp	hagnum moss (D8) (LRR T, U)
Field Observations:			
	Depth (inches):		
	Depth (inches):		<b>~</b>
Saturation Present? Yes No X [ (includes capillary fringe)	Depth (inches):	Wetland Hydrolog	gy Present? Yes No X
Describe Recorded Data (stream gauge, monitoring we	ll, aerial photos, previous	inspections), if available:	
NRCS Soil Survey Data, Aerial Photo	tography, NHD [	Data	
Remarks:			
Agricultural field located east of drains	age feature off H	wy 181. (See Plot	16 for OHWM data)

# VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: PL-17 Absolute Dominant Indicator Dominance Test worksheet:

001	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: 30')	% Cover Species? Status	Number of Dominant Species
1. NA		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4		
5		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6.		
7.		Prevalence Index worksheet:
8.		Total % Cover of: Multiply by:
	= Total Cover	OBL species x 1 =
50% of total or	over: 20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30'		FAC species x 3 =
4 NA		FACU species x 4 =
<del></del>		UPL species x 5 =
2		Column Totals: (A) (B)
3		(7)
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		
8		3 - Prevalence Index is ≤3.0 <sup>1</sup>
	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total co	over: 20% of total cover:	1 Toblematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 30' )		
. NIA		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		Definitions of Four Vegetation Strata:
2		Definitions of Four Vegetation Strata.
3		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		more in diameter at breast height (DBH), regardless of height.
5		noight.
6		Sapling/Shrub – Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		<b>Herb</b> – All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10		Woody vine – All woody vines greater than 3.28 ft in
11		height.
12		
	= Total Cover	
50% of total co	over: 20% of total cover:	
Woody Vine Stratum (Plot size: 30'		
. NIA	<del></del> ,	
2		
3		
4		
5		Hydrophytic
	= Total Cover	Vegetation No. No.
50% of total co	over: 20% of total cover:	Present? Yes No
Remarks: (If observed, list morphological adap	otations below).	
Agricultural field, no data collec	ted	
Agricultural field, fio data collect	ieu.	

SOIL

Depth	cription: (Describ Matrix		Red	i <b>ment the</b> ox Featur			n the absence of ir	ndicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type		<u>Texture</u>	Remarks
0-6	10YR 3/1	75	10YR 6/2	25	_ <u>D</u>	M	clay loam	
6-15	10YR 3/1	85	10YR 6/3	15	_ <u>D</u>	<u>M</u>	clay loam	
1- 0.0						<del> </del>	21 11 51	B. III. MANA
			=Reduced Matrix, M LRRs, unless othe			Frains.		Pore Lining, M=Matrix.  Problematic Hydric Soils³:
Histosol		ioabic to all	Polyvalue B			(IRRS T		(A9) (LRR O)
_	pipedon (A2)		Thin Dark S					(A10) (LRR S)
=	istic (A3)		Loamy Muc	-		-		ertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix	(F2)		Piedmont F	Floodplain Soils (F19) (LRR P, S, T)
=	d Layers (A5)		Depleted Ma					Bright Loamy Soils (F20)
=	Bodies (A6) (LRR	-	Redox Dark		` '		(MLRA 1	
	ucky Mineral (A7) (I resence (A8) <b>(LRR</b>		Depleted Da		` '			t Material (TF2) ow Dark Surface (TF12)
	uck (A9) (LRR P, T		Marl (F10) (	•	10)			lain in Remarks)
	d Below Dark Surfa		Depleted O	chric (F11	) (MLRA	151)	` '	,
Thick Da	ark Surface (A12)		☐ Iron-Manga	nese Mas	ses (F12)	(LRR O, P	, <b>T)</b> <sup>3</sup> Indicators	s of hydrophytic vegetation and
=	rairie Redox (A16)	-	. —		-	-		hydrology must be present,
=	Mucky Mineral (S1)	(LRR O, S)	Delta Ochrid					disturbed or problematic.
_	Gleyed Matrix (S4) Redox (S5)		Reduced Ve		-			
	Matrix (S6)					, ,	RA 149A, 153C, 153	BD)
=	rface (S7) (LRR P,	, S, T, U)	<del></del>	J	,	( ) (	, ,	,
Restrictive	Layer (if observed	d):						
Type:								
Depth (in	ches):						Hydric Soil Pres	sent? Yes X No
Remarks:	arioultural fic	ald Diet	daga maat by	dria ac	sil orito	rio		
A	gricultural ne	dia. Pioi	does meet hy	unc sc	on Crite	ila.		



#### Wetland Delineation Midway to Harbor Island Pipeline Project PCS Project # 18087

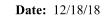




Photo 62 – Soil Sample at Plot PL-17



Photo 63 – Vegetation at Plot PL-17 looking easterly.



## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Axis - Redfish Facility	City/County: San	Patricio Co.	Sampling Date: 11/28/2018
Applicant/Owner: Axis Midstream Partners, LLC		State: TX	
	Section, Township		Camping Forms
	Local relief (conca		Slope (%): 0
Subregion (LRR or MLRA): LRRT/150A	23.942936°	Long: -97.336368°	Slope (70):
Soil Map Unit Name: VCA - Victoria clay, 0-1% slope	_ Lat	Long NWI classific	Datum
Are climatic / hydrologic conditions on the site typical for			
Are Vegetation $\frac{X}{X}$ , Soil $\frac{X}{X}$ , or Hydrology $\frac{X}{X}$			
Are Vegetation, Soil, or Hydrology		(If needed, explain any answe	
SUMMARY OF FINDINGS – Attach site ma	p showing sampling poi	nt locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes	No le the Sam	suled Avec	
Hydric Soil Present? Yes	is the dan	- T	No X
Wetland Hydrology Present? Yes		etialiur res	NO
Remarks:			
fallow agricultural field			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check a	all that apply)	Surface Soil	
	tic Fauna (B13)		getated Concave Surface (B8)
	Deposits (B15) (LRR U)	Drainage Pa	=
	ogen Sulfide Odor (C1)	Moss Trim L	
	zed Rhizospheres along Living F	=	Water Table (C2)
	ence of Reduced Iron (C4)	Crayfish Bur	
Drift Deposits (B3)	ent Iron Reduction in Tilled Soils	(C6) Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Muck Surface (C7)	Geomorphic	Position (D2)
Iron Deposits (B5)	r (Explain in Remarks)	☐ Shallow Aqu	itard (D3)
☐ Inundation Visible on Aerial Imagery (B7)		FAC-Neutral	Test (D5)
☐ Water-Stained Leaves (B9)		☐ Sphagnum n	noss (D8) <b>(LRR T, U)</b>
Field Observations:			
	Depth (inches):		
	Depth (inches):		
(includes capillary fringe)	Depth (inches):	Wetland Hydrology Preser	nt? Yes No
Describe Recorded Data (stream gauge, monitoring we			
NRCS Soil Survey Data, Aerial Pho	tography, NHD Data		
Remarks:			
Agricultural field.			

# **VEGETATION** (Four Strata) – Use scientific names of plants. Sampling Point: PL-18 Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: 30' % Cover Species? Status Number of Dominant Species 1. NA That Are OBL, FACW, or FAC: (A) 2. Total Number of Dominant 3. (B) Species Across All Strata:

4.		(-/
		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
7		
8		OBL species x 1 =
	= Total Cover	EACW appaires x 2 =
	20% of total cover:	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30' )		
1. NA	- <u></u>	FACU species x 4 =
2		UPL species x 5 =
3		Column Totals: (A) (B)
4.		<ul><li>Prevalence Index = B/A =</li></ul>
5		
6.		
7		
8.		<b>二</b>
<del></del>	= Total Cover	— ☐ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
500/ of total on you	<u> </u>	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	20% of total cover:	-
Herb Stratum (Plot size: 30' ) 1. NA		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2		Definitions of Four Vegetation Strata:
3		To a Manda de de control dispersione 2 in (7 C and ) a
4.		<ul> <li>Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or</li> <li>more in diameter at breast height (DBH), regardless of</li> </ul>
5.		height.
6.		Continu/Chruth Wasdy plants avaluding vines loss
		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7		_
8		\
9		
10		Woody vine - All woody vines greater than 3.28 ft in
11		_ height.
12		_
	= Total Cover	
50% of total cover:	20% of total cover:	_
Woody Vine Stratum (Plot size: 30' )		
1. NA		_
2		_
3		
4.		
5.		—
	= Total Cover	<ul><li>Hydrophytic</li><li>Vegetation</li></ul>
50% of total cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations bel		_
	ow).	
Agricultural field, no data collected.		

Depth	Matrix	pth needed to document the indicator or confire Redox Features	ii tiio abooiloo oi	marcatorol,
(inches)	Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
	·		·	
1 <sub>Tumou</sub> C=C	annontration D-Danlation DA	I=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> L coetion: DI	-Dara Lining M-Matrix
		I LRRs, unless otherwise noted.)		L=Pore Lining, M=Matrix.  r Problematic Hydric Soils³:
Histosol		Polyvalue Below Surface (S8) (LRR S, T,		ck (A9) (LRR O)
_	pipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)		ck (A10) (LRR S)
<b>=</b>	stic (A3)	Loamy Mucky Mineral (F1) (LRR O)		Vertic (F18) (outside MLRA 150A,B)
=	en Sulfide (A4)	Loamy Gleyed Matrix (F2)		t Floodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)	Depleted Matrix (F3)		us Bright Loamy Soils (F20)
	Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA	
	ıcky Mineral (A7) <b>(LRR P, T, U</b>			ent Material (TF2)
	esence (A8) (LRR U)	Redox Depressions (F8)		llow Dark Surface (TF12)
	ick (A9) (LRR P, T)	Marl (F10) (LRR U)	U Other (Ex	xplain in Remarks)
=	d Below Dark Surface (A11) ark Surface (A12)	☐ Depleted Ochric (F11) (MLRA 151) ☐ Iron-Manganese Masses (F12) (LRR O, P	T) <sup>3</sup> Indicate	ors of hydrophytic vegetation and
=	rairie Redox (A16) <b>(MLRA 15</b> 0		•	nd hydrology must be present,
	Mucky Mineral (S1) (LRR O, S)			s disturbed or problematic.
_	Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B		
Sandy F	Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 1	49A)	
=	Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLF	RA 149A, 153C, 1	53D)
	rface (S7) <b>(LRR P, S, T, U)</b>			
Restrictive	Layer (if observed):			
Type:				
Depth (in	ches):		Hydric Soil Pr	resent? Yes No
Remarks:	gricultural field, no d	ata collected		
^	gricultural field, fio d	ala collecteu.		