

Waters of the U.S. Delineation Report-Draft

Farm-to-Market Road 741 from U.S. Route 175 to Farm-to-Market Road 548 (CSJ 1092-01-021)

Texas Department of Transportation, Dallas District

July 2022

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 9, 2019, and executed by FHWA and TxDOT.

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1.0 Introduction

The Texas Department of Transportation (TxDOT) conducted a waters of the U.S. (WOTUS) delineation for a proposed road project on Farm-to-Market Road (FM) 741 from U.S. Route (US) 175 to FM 548 in the cities of Forney and Crandall, and the unincorporated community of Heartland, Kaufman County, Texas (CSJ 1092-01-021). The delineation was conducted on April 14, 28, and 29, 2022.

The delineation was performed to evaluate the presence of jurisdictional WOTUS and identify their boundaries within the project area. It is anticipated that this waters of the U.S. delineation report (WOTUS DR) will be used in support of the jurisdictional determination process for on-site aquatic resources. If it is determined that jurisdictional resources will be impacted, this WOTUSDR will also support applications for regulatory permits that may be required from the United States Army Corps of Engineers (USACE) for proposed construction activities.

Waterbodies were delineated according to USACE Regulatory Guidance Letter (RGL) 05-05 Ordinary High Water Mark (OHWM) Identification for non-tidal waters and the Mean High Tide (MHT) line for tidal waters. As required under Section 404 of the Clean Water Act (CWA), wetlands were delineated using the routine method described in the USACE 1987 Wetlands Delineation Manual (1987 Manual) and the USACE Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Regional Supplement (Version 2.0) (2010 Regional Supplement). Wetland types and boundaries were determined through initial map review, followed by fieldwork involving the examination of three (3) parameters: hydrology, vegetation, and soils. Delineation criteria and indicators for each of these parameters are outlined in the 1987 Manual and the 2010 Regional Supplement. The 2010 Regional Supplement presents wetland indicators, delineation guidance, and other information that is specific to the Great Plains Region, per the regional supplement. Wetlands were classified according to the Cowardin Classification System used for the United States Fish and Wildlife Service's (USFWS) National Wetlands Inventory (NWI).

This document contains the following five (5) attachments:

- Attachment 1 Figures: contains maps of the project area
- Attachment 2 Wetland Determination Data Forms: documents the three (3) criteria for wetlands at all sample points
- Attachment 3 Historical Aerial Photographs: contains historical aerial imagery, starting with the oldest photographs first
- Attachment 4 Site Photographs: contains photographs taken during the site visit(s)
- Attachment 5 USACE Antecedent Precipitation Tool Results

2.0 Project Overview

TxDOT is proposing to reconstruct and widen approximately 8.32 miles of FM 741 from US 175 to FM 548 in Kaufman County. An additional 12-foot travel lane is proposed in each direction as well as a raised median, totaling four lanes with a typical section varying from 140 to 180-feet-wide from US 175 to FM 2757 and 120 to 153-feet-wide from FM 2757 to the end of project. No shoulders are proposed, and a 2-foot offset would be included for safety reasons. The project would include the replacement of two bridges and a 10-foot shared-use path on both sides of the roadway. Twelve-foot northbound and/or southbound turn-lanes are proposed at major cross streets. The bridges at the unnamed tributary to Buffalo Creek would be replaced; four 12-foot mainlanes would be separated by an 18-foot median, with 10.5-foot shared-use paths along both sides of the bridge. Roadside drainage will be conveyed through a combination of enclosed storm sewers and grass-lined ditches. There are no proposed easements associated with this project.

Right-of-entry (ROE) was limited at the time of the field investigation, thus limiting the delineation of some water features to only the portions of said water features in the existing right-of-way (ROW). Based upon limited ROE available beyond the limits of the existing ROW, field investigations were limited to 47 of the 174 parcels or approximately 27.01 percent of the proposed ROW. Where ROE was not available, delineations of aquatic features were conducted using observations from adjacent parcels/ROW and a combination of aerial imagery, LiDAR, and desktop resources.

Attachment 1 - Figures contains numbered maps of the project area. Figure 1 provides a vicinity map that depicts the location of the project area, Figure 2 is an aerial overview map of the project area, and Figure 3 is a 7.5-minute series United States Geological Survey (USGS) topographic overview map Figure 4 depicts the National Wetlands Inventory (NWI) features and the Federal Emergency Management Agency (FEMA) designated 100-year floodplain areas within and around the project area. Figure 5 depicts the mapped soil units within and around the project area overlain on a Light Detection and Ranging (LiDAR) base map. Figure 7 depicts water features identified during the delineation field investigations in April 2022.

3.0 Ecological Site Description

The project area is located within the Southwestern Prairies Cotton and Forage Land Resource Region (LRR J) of the Great Plains and is more specifically located in Major Land Resource Area (MLRA) 86A (Texas Blackland Prairie, Northern Part).

LRR J soils are dominantly Mollisols, Entisols, Alfisols, and Vertisols. The major soil suborders are Paleustalfs, Haplustolls, Haplusterts, and Argiustolls. All of the soils in the region have a thermic soil temperature regime, and most have an ustic soil moisture regime. Grasslands include mixtures of range, pasture, and improved pasture. Nearly all of this area is improved pasture, cropland, or rangeland. Urban development is rapidly increasing adjacent to the major cities. The average annual precipitation is 30 to 46 inches in most of the area, but it is less than 30 inches in the southern tip. Most of the rainfall occurs in spring and fall. The average annual temperature is 63 to 69 degrees F. The freeze-free period averages about 280 days and ranges from 250 to 310 days. The average precipitation during the freeze-free period is about 24 to 26 inches. Average annual temperatures and the length of the freeze-free period increase to the south. (NRCS, 2006).

The dominant soil orders in MLRA 86A are Entisols, Mollisols, and Vertisols. The soils are well drained or moderately well drained and fine textured or medium textured. They have a thermic soil temperature regime, an ustic soil moisture regime, and smectitic, carbonatic, or mixed mineralogy. This area supports mixed tall and mid prairie grasses. Little bluestem (*Schizachyrium scoparium*) is the dominant species. Indiangrass (*Sorghastrum nutans*), big bluestem (*Andropogon gerardii*), switchgrass (*Panicum virgatum*), tall dropseed (*Sporobolus texansu*), silver bluestem (*Bothriochloa saccharoides*), sideoats grama (*Bouteloua curtipendula*), eastern gamagrass (*Tripsacum dactyloides*), and vine mesquite (*Panicum obtusum*) are the major herbaceous species. The plant community has many forbs, such as prairie clover (*Dalea aurea*), western ragweed (*Ambrosia artemisifolia*), Maximilian sunflower (*Helianthus maximiliani*), gayfeather (*Liatris spicata*), rattlesnake master (*Eryngium aquaticum*), and Indian plantain (*Arnoglossum plantagineum*). Areas along the major rivers and streams support savanna vegetation. Oak, elm, cottonwood, hackberry, and pecan trees produce a canopy cover of about 30 percent (NRCS, 2006).

Currently, the project area consists of a mixture of agricultural land (row crop, grazing, and hay production). The northern extent is characterized by low and high intensity urban vegetation communities interspersed with undeveloped tracts of agriculture and disturbance grasslands, and the southern extent is mostly agricultural with limited low intensity urban vegetation communities. Several stands of riparian vegetation are present along FM 741 where creeks and tributaries cross the roadway. Buffalo Creek is the largest water body crossing FM 741; however, several unnamed tributaries are mapped within the project area. Several stock tanks and stormwater detention ponds are located outside the proposed project area, as well as a Soil Conservation Service Site 1 Reservoir.

4.0 Methods

4.1 Map and Database Review

The following information sources were considered and, if applicable, consulted prior to and during the field delineation to assist in the identification of potential waters of the U.S. within the project area.

4.1.1 USGS Topographic Maps

USGS topographic maps illustrate elevation contours, drainage patterns, and hydrography. The Forney South, Texas, USGS Quad map was reviewed to determine the likelihood of the project area containing jurisdictional waterbodies.

4.1.2 USFWS NWI Data

NWI data were reviewed as a contributing resource to help identify potential wetland features located within the project area.

4.1.3 NRCS Soil Survey Data

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) maintains an online Web Soil Survey database. The data provided in the Web Soil Survey provides a good basis for the soil textures and types one can expect to find at a particular delineation area. NRCS-mapped soil types at the project area were reviewed to determine which of the soils exhibit hydric characteristics. NRCS-mapped soil types are assigned a hydric indicator status of "hydric" or "non-hydric" by the National Technical Committee for Hydric Soils.

4.1.4 Aerial Photography

Aerial photography provides good insight to the state and function of land resources. Signs of inundation and vegetative signatures on aerial images indicate whether land might be functioning as a wetland or supporting a stream system. Historic and current aerial photography was reviewed utilizing Google Earth, prior to and during the field delineation, in order to further understand the nature of the project area.

4.1.5 FEMA FIRM

The Federal Emergency Management Agency (FEMA) maintains flood insurance rate maps (FIRMs). The FIRM including the project area was reviewed to determine if the 100-year floodplain is mapped. The USACE utilizes the 100-year floodplain to assist in determining jurisdiction of aquatic features. FEMA FIRM data was reviewed to evaluate the location of any mapped floodplain in relation to aquatic resources located within the project area.

4.1.6 LiDAR

Light detection and ranging (LiDAR) is a remote sensing technique that measures spatial and temporal data. LiDAR information is provided by the TNRIS online database for each USGS Quad. LiDAR data was obtained for the Forney South, Texas, USGS Quad to evaluate elevation changes throughout the project area.

4.2 Waters of the U.S. Delineation

With respect to any non-tidal waterbodies located within the project area, biologists followed the methodology outlined in RGL 05-05. With respect to any tidal waterbodies located within the site, biologists identified the MHT line by observing changes in vegetation, drift deposits of shells and debris, and physical markings or characteristics along the shoreline that may indicate the general height reached by a rising tide.

Data collected for any waterbodies includes average water depth, average width per waterbody, length of linear segments within the project boundary, and water flow classification (i.e., tidal, non-tidal, ephemeral, intermittent, and/or perennial).

Any wetland delineation was conducted based on the 1987 Manual and the 2010 Regional Supplement, as well as the three (3) parameters described within. The three-parameter approach requires investigation of hydrological characteristics, hydrophytic vegetation, and hydric soils at selected sample points within a project area. Sample points are located to ascertain upland/wetland boundaries and to record significant spatial changes in wetland plant communities. All three (3) indicator parameters must be met in order for the area to be classified as a wetland. See subsections on Hydrology, Vegetation, and Soils, below, for indicator-specific information.

Geospatial data was collected utilizing a handheld global navigation satellite system (GNSS) receiver and iPads with ArcGIS Field Maps, to achieve sub-meter accuracy. All geospatial data was collected in accordance with the April 21, 2016, memorandum from the Galveston District of the USACE entitled, "Standard Operating Procedure, Recording Jurisdictional Delineations using GPS."

4.2.1 Hydrology

Wetland hydrology is characterized when, under normal circumstances, the surface is either inundated or the upper horizon(s) of the soil are saturated at a sufficient frequency and duration to create anaerobic conditions. Seasonal and long-term rainfall patterns, local geology and topography, soil type, local water table conditions, and drainage are factors that influence hydrology.

Wetland hydrology indicators include: oxidized rhizospheres along living roots, saturated soils, standing surface water, algal mat, aquatic fauna, high water table, iron deposits, sparsely vegetated concave surface, geomorphic position, moss trim lines, water-stained leaves, crawfish burrows, watermarks, drainage patterns, and surface soil cracks.

During the field survey, these indicators were used to determine if an area exhibited wetland hydrology.

4.2.2 Vegetation

In accordance with the procedure set forth in the 1987 Manual and the 2010 Regional Supplement, the hydrophytic status of vegetation communities was determined by identifying dominant species and, if necessary, calculating a "Prevalence Index," as defined in the 1987 Manual.

Individual plant species were checked against the current National Wetland Plant List (NWPL), and their regional wetland indicator status was determined. Species are classified as follows:

- Obligate Wetland (OBL) if they almost always occur in wetlands (>99 percent of the time)
- Facultative Wetland (FACW) if they usually occur in wetlands (67-99 percent of the time)
- Facultative (FAC) if they are equally likely to occur in wetlands and non-wetlands (34-66 percent of the time)
- Facultative Upland (FACU) if they usually occur in non-wetlands (67-99 percent of the time)
- Obligate Upland (UPL) if they almost always occur in non-wetlands (>99 percent of the time)
- A no indicator (NI) status is recorded for those species for which insufficient information is available to determine an indicator status.

Hydrophytic (wetland) vegetation is considered prevalent where more than 50% of the dominant species in a plant community have an indicator status of OBL, FACW, or FAC. However, in cases where the vegetation community does not meet this hydrophytic threshold, but indicators of hydric soils and wetlands hydrology are present, the prevalence index can be applied. Calculation of this index is based on consideration of both dominant and non-dominant plants in the vegetation community, whereby each indicator status category is given a numeric code and weighted by absolute percent cover. The prevalence index ranges from 1 to 5 and an index of 3.0 or less signifies that hydrophytic vegetation is present. In the current delineation, and as shown on the

wetland determination data forms in **Attachment 2**, a prevalence index was calculated for each sample point's vegetation community.

4.2.3 Soils

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper horizons. Anaerobic conditions created by repeated or prolonged saturation or flooding result in permanent changes in soil color and chemistry. The changes in soil color are used to differentiate hydric from non-hydric soils.

At each sample point, in areas where the absence of inundation or heavy saturation allowed, a pit was excavated to a depth of at least 16 inches to reveal soil profiles and to determine whether or not positive indicators of hydric soils were present. Hydric soil indicators relate to color, structure, organic content, and the presence of reducing conditions. Color characteristics (Hue, Value, and Chroma) were recorded using Munsell® Charts.

5.0 Results

5.1 Map and Database Review

5.1.1 USGS Topographic Maps

USGS topographic maps were reviewed to ascertain the potential presence of surface waters and wetlands. The project area is generally 430 to 480 feet above sea level according to USGS topographic maps. One named intermittent creek, Buffalo Creek, was identified approximately 0.26 miles east of the intersection of Country Woods Road and FM 741.

5.1.2 USFWS NWI Data

The table below summarizes the NWI features within the project area. Refer to **Figure 4** in **Attachment 1** for an illustration of the NWI features in and surrounding the project area.

Classification Code	Code Description	Wetland Type
PF01C	Palustrine Forested Broad-Leaved Deciduous Seasonally Flooded	Palustrine
R4SBC	Riverine Intermittent Streambed Seasonally Flooded	Riverine
R5UBH	Riverine Unknown Perennial Unconsolidated Bottom Permanently Flooded	Riverine

Table 1: NWI Features

5.1.3 NRCS Soil Survey Data

The table below summarizes the soil units represented within the project area based on information collected from the Web Soil Survey database. Refer to **Figure 5** in **Attachment 1** for an illustration of the mapped soil units in and surrounding the project area.

Table 2: NRCS Soil Units

Soil Unit	Soil Unit Name	Description	Hydric/Non-hydric
FeD2	Ferris clay, 5 to 12 percent slopes, eroded	The Ferris series consists of deep to mudstone, well drained, very slowly permeable soils that formed in clayey residuum weathered from calcareous mudstone. These gently sloping to moderately steep soils occur on backslopes of side slopes of ridges on dissected plains. Slopes range from 1 to 20 percent.	Non-hydric
FhC	Ferris-Heiden complex, 2 to 5 percent slopes	The Ferris series consists of deep to mudstone, well drained, very slowly permeable soils that formed in clayey residuum weathered from calcareous mudstone. These gently sloping to moderately steep soils occur on backslopes of side slopes of ridges on dissected plains. Slopes range from 1 to 20 percent. The Heiden series consists of deep and very deep to mudstone, well drained, very slowly permeable soils that formed in clayey residuum weathered from mudstone. These nearly level to moderately steep soils occur on footslopes of base slopes, shoulders of interfluves, and backslopes of side slopes range from 0.5 to 20 percent.	Non-hydric
HeC	Heiden clay, 3 to 5 percent slopes	The Heiden series consists of deep and very deep to mudstone, well drained, very slowly permeable soils that formed in clayey residuum weathered from mudstone. These nearly level to moderately steep soils occur on footslopes of base slopes, shoulders of interfluves, and backslopes of side slopes of ridges on dissected plains. Slopes range from 0.5 to 20 percent.	Non-hydric

Table 2: NRCS Soil Units

Soil Unit	Soil Unit Name	Description	Hydric/Non-hydric
НоА	Houston Black clay, 0 to 1 percent slopes	The Houston series consists of moderately well drained, slowly permeable, cyclic soils that formed in alkaline clays and chalk of the Blackland Prairies. These clayey soils have very high shrink-swell potential. Slope ranges from 0 to 8 percent.	Non-hydric
НоВ	Houston Black clay, 1 to 3 percent slopes	The Houston series consists of moderately well drained, slowly permeable, cyclic soils that formed in alkaline clays and chalk of the Blackland Prairies. These clayey soils have very high shrink-swell potential. Slope ranges from 0 to 8 percent.	Non-hydric
HoC	Houston Black clay, 3 to 5 percent slopes	The Houston series consists of moderately well drained, slowly permeable, cyclic soils that formed in alkaline clays and chalk of the Blackland Prairies. These clayey soils have very high shrink-swell potential. Slope ranges from 0 to 8 percent.	Non-hydric
Tf	Trinity clay, 0 to 1 percent slopes, frequently flooded	The Trinity series consists of very deep, moderately well drained, very slowly permeable soils that formed in calcareous clayey alluvium derived from mudstone. These nearly level soils occur on flood plains on river valleys and large streams on dissected plains. Slopes are typically less than 1 percent, but the range is 0 to 3 percent.	Hydric

5.1.4 Aerial Photography

Historic aerial imagery for the project and surrounding areas was evaluated using images provided by Google Earth. The table below summarizes observations for the project area for each year reviewed. Attachment 3 contains copies of the historic aerial photographs reviewed for the project area.

Table 3: Historic Aerial Photography Observations

Year	Observations
2004	Within the project area, all crossings can be observed. Primarily agricultural, residential, commercial properties, and vacant lots occur immediately adjacent to FM 741 and the vicinity around the project area.
2009	Residential developments on the west and east sides adjacent to the project area south of Interstate 20 can be observed in the early stages of development.
2015	No changes are visible within the project area.

5.1.5 FEMA FIRM

A review of FEMA FIRMs indicated a portion of the project area is within the 100-year floodplain associated with an unnamed tributary to Buffalo Creek from the Lower East Fork Lateral Site Number One. The project area is located within two map panels, 48257C0155D (effective July 3, 2012), and 48257C0175D (effective July 3, 2012). Refer to **Figure 4** in **Attachment 1** for an illustration of the FEMA FIRM data within and surrounding the project area.

5.1.6 LiDAR

A review of LiDAR data indicated that the site is approximately 430 to 480 feet above sea level (North American Vertical Datum 1988). LiDAR data is consistent with USGS topographic maps and aerial imagery observations. Refer to **Figure 6** in **Attachment 1** for an illustration of LiDAR data within the project area.

5.2 Waters of the U.S. Delineation

The table below summarizes the waterbodies/wetlands identified within the project area. Refer to **Figure 7** in **Attachment 1** for a depiction of the boundaries of each waterbody/wetland feature, as well as the location within the project area where sample point data were collected. Refer to **Attachment 2**, Wetland Determination Data Forms, for the completed wetland determination data forms for the project. Refer to **Attachment 4**, Representative Site Photos, for one or more photographs of each waterbody/wetland feature observed within the project area.

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Waterbody or Wetland Number	Name	Туре	Latitude, Longitude	Acres within project area (all waterbodies and wetlands)	Linear feet within project area (waterbodies only)	Potentially Jurisdictional (Section 404)?	Potentially Navigable (Section 10)?
1	Wetland 1	Palustrine Emergent Wetland	32.636450, -96.466532	0.020	N/A	No	No
2	Wetland 2	Palustrine Emergent Wetland	32.637339, -96.466414	0.003	N/A	No	No
3	Crossing 1a, Wetland 3	Palustrine Emergent Wetland	32.663127, -96.453975	0.024	N/A	Yes	No
4	Crossing 1b, Water 1	Ephemeral Stream	32.663530, -96.454003	0.010	158	Yes	No
5	Crossing 2a, Water 2	Intermittent Stream	32.668111, -96.448227	0.013	107	Yes	No
6	Crossing 2b, Wetland 4	Palustrine Scrub/Shrub Wetland	32.668353, -96.448183	0.027	N/A	Yes	No
7	Crossing 2c, Wetland 5	Palustrine Emergent Wetland	32.668130, -96.447926	0.054	N/A	Yes	No
8	Water 12	Drainage Ditch	32.668259, -96.448371	0.002	87	No	No
9	Water 13	Drainage Ditch	32.668029, -96.448558	0.002	91	No	No
10	Crossing 3a, Water 3	Perennial Stream	32.672136, -96.443524	0.112	321	Yes	No
11	Crossing 3b Water 4	Ephemeral Stream	32.671842, -96.443999	0.007	281	Yes	No

Table 4: Summary of Waterbody/Wetland Features

Waterbody or Wetland Number	Name	Туре	Latitude, Longitude	Acres within project area (all waterbodies and wetlands)	Linear feet within project area (waterbodies only)	Potentially Jurisdictional (Section 404)?	Potentially Navigable (Section 10)?
12	Crossing 3c, Water 5	Ephemeral Stream	32.672088, -96.443748	0.002	39	Yes	No
13	Crossing 3d, Wetland 6	Palustrine Forested Wetland	32.671563, -96.444412	0.016	N/A	Yes	No
14	Water 14	Drainage Ditch	32.671843, -96.443863	0.005	199	No	No
15	Crossing 4 Wetland 7	Palustrine Emergent Wetland	32.676546, -96.441562	0.015	N/A	Yes	No
16	Crossing 5a Water 3	Perennial Stream	32.677904, -96.442678	0.072	296	Yes	No
17	Crossing 5b Water 6	Ephemeral Stream	32.6779416, -96.442855	0.009	108	Yes	No
18	Crossing 5c Wetland 8	Palustrine Emergent Wetland	32.678293, -96.443276	0.031	N/A	Yes	No
19	Crossing 5d Wetland 9	Palustrine Emergent Wetland	32.678781, -96.443826	0.014	N/A	Yes	No
20	Crossing 6a Water 7	Intermittent Stream	32.681098, -96.446549	0.023	375	Yes	No
21	Crossing 6b Water 8	Ephemeral Stream	32.681764, -96.447226	0.042	921	Yes	No
22	Crossing 6c Wetland 10	Palustrine Scrub/Shrub Wetland	32.681264, -96.446946	0.021	N/A	Yes	No

Waterbody or Wetland Number	Name	Туре	Latitude, Longitude	Acres within project area (all waterbodies and wetlands)	Linear feet within project area (waterbodies only)	Potentially Jurisdictional (Section 404)?	Potentially Navigable (Section 10)?
23	Crossing 6d Wetland 12	Palustrine Emergent Wetland	32.683571, -96.450182	0.346	N/A	Yes	No
24	Crossing 6e Wetland 11	Palustrine Scrub/Shrub Wetland	32.682453, -96.448980	0.100	N/A	Yes	No
25	Crossing 6f, Wetland 13	Palustrine Scrub/Shrub Wetland	32.683432, -96.450607	0.010	N/A	Yes	No
26	Crossing 7a, Water 9	Ephemeral Stream	32.689140, -96.457658	0.011	149	Yes	No
27	Crossing 7b, Wetland 14	Palustrine Emergent Wetland	32.689472, -96.457718	0.015	N/A	Yes	No
28	Crossing 7c, Wetland 15	Palustrine Emergent Wetland	32.689320, -96.457917	0.006	N/A	Yes	No
29	Wetland 16	Palustrine Emergent Wetland	32.690492, -96.458927	0.035	N/A	No	No
30	Wetland 17	Palustrine Emergent Wetland	32.691152, -96.459366	0.048	N/A	No	No
31	Wetland 18	Palustrine Emergent Wetland	32.691040, -96.459833	0.005	N/A	No	No
32	Crossing 8a, Water 10	Ephemeral Stream	32.694882, -96.457839	0.006	N/A	Yes	No

Waterbody or Wetland Number	Name	Туре	Latitude, Longitude	Acres within project area (all waterbodies and wetlands)	Linear feet within project area (waterbodies only)	Potentially Jurisdictional (Section 404)?	Potentially Navigable (Section 10)?
33	Crossing 8b, Wetland 19	Palustrine Emergent Wetland	32.694996, -96.457813	0.019	N/A	Yes	No
34	Wetland 20	Palustrine Emergent Wetland	32.700843, -96.450411	0.021	N/A	No	No
35	Wetland 21	Palustrine Emergent Wetland	32.701327, -96.449803	0.014	N/A	No	No
36	Wetland 22	Palustrine Emergent Wetland	32.701563, -96.449562	0.006	N/A	No	No
37	Wetland 23	Palustrine Emergent Wetland	32.701881, -96.449470	0.014	N/A	No	No
38	Wetland 24	Palustrine Emergent Wetland	32.702523, -96.448680	0.038	N/A	No	No
39	Wetland 25	Palustrine Emergent Wetland	32.703634, -96.446953	0.010	N/A	No	No
40	Wetland 26	Palustrine Emergent Wetland	32.705093, -96.446463	0.036	N/A	No	No
41	Wetland 27	Palustrine Emergent Wetland	32.716490, -96.447589	0.033	N/A	No	No
42	Crossing 9a, Water 11	Ephemeral Stream	32.689140, -96.457658	0.011	149	Yes	No

Waterbody or Wetland Number	Name	Туре	Latitude, Longitude	Acres within project area (all waterbodies and wetlands)	Linear feet within project area (waterbodies only)	Potentially Jurisdictional (Section 404)?	Potentially Navigable (Section 10)?
43	Crossing 9b, Wetland 28	Palustrine Emergent Wetland	32.727737, -96.457090	0.003	N/A	Yes	No
	т	otal		1.31	3,141		

5.2.1 Hydrology

To determine the normality of rainfall at the time of the field investigation, the USACE-based Antecedent Precipitations Tool (APT), Version 1.0 was utilized. Based on the data provided by the APT, drier than normal conditions were present during the field investigation on April 14, wetter than normal conditions on April 28, and normal conditions on April 29, 2022. The data is provided in **Attachment 5**.

The table below summarizes wetland hydrological indicators identified within the project area. Refer to the wetland determination data forms in **Attachment 2** to see the specific hydrology recorded at each sample point.

Wetland Type	Sample Point Name(s)	Primary Wetland Hydrological Indicators	Secondary Wetland Hydrological Indicators
Ephemeral Stream	WDP11	Drift Deposits (B3)	Drainage Patterns (B10)
Palustrine Emergent Wetland	WDP01, WDP03, WDP09, WDP15, WDP23, WDP25, WDP35, WDP38, WDP40, WDP42, WDP44, WDP46, WDP44, WDP46, WDP48, WDP50, WDP52, WDP54, WDP56, WDP59, WDP61	Surface Water (A1), High Water Table (A2), Saturation (A3), Sediment Deposits (B2), Drift Deposits (B3), Algal Mat or Crust (B4), Water-Stained Leaves (B9), Aquatic Invertebrates (B13)	Sparsely Vegetated Concave Surface (B8), Drainage Patterns (B10), Crayfish Burrows (C8), Saturation Visible on Aerial Imagery (C9), Geomorphic Position (D2), FAC-Neutral Test (D5)
Palustrine Forested Wetland	WDP19	Surface Water (A1), Water Marks (B1), Algal Mat or Crust (B4), Water-Stained Leaves (B9)	Drainage Patterns (B10), Geomorphic Position (D2)

Table 5: Wetland Hydrological Indicators

Wetland Type	Sample Point Name(s)	Primary Wetland Hydrological Indicators	Secondary Wetland Hydrological Indicators
Palustrine Scrub/Shrub Wetland	WDP13, WDP28, WDP30, WPD32, WDP36	Surface Water (A1), High Water Table (A2), Saturation (A3)	Drainage Patterns (B10), Crayfish Burrows (C8), Saturation Visible on Aerial Imagery (C9), Geomorphic Position (D2), FAC-Neutral Test (D5)
Non-Wetland	WDP02, WDP05, WDP06, WDP07, WDP08, WDP12, WDP14, WDP17, WDP18, WDP21, WDP26, WDP27, WDP29, WDP34, WDP41, WDP34, WDP45, WDP43, WDP51, WDP55, WDP57	Surface Water (A1), High Water Table (A2), Saturation (A3)	Drainage Patterns (B10), Crayfish Burrows (C8), Geomorphic Position (D2)

5.2.2 Vegetation

To determine the normality of rainfall at the time of the field investigation, the USACE-based APT, Version 1.0 was utilized. Based on the data provided by the APT, drier than normal conditions were present during the field investigation on April 14, wetter than normal conditions on April 28, and normal conditions on April 29, 2022. The data is provided in **Attachment 5**.

Representative dominant taxa for each distinct habitat type encountered within the project area are listed in the tables below. Indicator status for each species was obtained from the current NWPL.

Strata	Scientific Name	Common Name	NWPL Classification
Tree	Celtis laevigata	Sugarberry	FAC
	Gleditsia triacanthos	Honeylocust	FACU
	Ulmus americana	American elm	FAC
Sapling/Shrub	Celtis laevigata	Sugarberry	FAC
	Gleditsia triacanthos	Honeylocust	FACU
	Fraxinus pennsylvanica	Green ash	FAC
	Rubus trivialis	Southern dewberry	FACU
	Salix nigra	Black willow	FACW
	Ulmus crassifolia	Cedar elm	FAC
Herb	Carex cherokeensis Valerianella radiata Juncus marginatus Tridens albescens Geranium dissectum Oenothera speciosa Lolium perenne Sisyrinchium pallidum Geranium carolinianum Lupinus texensis Anemone berlandieri Eleocharis palustris Rumex crispus Ambrosia psilostachya Sorghum halepense Rapistrum rugosum Daucus carota Alopecurus carolinianus Vicia sativa Solidago canadensis Bromus arvensis Packera tampicana Cynodon dactylon Allium canadense Chaerophyllum tainturieri Ambrosia artemisiifolia Erodium cicutarium ssp. Cicutarium Setaria viridis	Cherokee sedge Beaked cornsalad Grassleaf rush White tridens Cutleaf geranium Pinkladies Perennial ryegrass Pale blue-eyed grass Carolina geranium Texas lupine Tenpetal thimbleweed Common spikerush Curly dock Cuman ragweed Johnsongrass Annual bastardcabbage Queen Anne's lace Carolina foxtail Garden vetch Canada goldenrod Field brome Great Plains ragwort Bermudagrass Meadow garlic Hairyfruit chervil Annual ragweed Redstem stork's bill Green bristlegrass	FACW FACW FACW FAC NI NI FACU NI NI OBL FAC FACU FACU FACU FACU FACU FACU FACU
Woody Vine	Smilax bona-nox	Saw greenbrier	FACU
	Toxicodendron radicans	Eastern poison ivy	FACU

Table 6: Blackland Prairie Disturbance or Tame Grassland Habitat Type Dominant Plant Species

Strata	Scientific Name	Common Name	NWPL Classification
Tree	Salix nigra	Black willow	FACW
	Celtis laevigata	Sugarberry	FAC
	Carya illinoinensis	Pecan	FAC
Sapling/Shrub	Baccharis neglecta	Rooseveltweed	FAC
	Salix nigra	Black willow	FACW
	Cornus drummondii	Roughleaf dogwood	FAC
	Celtis laevigata	Sugarberry	FAC
	Ulmus crassifolia	Cedar elm	FAC
	Maclura pomifera	Osage-orange	FACU
	Gleditsia triacanthos	Honeylocust	FACU
Herb	Ambrosia artemisiifolia	Annual ragweed	FACU
	Bromus arvensis	Field brome	FACU
	Carex tetrastachya	Britton's sedge	FACU
	Lolium perenne	Perennial ryegrass	OBL
	Typha angustifolia	Narrowleaf cattail	FAC
	Rumx crispus	Curly dock	FAC
	Juncus marginatus	Grassleaf rush	FACU
	Elymus virginicus	Coralberry	OBL
	Sisyrinchium pallidum	Pale blue-eyed grass	FAC
	Eleocharis palustris	Common spikerush	FACU
	Stenotaphrum secundatum	St. Augustine grass	OBL
	Taraxacum officinale	Common dandelion	FACU
	Scirpus pendulus	Rufous bulrush	OBL
	Setaria magna	Giant bristlegrass	FACW
Woody Vine	Lonicera japonica	Japanese honeysuckle	FACU
	Toxicodendron radicans	Eastern poison ivy	FACU
	Vitis rotundifolia	Munson's grape	FAC

Table 7: Central Texas Riparian Deciduous Shrubland Habitat Type Dominant Plant Species

Strata	Scientific Name	Common Name	NWPL Classification
	Carya illinoinensis	Pecan	FAC
Tree	Celtis laevigata	Sugarberry	FAC
	Ulmus crassifolia	Cedar elm	FAC
	Ulmus americana	American elm	FAC
	Fraxinus pennsylvanica	Green ash	FAC
	Salix nigra	Black willow	FACW
	Populus deltoides	Eastern cottonwood	FAC
	Acer negundo	Boxelder	FAC
	Celtis laevigata	Sugarberry	FAC
	Cornus drummondii	Roughleaf dogwood	FAC
Sapling/Shrub	Diospyros virginiana	Common persimmon	FAC
	Ulmus americana	American elm	FAC
	Symphoricarpos orbiculatus	Coralberry	FACU
	Fraxinus pennsylvanica	Green ash	FAC
	Allium canadense	Meadow garlic	FACU
	Bromus arvensis	Field brome	FACU
	Carex planostachys	Cedar sedge	NI
	Chasmanthium latifolium	Indian woodoats	FACU
Herb	Elymus virginicus	Virginia wildrye	FAC
	Lolium perenne	Perennial ryegrass	FACU
	Solidago canadensis	Canada goldenrod	FACU
	Rubus trivialis	Southern dewberry	FACU
	Torilis arvensis	Spreading hedgeparsley	NI
	Smilax bona-nox	Saw greenbrier	FACU
Woody Vine	Vitis rotundifolia	Munson's grape	FAC
	Toxicodendron radicans	Eastern poison ivy	FACU

Table 8: Central Texas Riparian Hardwood Forest Habitat Type Dominant Plant Species

Strata	Scientific Name	Common Name	NWPL Classification
Tree	Celtis laevigata	Sugarberry	FAC
Sapling/Shrub	Salix nigra	Black willow	FACW
	Ambrosia trifida	Great ragweed	FAC
	Bouteloua dactyloides	Buffalograss	FACU
	Carex cherokeensis	Cherokee sedge	FACW
	Cynodon dactylon	Bermudagrass	FACU
	Eleocharis palustris	Common spikerush	OBL
	Juncus effusus	Common rush	OBL
	Juncus marginatus	Grassleaf rush	FACW
	Lolium perenne	Perennial ryegrass	FACU
Herb	Phyla fruticose	Diamondleaf fogfruit	FAC
	Plantago rhodosperma	Redseed plantain	FACU
	Potamogeton nodosus	Longleaf pondweed	OBL
	Ranunculus sardous	Hairy buttercup	FAC
	Rumex crispus	Curly dock	FAC
	Setaria viridis	Green bristlegrass	NI
	Scirpus pendulus	Rufous bulrush	OBL
	Sorghum halepense	Johnsongrass	FACU
	Typha angustifolia	Narrowleaf cattail	OBL

Table 9: Central Texas Riparian Herbaceous Habitat Type Dominant Plant Species

Strata	Scientific Name	Common Name	NWPL Classification
Tree	Celtis laevigata	Sugarberry	FAC
	Populus deltoides	Eastern cottonwood	FAC
	Ulmus americana	American elm	FAC
Sapling/Shrub	Cornus drummondii	Roughleaf dogwood	FAC
	Fraxinus pennsylvanica	Green ash	FAC
	Ligustrum sinense	Chinese privet	UPL
	Populus deltoides	Eastern cottonwood	FAC
	Salix nigra	Black willow	FACW
	Rubus trivialis	Southern dewberry	FACU
	Zanthoxylum clava-herculis	Hercules' club	FACU
Herb	Ageratina altissima	White snakeroot	UPL
	Eleocharis palustris	Common spikerush	OBL
	Lolium perenne	Perennial ryegrass	FACU
	Paspalum dilatatum	Dallisgrass	FAC
	Poa annua	Annual bluegrass	FACU
	Sorghum halepense	Johnsongrass	FACU
Woody Vine	Parthenocissus quinquefolia	Virginia creeper	FACU
	Toxicodendron radicans	Eastern poison ivy	FACU

Table 10: Deciduous Woodland Habitat Type Dominant Plant Species

Strata	Scientific Name	Common Name	NWPL Classification
Tree	Celtis laevigata Salix nigra	Sugarberry Black willow	FAC FACW
Sapling/Shrub	Celtis laevigata Juniperus virginiana Maclura pomifera Rubus trivialis Salix nigra	Sugarberry Eastern redcedar Osage-orange Southern dewberry Black willow	FAC UPL FACU FACU FACW
Herb	Bromus arvensis Cynodon dactylon Eleocharis palustris Erigeron canadensis Erodium cicutarium ssp. cicutarium Geranium dissectum Houstonia micrantha Juncus marginatus Lolium perenne Medicago lupulina Myosotis macrosperma Oenothera speciosa Panicum virgatum Phyla fruticose Pyrrhopappus pauciflorus Rumex crispus Setaria viridis Sherardia arvensis Sorghum halepense Tridens albescens Torilis nodosa Valerianella radiata Veronica arvensis	Field brome Bermudagrass Common spikerush Canadian horseweed Redstem Stork's bill Cutleaf geranium Southern bluet Grassleaf rush Perennial ryegrass Black medick Largeseed forget-me-not Pinkladies Switchgrass Diamondleaf fogfruit Smallflower desert-chicory Curly dock Green bristlegrass Blue fieldmadder Johnsongrass White tridens Knotted hedgeparsley Beaked cornsalad Corn speedwell Garden vetch	FACU FACU OBL FACU NI NI FACW FACU FACU FACU FACU FAC NI FACU FACU
Woody Vine	Smilax bona-nox Toxicedendron radicans	Saw greenbrier Eastern poison ivy	FACU

Table 11: Urban Low Intensity Habitat Type Dominant Plant Species

5.2.3 Soils

The table below summarizes hydric soil data identified within the project area. Refer to the wetland determination data forms in **Attachment 2** to see the specific soil data recorded at each sample point.

Wetland Type	Wetland Type Sample Point Name(s)	
Palustrine Emergent Wetland	WPD01, WDP03, WDP09, WDP15, WDP23, WDP25, WDP35, WDP38, WDP40, WDP42, WDP44, WDP46, WDP48, WDP50, WDP52, WDP54, WDP56, WDP59, WDP61	Hydrogen Sulfide (A4), Loamy Gleyed Matrix (F2), Depleted Matrix (F3), Redox Dark Surface (F6), Depleted Dark Surface (F7)
Palustrine Forested Wetland	WDP19	Loamy Gleyed Matrix (F2)
Palustrine Scrub/Shrub Wetland	WDP13, WDP28, WDP30, WDP32, WDP36	Loamy Gleyed Matrix (F2), Depleted Matrix (F3), Redox Dark Surface (F6), Depleted Dark Surface (F7)
Non-Wetland	WDP04, WDP06, WDP14, WDP33, WDP34, WDP41, WDP43, WDP47, WDP55	Depleted Matrix (F3), Redox Dark Surface (F6), Depleted Dark Surface (F7)

6.0 Conclusion

A WOTUS delineation was conducted for FM 741 from US 175 to FM 548 in the cities of Forney and Crandall, and the unincorporated community of Heartland, Kaufman County, Texas (CSJ 1092-01-021). The field delineation was conducted on April 14, 28, and 29, 2022. Refer to **Section 5.2**, above, for a table summarizing the aquatic resources (i.e., waterbodies/wetlands) identified within the project area.

Forty-three aquatic features were observed during the April 2022 field investigation. Three aquatic features are preliminarily categorized as drainage ditches (Water 12, Water 13, and Water 14), seven aquatic features are preliminarily categorized as ephemeral streams (Water 1, Water 4, Water 5, Water 6, Water 8, Water 9, and Water 10), three aquatic features are preliminarily categorized as intermittent streams (Water 2, Water 7, and Water 11), one aquatic feature that crosses the project area in two locations is preliminarily categorized as a perennial stream (Water 3), twenty-three aquatic features are preliminarily categorized as palustrine emergent wetlands (Wetland 1-3, Wetland 5, Wetland 7-9, Wetland 12, Wetland 14-28), one aquatic feature is preliminarily categorized as a palustrine forested wetland (Wetland 6), and four aquatic features that are preliminarily categorized as palustrine scrub/shrub wetlands (Wetland 4, Wetland 10, Wetland 11, and Wetland 13).

6.1 Drainage Ditches

Water 12

Water 12 is a drainage ditch that occurs adjacent to the FM 741 corridor. This water feature is not shown on NWI or topographic maps. This feature only conveys ephemeral flows immediately after precipitation events. This feature does not contain a contiguous OHWM. See Figure 7h in Attachment 1, Wetland Determination Data Forms 13-14 in Attachment 3, and Photos 013-014 in Attachment 4.

Water 13

Water 13 is a drainage ditch that occurs adjacent to the FM 741 corridor. This water feature is not shown on NWI or topographic maps. This feature only conveys ephemeral flows immediately after precipitation events. This feature does not contain a contiguous OHWM. See Figure 7h in Attachment 1, Wetland Determination Data Form 12 in Attachment 3, and Photo 012 in Attachment 4.

Water 14

Water 14 is a drainage ditch that occurs adjacent to the FM 741 corridor. This water feature is not shown on NWI or topographic maps. This feature only conveys ephemeral flows immediately after precipitation events. This feature does not contain a contiguous OHWM. See **Figure 7h** in **Attachment 1**.

6.2 Ephemeral Streams

Water 1

Water 1 (Crossing 1b) is an unnamed ephemeral stream that is shown on NWI and topographic maps. Water 1 appears to exhibit flows in response to direct or repeated precipitation events. Flowing water is infrequent enough that sustained aquatic life is not anticipated within this water feature. Therefore, Water 1 would be classified as a non-relatively permanent water (NRPW). Water 1 exhibited an observable OHWM and bed and banks with a continuous surface hydrologic connection to a potentially jurisdictional WOTUS (Buffalo Creek), a stream that flows into the Trinity River, a traditionally navigable water (TNW). See Figure 7g in Attachment 1, Wetland Determination Data Form 11 in Attachment 3, and Photo 011 in Attachment 4.

Water 4

Water 4 (Crossing 3b) is an unnamed ephemeral stream that is shown on NWI and topographic maps. Water 4 appears to exhibit flows in response to direct or repeated precipitation events. Flowing water is infrequent enough that sustained aquatic life is not anticipated within this water feature. Therefore, Water 4 would be classified as a NRPW. Water 4 exhibited an observable OHWM and bed and banks with a continuous surface hydrologic connection to a potentially jurisdictional WOTUS (Buffalo Creek), a stream that flows into the Trinity River, a TNW. See **Figure 7i** in **Attachment 1.**

Water 5

Water 5 (Crossing 3c) is an unnamed ephemeral stream that is shown on NWI and topographic maps. Water 5 appears to exhibit flows in response to direct or repeated precipitation events. Flowing water is infrequent enough that sustained aquatic life is not anticipated within this water feature. Therefore, Water 5 would be classified as a NRPW. Water 5 exhibited an observable OHWM and bed and banks with a continuous surface hydrologic connection to a potentially jurisdictional WOTUS (Buffalo Creek), a stream that flows into the Trinity River, a TNW. See **Figure 7i** in **Attachment 1**, **Wetland Determination Data Form 17** in **Attachment 3**, and **Photo 017** in **Attachment 4**.

Water 6

Water 6 (Crossing 5b) is an unnamed ephemeral stream that is shown on NWI and topographic maps. Water 6 appears to exhibit flows in response to direct or repeated precipitation events. Flowing water is infrequent enough that sustained aquatic life is not anticipated within this water feature. Therefore, Water 6 would be classified as a NRPW. Water 6 exhibited an observable OHWM and bed and banks with a continuous surface hydrologic connection to a potentially jurisdictional WOTUS (Buffalo Creek), a stream that flows into the Trinity River, a TNW. See **Figure 7j & 7k** in **Attachment 1**.

Water 8

Water 8 (Crossing 6b) is an unnamed ephemeral stream that is shown on NWI but is not depicted on topographic maps. Water 8 appears to exhibit flows in response to direct or repeated precipitation events. Flowing water is infrequent enough that sustained aquatic life is not anticipated within this water feature. Therefore, Water 8 would be classified as a NRPW. Water 8 exhibited an observable OHWM and bed and banks with a continuous surface hydrologic connection to a potentially jurisdictional WOTUS (Buffalo Creek), a stream that flows into the Trinity River, a TNW. See **Figure 7I** in **Attachment 1**.

Water 9

Water 9 (Crossing 7a) is an unnamed ephemeral stream that is not depicted on NWI or topographic maps. Water 9 appears to exhibit flows in response to direct or repeated precipitation events. Flowing water is infrequent enough that sustained aquatic life is not anticipated within this water feature. Therefore, Water 9 would be classified as a NRPW. Water 9 exhibited an observable OHWM and bed and banks with a continuous surface hydrologic connection to a potentially jurisdictional WOTUS (Mustang Creek), a stream that flows into the Trinity River, a TNW. See **Figure 7n** in **Attachment 1**.

Water 10

Water 10 (Crossing 8a) is an unnamed ephemeral stream that is depicted on NWI and topographic maps. Water 10 appears to exhibit flows in response to direct or repeated precipitation events. Flowing water is infrequent enough that sustained aquatic life is not anticipated within this water feature. Therefore, Water 10 would be classified as a NRPW. Water 10 exhibited an observable OHWM and bed and banks with a continuous surface hydrologic connection to a potentially jurisdictional WOTUS (Mustang Creek), a stream that flows into the Trinity River, a TNW. See **Figure 70** in **Attachment 1**, **Wetland Determination Data Form 45** in **Attachment 3**, and **Photo 045** in **Attachment 4**.

6.3 Intermittent Streams

Water 2

Water 2 (Crossing 2a) is an unnamed intermittent stream that is not shown on NWI maps but is depicted on topographic maps. Based on the size of Water 2's watershed and observations made during field investigations, Water 2 would be classified as a relatively permanent water (RPW) with prolonged hydrologic regimes capable of supporting aquatic fauna. Water 2 also exhibited an observable OHWM and bed and banks with a continuous surface hydrologic connection to a potentially jurisdictional WOTUS (Buffalo Creek), a stream that flows into the Trinity River, a TNW. See **Figure 7h** in **Attachment 1**, **Wetland Determination Data Form 12** in **Attachment 3**, and **Photo 012** in **Attachment 4**.

Water 7

Water 7 (Crossing 6a) an unnamed intermittent stream that is depicted on NWI and topographic maps. Based on the size of Water 7's watershed and observations made during field investigations, Water 7 would be classified as a RPW with prolonged hydrologic regimes capable of supporting aquatic fauna. Water 7 also exhibited an observable OHWM and bed and banks with a continuous surface hydrologic connection to a potentially jurisdictional WOTUS (Buffalo Creek), a stream that flows into the Trinity River, a TNW. See Figure 7k in Attachment 1, Wetland Determination Data Form 27 in Attachment 3, and Photo 027 in Attachment 4.

Water 11

Water 11 (Crossing 9a) is an unnamed intermittent stream that is depicted on NWI and topographic maps. Based on the size of Water 11's watershed and observations made during field investigations, Water 11 would be classified as a RPW with prolonged hydrologic regimes capable of supporting aquatic fauna. Water 11 also exhibited an observable OHWM and bed and banks with a continuous surface hydrologic connection to a potentially jurisdictional WOTUS (Mustang Creek), a stream that flows into the Trinity River, a TNW. See **Figure 7x** in **Attachment 1**.

6.4 Perennial Stream

Water 3

Water 3 (Crossing 3a and Crossing 5a) is a named perennial stream (Buffalo Creek) that is shown on NWI and topographic maps. Based on the size of Water 3's watershed and observations made during field investigations, Water 3 would be classified as a RPW with prolonged hydrologic regimes capable of supporting aquatic fauna. Water 3 also exhibited an observable OHWM and bed and banks with a continuous surface hydrologic connection to a potentially jurisdictional WOTUS (East Fork Trinity River), a stream that flows into the Trinity River, a TNW. See Figure 7i & 7j in Attachment 1, Wetland Determination Data Forms 17-18, 21-22 in Attachment 3, and Photos 017-018, 021-022 in Attachment 4.

6.5 Palustrine Emergent Wetlands

Wetland 1

Wetland 1 is a palustrine emergent wetland that is not shown on NWI and topographic maps. Wetland 1 is located high on the landscape and appears to have formed due to a concave depression collecting precipitation as the result of hydrology driven by direct precipitation and overland flow entrapment. This feature does not exhibit an observable hydrological connection to a WOTUS and appears to be isolated. See **Figure 7a** in **Attachment 1**, **Wetland Determination Data Forms 01-02** in **Attachment 3**, and **Photos 01-02** in **Attachment 4**.

Wetland 2 is a palustrine emergent wetland that is not shown on NWI and topographic maps. Wetland 2 is located high on the landscape and appears to have formed due to a concave depression collecting precipitation as the result of hydrology driven by direct precipitation and overland flow entrapment. This feature does not exhibit an observable hydrological connection to a WOTUS and appears to be isolated. See **Figure 7a** in **Attachment 1**, **Wetland Determination Data Forms 03-04** in **Attachment 3**, and **Photos 03-04** in **Attachment 4**.

Wetland 3

Wetland 3 (Crossing 1a) is a palustrine emergent wetland this is shown on NWI and topographic maps. Wetland 3 is abutting Water 1, an emergent stream that is preliminarily considered a jurisdictional WOTUS. See Figure 7g in Attachment 1, Wetland Determination Data Forms 09-10 in Attachment 3, and Photos 09-10 in Attachment 4.

Wetland 5

Wetland 5 (Crossing 2c) is a palustrine emergent wetland that is not shown on NWI maps but is depicted on topographic maps. Wetland 5 appears to be an impounded stream features and water exits this feature frequently enough to be hydrologically connected to Water 2, a presumed intermittent stream located within the project area. See Figure 7h in Attachment 1, Wetland Determination Data Forms 15 in Attachment 3, and Photo 15 in Attachment 4.

Wetland 7

Wetland 7 (Crossing 4) is an unnamed palustrine emergent wetland that is not shown on NWI maps or topographic maps. Wetland 7 appears to be an impounded stream features and water exits this feature frequently enough to be hydrologically connected to Water 3, a presumed perennial stream located within the project area. See **Figure 7j** in **Attachment 1**.

Wetland 8

Wetland 8 (Crossing 5c) is a palustrine emergent wetland that is not shown on NWI maps but is depicted on topographic maps. Wetland 8 appears to be an impounded stream features and water exits this feature frequently enough to be hydrologically connected to Water 3, a presumed perennial stream located within the project area. See Figure 7j & 7k in Attachment 1, Wetland Determination Data Forms 23-24 in Attachment 3, and Photos 23-24 in Attachment 4.

Wetland 9

Wetland 9 (Crossing 5d) is a palustrine emergent wetland that is not shown on NWI maps but is depicted on topographic maps. Wetland 9 appears to be an impounded stream feature and water exits this feature frequently enough to be hydrologically connected to Water 3, a presumed perennial stream located within the project area. See Figure 7k in Attachment 1, Wetland Determination Data Forms 25-26 in Attachment 3, and Photos 25-26 in Attachment 4.

Wetland 12

Wetland 12 (Crossing 6d) is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 12 appears to be a roadside collection facility that exhibits water exiting the feature frequently enough to be hydrologically connected to Water 3, a presumed perennial stream located within the project area. See Figure 7m in Attachment 1, Wetland Determination Data Form 35 in Attachment 3, and Photo 35 in Attachment 4.

Wetland 14 (Crossing 7b) is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 14 appears to be a roadside collection facility that exhibits water exiting the feature frequently enough to be hydrologically connected to a potentially jurisdictional WOTUS (Mustang Creek). See **Figure 7n** in **Attachment 1**, **Wetland Determination Data Forms 40-41** in **Attachment 3**, and **Photos 40-41** in **Attachment 4**.

Wetland 15

Wetland 15 (Crossing 7c) is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 15 appears to be a roadside collection facility that exhibits water exiting the feature frequently enough to be hydrologically connected to a potentially jurisdictional WOTUS (Mustang Creek). See **Figure 7m** in **Attachment 1**, **Wetland Determination Data Form 35** in **Attachment 3**, and **Photo 35** in **Attachment 4**.

Wetland 16

Wetland 16 is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 16 appears to be a roadside collection facility that appears to be isolated. See **Figure 7m** in **Attachment 1**, **Wetland Determination Data Forms 42-43** in **Attachment 3**, and **Photos 42-43** in **Attachment 4**.

Wetland 17

Wetland 17 is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 17 appears to be a roadside collection facility that appears to be isolated. See **Figure 7m** in **Attachment 1**, **Wetland Determination Data Forms 43-44** in **Attachment 3**, and **Photos 43-44** in **Attachment 4**.

Wetland 18

Wetland 18 is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 18 appears to be a roadside collection facility that appears to be isolated. See **Figure 7n** & **7o** in **Attachment 1**.

Wetland 19

Wetland 19 is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 19 appears to be a roadside collection facility that appears to be isolated. See **Figure 7n** & **7o** in **Attachment 1**.

Wetland 20

Wetland 20 is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 20 appears to be a roadside collection facility that appears to be isolated. See Figure 7q in Attachment 1, Wetland Determination Data Forms 48-49 in Attachment 3, and Photos 48-49 in Attachment 4.

Wetland 21

Wetland 21 is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 21 appears to be a roadside collection facility that appears to be isolated. See Figure 7q in Attachment 1, Wetland Determination Data Forms 46-47 in Attachment 3, and Photos 46-47 in Attachment 4.

Wetland 22

Wetland 22 is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 22 appears to be a roadside collection facility that appears to be isolated. See Figure 7q in Attachment 1, Wetland Determination Data Forms 54-55 in Attachment 3, and Photos 54-55 in Attachment 4.

Wetland 23

Wetland 23 is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 23 appears to be a roadside collection facility that appears to be isolated. See Figure 7q in Attachment 1, Wetland Determination Data Forms 50-51 in Attachment 3, and Photos 50-51 in Attachment 4.

Wetland 24 is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 24 appears to be a roadside collection facility that appears to be isolated. See Figure 7q in Attachment 1, Wetland Determination Data Forms 52-53 in Attachment 3, and Photos 52-53 in Attachment 4.

Wetland 25

Wetland 25 is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 25 appears to be a roadside collection facility at the base of a cross culvert under FM 741 that appears to be isolated. See Figure 7q in Attachment 1.

Wetland 26

Wetland 26 is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 26 appears to be a roadside collection facility that appears to be isolated. See Figure 7r in Attachment 1, Wetland Determination Data Forms 56-57 in Attachment 3, and Photos 56-57 in Attachment 4.

Wetland 27

Wetland 27 is a palustrine emergent wetland that is not depicted on NWI or topographic maps. Wetland 27 appears to be a roadside collection facility that appears to be isolated. See Figure 7u in Attachment 1, Wetland Determination Data Forms 59-60 in Attachment 3, and Photos 59-60 in Attachment 4.

Wetland 28

Wetland 28 (Crossing 9b) is a palustrine emergent wetland this is shown on NWI and topographic maps. Wetland 3 is abutting Water 11, an intermittent stream that is preliminarily considered a jurisdictional WOTUS. See Figure 7x in Attachment 1, Wetland Determination Data Forms 61-62 in Attachment 3, and Photos 61-62 in Attachment 4.

6.6 Palustrine Forested Wetland

Wetland 6

Wetland 6 (Crossing 3d) is a palustrine forested wetland that is not shown on NWI maps but is depicted on topographic maps. Wetland 6 appears to be an impounded stream features and water exits this feature frequently enough to be hydrologically connected to Waters 3 and 4, a presumed ephemeral stream located within the project area. See Figure 7i in Attachment 1, Wetland Determination Data Forms 19-20 in Attachment 3, and Photos 19-20 in Attachment 4.

6.7 Palustrine Scrub/Shrub Wetland

Wetland 4

Wetland 4 (Crossing 2b) is a palustrine scrub/shrub wetland that is not shown on NWI maps but is depicted on topographic maps. Wetland 4 appears to be an impounded stream feature, and water exits this feature frequently enough to be hydrologically connected to Water 2, a presumed intermittent stream located within the project area. See Figure 7h in Attachment 1, Wetland Determination Data Form 12 in Attachment 3, and Photo 12 in Attachment 4.

Wetland 10

Wetland 10 (Crossing 6c) is a palustrine scrub/shrub wetland that is shown on NWI maps but is not depicted on topographic maps. Wetland 10 appears to be an impounded stream feature and water exits this feature frequently enough to be hydrologically connected to Water 3, a presumed perennial stream located within the project area. See Figure 7I in Attachment 1, Wetland Determination Data Forms 28-29 in Attachment 3, and Photos 28-29 in Attachment 4.

Wetland 11 (Crossing 6e) is a palustrine scrub/shrub wetland that is not shown on NWI or topographic maps. Wetland 11 appears to be a roadside collection facility that exhibits water exiting the feature frequently enough to be hydrologically connected to Water 3, a presumed perennial stream located within the project area. See Figure 7I in Attachment 1, Wetland Determination Data Forms 30-31 in Attachment 3, and Photos 30-31 in Attachment 4.

Wetland 13

Wetland 13 (Crossing 6f) is a palustrine scrub/shrub wetland that is not shown on NWI or topographic maps. Wetland 13 appears to be a roadside collection facility that exhibits water exiting the feature frequently enough to be hydrologically connected to Water 3, a presumed perennial stream located within the project area. See Figure 7I in Attachment 1, Wetland Determination Data Forms 32-33 in Attachment 3, and Photos 32-33 in Attachment 4.

The professional opinion offered in this report is based on best professional judgement. It should be noted that the USACE makes the final determination on the location of waterbody and wetland boundaries.

7.0 References

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8.0 Attachments

- 1. Figures
- 2. Wetland Determination Data Forms
- 3. Historical Aerial Photographs
- 4. Site Photographs
- 5. USACE Antecedent Precipitation Tool Results

Attachment 1 - Figures


































































Attachment 2 - Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site:	FM 741 EA	(City/County:	к	Kaufman County	Sampling Date:	04/14/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Texas	Sampling Point:	WDP01
Investigator(s):	CW and CP		Section, Town	ship, Range:		N/A	
Landform (hillslope, terrace,	etc): depression		Local relief (co	ncave, conve	ex, none): c	oncave	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6364	599	Lona: -96.466	52119 Datur	n: NAD 83
Soil Map Unit Name: Hous	ton Black clay. 0 to 1 percent slopes				NWI classific	cation: NA	
Are climatic / hvdrologic cond	ditions on the site typical for this time	of vear?	Yes	No X	(If no. explain in Rem	arks.)	
Are Vegetation . So	oil . or Hydrology	significantly	disturbed?	Are "I	Normal Circumstances" pr	esent? Yes	X No
Are Vegetation . So	oil . or Hydrology	naturally pro	blematic?	(If ne	eded. explain any answer	s in Remarks.)	
SUMMARY OF FINDIN	IGS - Attach site map show	ing samr	olina point	locations.	transects. importa	nt features, etc.	
	acont? Yor Y N		<u></u>	<u></u> ,	,		
Hydrio Soil Prosont?		°		ha Samplad	Aroa		
Watland Hudralagy Drazar		°	15 1	hin o Wotlon	d2 Vaa	V No	
		·	with			<u> </u>	_
Remarks: Three of the th conditions duri	ree wetland indicators were present. ng the site investigations were drier	This point i than normal	s located withi	n a wetland.	The Antecedent Precipital	ion Tool scored a 9, ir	ndicating
VEGETATION - Use so	cientific names of plants.						
					Dominance Test wor	ksheet:	
		Absolute	Dominant	Indicator	Number of Dominant	Species	
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW	or FAC:	2 (A)
1							
2				·	Iotal Number of Domi	nant	
3					Species Across All St		2 (B)
4				· <u> </u>	Dereent of Deminent (
		0	= 10tal Cove	er	That Are OBL EACW	or EAC: 10	
Sapling/Shrub Stratum	(Plot size:)				That Ale OBL, FACW	01 FAC. 10	<u>0.0</u> (А/В)
1				· <u> </u>	Prevalence Index wo	rksheet:	
2					Total % Cover of	: Multip	bly by:
3				· <u> </u>	OBL species	0 x 1 =	0
4. 5					FACW species	70 x 2 =	140
0			= Total Cove		FAC species	10 x 3 =	30
Herb Stratum (Plot size:	30' radius				FACU species	0 x 4 =	0
1 Carex cherokeensis	<u> </u>	25	Yes	FACW	UPL species	5 x 5 =	25
2. Valerianella radiata		25	Yes	FACW	Column Totals:	85 (A)	195 (B)
3. Juncus marginatus		15	No	FACW			
4. Tridens albescens		10	No	FAC	Prevalence Inde	ex = B/A =2.	29
5. Geranium dissectum		5	No	NI	Livelya why tie Magaza	ian Indiantana.	
6. Packera tampicana		5	No	FACW	A Dopid Toot for	Ion Indicators:	
7.							JII
8.					X 3 Prevalence In	51 is >50 %	
9.					4 - Morphologica	Adaptations ¹ (Provide	e supporting
10					Problematic Hydr	ophytic Vegetation ¹ (F	-
		85	= Total Cove	er			
Woody Vine Stratum (P	Plot size:)				¹ Indicators of hydric se	oil and wetland hydrol	oav must
1					be present, unless dis	turbed or problematic.	
2					. ,	•	
		0	_ = Total Cove	er	Hydrophytic		
% Bare Ground in Herb St	ratum 15				Vegetation		
					Present?	Yes X No	
Remarks:							
Remarks.							
Hydrophytic vegetation is	s present.						

SOIL	
------	--

Depth	ption: (Describe to tl Matrix	ne depth need	ea to document th Redox	e indicator Features	or confirm	the absei	nce of indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 3/1	90	10YR 8/1	10	D	М	Clay	
							<u> </u>	
		<u> </u>			<u> </u>			
				. <u> </u>	<u> </u>			
¹ Type: C=Cond	centration, D=Depletio	n, RM=Reduce	d Matrix, CS=Cove	red or Coate	ed Sand Gra	ains.	² Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil In	dicators: (Applicable	to all LRRs, ι	Inless otherwise n	oted.)			Indicators for	r Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gley	ed Marix (S	4)		1 cm	Muck (A9) (LRR I, J)
Histic Epi	pedon (A2)		Sandy Red	ox (S5)			Coast	t Prairie Redox (A16) (LRR F, G, H)
Black His	tic (A3)		Stripped Ma	atrix (S6)			Dark	Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Muc	ky Mineral (F1)		High I	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)		Loamy Gley	ed Matrix (F	-2)		(LRR	H outside of MLRA 72 & 73)
1 cm Muc	k (A9) (LRR F, G, H))	Depleted M	atrix (F3)	~		Redu	ced Vertic (F18)
Depleted	Below Dark Surface (/	411)	Redox Dark	CSurface (F6	6) (F7)		Red F	Parent Material (TF2)
I NICK Dar	K Sufface (A12)		X Depleted D		(F7)		very :	Shallow Dark Surface (TF12)
Sanuy Mi	ucky Peat or Peat (S2)		High Plains	Depression	9) s (E16)			(Explain III Remarks)
2.0 Cm M	ky Peat or Peat (S3)	(IRR F)	(MI RA 72)	8 73 of I RR	2 H)		wetland	t hydrology must be present
0 011 11100		(2.0.07)			,		unless	disturbed or problematic.
Restrictive La	iver (if present):							
Type:	. j e: (.: p: eee,:							
Depth (inc	hes):						Hydric Soil Pres	ent? Yes X No
Remarks:								
Hydric soil ind	dicators are present.							
	v							
Wetland Hydr	ology Indicators:							
Primary Indica	tors (minimum of one	required: check	(all that apply)				Secondary	(Indicators (minimum of two required)
X Surface V	Vater (A1)		Salt Crust (B11)			<u>occontadiy</u> Surfa	ce Soil Cracks (B6)
X High Wat	er Table (A2)		Aquatic Inv	ertebrates (E	313)		Spars	selv Vegetated Concave Surface (B8)
X Saturation	n (A3)		Hydrogen S	Sulfide Odor	(C1)		Drain	age Patterns (B10)
Water Ma	irks (B1)		Dry-Seasor	Water Table	e (C2)		Oxidiz	zed Rhizospheres on Living Roots (C3)
Sediment	Deposits (B2)		Oxidized RI	nizospheres	along Living	g Roots (C	C3) (wh	ere tilled)
Drift Depo	osits (B3)		(where no	ot tilled)			X Crayf	ish Burrows (C8)
Algal Mat	or Crust (B4)		Presence o	f Reduced Ir	ron (C4)		Satur	ation Visible on Aerial Imagery (C9)
Iron Depo	osits (B5)		Thin Muck	Surface (C7))		X Geom	norphic Position (D2)
Inundatio	n Visible on Aerial Ima	igery (B7)	Other (Expl	ain in Rema	rks)		X FAC-I	Neutral Test (D5)
Water-Sta	ained Leaves (B9)						Frost-	Heave Hummocks (D7)(LRR F)
Field Observa	ations:							
Surface Water	Present? Ye	es <u>X</u> No	Depth (inc	hes):	2			
Water Table P	resent? Ye	es <u>X</u> No	Depth (inc	hes):	12			
Saturation Pre	sent? Ye	es <u>X</u> No	Depth (inc	hes):	12	Wetla	nd Hydrology Pres	ent? Yes X No
(includes capil	lary fringe)							
Describe Reco	orded Data (stream ga	uge, monitoring	well, aerial photos,	previous in	spections),	if available	9:	
Domorko								
Remarks: Hydrology ind	icators are present							
a garology illu	isatoro aro prosont.							

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: FM 741 EA		City/County:	ĸ	aufman County	Sampling Date:	04/14/2022
Applicant/Owner: Texas Departmen	t of Transpor	tation		State: Texas	Sampling Point:	WDP02
Investigator(s): CW and CP		Section, Town	ship, Range:		N/A	
Landform (hillslope, terrace, etc): roadside depressio	n l	Local relief (co	oncave, conve	ex, none): con	cave S	Slope (%): 0-1
Subregion (LRR): LRR J MLRA 86A	Lat:	32.63659	9537	Long: -96.466442	228 Datur	n: NAD 83
Soil Map Unit Name: Houston Black clay 0 to 1 percent slopes				NWI classificat	ion: NA	
Are climatic / hydrologic conditions on the site typical for this time	e of year?	Yes	No X	(If no, explain in Remar	ks.)	
Are Vegetation , Soil , or Hydrology	significantly	disturbed?	Are "I	Normal Circumstances" pres	ent? Yes X	No
Are Vegetation , Soil , or Hydrology	naturally pro	blematic?	(If nee	eded, explain any answers ir	n Remarks.)	
SUMMARY OF FINDINGS - Attach site map show	ving samp	oling point	locations,	transects, important	features, etc.	
Hydrophytic Vegetation Present? Yes	No X					
Hydric Soil Present? Yes	No X	ls t	he Sampled	Area		
Wetland Hydrology Present? Yes	No X	wit	hin a Wetlan	d? Yes	No X	
Remarks: None of the three wetland indicators were present. conditions during the site investigations were drier	This point is than normal.	not located w	vithin a wetlan	d. The Antecedent Precipita	tion Tool scored a 9	, indicating
VEGETATION - Use scientific names of plants.				1		
				Dominance Test works	heet:	
	Absolute	Dominant	Indicator	Number of Dominant Sp	ecies	
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW, or	FAC: () (A)
1						
2				Total Number of Domina	nt	
3				Species Across All Strata	a: <u> </u>	3 (B)
4						
	0	= Total Cov	er	Percent of Dominant Spe	ecies	
Sapling/Shrub Stratum (Plot size:)				That Are OBL, FACW, or	FAC: 0	.0 (A/B)
1				Drevelence Index work	- h 4:	
2					Sneet:	ha ha a
3						
4					x 1 =	0
5				FAC species	$\frac{2}{2}$	0
	0	_ = Total Cov	er	FACIL species	<u> </u>	60
Herb Stratum (Plot size: <u>30' radius</u>)				UPL species 8	<u>5 x5=</u>	425
1. <u>Oenothera speciosa</u>	40	Yes	NI	Column Totals: 10)0 (A)	485 (B)
2. Lolium perenne	15	Yes	FACU		(()	
3. <u>Sisyrinchium pallidum</u>	15	Yes	NI	Prevalence Index :	= B/A =	85
4. Geranium carolinianum	10	No	<u>NI</u>			
5. Lupinus texensis	10	No	<u>NI</u>	Hydrophytic Vegetation	n Indicators:	
6. Anemone berlandieri	10	No	NI	1 - Rapid Test for H	ydrophytic Vegetatio	on
				2 - Dominance Test	is >50%	
8				3 - Prevalence Inde	x ≤3.0¹	
9				4 - Morphological A	daptations ¹ (Provide	e supporting
10				Problematic Hydrop	hytic Vegetation ¹ (E	xplain)
	100	= Total Cov	er			
Woody Vine Stratum (Plot size:)				¹ Indicators of hydric soil	and wetland hydrold	ogy must
1				be present, unless distur	bed or problematic.	
2						
	0		er	Hydrophytic		
% Bare Ground in Herb Stratum 100				Vegetation		
				Present? Ye	es <u>No</u>	X
Remarks						
Hydronhytic vegetation is not present						

S	0	IL	
J	J		-

Ueptn				E e eturca a					
		0/.			no1 1?	Touturo	Domotio		
		100	JUIUI (MUIST)	<u>70</u> Iy	LOC		fill material/gravel present		
<u> </u>	1015 3/2	100		·		Gidy	าก กลเอกลมฐาลงอา present		
				<u> </u>					
				<u> </u>					
		·							
		·							
· ·		·		·					
				······					
¹ Type: C=Conce	ntration, D=Depletion	n, RM=Reduced	Matrix, CS=Cover	ed or Coated Sar	d Grains.	²Loc	cation: PL=Pore Lining, M=Matrix.		
Hydric Soil Indi	cators: (Applicable	to all LRRs, un	less otherwise n	oted.)		Indicato	rs for Problematic Hydric Soils ³ :		
Histosol (A1	I)		Sandy Gley	ed Marix (S4)			I cm Muck (A9) (LRR I, J)		
Histic Epipe	don (A2)		Sandy Redo	ox (S5)		(Coast Prairie Redox (A16) (LRR F, G, H)		
Black Histic	(A3)		Stripped Ma	trix (S6)		[Dark Surface (S7) (LRR G)		
Hydrogen S	Sulfide (A4)		Loamy Muc	ky Mineral (F1)		H	High Plains Depressions (F16)		
Stratified La	ayers (A5) (LRR F)		Loamy Gley	ed Matrix (F2)		(LRR H outside of MLRA 72 & 73)		
1 cm Muck	(A9) (LRR F, G, H)	1	Depleted M	atrix (F3)		F	Reduced Vertic (F18)		
Depleted Be	elow Dark Surface (A	411)	Redox Dark	Surface (F6)		— f	Red Parent Material (TF2)		
Thick Dark	Surface (A12)		Depleted Da	ark Surface (F7)		\	Very Shallow Dark Surface (TF12)		
Sandy Mucl	ky Mineral (S1)			essions (F8)	2)		Juner (Explain in Remarks)		
	Ny Feat OF Peat (S2)	I DD E)	°Ir	alload by drology must be present		
	T CAL UI FEAL (33)					we Lin	less disturbed or problematic.		
						-			
Restrictive Laye	er (if present):								
Type. Denth (incho	<i>ve).</i>		-			Hydric Soil	Present? Yes No Y		
			_						
Remarks:									
Hydric soil indic	ators are not preser	nt.							
HYDROLOGY									
HYDROLOGY Wetland Hydrol	ogy Indicators:		Il that cools?						
HYDROLOGY Wetland Hydrol Primary Indicator	ogy Indicators: rs (minimum of one r	required; check a	Ill that apply)	244)		Secol	ndary Indicators (minimum of two required)		
HYDROLOGY Wetland Hydrol Primary Indicator Surface Wa	ogy Indicators: rs (minimum of one r ter (A1) Table (A2)	required; check a	Il that apply)	311)		<u>Seco</u> i	ndary Indicators (minimum of two required) Surface Soil Cracks (B6)		
HYDROLOGY Wetland Hydrol Primary Indicator Surface Wa High Water Saturation (ogy Indicators: rs (minimum of one r ter (A1) Table (A2) A3)	required; check a	III that apply) Salt Crust (I Aquatic Inve	311) ertebrates (B13)		Secol	ndary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Orainage Patterns (B10)		
HYDROLOGY Wetland Hydrol Primary Indicator Surface Wa High Water Saturation (ogy Indicators: rs (minimum of one r ter (A1) Table (A2) A3) s (B1)	required; check a	III that apply) Salt Crust (I Aquatic Inve Hydrogen S	311) ertebrates (B13) ulfide Odor (C1) Water Table (C2)		<u>Seco</u> i \$ \$ \$	ndary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Dividized Bhizospheres on Living Boots (C3)		
HYDROLOGY Wetland Hydrol Primary Indicator Surface Wa High Water Saturation (Water Mark Sediment D	ogy Indicators: rs (minimum of one r ter (A1) Table (A2) A3) s (B1) leposits (B2)	required; check a	Il that apply) Salt Crust (I Aquatic Inve Hydrogen S Dry-Season Oxidized P	311) ertebrates (B13) ulfide Odor (C1) Water Table (C2)	l iving Roots (<u>Secon</u>	ndary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Dxidized Rhizospheres on Living Roots (C3)		
HYDROLOGY Wetland Hydrol Primary Indicator Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi	ogy Indicators: rs (minimum of one r ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3)	required; check a	II that apply) Salt Crust (I Aquatic Inve Hydrogen S Dry-Season Oxidized Rf (where po	B11) ertebrates (B13) ulfide Odor (C1) Water Table (C2) nizospheres along ot tilled)) Living Roots (0	<u>Seco</u> r S C C C3)	ndary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Dxidized Rhizospheres on Living Roots (C3) (where tilled) Cravfish Burrows (C8)		
HYDROLOGY Wetland Hydrol Primary Indicator Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Algal Mat or	ogy Indicators: rs (minimum of one r ter (A1) Table (A2) A3) s (B1) reposits (B2) its (B3) r Crust (B4)	required; check a	Il that apply) Salt Crust (I Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of	B11) ertebrates (B13) ulfide Odor (C1) Water Table (C2) nizospheres along ot tilled) f Reduced Iron (C	Living Roots (0	<u>Seco</u> i S S C C3) (ndary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Dxidized Rhizospheres on Living Roots (C3) (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)		
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Project/Site:	FM 741 EA	(City/County:	k	Kaufman County	S	Sampling Date:	04/1	4/2022
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Applicant/Owner:	Texas Department	of Transpor	tation		State: Te	exas S	Sampling Point	: W	DP03
Investigator(s):	CW and CP	;	Section, Town	ship, Range:			N/A		
Landform (hillslope, terrace, etc):	depression		Local relief (co	oncave, conve	ex, none):	concav	'e	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.63733	3966	Long: -96	.46639772	Dat	.um: 🚹	NAD 83
Soil Map Unit Name: Houston E	Black clay, 0 to 1 percent slopes	;			NWI cla	assification	NA		
Are climatic / hydrologic condition	s on the site typical for this time	of year?	Yes	No x	(If no, explain in	Remarks.)		
Are Vegetation, Soil	, or Hydrologys	significantly	disturbed?	Are "	Normal Circumstance	es" present	? Yes	XN	lo
Are Vegetation, Soil	, or Hydrologyı	naturally pro	blematic?	(If ne	eded, explain any an	swers in R	emarks.)		
SUMMARY OF FINDINGS	- Attach site map show	ing samp	oling point	locations	, transects, imp	ortant fe	atures, etc		
Hydrophytic Vegetation Presen	t? Yes X N	0							
Hydric Soil Present?	Yes X N	o	ls t	the Sampled	Area				
Wetland Hydrology Present?	Yes X N	0	wit	hin a Wetlan	d? Ye	s X	No		
Remarks: Three of the three we conditions during the	etland indicators were present. T site investigations were drier th	This point is an normal.	located withir	n a wetland. T	he Antecedent Preci	pitation Too	ol scored a 9, i	ndicating	
VEGETATION - Use scien	tific names of plants.								
					Dominance Tes	t workshee	et:		
		Absolute	Dominant	Indicator	Number of Domi	nant Specie	es		
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, F	ACW, or FA	AC:	3	(A)
1									
2					Total Number of	Dominant			
3					Species Across /	All Strata:		3	(B)
4									
		0	= Total Cov	er	Percent of Domin	nant Specie	es		
Sapling/Shrub Stratum (Plot	size: 30' radius)				That Are OBL, F	ACW, or FA	AC:	100.0	(A/B)
1. Fraxinus pennsylvanica		5	Yes	FAC	Prevalence Inde	worksh	oot:		
2					Total % Co	ver of	Mul	tiply by:	
3						40	<u>v 1 =</u>	<u>1019 09.</u> 40	
4					FACW species	30	x2=	60	
5					FAC species	20		60	
		5	= Total Cov	er	FACU species	15	x 4 =	60	
Herb Stratum (Plot size:	<u>30' radius</u>)			0.01	UPL species	10	x 5 =	50	
1. Eleocharis palustris		40	Yes	OBL	Column Totals:	115	(A)	270	(B)
2. Valerianella radiata		30	Yes	FACW					()
3. Rumex crispus		15			Prevalence	e Index = B	/A =	2.35	
4. Ambrosia psilostachya		10		FACU					
		10	INU		Hydrophytic Ve	getation In	dicators:		
7					1 - Rapid Te	st for Hydr	ophytic Vegeta	ation	
8					X 2 - Dominar	ice Test is :	>50%		
9					X 3 - Prevalen	ice Index ≤	3.0 ¹		
10					4 - Morpholo	ogical Adap	otations ¹ (Prov	de suppo	rting
10		110	= Total Cov	er	Problematic	Hydrophyt	ic Vegetation ¹	(Explain))
Woody Vine Stratum (Plot si	76.)	110							
					¹ Indicators of hyd	dric soil and	d wetland hydr	ology mus	st
2					be present, unles	ss disturbe	d or problemat	iC.	
		0	= Total Cov	er	Hydrophytic				
% Bare Ground in Herb Stratun	n <u> 0 </u>				Vegetation				
					Present?	Yes	<u> </u>		
Remarks: Hydrophytic vegetation is pres	sent.								
L									

SOIL	
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Depth			Redu	reatures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 3/1	90	10YR 8/1	10	D	Μ	Clay	
							·	
							·	
Type: C=Conc	entration, D=Depletio	n, RM=Reduc	ed Matrix, CS=Cove	red or Coat	ed Sand Gr	ains.	²Locati	ion: PL=Pore Lining, M=Matrix.
ydric Soil Ind	licators: (Applicable	e to all LRRs,	unless otherwise r	noted.)			Indicators	for Problematic Hydric Soils ³ :
Histosol (A	\1)		Sandy Gle	yed Marix (S	64)		1 ci	m Muck (A9) (LRR I, J)
Histic Epip	oedon (A2)		Sandy Rec	ox (S5)			Coa	ast Prairie Redox (A16) (LRR F, G, H)
Black Hist	ic (A3)		Stripped M	atrix (S6)			Dar	rk Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Mu	cky Mineral	(F1)		Hig	h Plains Depressions (F16)
Stratified I	ayers (A5) (LRR F)		Loamy Gle	yed Matrix (F2)		(LR	RR H outside of MLRA 72 & 73)
1 cm Muc	k (A9) (LRR F, G, H)	Depleted N	latrix (F3)			Rec	duced Vertic (F18)
Depleted I	Below Dark Surface (A	A11)	Redox Dar	k Surface (F	-6)		Rec	d Parent Material (TF2)
Thick Darl	k Surface (A12)		X Depleted D	ark Surface	e (F7)		Ver	y Shallow Dark Surface (TF12)
Sandy Mu	cky Mineral (S1)		Redox Dep	pressions (F	8)		Oth	ier (Explain in Remarks)
2.5 cm Mu	icky Peat or Peat (S2) (LRR G, H)	High Plains	3 Depression	ns (F16)		³Indic	cators of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LRI	R H)		wetla	and hydrology must be present,
							unies	as disturbed of problematic.
estrictive La	yer (if present):							
Type.	\.						Ubadaia Osil Da	
Depth (inch Remarks: Hydric soil indi	nes):						Hydric Soil Pre	esent? Yes X No
emarks: lydric soil indi	nes):						Hydric Soil Pro	esent? Yes <u>X</u> No
Depth (inch emarks: lydric soil indi	nes):						Hydric Soil Pre	esent? Yes <u>X</u> No
Depth (inch emarks: lydric soil indi DROLOGY	nes):	required: che					Hydric Soil Pre	esent? Yes X No
Depth (inch emarks: lydric soil indi DROLOGY /etland Hydro rimary Indicat	nes): cators are present. / plogy Indicators: ors (minimum of one /ater (A1)	required; cher	<u></u>	 			Hydric Soil Pro	esent? Yes X No
Depth (inch emarks: lydric soil indi DROLOGY /etland Hydro rimary Indicat <u>C</u> Surface W High Wate	tes):	required; chee	<u></u>	B11) ertebrates (B13)		Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8
Depth (inch Depth (inch Hydric soil indi DROLOGY Vetland Hydro rimary Indicat <u>C</u> Surface W <u>C</u> High Wate Saturation	cators are present.	required; cheo	<u></u>	B11) ertebrates (Sulfide Odor	B13)		Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 binage Patterns (B10)
Depth (inch emarks: lydric soil indi DROLOG) /etland Hydro rimary Indicat (cators are present.	required; cher	<u>k all that apply)</u> Salt Crust Aquatic Inv Hydrogen S	B11) ertebrates (Sulfide Odor n Water Tab	B13) r (C1) le (C2)		Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 ninage Patterns (B10) dized Rhizospheres on Living Roots (0
Depth (inch emarks: Hydric soil indi DROLOGY /etland Hydro rimary Indicat K_Surface W K_High Wate K_Saturation Water Mai Sediment	cators are present.	required; chea	<u>ck all that apply)</u> Salt Crust Aquatic Inv Hydrogen s Dry-Seaso Oxidized R	(B11) ertebrates (วันlfide Odor า Water Tab hizospheres	B13) r (C1) ile (C2) s along Livir	g Roots (C	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled)
Type Depth (incl temarks: Hydric soil indi Topological Tetland Hydro Trimary Indicat X Surface W X High Water X Saturation Water Mai Sediment Drift Depo	nes): cators are present. // blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3)	required; chea	<u>k all that apply)</u> Salt Crust Aquatic Inv Hydrogen S Dry-Seaso Oxidized R (where n	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled)	B13) r (C1) le (C2) s along Livir	g Roots (C	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) ayfish Burrows (C8)
Type Depth (incl Lemarks: Hydric soil indi TOROLOGY Vetland Hydro trimary Indicat X Surface W X High Wate X Saturation Water Mai Sediment Drift Depo Algal Mat	hes): cators are present. // blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)	required; che	Salt Crust Aquatic Inv. Aquatic Inv. Hydrogen S Dry-Seaso Oxidized R (where n Presence of the searce of the sea	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I	B13) r (C1) le (C2) s along Livir Iron (C4)	g Roots (C	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) nyfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Type: Depth (incl Depth (incl Demarks: Hydric soil indi DROLOGY Vetland Hydro Timary Indicat X Surface V X High Wate X Saturation Water Mai Sediment Drift Depo Algal Mat Iron Depo	nes): cators are present. plogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	required; cheo	<u>k all that apply)</u> Salt Crust Aquatic Inv Hydrogen 3 Dry-Seaso Oxidized R (where n Presence o Thin Muck	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7	B13) r (C1) le (C2) s along Livir Iron (C4) 7)	g Roots (C	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 ninage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) nyfish Burrows (C8) curation Visible on Aerial Imagery (C9) omorphic Position (D2)
	nes): cators are present. plogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima	required; chea	<u>Sk all that apply)</u> Salt Crust Aquatic Inv Hydrogen 3 Dry-Seaso Oxidized R (where n Presence of Thin Muck Other (Exp	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7 lain in Rema	B13) r (C1) le (C2) s along Livir Iron (C4) 7) arks)	g Roots (C	Hydric Soil Pre	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 ainage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) ayfish Burrows (C8) curation Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5)
Depth (inch Depth (inch emarks: lydric soil indi DROLOGY fetland Hydrr imary Indicat C Surface W G Saturation Water Mai Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta	cators are present.	required; che	ck all that apply) Salt Crust Aquatic Inv Hydrogen S Dry-Seaso Oxidized R (where n Presence o Thin Muck Other (Exp	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks)	g Roots (C	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) ayfish Burrows (C8) uration Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
	res): cators are present. plogy Indicators: ors (minimum of one vater (A1) rr Table (A2) r(A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions:	required; cher	<u>ck all that apply)</u> Salt Crust Aquatic Inv Hydrogen 3 Dry-Seaso Oxidized R (where n Presence o Thin Muck Other (Exp	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks)	g Roots (C	Hydric Soil Pre	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 ninage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) uration Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
	icators are present.	required; cher igery (B7)	ck all that apply)	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema 	B13) r (C1) ile (C2) s along Livir lron (C4) 7) arks) 2	g Roots (C	Hydric Soil Pre	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) uration Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
	icators are present.	igery (B7) =s <u>X</u> No =s <u>X</u> No	ck all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema 	B13) r (C1) ile (C2) s along Livir lron (C4) 7) arks) <u>2</u> 12	g Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) uration Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
	icators are present.	igery (B7) es <u>X</u> No es <u>X</u> No es <u>X</u> No	ck all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema 	B13) r (C1) lle (C2) s along Livir lron (C4) 7) arks) <u>2</u> 12 12	g Roots (C	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) ayfish Burrows (C8) uration Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
Type Depth (incl Temarks: Hydric soil indi Temarks: Hydric soil indi Temarks: Hydric soil indi Temarks: Temar	icators are present.	igery (B7) =s X No =s X No =s X No =s X No	ck all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches):	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks) <u>2 12 12</u>	g Roots (C	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
	res):	igery (B7) es X No es X No es X No es X No es X No es X No	ck all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): 	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks) 2 12 12 12 12	g Roots (C Wetlan	Hydric Soil Pro	esent? Yes X No any Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 ninage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) hyfish Burrows (C8) turation Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
Depth (inch emarks: Aydric soil indi DROLOGY /etland Hydro rimary Indicat (icators are present.	igery (B7) es X No es X No es X No es X No uge, monitorir	ck all that apply)	(B11) rertebrates (Sulfide Odoi n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches): , previous ir	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks) 2 12 12 12 12	g Roots (C	Hydric Soil Pro	esent? Yes X No
	icators are present.	agery (B7) es X No es X No es X No uge, monitorir	ck all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches): , previous ir	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks) 2 12 12 12 12	g Roots (C	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 ainage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) hyfish Burrows (C8) turation Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No

Project/Site:	FM 741 EA		City/County:	ĸ	aufman County	Sampling Date:	04/14/2022
Applicant/Owner:	Texas Departme	nt of Transpo	ortation		State: Texas	Sampling Point:	WDP04
Investigator(s):	CW and CMP		Section, Tow	vnship, Range:		N/A	
Landform (hillslope, terrace, etc):	hillslope		Local relief (concave, conve	ex, none): col	nvex	Slope (%): 2-3
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.637	32869	Long: -96.46636	132 Datur	n: NAD 83
Soil Map Unit Name: Houston Bl	ack clay, 0 to 1 percent slope				NWI classification	tion: NA	
Are climatic / hydrologic condition	is on the site typical for this tin	ne of year?	Yes	No x	(If no, explain in Rema	rks.)	
Are Vegetation , Soil	, or Hydrology	significantly	disturbed?	 Are "N	Normal Circumstances" pres	sent? Yes 2	K No
Are Vegetation . Soil	, or Hydrology	naturally pro	oblematic?	(If nee	eded. explain any answers i	n Remarks.)	
SUMMARY OF FINDINGS	- Attach site map sho	wing sam	plina poir	t locations	transects, important	t features, etc.	
	40 Xee	N- V		it iooutionio,	tranoooto, importan		
Hydrophytic Vegetation Presen	t? Yes			41	A		
Hydric Soll Present?	Yes <u>X</u>		- 19	s the Sampled	Area		
Vvetland Hydrology Present?	Yes	NO X	- "	lithin a Wetland	d? Yes	NOX	—
Remarks: One of the three we conditions during the	tland indicators were present. e site investigations were drier	This point is than normal	not located v	vithin a wetland	. The Antecedent Precipitati	on Tool scored a 9,	indicating
VEGETATION - Use scien	tific names of plants.						
					Dominance Test works	sheet:	
		Absolute	Dominant	Indicator	Number of Dominant Sp	ecies	
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW, o	r FAC:) (A)
1							
2					Total Number of Domina	int	
3					Species Across All Strat	ia:	2 (B)
4							
		0	_ = Total Co	over	Percent of Dominant Sp	ecies	
Sapling/Shrub Stratum (Plot	size:)				That Are OBL, FACW, o	r FAC: 0	.0 (A/B)
1					Prevalence Index work	sheet.	
2					Total % Cover of	Multin	ly by:
3						$\frac{1}{x 1 =}$	0
4.					FACW species	$\frac{0}{0}$ x 2 =	0
5					FAC species	0 x 3 =	0
Liegh Otrature (Distaine)		0		over	FACU species	35 x 4 =	140
Herb Stratum (Plot size.	<u>30 radius</u>)	50	Vee	NU	UPL species 6	35 x 5 =	325
			Yee		Column Totals: 1	00 (A)	465 (B)
2. Lonum perenne			tes	FACU			
		10			Prevalence Index	= B/A = 4.	65
4. Rapistrum rugosum							
5. Daucus carola		5	INU		Hydrophytic Vegetatio	n Indicators:	
7					1 - Rapid Test for H	lydrophytic Vegetatio	on
8				·	2 - Dominance Test	t is >50%	
0					3 - Prevalence Inde	ex ≤3.0¹	
9					4 - Morphological A	daptations ¹ (Provide	supporting
10		100	- Total Co	wer	Problematic Hydrop	ohytic Vegetation1 (E	xplain)
Moody Vino Stratum (Plot si	70:	100	_ = 10(a) CO	Wei			
	26)				¹ Indicators of hydric soil	and wetland hydrold	ogy must
2					be present, unless distu	rbed or problematic.	
Z		0	= Total Co		Hydrophytic		
% Bare Ground in Herb Stratur	n 0				Vogotation		
					Procent2 V	ies No	Y
					Fiesent:		<u></u>
Remarks: Hydrophytic vegetation is not	present.						

SOIL	
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Depth	Matrix		Redu	x realures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 3/2	85	10YR 8/1	15	D	М	Clay	
					·			
					. <u> </u>			
·					·			
·					·			
					·			
ype: C=Conc	entration, D=Depletic	n, RM=Reduc	ed Matrix, CS=Cove	ered or Coat	ed Sand Gr	ains.	² Locatio	on: PL=Pore Lining, M=Matrix.
ydric Soil Inc	licators: (Applicable	e to all LRRs,	unless otherwise	noted.)			Indicators f	or Problematic Hydric Soils ³ :
Histosol (A	41)		Sandy Gle	yed Marix (S	64)		1 cn	n Muck (A9) (LRR I, J)
Histic Epip	edon (A2)		Sandy Rec	lox (S5)			Coa	st Prairie Redox (A16) (LRR F, G, H)
Black Hist	ic (A3)		Stripped N	atrix (S6)			Dar	< Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Mu	cky Mineral	(F1)		High	n Plains Depressions (F16)
Stratified L	ayers (A5) (LRR F)	(Loamy Gle	yed Matrix (F2)		(LR	R H outside of MLRA 72 & 73)
1 cm Mucl	k (A9) (LRR F, G, H)	Depleted N	/latrix (F3)			Red	uced Vertic (F18)
Depleted I	3elow Dark Surface (A11)	Redox Dar	k Surface (F	6)		Red	Parent Material (TF2)
Thick Dark	(Surface (A12)		X Depleted [Oark Surface	(F7)		Very	/ Shallow Dark Surface (TF12)
Sandy Mu	cky Mineral (S1)		Redox Dep	pressions (F	8)		Oth	er (Explain in Remarks)
2.5 cm Mu	icky Peat or Peat (S2) (LRR G, H)	High Plain	s Depressior	ns (F16)		³Indic	ators of hydrophytic vegetation and
5 cm Mucl	<y (s3)<="" or="" peat="" td=""><td>(LRR F)</td><td>(MLRA 72</td><td>& 73 of LRI</td><td>R H)</td><td></td><td>wetla</td><td>nd hydrology must be present,</td></y>	(LRR F)	(MLRA 72	& 73 of LRI	R H)		wetla	nd hydrology must be present,
							unes	
estrictive Lag	yer (if present):							
Typo:								
Type:							Hydric Soil Pre	sent? Yes X No
Type: Depth (inch Remarks: Hydric soil indi	ies):						Hydric Soil Pre	sent? Yes <u>X</u> No
Type: Depth (inch emarks: Hydric soil indi	icators are present.						Hydric Soil Pre	sent? Yes <u>X</u> No
Type: Depth (inch emarks: łydric soil indi DROLOGY	nes): icators are present. /						Hydric Soil Pre	sent? Yes <u>X</u> No
Type: Depth (inch Remarks: Hydric soil indi DROLOGY Vetland Hydro	nes): icators are present. r / orgy Indicators: ors (minimum of one	required: chec					Hydric Soil Pre	sent? Yes X No
Type: Depth (inch Remarks: Hydric soil indi DROLOGY Vetland Hydro Irimary Indicat Surface W	nes): icators are present. / /ogy Indicators: ors (minimum of one ater (A1)	required; chec	<u></u>	(B11)			Hydric Soil Pre	sent? Yes X No
Type: Depth (inch emarks: Hydric soil indi DROLOGY /etland Hydro rimary Indicat Surface W High Wate	r blogy Indicators: ors (minimum of one 'ater (A1) r Table (A2)	required; chec	<u></u>	(B11) vertebrates (B13)		Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) rsely Vegetated Concave Surface (B8
Type: Depth (inch Remarks: Hydric soil indi DROLOGY Vetland Hydro rimary Indicat Surface W High Wate Saturation	nes): icators are present. r blogy Indicators: ors (minimum of one /ater (A1) r Table (A2) (A3)	required; chec	<u></u>	(B11) /ertebrates (Sulfide Odor	B13) • (C1)		Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10)
Type: Depth (inch emarks: Hydric soil indi DROLOGY /etland Hydro rimary Indicat Surface W High Wate Saturation Water Mar	res): icators are present. // plogy Indicators: ors (minimum of one /ater (A1) r Table (A2) (A3) /ks (B1)	required; chec	<u>k all that apply)</u> Salt Crust Aquatic Inv Hydrogen Dry-Seaso	(B11) /ertebrates (Sulfide Odor n Water Tab	B13) • (C1) le (C2)		Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) dized Rhizospheres on Living Roots (0
Type: Depth (inch emarks: Hydric soil indi DROLOGY Vetland Hydro rrimary Indicat Surface W High Wate Saturation Water Mar Sediment	icators are present.	required; chec	<u>k all that apply)</u> <u>Salt Crust</u> <u>Aquatic Inv</u> <u>Hydrogen</u> <u>Dry-Seaso</u> Oxidized F	(B11) vertebrates (Sulfide Odor n Water Tab	B13) • (C1) le (C2) s along Livir	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled)
Type: Depth (inch Remarks: Hydric soil indi DROLOGY Vetland Hydro rimary Indicat Surface W Surface W High Wate Saturation Water Mar Sediment Drift Depo	icators are present.	required; chec	:k all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab thizospheres ot tilled)	B13) • (C1) le (C2) s along Livir	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8)
Type: Depth (inch Remarks: Hydric soil indi DROLOGY Vetland Hydro rimary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat	icators are present.	required; chec		(B11) vertebrates (Sulfide Odor n Water Tab thizospheres iot tilled) of Reduced I	B13) · (C1) le (C2) s along Livir ron (C4)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Type: Depth (inch iemarks: Hydric soil indi DROLOGY /etland Hydro rimary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos	icators are present.	required; chec	<u>k all that apply)</u> Salt Crust Aquatic Inv Hydrogen Dry-Seaso Oxidized F (where n Presence o Thin Muck	(B11) vertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7	B13) · (C1) le (C2) s along Livir ron (C4) ′)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two require face Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) dized Rhizospheres on Living Roots ((here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) morphic Position (D2)
Type: Depth (inch itemarks: Hydric soil indi DROLOGY /etland Hydro rimary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation	icators are present.	required; chec	<u>k all that apply)</u> Salt Crust Aquatic Inv Hydrogen Dry-Seaso Oxidized F (where n Presence o Thin Muck	(B11) vertebrates (Sulfide Odor n Water Tab thizospheres ot tilled) of Reduced I Surface (C7 Jain in Rema	B13) · (C1) le (C2) s along Livir ron (C4) ') arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5)
Type: Depth (inch emarks: lydric soil indi DROLOGY fetland Hydro rimary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta	icators are present. icators are present. icators are present. icators: ors (minimum of one 'ater (A1) :r Table (A2) (A3) :r Table (A2) (A3) :r S (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Ima ined Leaves (B9)	required; chec	ck all that apply) Salt Crust Aquatic Inv Hydrogen Dry-Seaso Oxidized F (where n Presence o Thin Muck Other (Exp	(B11) vertebrates (Sulfide Odor n Water Tab thizospheres tot tilled) of Reduced I Surface (C7 Iain in Rema	B13) • (C1) le (C2) s along Livir (ron (C4) *) arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) morphic Position (D2) S-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F)
Type: Depth (inch emarks: Hydric soil indi DROLOGY /etland Hydro rimary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta	icators are present. icators are present. icators are present. icators are present. icators: ors (minimum of one /ater (A1) ir Table (A2) (A3) ·ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) · Visible on Aerial Ima ined Leaves (B9) 	required; chea	<u>Sk all that apply)</u> Salt Crust Aquatic Inv Hydrogen Dry-Seaso Oxidized F (where n Presence o Thin Muck Other (Exp	(B11) vertebrates (Sulfide Odor n Water Tab thizospheres iot tilled) of Reduced I Surface (C7 lain in Rema	B13) • (C1) le (C2) s along Livir ron (C4) •) arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) st-Heave Hummocks (D7)(LRR F)
Type: Depth (inch demarks: Hydric soil indi DROLOGY /etland Hydro rimary Indicat Surface W High Water Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta	icators are present. icators are present. icators are present. icators (minimum of one /ater (A1) ir Table (A2) (A3) iks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima ined Leaves (B9) 	<u>required; chea</u> 3gery (B7) 8	:k all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab chizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches):	B13) • (C1) le (C2) s along Livir ron (C4) ') arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) morphic Position (D2) S-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Type: Depth (inch itemarks: Hydric soil indi DROLOGY /etland Hydro rimary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta ield Observar urface Water	res): icators are present. plogy Indicators: ors (minimum of one fater (A1) rr Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) r Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye esent? Ye	required; chea agery (B7) es No es No	ck all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab thizospheres ot tilled) of Reduced I Surface (C7 ilain in Rema ches): ches):	B13) • (C1) le (C2) s along Livir ron (C4) ') arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) morphic Position (D2) c-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Type: Depth (inch emarks: Hydric soil indi DROLOGY /etland Hydro rimary Indicat Surface W High Water Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta ield Observat urface Water /ater Table Pre	icators are present. icators are present. icators are present. icators are present. icators (minimum of one (ater (A1) r Table (A2) (A3) r'ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) I Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye sent? Ye	in the second se	ck all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab thizospheres ot tilled) of Reduced I Surface (C7 ilain in Rema ches): ches): ches):	B13) • (C1) le (C2) s along Livir ron (C4) *) arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) morphic Position (D2) c-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes NoX
Type: Depth (inch Remarks: Hydric soil indi DROLOGY Vetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta Surface Water Vater Table Pro- Saturation Press ncludes capilla	icators are present. icators are present. icators are present. icators: ors (minimum of one (ater (A1) r Table (A2) (A3) 'ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) I Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye sent? Ye ary fringe)	 required; chea agery (B7) es No es No es No	ck all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab thizospheres tot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches):	B13) · (C1) le (C2) s along Livir iron (C4) ') arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) rsely Vegetated Concave Surface (B6) nage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) morphic Position (D2) S-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F) esent? Yes NoX
Type: Depth (inch iemarks: Hydric soil indi DROLOGY /etland Hydro rimary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta ield Observa urface Water /ater Table Pro aturation Pres ncludes capilla	icators are present. icators are present. icators are present. icators are present. icators: ors (minimum of one (ater (A1) ir Table (A2) (A3) ixs (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima ined Leaves (B9) tions: Present? icators: Present? icators: Present? icators: Present? icators: Present? icators: Present? icators: Present? icators: Present? icators: icators: Present? icators: icators: Present? icators: i	required; chea agery (B7) es Na es Na uge, monitorir	2k all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab thizospheres tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches): s, previous ir	B13) · (C1) le (C2) s along Livir /ron (C4) /) arks) 	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) morphic Position (D2) S-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F) esent? Yes No X
Type: Depth (inch emarks: Hydric soil indi DROLOGY /etland Hydro rimary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta ield Observar urface Water /ater Table Pro aturation Pres ncludes capilla	icators are present. icators are present. icators are present. icators are present. icators: ors (minimum of one (A2) (A3) ·*r Table (A2) (A3) ·*r Table (A2) · (A3) ·*r Table (A2) · (A3) ·*r Table (A2) · (A3) ·*r Table (A2) · (A3) ·*r Table (A2) · (A3) · (agery (B7) es No es No uge, monitorir	Sk all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab thizospheres ot tilled) of Reduced I Surface (C7 ilain in Rema ches): ches): ches): ches):	B13) · (C1) le (C2) s along Livir ron (C4) ·) arks) inspections),	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) at-Heave Hummocks (D7) (LRR F) esent? Yes No X
Type: Depth (inch emarks: Hydric soil indi DROLOGY /etland Hydro rimary Indicat Surface W High Water Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta ield Observar urface Water /ater Table Pro aturation Pres ncludes capilla escribe Recon	icators are present. icators are present. icators are present. icators are present. icators: ors (minimum of one /ater (A1) r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) I Visible on Aerial Ima ined Leaves (B9) 	required; chec agery (B7) es No es No es No uge, monitorir	ck all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab thizospheres ot tilled) of Reduced I Surface (C7 ilain in Rema ches): ches): ches): ches): s, previous ir	B13) · (C1) le (C2) s along Livir ron (C4) ·) arks) 	mg Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) rsely Vegetated Concave Surface (B6) nage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) st-Heave Hummocks (D7)(LRR F) esent? Yes No X

Applicant/Owner: Investigator(s): Landform (hillslope, terrace, etc): Subregion (LRR):LRF Soil Map Unit Name:Houston Blac Are climatic / hydrologic conditions or Are Vegetation, Soil Are Vegetation, Soil Are Vegetation, Soil SUMMARY OF FINDINGS - A Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Texas Departmen CW and CP depression J MLRA 86A k clay. 0 to 1 percent slope: the site typical for this time , or Hydrology , or Hydrology Vittach site map show Yes N Yes N Yes N d indicators were present. T e investigations were drier	t of Transpor	tation Section, Tov Local relief (32.641 Yes disturbed? blematic?	vnship, Range: (concave, conve 73694 No Are "N (If nee nt locations,	State: Tex x, none): Long:96.4 NWI clas (If no, explain in F Normal Circumstances eded, explain any ans transects, impo	as Sam, N/A concave 6741078 sification: L Remarks.) " present? wers in Rema rtant featu	Ding Point: Datur Datur VA Yes Irks.)	WE Slope (% n: <u>N</u> X_ N	DP05
Investigator(s): Landform (hillslope, terrace, etc): Subregion (LRR):LRF Soil Map Unit Name:Houston Blac Are climatic / hydrologic conditions or Are Vegetation, Soil Are Vegetation, Soil Are Vegetation, Soil SUMMARY OF FINDINGS - A Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	CW and CP depression J MLRA 86A k clay, 0 to 1 percent slope: the site typical for this time , or Hydrology , or Hydrology Vittach site map show Yes N Yes N Yes N d indicators were present. T e investigations were drier	Lat:Lat:Lat:Lat:Lat:	Section, Tov _ocal relief (vnship, Range: (concave, conve 73694 No Are "N (If nee nt locations,	x, none): Long:	N/A concave 66741078 sification: Remarks.) " present? wers in Rema rtant featu	Datur NA Yes rks.) I res, etc.	Slope (% n: <u>N</u> X N	o): <u>1-2</u> AD 83
Landform (hillslope, terrace, etc): Subregion (LRR): LRF Soil Map Unit Name: <u>Houston Blac</u> Are climatic / hydrologic conditions or Are Vegetation, Soil Are Vegetation, Soil SUMMARY OF FINDINGS - A Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	depression R J MLRA 86A k clay, 0 to 1 percent slope h the site typical for this time , or Hydrology	Lat: significantly of naturally pro ving samp No No No No	_ocal relief (32.641 Yes disturbed? blematic? bling poir	(concave, conve 73694 No Are "N (If nee nt locations,	x, none): Long:NWI clas (If no, explain in F Normal Circumstances eded, explain any ans transects, impo	concave 6741078 sification: Remarks.) " present? wers in Rema rtant featu	Datur NA Yes Irks.) I res, etc.	Slope (% n: <u>N</u> X N	o): 1-2 AD 83
Subregion (LRR): LRF Soil Map Unit Name: Houston Blac Are climatic / hydrologic conditions or Are Vegetation Soil Are Vegetation Soil SUMMARY OF FINDINGS - A Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	R J MLRA 86A k clay, 0 to 1 percent slope the site typical for this time , or Hydrology , or Hydrology ttach site map show Yes N Yes N Yes N d indicators were present. T e investigations were drier	Lat: significantly for naturally pro ving samp No No No	32.641 Yes disturbed? blematic? bling poir	No <u>x</u> Are "No (If nee	Long:96.4 NWI clas (If no, explain in F Normal Circumstances eded, explain any ans transects, impo	6741078 sification: Remarks.) " present? wers in Rema rtant featu	Datur NA Yes Irks.) I res, etc.	n: <u>N</u>	AD 83
Soil Map Unit Name: <u>Houston Blac</u> Are climatic / hydrologic conditions or Are Vegetation, Soil SUMMARY OF FINDINGS - A Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	k clay. 0 to 1 percent slope the site typical for this time , or Hydrology , or Hydrology Attach site map shov Yes X N Yes X N Yes X N Yes X N d indicators were present. T e investigations were drier	s e of year? significantly naturally pro ving samp ving samp No Xo	Yes disturbed? blematic? bling poir	No Are "N (If nee nt locations,	NWI clas (If no, explain in F Normal Circumstances eded, explain any ans transects, impo	sification: Remarks.) " present? wers in Rema rtant featu	Yes rks.) I res, etc.	<u>x</u> N	٥
Are climatic / hydrologic conditions or Are Vegetation, Soil, Are Vegetation, Soil, SUMMARY OF FINDINGS - A Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	A clay to the percent support A the site typical for this time , or Hydrology , or Hydrology Attach site map show Yes N Yes N Yes N d indicators were present. T e investigations were drier	e of year? significantly naturally pro ving samp vo vo Xo Xo	Yes disturbed? blematic? bling poir	No <u>x</u> Are "No (If nee	(If no, explain in F Normal Circumstances eded, explain any ans transects, impo	Remarks.) " present? wers in Rema rtant featu	Yes <u> </u>	<u>X </u> N	ວ
Are Vegetation, Soil Are Vegetation, Soil SUMMARY OF FINDINGS - A Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	, or Hydrology , or Hydrology Attach site map show Yes N Yes N Yes N d indicators were present. T	significantly naturally pro ving samp No No No	disturbed? blematic? bling poir	Are "N (If nee nt locations,	Normal Circumstances eded, explain any ans transects, impo	" present? wers in Rema rtant featu	Yes <u> </u>	<u>X</u> N	0
Are Vegetation, Soil, Soil, Soil, Soil, Soil, Soil, Soil, Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	, or Hydrology <u>Attach site map show</u> Yes N Yes N Yes N d indicators were present. T e investigations were drier	naturally pro ving samp No No No	blematic?	(If nee nt locations,	eded, explain any ans transects, impo	wers in Rema rtant featu	irks.)		-
SUMMARY OF FINDINGS - A Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Attach site map shov Yes X M Yes X M Yes X M d indicators were present. T	ving samp	bling poir	nt locations,	transects, impo	rtant featu	ires, etc.		
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X N Yes A Yes	No No No	<u> </u>	<u></u>	tranocoto, impo	i tuiit ioutu			
Hydroc Soil Present? Wetland Hydrology Present?	Yes <u>X</u> M Yes <u>X</u> M d indicators were present. T	10 <u>X</u> 10 <u>X</u>	ls				-		
Wetland Hydrology Present?	Yes X M	No <u>×</u>	R	the Sampled	Aroa				
	d indicators were present. T	NU		s the Sampleu /			No V		
	d indicators were present. The investigations were driver		v					_	
Remarks: Two of the three wetlan conditions during the sit		This point is r than normal.	not located v	within a wetland	. The Antecedent Pred	cipitation Tool	scored a 9,	indicatir	ıg
VEGETATION - Use scientifi	c names of plants.								
					Dominance Test	worksheet:			
		Absolute	Dominant	Indicator	Number of Domina	ant Species			
Tree Stratum (Plot size: 30'	radius)	% Cover	Species?	Status	That Are OBL, FA	CW, or FAC:	;	3	(A)
1. Celtis laevigata		10	Yes	FAC					
2.					Total Number of D	ominant			
3.					Species Across Al	I Strata:		7	(B)
4.									
		10	= Total Co	over	Percent of Domina	int Species			
Sapling/Shrub Stratum (Plot size	_{∋:} 30' radius)		-		That Are OBL, FA	CW, or FAC:	42	2.9	(A/B)
1. Salix nigra	·	10	Yes	FACW					
2. Rubus trivialis		10	Yes	FACU	Prevalence Index	worksheet:			
3. Zanthoxylum clava-herculis		5	Yes	FACU	Total % Cove	er of:	Multip	oly by:	
4.					OBL species	30	x 1 =	30	
5.			-		FACW species	20	x 2 =	40	
		25	= Total Co	over	FAC species	10	x 3 =	30	
Herb Stratum (Plot size: 30'	radius)		-		FACU species	50	x 4 =	200	
1. Eleocharis palustris	,	30	Yes	OBL	UPL species	0	x 5 =	0	
2. Lolium perenne		15	Yes	FACU	Column Totals:	110	(A)	300	(B)
3. Verbena bonariensis		10	No	FACW					
4.					Prevalence	ndex = B/A =	2.	73	
5.			-		Lludronbutio Voc	tation India			
6.							ators:		
7.			-					on	
8.					2 - Dominanc		/0		
9.			-		X 3 - Prevalenc	e muex ≤3.0° visel Adentativ	nal (Dravid		ting
10.			-		4 - Worpholog	lical Adaptatio	ons' (Provide	e suppor	ung
		55	= Total Co	over			egetation (E	xpiain)	
Woody Vine Stratum (Plot size:	30' radius)		-		1 Indiantara of budy		اممط امتطعما		
1. Toxicodendron radicans	′	20	Yes	FACU		ic soll and we		ogy mus	L
2.			-		be present, unless	disturbed or	problematic.		
		20	= Total Co	over	Hydrophytic				
% Bare Ground in Herb Stratum	45		_		Vegetation				
					Present?	Yes)	(No		
					Tresent	100	<u> </u>		
Remarks: Hydrophytic vegetation is present.									

S	0	IL	
J	J		-

Profile Desc	ription: (Describe to t Matrix	he depth nee	eded to document th Redo	ne indicato x Features	r or confirm	the abser	nce of indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 4/1	100				200	Clav	
		·						
		·						
		·						
		·						
		·						
		·						
¹ Type: C=Cor	ncentration, D=Depletic	on, RM=Redu	ced Matrix, CS=Cove	ered or Coat	ted Sand Gra	ins.	² Location	: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applicable	e to all LRRs	, unless otherwise r	noted.)			Indicators for	Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gle	yed Marix (S	S4)		1 cm M	Muck (A9) (LRR I, J)
Histic Ep	pipedon (A2)		Sandy Rec	lox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Black Hi	stic (A3)		Stripped M	atrix (S6)			Dark S	Surface (S7) (LRR G)
Hydroge	en Sulfide (A4)		Loamy Mu	cky Mineral	(F1)		High F	Plains Depressions (F16)
Stratified	d Layers (A5) (LRR F)		Loamy Gle	yed Matrix	(F2)		(LRR	H outside of MLRA 72 & 73)
1 cm Mu	ick (A9) (LRR F, G, H)	Depleted N	/latrix (F3)			Reduc	ed Vertic (F18)
Depleted	d Below Dark Surface (A11)	Redox Dar	k Surface (F	=6)		Red P	arent Material (TF2)
Thick Da	ark Surface (A12)		Depleted D	Oark Surface	e (F7)		Very S	Shallow Dark Surface (TF12)
Sandy M	lucky Mineral (S1)		Redox Dep	pressions (F	8)		Other	(Explain in Remarks)
2.5 cm N	Aucky Peat or Peat (S2) (LRR G, H)	High Plains	s Depressio	ns (F16)		³ Indicate	ors of hydrophytic vegetation and
5 cm Mu	icky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LR	RH)		wetland	hydrology must be present,
							unless o	listurbed or problematic.
Restrictive L	ayer (if present):							
Туре:								
Depth (in	ches):						Hydric Soil Prese	ent? Yes <u>No X</u>
Remarks [.]								
Hvdric soil in	ndicators are not prese	nt.						
,	·							
HYDROLOG	βY							
Wetland Hyd	Irology Indicators:							
Primary Indic	ators (minimum of one	required; che	ck all that apply)				Secondary	Indicators (minimum of two required)
X Surface	Water (A1)		Salt Crust	(B11)			Surfac	e Soil Cracks (B6)
X High Wa	iter Table (A2)		Aquatic Inv	vertebrates ((B13)		Spars	ely Vegetated Concave Surface (B8)
X Saturatio	on (A3)		Hydrogen	Sulfide Odo	r (C1)		Draina	age Patterns (B10)
Water M	arks (B1)		Dry-Seaso	n Water Tab	ole (C2)		Oxidiz	ed Rhizospheres on Living Roots (C3)
Sedimer	nt Deposits (B2)		Oxidized R	hizosphere	s along Living	g Roots (C	(whe	ere tilled)
Drift Dep	oosits (B3)		(where n	ot tilled)			X Crayfi	sh Burrows (C8)
Algal Ma	at or Crust (B4)		Presence of	of Reduced	Iron (C4)		Satura	ation Visible on Aerial Imagery (C9)
Iron Dep	oosits (B5)		Thin Muck	Surface (C	7)		X Geom	orphic Position (D2)
Inundati	on Visible on Aerial Ima	agery (B7)	Other (Exp	lain in Rem	arks)		FAC-N	leutral Test (D5)
Water-S	tained Leaves (B9)						Frost-	Heave Hummocks (D7) (LRR F)
Field Observ	vations:							
Surface Wate	er Present? Y	es <u>X</u> N	o Depth (in	ches):	1	1		
Water Table I	Present? Y	es <u>X</u> N	o Depth (in	ches):	12	1		
Saturation Pr	esent? Y	es <u>X</u> N	o Depth (in	ches):	12	Wetla	nd Hydrology Prese	ent? Yes X No
(includes cap	illary fringe)							
Describe Rec	corded Data (stream ga	uge, monitori	ng well, aerial photos	s, previous i	nspections), i	f available	:	
Remarks:	diantoro ere ere eret							
nyarology in	iuicators are present.							

Project/Site: FM 741 E/	4	City/County:	к	aufman County	Samp	ling Date:	04/14/2022
Applicant/Owner: Te	xas Department of Transpo	ortation		State: Te	xas Samp	ling Point:	WDP06
Investigator(s): CW and	CP	Section, Towr	ship, Range:		N/A		
Landform (hillslope, terrace, etc):	depression	Local relief (c	oncave. conve	ex. none):	concave	S	Slope (%): 0-1
Subregion (LRR): LRR J MLRA 8	6A Lat:	32.6477	7848	Lona: -96	.4669718	Datum	n: NAD 83
Soil Map Unit Name: Houston Black clay 0 to 1	nercent slones			NWI cla	ssification: N		
Are climatic / hydrologic conditions on the site tyr	pical for this time of year?	Yes	No X	(If no explain in	Remarks)		
Are Vegetation Soil or Hvd	rology significantly	v disturbed?	Are "I	Normal Circumstance	s" present?	Yes X	(No
Are Vegetation Soil or Hvd	rologyology	roblematic?	(If ne	eded explain any any	swers in Remai	rks)	<u> </u>
SUMMARY OF EINDINGS Attach sit	o man showing sam	nling noint	locations	transocts imp	ortant foatu	ros oto	
	e map showing sam		iocations,	transects, impo		163, 610.	
Hydrophytic Vegetation Present?	es <u> </u>	- .					
Hydric Soil Present? Y	es <u>X</u> No		the Sampled	Area			
Wetland Hydrology Present? Y	es <u>X</u> No	wit	thin a Wetlan	d? Yes	6 <u> </u>	No X	-
Remarks: Two of the three wetland indicators conditions during the site investigat	were present. This point is ions were drier than norma	s not located wi al.	thin a wetland	. The Antecedent Pre	ecipitation Tool	scored a 9, i	indicating
VEGETATION - Use scientific fiames	or plants.			Τ			
				Dominance Test	worksheet:		
	Absolute	Dominant	Indicator	Number of Domin			(
Iree Stratum (Plot size:) <u>% Cover</u>	Species?	Status	That Are UBL, FA	ACVV, OF FAC:		(A)
1				Total Number of I	Densin ent		
2						1	(D)
3				Species Across A	Al Strata:	I	(B)
4				Parcent of Domin	ant Spacios		
Quality (Observe Observerse (Distriction)	<u> </u>		er			0	0 (A/P)
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FA	ACW, OFFAC.	0.	<u> </u>
1	·			Prevalence Inde	x worksheet:		
2	· ·			Total % Cov	er of:	Multip	ly by:
3				OBL species	0	x 1 =	0
5				FACW species	10	x 2 =	20
J		- Total Cov	or	FAC species	2	x 3 =	6
Herb Stratum (Plot size: 30' radius)		CI	FACU species	80	x 4 =	320
1 Lolium perenne	, 80	Vas	FACU	UPL species	10	x 5 =	50
2 Geranium carolinianum		No	NI	Column Totals:	102	(A)	396 (B)
2. Geranium carolinianum 3. Valerianella radiata	10	No					
	2	No	EAC	Prevalence	Index = B/A =	3.8	38
5	<u> </u>						_
6				Hydrophytic Veg	getation Indica	tors:	
7				1 - Rapid Te	st for Hydrophy	tic Vegetatio	n
8				2 - Dominan	ce Test is >50%	0	
0				3 - Prevalen	ce Index ≤3.0 ¹		
10				4 - Morpholo	gical Adaptatio	ns ¹ (Provide	supporting
10	102	- Total Cov	or	Problematic	Hydrophytic Ve	egetation ¹ (E	xplain)
Woody Vine Stratum (Plot size:)		Ci				
)			¹ Indicators of hyd	ric soil and wet	land hydrolo	gy must
2				be present, unles	s disturbed or p	problematic.	
£		= Total Cov	er	Hydrophytic			
% Bare Ground in Herb Stratum0				Vegetation Present?	Yes	No	X
Remarks: Hydrophytic vegetation is not present.							

SOIL	
------	--

Deptii	IVIALITA		Redox	Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 4/1	95	10YR 8/1	5	D	М	Clay	
							·	
<u> </u>								
							·	
		·						
							·	
ype: C=Conc	entration, D=Depletio	n, RM=Reduc	ed Matrix, CS=Cove	red or Coat	ted Sand Gra	ains.	² Locati	on: PL=Pore Lining, M=Matrix.
dric Soil Ind	dicators: (Applicable	e to all LRRs,	unless otherwise r	oted.)			Indicators	or Problematic Hydric Soils ³ :
Histosol (/	41)		Sandy Gle	yed Marix (१	S4)		1 ci	m Muck (A9) (LRR I, J)
Histic Epi	bedon (A2)		Sandy Rec	ox (S5)			Coa	ast Prairie Redox (A16) (LRR F, G, H)
Black Hist	ic (A3)		Stripped M	atrix (S6)			Dar	k Surface (S7) (LRR G)
_ Hydrogen	Sulfide (A4)		Loamy Mu	ky Mineral	(F1)		Hig	h Plains Depressions (F16)
_ Stratified I	_ayers (A5) (LRR F)		Loamy Gle	yed Matrix ((F2)		(LR	R H outside of MLRA 72 & 73)
1 CM IVIUC	K (A9) (LKK F, G, H) Bolow Dork Surface ()	Depleted N	latrix (F3)				Liuced Vertic (F18)
_ Depleted Thick Dar	Selow Dark Surface (A	ATT)		A Sunace (r Jark Surface	FO) 2 (F7)			v Shallow Dark Surface (TE12)
Sandy Mu	(S1)		Redox Der	ressions (F			Ver	er (Explain in Remarks)
2.5 cm Mi	ucky Peat or Peat (S2) (LRR G. H)	High Plains	Depressio	ons (F16)		³Indic	ators of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LR	RH)		wetla	nd hydrology must be present,
_		,	,		,		unles	s disturbed or problematic.
estrictive La	ver (if present):							
Type:	y ei (p. eee).							
JI: -								
Depth (incl emarks: lydric soil ind	licators are present.						Hydric Soil Pre	esent? Yes <u>X</u> No
Depth (incl emarks: Hydric soil inc	nes):						Hydric Soil Pro	esent? Yes <u>X</u> No
Depth (incl emarks: lydric soil inc DROLOG	hes): licators are present.						Hydric Soil Pro	esent? Yes <u>X</u> No
Depth (incl emarks: Hydric soil inc DROLOG	hes): licators are present. / cors (minimum of one	required: chec	sk all that apply)				Hydric Soil Pro	esent? Yes <u>X</u> No
Depth (incl emarks: Hydric soil inc DROLOG Vetland Hydro rimary Indicat Surface W	hes): licators are present. / ors (minimum of one /ater (A1)	required; chec	<u>k all that apply)</u>	 			Hydric Soil Pro	esent? Yes <u>X</u> No
Depth (incl emarks: Hydric soil inc DROLOG Vetland Hydro rimary Indical C Surface W High Wate	hes): licators are present. f ology Indicators: ors (minimum of one fater (A1) rr Table (A2)	required; chec	× all that apply) Salt Crust	B11) ertebrates ((B13)		Hydric Soil Pro	esent? Yes X No nry Indicators (minimum of two required face Soil Cracks (B6) ursely Vegetated Concave Surface (B8
Depth (incl emarks: lydric soil inc DROLOG tetland Hydro imary Indicat Surface W High Wate Saturatior	nes):	required; chec	<u>k all that apply)</u> Salt Crust Aquatic Inv Hydrogen 3	'B11) ertebrates (Sulfide Odo	(B13) rr (C1)		Hydric Soil Pro	ry Indicators (minimum of two required face Soil Cracks (B6) insely Vegetated Concave Surface (B8 inage Patterns (B10)
Depth (incl emarks: lydric soil inc DROLOG) etland Hydro imary Indicat <u>C</u> Surface W High Wate Saturation Water Ma	Iicators are present.	required; chec	<u>:k all that apply)</u> Salt Crust Aquatic Inv Hydrogen S Hydrogen S	(B11) ertebrates (Sulfide Odo n Water Tab	(B13) r (C1) ble (C2)		Hydric Soil Pro	esent? Yes X No Iry Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (0
Depth (incl emarks: lydric soil inc DROLOG Tetland Hydr imary Indicat Surface W High Wate Saturation Water Ma Sediment	licators are present. f blogy Indicators: ors (minimum of one /ater (A1) rr Table (A2) (A3) 'ks (B1) Deposits (B2)	required; chec	<u>k all that apply)</u> Salt Crust Aquatic Inv Hydrogen S Dry-Seaso	(B11) ertebrates (Sulfide Odo n Water Tab hizosphere	(B13) rr (C1) ble (C2) s along Livin	g Roots (C	Hydric Soil Pro	esent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) insely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C there tilled)
Depth (incl emarks: Hydric soil inc DROLOG Tetland Hydre rimary Indicat Surface W High Wate Saturatior Water Ma Sediment Drift Depo	hes): licators are present. / ology Indicators: ors (minimum of one /ater (A1) er Table (A2) i (A3) 'ks (B1) Deposits (B2) sits (B3)	required; chec	x all that apply) Salt Crust Aquatic Inv Hydrogen S Dry-Seaso Oxidized R (where n	B11) ertebrates (Sulfide Odo ר Water Tab hizosphere: ot tilled)	(B13) r (C1) ole (C2) s along Livin	g Roots (C	Hydric Soil Pro	esent? Yes X No Iry Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C /here tilled) yfish Burrows (C8)
Depth (incl emarks: Hydric soil inc DROLOG Vetland Hydro fimary Indicat Surface W Saturatior Water Mai Sediment Drift Depo Algal Mat	hes): licators are present. f ology Indicators: ors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)	required; chec	A all that apply) Salt Crust Aquatic Inv Hydrogen 3 Dry-Seaso Oxidized R (where n Presence of	(B11) ertebrates (Sulfide Odo n Water Tab hizosphere ot tilled) if Reduced	(B13) r (C1) ble (C2) s along Livin Iron (C4)	g Roots (C	Hydric Soil Pro	esent? Yes X No rry Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C rhere tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Depth (incl emarks: Hydric soil inc DROLOG Tetland Hydro fimary Indical Surface W G Surface W G High Wate G Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo	hes): licators are present. f ology Indicators: ors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	required; chec	Sk all that apply) Salt Crust Aquatic Inv Hydrogen S Dry-Seaso Oxidized R (where n Presence o Thin Muck	(B11) rertebrates (Sulfide Odo n Water Tab hizosphere: ot tilled) if Reduced Surface (C)	(B13) r (C1) ble (C2) s along Livin Iron (C4) 7)	g Roots (C	Hydric Soil Pro	esent? Yes X No rry Indicators (minimum of two required face Soil Cracks (B6) ursely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2)
Depth (incl emarks: Hydric soil inc DROLOG DROLOG Cetland Hydro rimary Indical Cetland Hydro rimary Indical Cetland Hydro rimary Indical Cetland Hydro Saturation Water Mai Sediment Drift Depo Algal Mat Iron Depo Inundation	Iicators are present. f ology Indicators: ors (minimum of one /ater (A1) r Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima	required; chec	<u>k all that apply)</u> Salt Crust Aquatic Inv Hydrogen 3 Dry-Seaso Oxidized R (where n Presence o Thin Muck Other (Exp	(B11) rertebrates (Sulfide Odo n Water Tab hizosphere ot tilled) if Reduced Surface (C) lain in Rem	(B13) r (C1) ble (C2) s along Livin Iron (C4) 7) arks)	g Roots (C	Hydric Soil Pro	ry Indicators (minimum of two required face Soil Cracks (B6) ursely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5)
Depth (incl emarks: Hydric soil inc DROLOG Vetland Hydr rimary Indicat C Surface W C High Wate C Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta	hes): licators are present. ology Indicators: cors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima ined Leaves (B9)	required; chec	<u>k all that apply)</u> Salt Crust (Aquatic Inv Hydrogen 3 Dry-Seaso Oxidized R (where n Presence o Thin Muck Other (Exp	B11) ertebrates (Sulfide Odo n Water Tab hizosphere ot tilled) of Reduced Surface (C lain in Rem	(B13) r (C1) ble (C2) s along Livin Iron (C4) 7) iarks)	g Roots (C	Hydric Soil Pro	esent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C rhere tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F)
Depth (incl emarks: Hydric soil incl DROLOGY /etland Hydro rimary Indicat (Surface W Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta	hes): licators are present. f ology Indicators: cors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima ined Leaves (B9) tions:	required; chec igery (B7)	x all that apply) Salt Crust Aquatic Inv Hydrogen 3 Dry-Seaso Oxidized R (where n Presence o Thin Muck Other (Exp	(B11) ertebrates (Sulfide Odo n Water Tab hizosphere: ot tilled) of Reduced Surface (C lain in Rem	(B13) or (C1) ole (C2) s along Livin Iron (C4) 7) arks)	g Roots (C	Hydric Soil Pro	esent? Yes X No rry Indicators (minimum of two required face Soil Cracks (B6) Insely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Depth (incl emarks: Hydric soil incl DROLOGY /etland Hydro rimary Indical C Surface W C High Wate C Saturation Water Mai Sediment Drift Depc Algal Mat Iron Depo Inundation Water-Sta ield Observa	Iicators are present. f ology Indicators: ors (minimum of one /ater (A1) r Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima ined Leaves (B9) tions: Present?	<u>required; chec</u> 3gery (B7) 	:k all that apply)	(B11) rertebrates of Sulfide Odo n Water Tatt hizosphere: ot tilled) of Reduced Surface (C: lain in Rem 	(B13) or (C1) ole (C2) s along Livin Iron (C4) 7) arks) <u>1</u>	g Roots (C	Hydric Soil Pro	esent? Yes X No rry Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
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Depth (incl emarks: Hydric soil inc DROLOG /etland Hydre rimary Indicat Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta ield Observa urface Water /ater Table Pr aturation Pres	Ilicators are present. Ilicators are present. Ilicators are present. Ilicators are present. Ilicators (minimum of one Jater (A1) Par Table (A2) Il (A3) rks (B1) Deposits (B2) Ilicators (B4) sits (B3) or Crust (B4) sits (B5) Il Visible on Aerial Ima ined Leaves (B9) Ilicators (B2) Present? Ye sent? Ye	igery (B7) es X No es X No es X No	:x all that apply)	(B11) rertebrates i Sulfide Odo n Water Tab hizosphere: ot tilled) of Reduced Surface (C: lain in Rem ches): 	(B13) r (C1) ble (C2) s along Livin Iron (C4) 7) iarks) <u>1</u> <u>12</u> <u>12</u>	g Roots (C	Hydric Soil Pro	esent? Yes X No
Depth (incl emarks: Hydric soil inc DROLOG) /etland Hydre rimary Indicat (Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta ield Observa urface Water /ater Table Pr aturation Pres ncludes capill	Ilicators are present. Ilicators are present. Ilicators are present. Ilicators are present. Ilicators (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) 1 Visible on Aerial Ima ined Leaves (B9) Ilicators Present? Ye sent? Ye sent? Ye ary fringe)	es X No es X No es X No	Aquatic Inv Aquatic Inv Aquatic Inv Hydrogen 3 Dry-Seaso Oxidized R (where n Presence o Thin Muck Other (Exp Depth (in Depth (in Depth (in	(B11) rertebrates i Sulfide Odo n Water Tab hizosphere ot tilled) of Reduced Surface (C3 lain in Rem 	(B13) r (C1) ble (C2) s along Livin Iron (C4) 7) iarks) <u>1</u> 12 12	g Roots (C	Hydric Soil Pro	esent? Yes X No rry Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C rhere tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F) esent? Yes X No
Depth (incl emarks: Hydric soil inc Additional and the product of	Ilicators are present. Ilicators are present. Ilicators are present. Ilicators are present. Ilicators (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) 1 Visible on Aerial Ima ined Leaves (B9) Ilicators: Present? Ye sent? Ye sent? Ye ary fringe) rded Data (stream ga	agery (B7) es <u>X</u> No es <u>X</u> No es <u>X</u> No es <u>X</u> No	:k all that apply)	(B11) rertebrates i Sulfide Odo n Water Tat hizosphere ot tilled) of Reduced Surface (C: lain in Rem ches): ches): ches): , previous i	(B13) r (C1) ble (C2) s along Livin Iron (C4) 7) larks) <u>1</u> <u>12</u> 12 12 nspections),	g Roots (C Wetla	Hydric Soil Pro	esent? Yes X No rry Indicators (minimum of two required face Soil Cracks (B6) irsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
Depth (incl emarks: lydric soil inc DROLOGY etland Hydro imary Indicat <u>C</u> Surface W <u>C</u> Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta eld Observa urface Water tater Table Pr aturation Presence actudes capill escribe Reco	hes): licators are present. f ology Indicators: fors (minimum of one /ater (A1) er Table (A2) f(A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) f Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye esent? Ye ary fringe) rded Data (stream ga	agery (B7) es <u>X</u> No es <u>X</u> No es <u>X</u> No uge, monitorin	Aquatic Inv Aquatic Inv Hydrogen 3 Dry-Seaso Oxidized R (where n Presence 0 Thin Muck Other (Exp Depth (in Depth (in Depth (in Depth (in Depth (in Depth (in	(B11) rertebrates i Sulfide Odo n Water Tat hizosphere. ot tilled) of Reduced Surface (C: lain in Rem ches): ches): ches): ches):	(B13) or (C1) ole (C2) s along Livin lron (C4) 7) arks) <u>1</u> <u>12</u> 12 nspections),	g Roots (C Wetla if available	Hydric Soil Pro	esent? Yes X No rry Indicators (minimum of two required face Soil Cracks (B6) ursely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F) esent? Yes X No
Depth (incl emarks: lydric soil inc emarks: lydric soil inc etland Hydre imary Indicat Surface W High Water Saturation Water Mai Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta eld Observa aurface Water ater Table Pre- aturation Pre- actudes capill escribe Reco	Ilicators are present. Ilicators are present. Ilicat	required; chec agery (B7) es X No es X No es X No uge, monitorin	:k all that apply)	(B11) rertebrates i Sulfide Odo n Water Tat hizosphere ot tilled) of Reduced Surface (C: lain in Rem ches): ches): ches): ches): , previous in	(B13) r (C1) ble (C2) s along Livin Iron (C4) 7) larks) <u>1</u> <u>12</u> 12 nspections),	g Roots (C	Hydric Soil Pro	esent? Yes X No

Project/Site:	FM 741 EA		City/County:	к	aufman County	Sampling Date:	04/14/2022
Applicant/Owner:	Texas Department	t of Transpo	rtation		State: Texas	Sampling Point:	WDP07
Investigator(s):	CW and CP		Section, Towr	nship, Range:		N/A	
Landform (hillslope, terrace, e	etc): depression		Local relief (c	oncave, conve	ex, none): co	oncave	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6456	1287	Long: -96.4672	2929 Datu	im: NAD 83
Soil Map Unit Name: Hous	ston Black clay, 0 to 1 percent slope:	s			NWI classific	ation: NA	
Are climatic / hydrologic cond	ditions on the site typical for this time	e of year?	Yes	No x	(If no, explain in Rem	arks.)	
Are Vegetation , Sc	oil , or Hydrology	significantly	disturbed?	Are "I	Normal Circumstances" pre	esent? Yes	x No
Are Vegetation , Sc	, or Hydrology	naturally pro	oblematic?	(If nee	eded, explain any answers	in Remarks.)	
SUMMARY OF FINDIN	IGS - Attach site map show	ing sam	pling point	locations.	transects, importar	nt features, etc.	
Hydrophytic Vegetation Pre	esent? Yes N			,	· · ·	,	
Hydric Soil Present?	Yes N		- Is ⁻	the Sampled	Δrea		
Wetland Hydrology Presen	105 N			thin a Wetland	d? Yes	No X	
Weitand Hydrology Presen			-		u. 105		
Remarks: One of the thre conditions durin	e wetland indicators were present. ng the site investigations were drier	This point is than norma	not located w l.	vithin a wetland	d. The Antecedent Precipit	ation Tool scored a	9, indicating
VEGETATION - USe SU	tentific names of plants.				1		
					Dominance Test work	(sneet:	
		Absolute	Dominant	Indicator	Number of Dominant S	pecies	4 (***
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW,	or FAC:	1 (A)
1					Total Number of Demir		
2					Spacial Agrada All Str	iani	2 (P)
3					Species Across All Stra	ala.	<u> </u>
4					Dereent of Dominant S	nanica	
		0	= lotal Cov	er	That Are OBL EACW	or EAC:	
Sapling/Shrub Stratum (That Ale OBL, FACW,	01 FAC	<u>ы</u> (А/В)
1					Prevalence Index wo	rksheet:	
2					Total % Cover of:	Mult	ply by:
3					OBL species	0 x 1 =	0
4					FACW species	40 x 2 =	80
J			- Total Cov		FAC species	15 x 3 =	45
Herb Stratum (Plot size:	20' radius	0	_ = 10(a) COV	ei	FACU species	40 x 4 =	160
1 Alonecurus carolinianus	<u> </u>	30	Ves	FACW	UPL species	0 x 5 =	0
2 I olium perenne	,	30	Yes	FACU	Column Totals:	95 (A)	285 (B)
3 Rumey crispus		15	Ves	FAC			
4 Vicia sativa		10	No	FACU	Prevalence Inde	x = B/A =	3.0
5 Juncus marginatus		10	No	FACW			
6					Hydrophytic Vegetati	on Indicators:	
7					1 - Rapid Test for	Hydrophytic Vegetat	ion
8.					2 - Dominance Te	st is >50%	
9.		_			X 3 - Prevalence Inc	lex ≤3.0'	
10.					4 - Morphological		e supporting
		95	= Total Cov	rer		ophytic vegetation. (Explain)
Woody Vine Stratum (Pl	lot size:)		_		1 Indiantara of budris on		le au munt
1.					Indicators of hydric so	with and wettand nyoro	logy must
2.					be present, unless dist		<i>.</i>
		0	= Total Cov	rer	Hydrophytic		
% Bare Ground in Herb Str	ratum0		_		Vegetation Present?	Yes <u>No</u>	<u>x</u>
Remarks: Hydrophytic vegetation is	not present.						

S	0	IL	
J	J		-

Profile Descri	ption: (Describe to th	ne depth need	ed to document the	e indicator o	or confirm	the absen	nce of indicators.)	
Depth	Matrix	0/	Redox	Features	T 4	1 2	Testere	Demonstra
(inches)		<u> </u>	Color (moist)	<u>%</u>	туре'	LOC		Remarks
0-18	101 K 4/1	100					Ciay	· · · · · · · · · · · · · · · · · · ·
<u> </u>		<u> </u>						
		<u> </u>			<u> </u>			
		<u> </u>				<u> </u>		
		<u> </u>						
¹ Type: C=Con	centration, D=Depletio	n, RM=Reduce	d Matrix, CS=Cover	red or Coated	d Sand Gra	ains.	² Locatio	n: PL=Pore Lining, M=Matrix.
Hydric Soil In	dicators: (Applicable	to all LRRs, ι	Inless otherwise n	oted.)			Indicators for	or Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gley	ed Marix (S4)		1 cm	n Muck (A9) (LRR I, J)
Histic Epi	pedon (A2)		Sandy Redo	ox (S5)			Coas	st Prairie Redox (A16) (LRR F, G, H)
Black His	tic (A3)		Stripped Ma	atrix (S6)			Dark	Surface (S7) (LRR G)
Hydroger	n Sulfide (A4)		Loamy Muc	ky Mineral (F	-1)		High	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)		Loamy Gley	ed Matrix (F	2)		(LRF	R H outside of MLRA 72 & 73)
1 cm Muo	ck (A9) (LRR F, G, H)	1	Depleted M	atrix (F3)			Red	uced Vertic (F18)
Depleted	Below Dark Surface (A	411)	Redox Dark	Surface (F6	5) 		Red	Parent Material (TF2)
Thick Da	K Surface (A12)		Depleted Da	ark Surface (⊢7)		Very	Shallow Dark Surface (TF12)
Sandy Mi	ucky Mineral (S1)		Redox Depi	ressions (F8))		Othe	er (Explain in Remarks)
2.5 cm M	ucky Peat of Peat (S2)				ы (F16) Ц)		Sindica	ators of hydrophytic vegetation and
	rky real of reat (S3)		(WILKA /2 8	x / J OT LKR	п)		wetlar	a myanology must be present,
						I	uniess	
Restrictive La	ayer (if present):							
Туре:	b = =);							
Depth (inc	nes):		<u> </u>				Hydric Soil Pre	sent? Yes No X
Remarks:								
Hydric soil in	dicators are not preser	ıt.						
	-							
HYDROLOG	Y							
Wetland Hydr	ology Indicators:						_	
Primary Indica	tors (minimum of one	required; check	all that apply)				Secondar	ry Indicators (minimum of two required)
X Surface V	Vater (A1)		Salt Crust (I	B11)	10)		Surfa	ace Soil Cracks (B6)
X High Wat	er lable (A2)		Aquatic Inve	ertebrates (B	13)		Spar	rsely vegetated Concave Surface (B8)
	(A3)		Hyarogen S	outtae Odor (Drail	nage Patterns (B10)
vvater Ma	IIKS (BI)				; (UZ) along Livia:	a Poeto (C		have tilled)
	Depusits (DZ)			nzosprieres a	αιστιά Γινιυά	y roois (C		nere (neu) rfish Burrows (C8)
	or Crust (R4)		Presence	f Reduced In	on (C4)		Ciay	Iration Visible on Aerial Imagery (CQ)
	osits (B5)		Thin Muck 9	Surface (C7)	()		X Geo	morphic Position (D2)
Inundatio	n Visible on Aerial Ima	aery (B7)	Other (Fynl	ain in Remar	ks)		FAC	-Neutral Test (D5)
Water-St	ained Leaves (B9)	30'3 (2')		in roma	,		Fros	t-Heave Hummocks (D7)(LRR F)
Field Observa	ations:			h)	0			
Surface Water	Present? Ye	es <u>X</u> No	Depth (inc	nes):	3			
vvater Table P	resent? Ye		Deptn (inc	nes):	12	Metter	nd Uudralam, P	cont2 Voc V No
Saturation Pre	sent? Ye	5 <u> </u>		nes):	12	vvetiar	na nyarology Pre	
	ary mige)							
Describe Reco	orded Data (stream ga	uge, monitoring	well, aerial photos,	previous ins	pections), i	if available	:	
Remarks:								
Hydrology inc	licators are present.							

Project/Site:	FM 741 EA		City/County:	k	Kaufman County	Sampling Date:	04/14/2022
Applicant/Owner:	Texas Departmer	t of Transpo	portation		State: Texas	Sampling Point:	WDP08
Investigator(s):	CW and CP		Section, Towr	nship, Range:		N/A	
Landform (hillslope, terrace, et	c): depression		Local relief (c	oncave, conve	ex, none): co	ncave	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6549	5096	Long: -96.46384	1227 Datur	n: NAD 83
Soil Map Unit Name: Houston	n Black clay, 0 to 1 percent slope	s			NWI classifica	ation: NA	
Are climatic / hydrologic conditi	ions on the site typical for this tim	e of year?	Yes	No x	(If no, explain in Rema	arks.)	
Are Vegetation , Soil	, or Hydrology	significantly	disturbed?	Are "	Normal Circumstances" pre	esent? Yes 2	K No
Are Vegetation , Soil	, or Hydrology	naturally pro	blematic?	(If ne	eded, explain any answers	in Remarks.)	
SUMMARY OF FINDING	SS - Attach site map show	ving samp	oling point	t locations	, transects, importan	it features, etc.	
Hydrophytic Vegetation Pres	sent? Yes I	No X					
Hydric Soil Present?	Yes	No X	Is	the Sampled	Area		
Wetland Hydrology Present?	Yes X	No	wi	thin a Wetlan	d? Yes	No X	
			-				_
Remarks: One of the three conditions during	wetland indicators was present. g the site investigations were drie	This point is r than norma	not located w I.	ithin a wetland	d. The Antecedent Precipita	tion Tool scored a 9,	indicating
	entine names of plants.						
					Dominance lest work	sneet:	
T 01 1 (D) 1 1		Absolute	Dominant	Indicator	That Are OBL EACW	pecies	1 (A)
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are Obl, FACW, C	JI FAG.	I (A)
1					Total Number of Domin	ant	
2					Species Across All Stra	ant ata: '	2 (B)
3							
		0	= Total Cov	/er	Percent of Dominant St	oecies	
Sanling/Shrub Stratum (P	lot size: 30' radius)	0			That Are OBL, FACW, o	or FAC: 50).0 (A/B)
1 Rubus trivialis	() () () () () () () () () () () () () (20	Yes	FACU	,,.		()
2.					Prevalence Index wor	ksheet:	
3.					Total % Cover of:	Multip	ly by:
4.					OBL species	0 x 1 =	0
5.					FACW species	0 x 2 =	0
		20	= Total Cov	/er	FAC species	30 x 3 =	90
Herb Stratum (Plot size:	30' radius)		_		FACU species	40 x 4 =	160
1. Rumex crispus		30	Yes	FAC	UPL species	<u>5</u> x 5 =	25
2. Lolium perenne		10	No	FACU	Column Totals:	75 (A)	275 (B)
3. Solidago canadensis		10	No	FACU			
4. Veronica peregrina ssp. x	alapensis	5	No	NI	Prevalence Index	x = B/A = 3.0	67
5.					Hydronhytic Vegetatic	on Indicators:	
6					1 - Rapid Test for H	Hydrophytic Vegetatic	n
7					2 - Dominance Tes	st is >50%	
8					3 - Prevalence Ind	ex ≤3.0 ¹	
9					4 - Morphological	Adaptations ¹ (Provide	supporting
10					Problematic Hydro	phytic Vegetation ¹ (E	(xplain)
		55	= Total Cov	/er			. ,
Woody Vine Stratum (Plot	t size:)				¹ Indicators of hydric soi	il and wetland hydrold	ogy must
1					be present, unless distu	urbed or problematic.	
2							
		0	= Total Cov	/er	Hydrophytic		
% Bare Ground in Herb Stra	tum <u>45</u>				Vegetation		
					Present?	Yes No	X
Remarks: Line and Line of the	ation is not many						
Hydrophytic veget	auon is not present.						
1							

S	0	IL	
J	J		-

Profile Descri	ption: (Describe to tl Matrix	ne depth need	led to document th	e indicator	or confirm	the absend	ce of indicators.)	
(inches)	Color (moist)	0/_	Color (moist)		Type ¹		Texture	Pemarks
0_18	10VR 3/1	100		/0	Type	LUC	Clav	
0-10	1011(0/1							
						·		
						<u> </u>		
						·		
						·		
		·						
						·		
¹ Type: C=Cond	centration, D=Depletio	n, RM=Reduce	ed Matrix, CS=Cove	ered or Coate	ed Sand Gra	ins.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil In	dicators: (Applicable	to all LRRs, u	unless otherwise n	noted.)			Indicators for	Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gley	yed Marix (S	4)		1 cm M	/luck (A9) (LRR I, J)
Histic Epi	pedon (A2)		Sandy Red	lox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Black Hist	tic (A3)		Stripped M	atrix (S6)			Dark S	Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Muc	cky Mineral ((F1)		High F	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)		Loamy Gle	yed Matrix (I	F2)		(LRR	H outside of MLRA 72 & 73)
1 cm Muc	k (A9) (LRR F, G, H)		Depleted N	latrix (F3)			Reduc	ed Vertic (F18)
Depleted	Below Dark Surface (/	A11)	Redox Darl	k Surface (F	6)		Red P	arent Material (TF2)
Thick Dar	k Surface (A12)		Depleted D	ark Surface	(F7)		Very S	hallow Dark Surface (TF12)
Sandy Mu	icky Mineral (S1)		Redox Dep	pressions (F8	3)		Other	(Explain in Remarks)
2.5 cm Mi	ucky Peat or Peat (S2)) (LRR G, H)	High Plains	Depression	is (F16)		³ Indicate	ors of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LRF	R H)		wetland	hydrology must be present,
							unless c	listurbed or problematic.
Restrictive La	yer (if present):							
Туре:								
Depth (inc	hes):						Hydric Soil Prese	ent? Yes <u>No X</u>
i i i i i i i i i i i i i i i i i i i		or present.						
HYDROLOG	(
Wetland Hydr	ology Indicators:							
Primary Indica	tors (minimum of one	required; checl	k all that apply)				Secondary	Indicators (minimum of two required)
X Surface V	/ater (A1)		Salt Crust ((B11)			Surfac	e Soil Cracks (B6)
X High Wate	er Table (A2)		Aquatic Inv	ertebrates (I	B13)		Sparse	ely Vegetated Concave Surface (B8)
X Saturation	n (A3)		Hydrogen S	Sulfide Odor	(C1)		Draina	ge Patterns (B10)
Water Ma	rks (B1)		Dry-Seasor	n Water Tabl	e (C2)		Oxidiz	ed Rhizospheres on Living Roots (C3)
Sediment	Deposits (B2)		Oxidized R	hizospheres	along Living	Roots (C3	5) (whe	ere tilled)
Drift Depo	osits (B3)		(where n	ot tilled)			X Crayfis	sh Burrows (C8)
Algal Mat	or Crust (B4)		Presence c	of Reduced I	ron (C4)		Satura	tion Visible on Aerial Imagery (C9)
Iron Depo	sits (B5)		Thin Muck	Surface (C7)		X Geom	orphic Position (D2)
Inundation	n Visible on Aerial Ima	gery (B7)	Other (Exp	lain in Rema	ırks)		FAC-N	leutral Test (D5)
Water-Sta	ined Leaves (B9)						Frost-I	Heave Hummocks (D7) (LRR F)
Field Observa	tions:							
Surface Water	Present? Ye	es X No	Depth (ind	ches):	2			
Water Table Pr	resent? Ye	es X No	Depth (ind	ches):	12			
Saturation Pres	sent? Ye	es X No	Depth (ind	ches):	12	Wetlan	d Hydrology Prese	ent? Yes X No
(includes capill	ary fringe)							
Describe Reco	rded Data (stream ga	uge, monitoring	g well, aerial photos	, previous in	spections), i	f available:		
Domorke								
кетагкs: Нус	irology indicators are	present.						

Project/Site:	FM 741 EA	FM 741 EA City/County:			Kaufman County Sampling Date: 04/14/2		
Applicant/Owner:	Texas Department	of Transpor	ortation		State: Texas	Sampling Point:	WDP09
Investigator(s):	CW and CP	;	Section, Tow	nship, Range:		N/A	
Landform (hillslope, terrace, etc):	linear depression		Local relief (concave, conve	ex, none): cond	cave s	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.663	12057	Long: -96.453826	84 Datur	n: NAD 83
Soil Map Unit Name: Heiden c	lay, 3 to 5 percent slopes				NWI classificati	on: R4SBC	
Are climatic / hydrologic condition	s on the site typical for this time	of year?	Yes	No x	(If no, explain in Remark	ks.)	
Are Vegetation , Soil	, or Hydrology	significantly	disturbed?	Are "I	Normal Circumstances" pres	ent? Yes)	X No
Are Vegetation , Soil	, or Hydrology	naturally pro	blematic?	(If nee	eded, explain any answers in	Remarks.)	
SUMMARY OF FINDINGS	- Attach site map show	ing samp	oling poin	t locations.	transects, important	features, etc.	
Hydrophytic Vegetation Presen	t? Ves X N	<u> </u>		· · · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , ,		
Hydric Soil Present?		o	Ie	the Sampled	Aroa		
Wetland Hydrology Procent?		·		ithin a Watland		No	
		0	w				
Remarks: Three of the three w conditions during th	vetland indicators were present. e site investigations were drier t	This point is han normal.	s located wit	hin a wetland.⊺	The Antecedent Precipitation	Tool scored a 9, in	dicating
VEGETATION - Use scien	tific names of plants.						
					Dominance Test works	neet:	
		Absolute	Dominant	Indicator	Number of Dominant Spe	ecies	
Tree Stratum (Plot size:	30' radius)	% Cover	Species?	Status	That Are OBL, FACW, or	FAC:	3(A)
1. Gleditsia triacanthos		5	Yes	FACU			
2. <u>Ulmus americana</u>		5	Yes	FAC	Total Number of Dominar	nt	
3					Species Across All Strata	3:	<u>4</u> (B)
4							
		10	= Total Co	ver	Percent of Dominant Spe	Cles	
Sapling/Shrub Stratum (Plot	size:)				That Are OBL, FACW, or	FAC: 75	<u>.0</u> (A/B)
1				<u> </u>	Prevalence Index works	sheet:	
2					Total % Cover of:	Multin	lv bv:
3					OBL species 6	$\frac{1}{x 1 =}$	60
4.					FACW species 1	0 x 2 =	20
5					FAC species 3	5 x 3 =	105
Llark Strature (Dist size)		0		ver	FACU species 5	x 4 =	20
Herb Stratum (Piot size:	30 [°] radius)	60	Vaa		UPL species 0	x 5 =	0
		60	Yes		Column Totals: 11	0 (A)	205 (B)
2. Rumex crispus		20	Yes	FAC			()
3. Xanthium strumarium		10	NO	FAC	Prevalence Index =	= B/A = 1.	86
4. Valerianella radiata		10	NO	FACW			
5					Hydrophytic Vegetation	Indicators:	
6					1 - Rapid Test for Hy	drophytic Vegetatio	วท
/					X 2 - Dominance Test	is >50%	
8					X 3 - Prevalence Index	κ ≤3.0¹	
9					4 - Morphological Ad	daptations ¹ (Provide	e supporting
10					Problematic Hydrop	hytic Vegetation ¹ (E	xplain)
	、 、	100	= = lotal Co	ver			
Woody Vine Stratum (Plot si	ze:)				¹ Indicators of hydric soil a	and wetland hydrold	ogy must
1					be present, unless distur	bed or problematic.	
2							
% Bare Ground in Herb Stratur	n <u> 0 </u>		_ = 10(al Co	ver	Hydrophytic Vegetation Present?	es X No	
Remarks: Hydrophytic vegetation is pres	sent.						

SOIL	
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Depth	Watin		Redox	reatures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 4/1	90	10YR 7/2	10	D	Μ	Clay	
				·				
				·				
							·	
					·		·	
					·		·	
Type: C=Conc	entration, D=Depletio	n, RM=Reduc	ed Matrix, CS=Cove	red or Coat	ed Sand Gra	ains.	²Locati	on: PL=Pore Lining, M=Matrix.
lydric Soil Ind	dicators: (Applicable	e to all LRRs,	unless otherwise n	oted.)			Indicators	or Problematic Hydric Soils ³ :
Histosol (A	A1)		Sandy Gley	ed Marix (S	64)		1 cr	m Muck (A9) (LRR I, J)
Histic Epip	pedon (A2)		Sandy Red	ox (S5)			Coa	ast Prairie Redox (A16) (LRR F, G, H)
Black Hist	ic (A3)		Stripped Ma	atrix (S6)			Dar	k Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Muc	ky Mineral	(F1)		Hig	h Plains Depressions (F16)
Stratified L	ayers (A5) (LRR F)		Loamy Gle	ed Matrix (F2)		(LR	R H outside of MLRA 72 & 73)
1 cm Mucl	k (A9) (LRR F, G, H)	Depleted M	atrix (F3)			Rec	luced Vertic (F18)
Depleted I	Below Dark Surface (A	A11)	Redox Darl	Surface (F	6)		Rec	l Parent Material (TF2)
Thick Dark	k Surface (A12)		X Depleted D	ark Surface	(F7)		Ver	y Shallow Dark Surface (TF12)
Sandy Mu	cky Mineral (S1)		Redox Dep	ressions (F	8)		Oth	er (Explain in Remarks)
2.5 cm Mu	icky Peat or Peat (S2) (LRR G, H)	High Plains	Depression	ns (F16)		³ Indic	ators of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LRI	R H)		wetla	nd hydrology must be present,
							unles	s disturbed or problematic.
estrictive La	yer (if present):							
T								
Type:								
Depth (inch Remarks: Hydric soil ind	nes):						Hydric Soil Pre	esent? Yes <u>X</u> No
Depth (inch Remarks: Hydric soil ind	nes):						Hydric Soil Pre	esent? Yes <u>X</u> No
Depth (inch Remarks: Hydric soil ind	nes):						Hydric Soil Pre	esent? Yes <u>X</u> No
Type: Depth (inch Remarks: Hydric soil ind (DROLOG) Vetland Hydro	nes): licators are present. / plogy Indicators: ors (minimum of one.	required: cheq					Hydric Soil Pre	esent? Yes <u>X</u> No
Type: Depth (inch Remarks: Hydric soil ind /DROLOGY Vetland Hydro Primary Indicat X Surface W	nes): licators are present. / ology Indicators: ors (minimum of one /ater (A1)	required; cheo	<u></u>	B11)			Hydric Soil Pre	esent? Yes <u>X</u> No
Depth (inch Depth (inch Remarks: Hydric soil ind DROLOGY Vetland Hydro Primary Indicat X Surface W X High Wate	hes): licators are present. f blogy Indicators: cors (minimum of one /ater (A1) er Table (A2)	required; chea	<u></u>	B11)	B13)		Hydric Soil Pre	esent? Yes X No
Type: Depth (inch Remarks: Hydric soil ind /DROLOGY Vetland Hydro Primary Indicat X Surface W X High Wate X Saturation	icators are present.	required; cheo	<u></u>	B11) ertebrates (Sulfide Odor	B13)		Hydric Soil Pre	ry Indicators (minimum of two required) face Soil Cracks (B6) ursely Vegetated Concave Surface (B8) inage Patterns (B10)
Type: Depth (inch Remarks: Hydric soil ind DROLOGY Vetland Hydro rimary Indicat X Surface W X High Wate X Saturation Water Mai	icators are present.	required; cheo	<u>:k all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Drv-Seasor	B11) ertebrates (Sulfide Odor	B13) • (C1) le (C2)		Hydric Soil Pre	ry Indicators (minimum of two required face Soil Cracks (B6) ursely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C
Type: Depth (inch Remarks: Hydric soil ind DROLOGY Vetland Hydro Yrimary Indicat X_Surface W X_High Wate X_Saturation Water Mar Sediment	icators are present.	required; cheo	<u>:k all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R	B11) ertebrates (Sulfide Odor 1 Water Tab	B13) • (C1) le (C2) s along Livin	a Roots (Q	Hydric Soil Pre	esent? Yes X No ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (Concepted tilled)
Type: Depth (inch Remarks: Hydric soil ind Zemarks: Hydric soil ind Zemarks: Zeliand Hydro Primary Indicat X Surface W X High Wate X Saturation Water Mar Sediment X Drift Depo	hes): licators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) sits (B3)	required; chea	<u>xk all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized Ri (where ne	B11) ertebrates (Sulfide Odor n Water Tab nizospheres ot tilled)	B13) • (C1) le (C2) s along Livin	g Roots (C	Hydric Soil Pre	esent? Yes X No ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (Concernent Concernent Co
Type: Depth (inch Remarks: Hydric soil ind TDROLOGY Vetland Hydro Primary Indicat X Surface W X High Water X Saturation Water Mar Sediment X Drift Depo Aloal Mat	hes): licators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)	required; cheo	All that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized RI (where meree Presence o	B11) ertebrates (Sulfide Odor n Water Tab nizospheres ot tilled) f Reduced J	B13) • (C1) le (C2) s along Livin ron (C4)	g Roots (C	Hydric Soil Pre	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (Co where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Type: Depth (inch Remarks: Hydric soil ind (DROLOGY Vetland Hydro Primary Indicat X Surface W X High Wate X Saturation Water Mar Sediment X Drift Depo Algal Mat Iron Depo	icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	required; cheo	Salt that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized RI (where no Thin Muck S	B11) ertebrates (Sulfide Odor h Water Tab hizospheres ot tilled) f Reduced I Surface (C7	B13) · (C1) le (C2) s along Livin /ron (C4)	g Roots (C	Hydric Soil Pre	esent? Yes X No ary Indicators (minimum of two required) face Soil Cracks (B6) insely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C: /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2)
Type: Depth (inch Remarks: Hydric soil ind TOROLOGY Vetland Hydro Primary Indicat X Surface W X High Wate X Saturation Water Mar Sediment X Drift Depo Algal Mat Iron Depo: Inundatior	icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima	required; chea	:k all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized RI (where no Thin Muck S Other (Expl	B11) ertebrates (Sulfide Odor h Water Tab hizospheres bt tilled) f Reduced I Surface (C7 ain in Rema	B13) · (C1) le (C2) ₃ along Livin ron (C4) ′) arks)	g Roots (C	Hydric Soil Pre	esent? Yes X No ny Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) dized Rhizospheres on Living Roots (C: here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5)
Type: Depth (inch Remarks: Hydric soil ind DROLOGY Vetland Hydro Yrimary Indicat X Surface W X High Water X Saturation Water Man Sediment X Drift Depo Algal Mat Iron Depo: Inundatior Water-Sta	icators are present.	required; chea	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized Rl (where nd Presence o Thin Muck s Other (Expl	B11) ertebrates (Sulfide Odor n Water Tab nizospheres ot tilled) f Reduced I Surface (C7 ain in Rema	B13) · (C1) le (C2) s along Livin ron (C4) ') arks)	g Roots (C	Hydric Soil Pre	essent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Type: Depth (incl Depth (incl Remarks: Hydric soil ind DROLOGY Vetland Hydro Primary Indicat X Surface W X High Wate X Saturation Water Mai Sediment X Drift Depo Algal Mat Iron Depo: Inundatior Water-Sta	hes): licators are present. plogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions:	required; cher	<u>Sk all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized Ri (where no Presence o Thin Muck s Other (Expl	B11) ertebrates (Sulfide Odor hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema	B13) · (C1) le (C2) s along Livin ron (C4) ') arks)	g Roots (C	Hydric Soil Pre	esent? Yes X No rry Indicators (minimum of two required) face Soil Cracks (B6) ursely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Type: Depth (inch Remarks: Hydric soil ind /DROLOGY Vetland Hydro Primary Indicat X Surface W X High Wate X Saturation Water Man Sediment X Drift Depo Algal Mat Iron Depo Inundatior Water-Sta Surface Water	hes): licators are present. plogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye	required; chea	:k all that apply)	B11) ertebrates (Sulfide Odor n Water Tab nizospheres ot tilled) f Reduced I Surface (C7 ain in Rema shes):	B13) · (C1) le (C2) s along Livin ron (C4) ·) arks) 1	g Roots (C	Hydric Soil Pre	esent? Yes X No rry Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) dized Rhizospheres on Living Roots (C /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F)
Type: Depth (inch Remarks: Hydric soil ind TDROLOGY Vetland Hydro Primary Indicat X Surface W X High Water X Saturation Water Man Sediment X Drift Depo Algal Mat Iron Depo Inundatior Water-Sta Surface Water Vater Table Print	icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye	required; cher igery (B7) es X No es X No	ck all that apply)	B11) ertebrates (Sulfide Odor n Water Tab nizospheres ot tilled) f Reduced I Surface (C7 ain in Rema shes):	B13) · (C1) le (C2) s along Livin ron (C4) ·) arks) <u>1</u> 12	ig Roots (C	Hydric Soil Pre	esent? Yes X No ary Indicators (minimum of two required) face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C: /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Type: Depth (incl Depth (incl Remarks: Hydric soil ind /DROLOGY Vetland Hydro Yrimary Indicat X Surface W X High Water X Sediment X Drift Depoo Inundatior Water-Sta Gurface Water Surface Water Surface Water Surface Water Surface Water Surface Table Present	icators are present. icators are present. plogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye sent? Ye	Igery (B7) =s X No =s X No =s X No =s X No =s X No	ck all that apply)	B11) ertebrates (Sulfide Odor n Water Tab nizospheres ot tilled) f Reduced I Surface (C7 ain in Rema shes): thes):	B13) • (C1) le (C2) s along Livin ron (C4) ') arks) <u>1</u> <u>12</u> 12	ig Roots (C	Hydric Soil Pre	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
Type: Depth (incl Depth (incl Remarks: Hydric soil ind Zamarks: Hydric soil ind Zamarks: Hydric soil ind Zamarks: Hydric soil ind Zamarks: Yetland Hydro Primary Indicat X Surface W X High Water X Sediment X Mater Mar Sediment X Drift Depo Algal Mat Iron Depo: Inundation Water-Sta Surface Water Vater Table Prisaturation Presincludes capilla	icators are present. icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye sent? Ye ary fringe)	required; chea igery (B7) es X Na es X Na es X Na	ck all that apply)	B11) ertebrates (Sulfide Odor hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema shes): thes):	B13) • (C1) le (C2) s along Livin (ron (C4) *) arks) <u>1</u> <u>12</u> <u>12</u>	g Roots (C	Hydric Soil Pre	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
Type: Depth (incl Depth (incl Remarks: Hydric soil ind DROLOGY Vetland Hydro Yerland Hydro Primary Indicat X Surface W X High Water X Sediment X Drift Depo Algal Mat Iron Depo: Inundatior Water-Sta Gurface Water Vater Table Prisaturation Press ncludes capill: Describe Record	icators are present. icators are present. f f f f f f f f f f f f f	required; cher igery (B7) 25 X X No 25 X X No 25 X	Sk all that apply)	B11) ertebrates (Sulfide Odor h Water Tab hizospheres bt tilled) f Reduced I Surface (C7 ain in Rema strface (C7 ain in Rema strface): thes): thes): thes):	B13) (C1) le (C2) s along Livin ron (C4) ') arks) <u>1</u> <u>12</u> 12 12 12 12	g Roots (C Wetlan	Hydric Soil Pre	esent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) irrsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F) esent? Yes X No
Type: Depth (incl Depth (incl Nether Selimation Water Mar Sediment C Saturation Water Mar Sediment C Saturation Water Mar Sediment C Drift Depo Algal Mat Iron Depo Inundatior Water-Sta ield Observa urface Water Atter Table Pre- aturation Pres- ncludes capilla	icators are present.	required; chea igery (B7) es X No es X No es X No uge, monitorir	ck all that apply)	B11) ertebrates (Sulfide Odor n Water Tab nizospheres ot tilled) f Reduced I Surface (C7 ain in Rema ches): ches): ches): , previous ir	B13) · (C1) le (C2) s along Livin · (C4) ·) arks) <u>1</u> <u>12</u> <u>12</u> 12 	g Roots (C	Hydric Soil Pre	esent? Yes <u>X</u> No ary Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes <u>X</u> No
Type: Depth (incl Depth (incl Hydric soil ind Hydric soil ind DROLOGY Vetland Hydro rimary Indicat X Surface W X High Water X Sediment X Drift Depo Algal Mat Iron Depo Inundatior Water-Sta ield Observa urface Water Algal Rat Iron Depo Inundation Water Table Prist Alger Capilla High Observa urface Water ater Table Prist rescribe Record temarks: Hydrology (State)	icators are present. icators are present. f f f f f f f f f f f f f	required; chea Igery (B7) es X No es X No es X No uge, monitorir	:k all that apply)	B11) ertebrates (Sulfide Odor h Water Tab hizospheres bt tilled) f Reduced I Surface (C7 ain in Rema shes): thes): thes): previous ir	B13) · (C1) le (C2) s along Livin /ron (C4) /) arks) 1 12 12 12 12 12 12 12 12 12	g Roots (C	Hydric Soil Pre	esent? Yes X No

Project/Site:	FM 741 EA City/0		City/County:	К	aufman County	Sampling Date:	04/14/2022	
Applicant/Owner:	Texas Departmer	nt of Transpor	portation		State: Texas	Sampling Point:	WDP10)
Investigator(s):	CW and CP		Section, Towi	nship, Range:		N/A		
Landform (hillslope, terrace, etc):	flatland		Local relief (c	oncave, conve	ex, none): no	one	Slope (%):	0
Subregion (LRR):	LRR J MLRA 86A	Lat:			Long:	Datu	m: NAD	83
Soil Map Unit Name: Heiden d	ay, 3 to 5 percent slopes				NWI classification	tion: R4SBC		
Are climatic / hydrologic condition	is on the site typical for this tim	ne of year?	Yes	No x	(If no, explain in Rema	rks.)		
Are Vegetation , Soil	, or Hydrology	significantly	disturbed?	Are "N	Normal Circumstances" pres	sent? Yes	κ No	
Are Vegetation, Soil	, or Hydrology	naturally pro	blematic?	(If nee	eded, explain any answers i	n Remarks.)		
SUMMARY OF FINDINGS	- Attach site map show	wing samp	oling point	t locations,	transects, important	t features, etc.		
Hydrophytic Vegetation Preser	it? Yes X	No .			•	· · · ·		
Hydric Soil Present?	Yes	No X	Is	the Sampled	Δrea			
Wetland Hydrology Present?	Yes		wi	thin a Wetland	d? Yes	No X		
		<u></u>					_	
Remarks: One of the three wet conditions during the	land indicators was present. T	his point is no than normal.	ot located with	nin a wetland. 1	The Antecedent Precipitatio	n Tool scored a 9, ir	ndicating	
VEGETATION - Use scien	itific names of plants.							
					Dominance Test works	sheet:		
		Absolute	Dominant	Indicator	Number of Dominant Sp	ecies		
Tree Stratum (Plot size:	30' radius)	% Cover	Species?	Status	That Are OBL, FACW, o	r FAC:	5 (A	.)
1. Maclura pomifera		10	Yes	FACU				
2. Ulmus crassifolia		10	Yes	FAC	Total Number of Domina	ant		
3. <u>Salix nigra</u>		10	Yes	FACW	Species Across All Strat	a:	9 (B)
4								
		30	= Total Cov	/er	Percent of Dominant Sp	ecies		
Sapling/Shrub Stratum (Plot	size:)				That Are OBL, FACW, o	r FAC: 5	5.6 (A	/B)
1					Brovalanca Index work	choot:		
2						Sheet:	alu bu	
3							15	
4						10 x 2 =	0	
5					FACTO species 2	$x_2 = $	60	
		0	= Total Cov	/er	EACU species	10 × 4 =	160	
Herb Stratum (Plot size:	<u>30' radius</u>)					15 x 5 =	75	
1. Juncus marginatus		15	Yes	FACW	Column Totals: 1	30 (A)	390	(B)
2. Sisyrinchium pallidum		15	Yes	NI		(/ ()	000	(0)
3. <u>Bromus arvensis</u>		15	Yes	FACU	Prevalence Index	= B/A = 3	0	
4. Ambrosia psilostachya		15	Yes	FACU				
5. <u>Eleocharis palustris</u>		15	Yes	OBL	Hydrophytic Vegetatio	n Indicators:		
6. <u>Valerianella radiata</u>		15	Yes	FACW	1 - Rapid Test for H	lydrophytic Vegetati	on	
7. Xanthium strumarium		10	No	FAC	X 2 - Dominance Test	t is >50%		
8					X 3 - Prevalence Inde	ex ≤3.0¹		
9					4 - Morphological A	daptations ¹ (Provide	e supporting	
10					Problematic Hydror	ohytic Vegetation ¹ (E	Explain)	
	· · · · · · · · · · · · · · · · · · ·	100	= Total Cov	/er				
Woody Vine Stratum (Plot s	ize:)				¹ Indicators of hydric soil	and wetland hydrol	ogy must	
1					be present, unless distu	rbed or problematic		
2			Tabal Oas					
	•	0	= Iotal Cov	/er	Hydrophytic			
% Bare Ground in Herb Stratur	m				Vegetation			
					Present? Y	es <u>X</u> No		
Remarks: Hydrophytic vegetation is pres	sent.							

S	0	IL	
J	J		-

Profile Desc	ription: (Describe to 1 Matrix	he depth need	ed to do	cument th	e indicator	or confirm	the absen	nce of indicators.)	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹		Texture	Remarks
0-18	10YR 3/1	100	00001 (/0	- jhe	200	Clav	nomano
0.0					·			Sidy	
					·				
							·		
	-				·				
¹ Type: C=Cor	centration, D=Depletion	on, RM=Reduce	d Matrix	, CS=Cove	red or Coate	d Sand Gra	ains.	² Locatio	on: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applicabl	e to all LRRs, u	nless o	therwise n	oted.)			Indicators for	or Problematic Hydric Soils ³ :
Histosol	(A1)		:	Sandy Gley	ed Marix (Se	4)		1 cm	n Muck (A9) (LRR I, J)
Histic Ep	pipedon (A2)		:	Sandy Red	ox (S5)			Coas	st Prairie Redox (A16) (LRR F, G, H)
Black Hi	stic (A3)			Stripped Ma	atrix (S6)			Dark	Surface (S7) (LRR G)
Hydroge	n Sulfide (A4)			Loamy Muc	ky Mineral (I	F1)		High	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)	!	Loamy Gley	yed Matrix (F	-2)		(LRF	R H outside of MLRA 72 & 73)
1 cm Mu	CK (A9) (LRR F, G, F	l)	!	Depleted M	atrix (F3)	2)			Devent Material (TEO)
Depleted	Below Dark Surface	(A11)		Redox Dark	Contace (Ft) (F7)			Parent Material (TF2)
	lik Sullace (A12)		!	Depleted D		(F7)		Very	Silallow Dark Sullace (TFT2)
3anuy iv	lucky Milleral (31) Auchy Peat or Peat (S1			High Plains	Depression	r) s (E16)			ators of hydrophytic vegetation and
2.0 cm Mu	cky Peat or Peat (S3)	(I RR F)			& 73 of I RR	9 (1 10) 2 H)		wetlar	ad hydrology must be present
						,		unless	s disturbed or problematic
									· · · · · · · · · · · · · · · · · · ·
Restrictive L	ayer (if present):								
Type:									
Depth (in	cnes):		_					Hydric Soil Pre	sent? Yes <u>NO X</u>
Remarks:									
Hydric soil in	dicators are not prese	nt.							
HYDROLOG	iΥ								
Wetland Hyd	rology Indicators:								
Primary Indic	ators (minimum of one	required; check	all that	apply)				Secondar	ry Indicators (minimum of two required)
Surface	Water (A1)	•	:	Salt Crust (B11)			Surfa	ace Soil Cracks (B6)
High Wa	ter Table (A2)			Aquatic Inv	ertebrates (E	313)		 Spar	rsely Vegetated Concave Surface (B8)
Saturatio	on (A3)			Hydrogen S	Sulfide Odor	(C1)		Drai	nage Patterns (B10)
Water M	arks (B1)		I	Dry-Seasor	n Water Table	e (C2)		Oxid	lized Rhizospheres on Living Roots (C3)
Sedimer	t Deposits (B2)		(Oxidized RI	hizospheres	along Livin	ng Roots (C	3) (w	here tilled)
Drift Dep	oosits (B3)			(where no	ot tilled)			Cray	/fish Burrows (C8)
Algal Ma	t or Crust (B4)		'	Presence o	f Reduced Ir	on (C4)		Satu	ration Visible on Aerial Imagery (C9)
Iron Dep	osits (B5)		'	Thin Muck S	Surface (C7))		Geo	morphic Position (D2)
Inundatio	on Visible on Aerial Im	agery (B7)	(Other (Expl	ain in Rema	rks)		FAC	-Neutral Test (D5)
Water-St	ained Leaves (B9)							Fros	t-Heave Hummocks (D7) (LRR F)
Field Observ	ations:								
Surface Wate	r Present?	′es No	Х	Depth (inc	ches):				
Water Table F	Present?	/es No	Х	Depth (inc	hes):				
Saturation Press	esent? Y	/es No	Х	Depth (inc	ches):		Wetla	nd Hydrology Pre	sent? Yes No X
(includes cap	illary fringe)								
Describe Rec	orded Data (stream ga	auge, monitoring	well, ae	rial photos,	, previous in	spections),	if available	::	
Remarks:									
Hydrology in	dicators are not prese	nt.							

Project/Site:	FM 741 EA	(City/County:	K	aufman County	5	Sampling Date:	04/14/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: T	ēxas S	Sampling Point:	WDP11
Investigator(s):	CW and CP	ç	Section, Town	ship, Range:			N/A	
Landform (hillslope, terrace, etc)	: wooded hillslope	L	_ocal relief (co	oncave, conve	ex, none):	conve	x	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6634	5118	Long: -96	6.45415351	l Datur	n: NAD 83
Soil Map Unit Name: Heiden c	lay, 3 to 5 percent slopes				NWI cl	lassification	R4SBC	
Are climatic / hydrologic conditio	ns on the site typical for this time	of year?	/es	No <u>x</u>	(If no, explain i	n Remarks.	.)	
Are Vegetation, Soil	, or Hydrology	significantly	disturbed?	Are "I	Normal Circumstanc	es" presen	t? Yes	X No
Are Vegetation, Soil	, or Hydrology	naturally pro	blematic?	(If nee	eded, explain any ar	nswers in R	Remarks.)	
SUMMARY OF FINDINGS	S - Attach site map show	ing samp	ling point	locations,	transects, imp	ortant fe	eatures, etc.	
Hydrophytic Vegetation Prese	nt? Yes N	0 X						
Hydric Soil Present?	Yes N	0 X	ls f	the Sampled	Area			
Wetland Hydrology Present?	Yes N	0 X	wit	hin a Wetlan	d? Ye	es	No X	
		· · · · · ·						
Remarks: None of the three v	vetland indicators were present.	This point is	not located w	ithin a wetlan	d. The Antecedent F	Precipitation	n Tool scored a 9	, indicating
conditions during th	ne site investigations were drier t	han normal.						
Area highly disturb	ed by nearby construction. Highly	y eroaded.						
VEGETATION - Use scie	ntific names of plants.							
					Dominanco Tor	st workeho	ot:	
		A In a a luit a	Deminent	la d'a sta s	Number of Dom	inant Speci		
	30' radius	Absolute	Dominant	Indicator				2 (^)
<u>Tree Stratum</u> (Plot size:		% Cover	Species?	Status	mat Are Obl., P	ACVV, ULF	HC	<u> </u>
		20	Yes	FAC	Total Number of	Dominant		
2. Fraxinus pennsylvanica		20	res	FAC	Species Across	All Strata:		6 (B)
3					opecies Acioss	All Strata.		<u> </u>
4			- Total Cav		Percent of Domi	inant Sneci	05	
Sapling/Shrub Stratum (Pla	staiza: 30' radius)	00		ei	That Are OBL F		ΔC: 5() (A/B)
<u>Sapility/Silido Stratulii</u> (Fid	(Size)	15	Voc	EACU		7.000, 0117		<u>,,,,</u> (,,,,,)
2 Fravinus pennsylvanica	5	10	Vec	FACU FAC	Prevalence Ind	ex worksh	eet:	
2. Traxinus permisylvanica		10	103	170	Total % Co	over of:	Multip	bly by:
3					OBL species	0	x 1 =	0
5					FACW species	0	x 2 =	0
0		25	= Total Cov	er	FAC species	95	x 3 =	285
Herb Stratum (Plot size:	30' radius				FACU species	60	x 4 =	240
1 I olium perenne		45	Yes	FACU	UPL species	15	x 5 =	75
2. Torilis arvensis		15	Yes	NI	Column Totals:	170	(A)	600 (B)
3. Ambrosia trifida		5	No	FAC				
4.					Prevalenc	e Index = B	3/A =3.	53
5.					Lludro a buti o Ma	a station lu	- dia ata na i	
6.						egetation in	ndicators:	
7.						est ior myur		
8.					2 - Domina 3 Prevaler	nce Index <	~50 %	
9.					4 - Morphol		s.u ntations ¹ (Provide	a supporting
10					Problematic	n Hydronhy	tic Vegetation ¹ (F	-xnlain)
		65	= Total Cov	er		oriyaropity	lie vegetation (E	
Woody Vine Stratum (Plot s	size:)				¹ Indicators of by	dric soil an	d wetland hydrol	oav must
1					be present unle	ess disturbe	d or problematic	Jgy maar
2								
		0	= Total Cov	er	Hydrophytic			
% Bare Ground in Herb Stratu	ım <u>35</u>				Vegetation			
					Present?	Yes	No	Х
Remarks:								
Hydrophytic vegetation is not	t present.							

SOIL	
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Depth	Matrix	-	Redo	x Features			,	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 3/1	100					Clay	
<u> </u>		<u> </u>						
		<u> </u>					·	
		n RM=Reduced	Matrix CS=Cove		ad Sand Gra	aine		n: PL=Pore Lining M=Matrix
Hydric Soil Ind	dicators: (Applicable	to all LRRs, ur	liess otherwise i	10ted.)	4		Indicators to	r Problematic Hydric Solls":
HISTOSOI (/	41) 		Sandy Gle	yed Marix (S	4)		1 cm	Muck (A9) (LRR I, J)
Histic Epi	bedon (A2)		Sandy Red	10X (55)			Coas	Curfa as (07) (LRR F, G, H)
	IC (A3)		Stripped iv	latrix (S6)	-			
Hydrogen	Sulfide (A4)		Loamy Mu	cky Mineral ((⊢1) 		High	Plains Depressions (F16)
Stratified I	Layers (A5) (LRR F)		Loamy Gle	eyed Matrix (F	-2)		(LRR	H outside of MLRA 72 & 73)
1 cm Muc	k (A9) (LRR F, G, H))	Depleted N	/latrix (F3)			Redu	ced Vertic (F18)
Depleted	Below Dark Surface (A	A11)	Redox Dar	k Surface (F	6)		Red I	Parent Material (TF2)
Thick Dar	k Surface (A12)		Depleted D	Dark Surface	(F7)		Very	Shallow Dark Surface (TF12)
Sandy Mu	icky Mineral (S1)		Redox Dep	pressions (F8	3)		Other	r (Explain in Remarks)
2.5 cm Mu	ucky Peat or Peat (S2)) (LRR G, H)	High Plain	s Depression	is (F16)		³ Indica	tors of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LRF	R H)		wetland	d hydrology must be present,
							unless	disturbed or problematic.
Restrictive La	yer (if present):							
Туре:			_					
Depth (incl	nes):		_				Hydric Soil Pres	ent? Yes No X
YDROLOG	(
Wetland Hydro	ology Indicators:							
Primary Indicat	tors (minimum of one	required; check	all that apply)				Secondary	/ Indicators (minimum of two required
Surface W	/ater (A1)		Salt Crust	(B11)			Surfa	ce Soil Cracks (B6)
High Wate	er Table (A2)		Aquatic Inv	vertebrates (E	313)		Spars	sely Vegetated Concave Surface (B8)
Saturation	n (A3)		Hydrogen	Sulfide Odor	(C1)		X Drain	age Patterns (B10)
Water Ma	rks (B1)		Dry-Seaso	n Water Tabl	e (C2)		Oxidi	zed Rhizospheres on Living Roots (C
Sediment	Deposits (B2)		Oxidized F	Rhizospheres	along Living	g Roots (C	3) (wh	ere tilled)
X Drift Depo	sits (B3)		(where n	ot tilled)			Crayf	ish Burrows (C8)
Algal Mat	or Crust (B4)		Presence of	of Reduced I	ron (C4)		Satur	ation Visible on Aerial Imagery (C9)
Iron Depo	sits (B5)		Thin Muck	Surface (C7)		Geon	norphic Position (D2)
Inundation	n Visible on Aerial Ima	gery (B7)	Other (Exp	lain in Rema	ırks)		FAC-	Neutral Test (D5)
Water-Sta	ined Leaves (B9)						Frost	-Heave Hummocks (D7)(LRR F)
Field Observa	tions:							
Surface Water	Present? Ye	es No	X Depth (in	ches):				
Water Table Pr	esent? Ye	es <u>No</u> No	X Depth (in	ches):				
Saturation Pres	sent? Ye	es No	X Depth (in	ches):		Wetla	nd Hydrology Pres	sent? Yes No X
(includes capill	ary fringe)							
Describe Reco	rded Data (stream ga	uge, monitoring	well, aerial photos	s, previous in	spections),	if available	2:	
Remarks:	vdrology indicators	a not procent ^	rea highly disturb	ad by upstra	am construi	otion		
н	yurology indicators an	e not present A	aea mynny disturb	eu ny upsire	am construc	Juon.		

Project/Site:	FM 741 EA	(City/County	: •	Kaufman County	Sampling Date:	04/14/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Texas	Sampling Point:	WDP12
Investigator(s):	CW and CP		Section, Tov	wnship, Range:		N/A	
Landform (hillslope, terrace, etc):	terrace	I	Local relief	(concave, conve	ex, none): co	nvex	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.668	313173	Long: -96.44843	932 Datur	n: NAD 83
Soil Map Unit Name: Heiden cl	ay, 3 to 5 percent slopes				NWI classifica	tion: <u>NA</u>	
Are climatic / hydrologic condition	s on the site typical for this time	of year?	Yes	No x	(If no, explain in Rema	rks.)	
Are Vegetation, Soil	, or Hydrologys	significantly	disturbed?	Are "	Normal Circumstances" pres	sent? Yes	X No
Are Vegetation, Soil	, or Hydrologyr	naturally pro	blematic?	(If ne	eded, explain any answers	in Remarks.)	
SUMMARY OF FINDINGS	- Attach site map show	ing samp	oling poi	nt locations	, transects, importan	t features, etc.	
Hydrophytic Vegetation Present	t? Yes N	o X					
Hvdric Soil Present?	Yes N	0 X	·	s the Sampled	Area		
Wetland Hydrology Present?	Yes N	0 X		vithin a Wetlan	d? Yes	No X	
					· · · · ·		
Remarks: None of the three w conditions during the	etland indicators were present. e site investigations were drier t	This point is han normal.	not located	d within a wetlar	nd. The Antecedent Precipit	ation Tool scored a S), indicating
VEGETATION - Use scien	tific names of plants.						
					Dominance Test works	sheet:	
		Absolute	Dominan	t Indicator	Number of Dominant Sp	pecies	
Tree Stratum (Plot size:	30' radius)	% Cover	Species?	Status	That Are OBL, FACW, o	or FAC:	4 (A)
1. Populus deltoides		15	Yes	FAC			
2. <u>Celtis laevigata</u>		15	Yes	FAC	Total Number of Domina	ant	
3					Species Across All Stra	ta:	8 (B)
4							
		30	= Total C	over	Percent of Dominant Sp	ecies	
Sapling/Shrub Stratum (Plot	size: <u>30' radius</u>)				That Are OBL, FACW, o	or FAC: 50).0 (A/B)
1. Cornus drummondii		35	Yes	FAC		• •	
2. Ligustrum sinense		10	Yes	UPL	Prevalence Index worl	(sneet:	
3					Iotal % Cover of:	Multip	
4						$\frac{0}{2}$ x1=	
5					FAC vv species	$\frac{0}{12} \times 2 = $	
		45	= Total C	over	FAC species	$\frac{75}{20}$ $\times 4 =$	120
Herb Stratum (Plot size:	<u>30' radius</u>)					25 × 5 =	125
1. Ageratina altissima		15	Yes	UPL	Column Totals: 1	30 (A)	470 (B)
2. Paspalum dilatatum		10	Yes	FAC			<u></u> (B)
3					Prevalence Index	= B/A =3	62
4							
5					Hydrophytic Vegetatio	n Indicators:	
6					1 - Rapid Test for H	lydrophytic Vegetatio	on
/					2 - Dominance Tes	t is >50%	
8					3 - Prevalence Inde	ex ≤3.0¹	
9					4 - Morphological A	Adaptations ¹ (Provide	supporting
10					Problematic Hydro	phytic Vegetation ¹ (E	xplain)
Maadu Vina Ctratum (Dist si	30' radius	25		over			
Voody vine Stratum (Piot Si	26)	45	Vaa	FACU	¹ Indicators of hydric soil	and wetland hydrolo	ogy must
1. Partnenocissus quinquerona		15	Yes	FACU	be present, unless distu	rbed or problematic.	
		10					
% Bare Ground in Herb Stratun	n <u>75</u>		10(a) Ci	over	Vegetation	res No	×
Remarks: Hydrophytic vegetation is not	present.						

S	0	IL	
J	J		-

Profile Desci	ription: (Describe to t	the depth need	ed to docume	ent the indicator	or confirm	the absen	ce of indicators.)	
(inches)		0/_	Color (moist)		Tupo ¹		Texture	Pemarka
0_18	10YR 4/1	100		/0	туре	LUC	Clav	
0-10		100						
					<u> </u>		·	
							·	
	-				<u> </u>			
			d Matrix CC		d Card Car	aina	21 aaati	DI = Doro Lining M=Matrix
Type: C=Cor					u Sand Gra	ailis.	-Location	
Hydric Soil I	ndicators: (Applicabl	e to all LRRs, ι	unless otherw	ise noted.)			Indicators for	Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy	Gleyed Marix (S	4)			
Histic Ep	npeaon (A2)		Sandy	r Redox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
	suc (A3) n Sulfide (A4)			eu Mucky Mineral (F1)		Dark 3	Dians Depressions (E16)
Hyuruge Stratified	Havers (Δ5) /I RP F)		y white all (/ Gleved Matrix / I			רוטָרוּ ד וו פס	Houtside of MI RA 72 & 73)
1 cm Mu		, 1)	Loani	ted Matrix (F3)	-)		(LKK Reduc	ed Vertic (F18)
Denleter	Below Dark Surface	-, (A11)	Redox	Dark Surface (F	6)		Red P	arent Material (TF2)
Thick Da	rk Surface (A12)		Deple	ted Dark Surface	(F7)		Verv S	Shallow Dark Surface (TF12)
Sandy M	lucky Mineral (S1)		Redox	Depressions (F8	3)		Other	(Explain in Remarks)
2.5 cm N	lucky Peat or Peat (S2	2) (LRR G, H)	High F	Plains Depression	is (F16)		³ Indicate	ors of hydrophytic vegetation and
5 cm Mu	cky Peat or Peat (S3)	(LRR F)	(MLR	A 72 & 73 of LRF	R H)		wetland	hydrology must be present,
							unless	disturbed or problematic.
Restrictive L	aver (if present):							
Type:	· · · · · · · · · · · · · · · · · · ·							
Depth (in	ches):						Hydric Soil Prese	ent? Yes No X
Remarks:	- diastana ana matumaa							
Hydric soli ir	idicators are not prese	ent.						
HYDROLOG	iΥ							
Wetland Hyd	rology Indicators:							
Primary Indica	ators (minimum of one	e required; checl	k all that apply)			Secondary	Indicators (minimum of two required)
Surface	Water (A1)		Salt C	rust (B11)			Surfac	ce Soil Cracks (B6)
High Wa	ter Table (A2)		Aquat	ic Invertebrates (I	313)		Spars	ely Vegetated Concave Surface (B8)
Saturatio	on (A3)		Hydro	gen Sulfide Odor	(C1)		X Draina	age Patterns (B10)
Water M	arks (B1)		Dry-Se	eason Water Tabl	e (C2)	5	Oxidiz	ed Rhizospheres on Living Roots (C3)
Sedimer	it Deposits (B2)		Oxidiz	ed Rhizospheres	along Livin	ig Roots (C:	3) (whe	ere tilled)
	usits (B3)		(whe	ere not tilled)	ron(CA)		Crayfi	sn Bullows ($C\delta$)
Aigai Ma	n or Grust (B4) osite (B5)		Prese))		Satura	ation visible on Aerial Imagery (C9)
	oono (DO) on Visible on Aerial Im	agery (R7)	Other	(Explain in Rema	/ Irks)			Jeutral Test (D5)
Water-St	ained Leaves (R9)						FAC-1 Frost-	Heave Hummocks (D7)(LRR F)
						-		
Field Observ	ations:	,						
Surface Wate	r Present?	res No	X Dept	th (inches):				
vvater lable F	resent?	res <u>No</u> No	X Dept	in (inches):		141-41	d I ludual Di	
Saturation Pro	esent?	NO		(inches):		wetian	iu nyurology Pres	entr res NO X
(includes cap	mary mige)							
Describe Rec	orded Data (stream ga	auge, monitoring	g well, aerial pl	notos, previous in	spections),	if available:	:	
Remarks:								
Hydrology in	dicators are not prese	nt.						

Project/Site: FM 741 EA		City/County:	ĸ	Kaufman County	Sampling Date:	04/14/2022
Applicant/Owner: Texas Departme	nt of Transpor	tation		State: Texas	Sampling Point:	WDP13
Investigator(s): CW and CP		Section, Towr	ship, Range:		N/A	
Landform (hillslope, terrace, etc): depression		Local relief (c	oncave, conve	ex, none): con	cave S	Slope (%): 0-1
Subregion (LRR): LRR J MLRA 86A	Lat:	32.6684	1645	Long: -96.448154	182 Datur	n: NAD 83
Soil Map Unit Name: Houston Black clay, 1 to 3 percent slop	es			NWI classificat	ion: NA	
Are climatic / hydrologic conditions on the site typical for this tim	ne of year?	Yes	NoX	(If no, explain in Remar	ks.)	
Are Vegetation, SoilX, or Hydrology	significantly	disturbed?	Are "I	Normal Circumstances" pres	ent? Yes 📝	XNo
Are Vegetation, Soil, or Hydrology	_naturally pro	blematic?	(If ne	eded, explain any answers ir	n Remarks.)	
SUMMARY OF FINDINGS - Attach site map show	wing samp	oling point	locations,	, transects, important	features, etc.	
Hydrophytic Vegetation Present? Yes X	No					
Hydric Soil Present? Yes X	No	ls t	the Sampled	Area		
Wetland Hydrology Present? Yes X	No	wit	hin a Wetlan	d? Yes X	No	
Remarks: All of the three wetland indicators were present. T	his point is lo	cated within a	a wetland. The	e Antecedent Precipitation To	ool scored a 9, indic	ating
conditions during the site investigations were drie	r than normal					
VEGETATION - Use scientific names of plants.						
				Dominance Test works	heet:	
	Absolute	Dominant	Indicator	Number of Dominant Sp	ecies	
Tree Stratum (Plot size: 30' radius)	% Cover	Species?	Status	That Are OBL, FACW, or	FAC:	6 (A)
1 Ulmus americana	15	Yes	FAC			()
2 Celtis laevigata	10	Yes	FAC	Total Number of Domina	nt	
3 Populus deltoides	10	Yes	FAC	Species Across All Strata	a: {	8 (B)
4		100				
	35	= Total Cov	er	Percent of Dominant Spe	ecies	
Sapling/Shrub Stratum (Plot size: 30' radius)			01	That Are OBL. FACW. or	FAC: 75	5.0 (A/B)
1 Populus deltoides	25	Yes	FAC	,,.		()
2 Salix nigra	<u> </u>	Yes	FACW	Prevalence Index work	sheet:	
3 Fraxinus pennsylvanica	10	Yes	FAC	Total % Cover of:	Multip	ly by:
4		100		OBL species () x 1 =	0
5				FACW species 1	5 x 2 =	30
···	50	= Total Cov	er	FAC species 7	0 x 3 =	210
Herb Stratum (Plot size: 30' radius)				FACU species 4	5 x 4 =	180
1. Poa annua	30	Yes	FACU	UPL species () x 5 =	0
2 Sorghum halepense	15	Yes	FACU	Column Totals: 13	30 (A)	420 (B)
3						
4				Prevalence Index :	= B/A =3.	23
5.						
6.		_		Hydrophytic Vegetation	1 Indicators:	
7.		_		1 - Rapid Test for H	ydrophytic vegetatio	on
8.		_		X 2 - Dominance lest	IS >50%	
9.		_		3 - Prevalence Inde	X ≤3.0' dentetiene1 (Deerside	
10.				4 - Morphological A	daptations' (Provide	supporting
	45	= Total Cov	er		nytic vegetation' (E	xpiain)
Woody Vine Stratum (Plot size:)		_				
1.				'Indicators of hydric soil	and wetland hydroid	ogy must
2.		_		be present, unless distur	bed or problematic.	
	0	= Total Cov	er	Hydrophytic		
% Bare Ground in Herb Stratum 55				Vegetation		
				Present? Va	es X No	
Remarks:						
Hydrophytic vegetation is present.						

SOIL	
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Depth			11000	(Tealures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 4/1	85	10YR 7/2	15	D	Μ	Clay	
· ·							· ·	
							·	
							·	
		<u> </u>					·	
·							·	
Type: C=Conc	entration, D=Depletio	n, RM=Reduc	ed Matrix, CS=Cove	red or Coat	ed Sand Gr	ains.	²Locati	on: PL=Pore Lining, M=Matrix.
ydric Soil Ind	dicators: (Applicable	to all LRRs,	unless otherwise	noted.)			Indicators	or Problematic Hydric Soils ³ :
Histosol (A	հ 1)		Sandy Gle	yed Marix (S	64)		1 ci	m Muck (A9) (LRR I, J)
Histic Epip	oedon (A2)		Sandy Rec	lox (S5)			Coa	ast Prairie Redox (A16) (LRR F, G, H)
Black Hist	ic (A3)		Stripped N	atrix (S6)			Dar	k Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Mu	cky Mineral	(F1)		Hig	h Plains Depressions (F16)
Stratified I	_ayers (A5) (LRR F)		Loamy Gle	yed Matrix ((F2)		(LR	R H outside of MLRA 72 & 73)
1 cm Muc	k (A9) (LRR F, G, H)	i	Depleted N	/latrix (F3)			Rec	luced Vertic (F18)
Depleted I	3elow Dark Surface (A	\ 11)	Redox Dar	k Surface (F	-6)		Rec	l Parent Material (TF2)
Thick Darl	< Surface (A12)		X Depleted [ark Surface	e (F7)		Ver	y Shallow Dark Surface (TF12)
Sandy Mu	cky Mineral (S1)		Redox Dep	pressions (F	8)		Oth	er (Explain in Remarks)
2.5 cm Mu	cky Peat or Peat (S2)	(LRR G, H)	High Plain	3 Depressio	ns (F16)		³Indic	ators of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LR	R H)		wetla	nd hydrology must be present,
							unles	s disturbed or problematic.
estrictive La	ver (if present):							
	yer (il present).							
Туре:	yer (ii present).							
Type: Depth (inch Remarks: H	ydric soil indicators ar	e present. Er	uded soil material is	entering from	m nearby cc	onstruction.	Hydric Soil Pre	esent? Yes <u>X</u> No
Type: Depth (inch Remarks: H	ydric soil indicators ar	e present. Erc	 oded soil material is	entering from	m nearby co	onstruction.	Hydric Soil Pro	esent? Yes <u>X</u> No
Type: Depth (incl emarks: H DROLOG	ydric soil indicators ar	e present. Er	oded soil material is	entering fro	m nearby cc	Instruction.	Hydric Soil Pro	esent? Yes <u>X</u> No
Type: Depth (inch Remarks: H (DROLOG) Vetland Hydro	ydric soil indicators ar	e present. Er	oded soil material is	entering from	m nearby cc	onstruction.	Hydric Soil Pre	esent? Yes X No
Type: Depth (incl Remarks: H //DROLOG	ydric soil indicators ar ydric soil indicators ar ydric soil indicators ar ydric soil indicators ar ydric soil indicators: ors (minimum of one i (ater (A1))	e present. Er	 oded soil material is <u>:k all that apply)</u> Salt Crust	entering from	m nearby cc	onstruction.	Hydric Soil Pro	esent? Yes X No
Type: Depth (inch Remarks: H Zemarks: T DROLOG Vetland Hydro Primary Indicat X Surface W X High Wate	ydric soil indicators ar ydric soil indicat	e present. Er	bded soil material is 	entering from	m nearby cc	onstruction.	Hydric Soil Pro	esent? Yes X No
Type: Depth (incl Remarks: H TDROLOGY Vetland Hydro Primary Indicat X Surface W X High Wate X Saturation	ydric soil indicators ar ydric soil indicat	e present. Er	bded soil material is <u>k all that apply</u> <u>Salt Crust</u> <u>Aquatic Inv</u>	(B11) (B11) (B14) Odo	(B13)	onstruction.	Hydric Soil Pro	esent? Yes X No
Type: Depth (incl Remarks: H // TROLOGY /rimary Indicat X_Surface W X_High Wate X_Saturation Water Mai	ydric soil indicators ar ydric soil indicat	e present. Er	Decision of the second seco	entering from (B11) (B11) rertebrates (Sulfide Odo n Water Tab	m nearby cc [B13] r (C1)	onstruction.	Hydric Soil Pro	ry Indicators (minimum of two required face Soil Cracks (B6) ursely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C
Type: Depth (incl Remarks: H ZOROLOGY Vetland Hydro Primary Indicat X Surface W X High Wate X Saturation Water Man Sediment	ydric soil indicators ar ydric soil indicat	e present. Er	Decision of the second solution of the second solution of the second	entering from (B11) (B11) rertebrates (Sulfide Odou n Water Tab bizospheres	m nearby cc (B13) r (C1) ble (C2) s along Livir	onstruction.	Hydric Soil Pro	esent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) rrsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C there tilled)
Type: Depth (incl Remarks: H ////////////////////////////////////	ydric soil indicators ar ydric soil indicat	e present. Er	Salt Crust Aquatic Inv Characteristic Constraints	entering from (B11) rertebrates (Sulfide Odou n Water Tab hizospheres ot tilled)	m nearby cc (B13) r (C1) ole (C2) s along Livir	onstruction.	Hydric Soil Pro	esent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C here tilled) vfish Burrows (C8)
Type: Depth (incl Remarks: H (DROLOG) Netland Hydro Primary Indicat X Surface W X Surface W X High Wate X Saturation Water Mai Sediment Drift Depo Algal Mat	ydric soil indicators ar ydric soil indicators ar <u>f</u> <u>ology Indicators:</u> ors (minimum of one i /ater (A1) r: Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)	e present. Er	2k all that apply) Salt Crust Aquatic Inv Aquatic Inv Dry-Seaso Oxidized F (where n Presence of	entering from (B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced	m nearby cc (B13) r (C1) ole (C2) s along Livir	onstruction.	Hydric Soil Pro	esent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C there tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Type: Depth (incl Remarks: H TOROLOGY Vetland Hydro Primary Indicat X Surface W X High Wate X Saturation Water Mai Sediment Drift Depo Algal Mat Iron Depo	ydric soil indicators ar ydric soil indicators ar <u>ydric soil indicators:</u> ors (minimum of one i /ater (A1) rr Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	e present. Er	2k all that apply) (k all that apply) Salt Crust Aquatic Inv Hydrogen Dry-Seaso Oxidized F (where n Presence o Thin Muck	entering from (B11) rertebrates (Sulfide Odor n Water Tab 'hizospheres ot tilled) of Reduced Surface (C7	(B13) r (C1) ble (C2) s along Livir lron (C4) 7)	nstruction.	Hydric Soil Pro	esent? Yes X No rry Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C there tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2)
Type: Depth (incl Remarks: H TOROLOGY Vetland Hydra Primary Indicat X Surface W X High Wate X Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depo Inundation	ydric soil indicators ar ydric soil indicators ar <u>f</u> blogy Indicators: ors (minimum of one i /ater (A1) :r Table (A2) (A3) :ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) I Visible on Aerial Ima	e present. Er	2k all that apply) Aquatic Inv Aquatic Inv Aquatic Inv Aquatic Inv Aquatic Inv Dry-Seaso Oxidized F (where n Presence o Thin Muck Other (Exc	entering from (B11) vertebrates (Sulfide Odor n Water Tab (hizospheres ot tilled) of Reduced Surface (C7 lain in Rem	(B13) r (C1) s along Livir lron (C4) 7) arks)	nstruction.	Hydric Soil Pro	esent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) insely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5)
Type: Depth (incl Remarks: H ZOROLOGY Vetland Hydro Primary Indicat X Surface W X High Water X Saturation Water Mai Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta	ydric soil indicators ar ydric soil indicators ar <u>f</u> <u>ology Indicators:</u> <u>ors (minimum of one I</u> /ater (A1) r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) I Visible on Aerial Ima ined Leaves (B9)	e present. Ere	coded soil material is ck all that apply)	entering from (B11) rertebrates (Sulfide Odor n Water Tab chizospheres ot tilled) of Reduced Surface (C7 lain in Rema	m nearby cc (B13) r (C1) ole (C2) s along Livir Iron (C4) 7) arks)	onstruction.	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C there tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Type: Depth (incl Remarks: H TOROLOGY Vetland Hydro Vetland Hydro Vetland Hydro Vetland Hydro Vetland Hydro Vetland Hydro Surface W X Surface W X Surface W X Saturation Water Mai Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta	ydric soil indicators ar ydric soil indicat	e present. Er	ck all that apply) 	entering from (B11) rertebrates (Sulfide Odor n Water Tab (hizospheres ot tilled) of Reduced Surface (C7 lain in Rema	m nearby cc (B13) r (C1) ele (C2) s along Livir lron (C4) 7) arks)	nstruction.	Hydric Soil Pro	esent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) insely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Type: Depth (incl Remarks: H TOROLOGY Vetland Hydro Vetland Hydro Vetland Hydro Vetland Hydro Vetland Hydro Vetland Hydro Vetland Hydro Surface Water Algal Mat Iron Depo Inundatior Water-Sta Surface Water	ydric soil indicators ar ydric soil indicat	e present. Ero required; cheo gery (B7) 	ck all that apply) <u></u>	entering from (B11) (ertebrates (Sulfide Odor n Water Tab (hizospheres ot tilled) of Reduced Surface (C7 lain in Remain ches):	m nearby cc (B13) r (C1) ole (C2) s along Livir lron (C4) 7) arks) 2	nstruction.	Hydric Soil Pro	esent? Yes X No rry Indicators (minimum of two required face Soil Cracks (B6) ursely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F)
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Type: Depth (incl Remarks: H TOROLOGY Vetland Hydro Primary Indicat X Surface W X High Water X Saturation Water Mal Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta Surface Water Vater Table Pr Saturation Pres	ydric soil indicators ar ydric soil indicat	e present. Ero 	coded soil material is ck all that apply)	entering from (B11) (ertebrates (Sulfide Odou n Water Tab (hizospheres ot tilled) of Reduced Surface (C7 lain in Rema ches): ches): ches):	m nearby cc (B13) r (C1) ole (C2) s along Livir lron (C4) 7) arks) 2 12 12	onstruction.	Hydric Soil Pro	esent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) 2-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
Type: Depth (incl Remarks: H 2 2 2 2 2 2 2 2 2 2 2 2 2	ydric soil indicators ar ydric soil indicators ar ydric soil indicators: ors (minimum of one i /ater (A1) r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Nisible on Aerial Ima ined Leaves (B9) 	e present. En required; cher gery (B7) s X No s X No s X No	ck all that apply)	entering fro. (B11) /ertebrates (Sulfide Odol n Water Tab thizospheres ot tilled) of Reduced Surface (C7 lain in Remain ches): 	m nearby cc (B13) r (C1) ole (C2) s along Livir lron (C4) 7) arks) 2 12 12 12	onstruction.	Hydric Soil Pro	esent? Yes X No rry Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C there tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F) esent? Yes X No
Type: Depth (incl Remarks: H TOROLOGY Vetland Hydra Primary Indicat X Surface W X High Water X Saturation Water Mai Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta Surface Water Vater Table Pros Saturation Press includes capill Describe Reco	ydric soil indicators ar ydric soil indicators ar ydric soil indicators: ors (minimum of one i /ater (A1) rr Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye sent? Ye sent? Ye sent? Ye sent? Ye	e present. Er 	ck all that apply)	entering fro (B11) /ertebrates (Sulfide Odo n Water Tab (hizospheres ot tilled) of Reduced Surface (C7 lain in Rema ches): ches): ches):	m nearby cc (B13) r (C1) ble (C2) s along Livir lron (C4) 7) arks) 2 12 12 12 12 12	Instruction.	Hydric Soil Pro	esent? Yes X No rry Indicators (minimum of two required face Soil Cracks (B6) insely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) S-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F) esent? Yes X No
Type: Depth (incl demarks: H DROLOGY /etland Hydro rimary Indicat Surface W K Surface W K High Water Saturation Water Mai Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta ield Observa urface Water /aturation Pres ncludes capill Describe Reco	ydric soil indicators ar ydric soil indicators ar ydric soil indicators: ors (minimum of one i /ater (A1) rr Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye sent? Ye ary fringe) rded Data (stream gau	e present. Er <u>required; chea</u> gery (B7) <u>s X No</u> <u>s X No</u> <u>is X No</u> <u>is X No</u> <u>ige</u> , monitorir	coded soil material is ck all that apply)	entering fro (B11) /ertebrates (Sulfide Odo n Water Tab chizospheres ot tilled) of Reduced Surface (C7 lain in Rema ches): ches): ches): ches):	m nearby cc (B13) r (C1) ole (C2) s along Livir lron (C4) 7) arks) 2 12 12 12 12 12 12	onstruction.	Hydric Soil Pro	esent? Yes X No ry Indicators (minimum of two required face Soil Cracks (B6) Irsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C there tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
Type: Depth (incl emarks: Topological states and the second frimary Indicat X Surface W X High Water X Saturation Water Mater X Saturation Water Mater X Saturation Water Mater Algal Mat Iron Depo Inundation Water-States ield Observa water-States ield Observa water Table Prisaturation Presence includes capill bescribe Reco	ydric soil indicators ar ydric soil indicators ar ydric soil indicators: ors (minimum of one i /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye sent? Ye sent? Ye sent? Ye sent? Ye sent? Ye sent? Ye sent? Ye sent? Ye	e present. En required; chea gery (B7) 25 X No 25 X No 26 X No 27 X No 28 X No 29 X No	ck all that apply)	entering fro (B11) /ertebrates (Sulfide Odo n Water Tab (hizosphere: ot tilled) of Reduced Surface (C7 /ain in Remaination ches):	m nearby cc (B13) r (C1) vle (C2) s along Livir lron (C4) 7) arks) 2 12 12 12 12 12	nstruction.	Hydric Soil Pro	esent? Yes X No rry Indicators (minimum of two required face Soil Cracks (B6) insely Vegetated Concave Surface (B6) inage Patterns (B10) dized Rhizospheres on Living Roots (/here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) 2-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F) esent? Yes X No

Project/Site:	FM 741 EA		City/County:	ĸ	Kaufman County	Sampling Date:	04/14/2022
Applicant/Owner:	Texas Departmen	t of Transpor	tation		State: Texas	Sampling Point:	WDP14
Investigator(s):	CW and CP		Section, Towr	ship, Range:		N/A	
Landform (hillslope, terra	ace, etc): roadside swale		Local relief (c	oncave, conve	ex, none): co	oncave	Slope (%): 1-2
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6685	4883	Long: -96.4479	5428 Datur	n: NAD 83
Soil Map Unit Name:	Houston Black clay, 1 to 3 percent slope	es			NWI classific	ation: NA	
Are climatic / hydrologic	conditions on the site typical for this time	e of year?	Yes	No x	(If no, explain in Rem	arks.)	
Are Vegetation	, Soil , or Hydrology	significantly	disturbed?	Are "I	Normal Circumstances" pr	esent? Yes	X No
Are Vegetation	, Soil , or Hydrology	naturally pro	blematic?	(If ne	eded, explain any answers	in Remarks.)	
SUMMARY OF FIN	IDINGS - Attach site map show	ving samp	oling point	locations,	, transects, importa	nt features, etc.	
Hydrophytic Vegetatic	on Present? Yes X N	10					
Hydric Soil Present?	Yes X N	10	Is t	the Sampled	Area		
Wetland Hydrology Pr	resent? Yes N	lo X	wit	thin a Wetlan	d? Yes	No X	
			•		· · · · · ·		
Remarks: Two of the	e three wetland indicators were present.	This point is	not located wi	ithin a wetland	d. The Antecedent Precipit	ation Tool scored a 9,	indicating
conditions	during the site investigations were drier	than normal					
VEGETATION - Us	e scientific names of plants.				-		
					Dominance Test wor	ksheet:	
		Absolute	Dominant	Indicator	Number of Dominant S	Species	
Tree Stratum (Plot	size:)	% Cover	Species?	Status	That Are OBL, FACW,	or FAC:	3 (A)
1							
2					Total Number of Domin	nant	
3					Species Across All Str	ata:	5 (B)
4							
		0	= Total Cov	er	Percent of Dominant S	Species	
Sapling/Shrub Stratur	m (Plot size: <u>30' radius</u>)				That Are OBL, FACW,	or FAC: 60	<u>).0</u> (A/B)
1. <u>Salix nigra</u>		10	Yes	FACW	Prevalence Index wo	rksheet:	
2					Total % Cover of	Multir	alv by:
3					OBL species	0 x 1 =	0
4					FACW species	$\frac{1}{20}$ x 2 =	40
5					FAC species	40 x 3 =	120
Liest Otrature (Dist.		10	= 10tal Cov	er	FACU species	60 x 4 =	240
Herb Stratum (Piots	size: <u>30 radius</u>)	20	Vaa	FACU	UPL species	0 x 5 =	0
1. Lonurn perenne			Yes		Column Totals:	120 (A)	400 (B)
2. Sorgnum naiepens	se	20	Yes				
3. <u>Filipia indicosa</u>	erma	20	 	EAC	Prevalence Inde	x = B/A = 3.	.33
4. Myosolis macrospe	enna		No				
6 Packera tampicana	9	10	No	FACW	Hydrophytic Vegetat	on Indicators:	
7	ü	10		1400	1 - Rapid Test for	Hydrophytic Vegetation	n
8					X 2 - Dominance Te	st is >50%	
9					3 - Prevalence Inc	dex ≤3.0¹	
10.					4 - Morphological	Adaptations' (Provide	supporting
		110	= Total Cov	er	Problematic Hydr	opnytic vegetation' (E	:xplain)
Woody Vine Stratum	(Plot size:)		_		the disctory of building a		4
1.	`,				'Indicators of hydric so	bil and wetland hydrol	ogy must
2.					be present, unless dis	turbed of problematic.	·
		0	= Total Cov	er	Hydrophytic		
% Bare Ground in He	rb Stratum 0		_		Vegetation		
					Present?	Yes X No	
Remarks: Hydrophyt	tic vegetation is present.						

SOIL	
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(inches) 0-18				on outdied				
0-18	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
	10YR 3/1	90	10YR 3/4	10	С	Μ	Clay	
							<u> </u>	
							·	
Type: C=Conce	entration, D=Depletion,	RM=Reduced	Matrix, CS=Co	vered or Coate	ed Sand Gra	ains.	² Location	: PL=Pore Lining, M=Matrix.
ydric Soil Ind	icators: (Applicable t	o all LRRs, ui	less otherwise	noted.)			Indicators for	Problematic Hydric Soils ³ :
Histosol (A	.1)		Sandy Gl	eyed Marix (S	54)		1 cm	Muck (A9) (LRR I, J)
Histic Epipe	edon (A2)		Sandy Re	edox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Black Histic	c (A3)		Stripped	Matrix (S6)			Dark S	Surface (S7) (LRR G)
Hydrogen S	Sulfide (A4)		Loamy M	ucky Mineral ((F1)		High F	Plains Depressions (F16)
Stratified L	ayers (A5) (LRR F)		Loamy G	leyed Matrix (F2)		(LRR	H outside of MLRA 72 & 73)
1 cm Muck	(A9) (LRR F, G, H)		Depleted	Matrix (F3)			Reduc	ced Vertic (F18)
Depleted B	elow Dark Surface (A1	11)	X Redox Da	ark Surface (F	6)		Red F	arent Material (TF2)
Thick Dark	Surface (A12)		Depleted	Dark Surface	(F7)		Very S	Shallow Dark Surface (TF12)
Sandy Muc	ky Mineral (S1)		Redox De	epressions (F8	3)		Other	(Explain in Remarks)
2.5 cm Mu	cky Peat or Peat (S2)	(LRR G, H)	High Plai	ns Depressior	ns (F16)		³ Indicat	ors of hydrophytic vegetation and
5 cm Muck	y Peat or Peat (S3) (L	RR F)	 (MLRA 7	2 & 73 of LRF	R H)		wetland	hydrology must be present,
		,	,		,		unless	disturbed or problematic.
estrictive Lav	ver (if present):							
Type [.]	er (il present).							
Denth (inch	ec).		_				Hydric Soil Pres	ant? Yes X No
DROLOGY								
Vetland Hydro	logy Indicators:						0	
Vetland Hydro	logy Indicators: prs (minimum of one re	quired; check	all that apply)				Secondary	Indicators (minimum of two required
Vetland Hydro	logy Indicators: ors (minimum of one re ater (A1)	quired; check	all that apply) Salt Crus	t (B11)			Secondary	Indicators (minimum of two required ce Soil Cracks (B6)
Vetland Hydro rimary Indicato Surface Wa High Water	logy Indicators: ors (minimum of one re ater (A1) r Table (A2)	quired; check	all that apply) Salt Crus Aquatic I	t (B11) nvertebrates (l	B13)		Secondary Surfac	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8)
Vetland Hydro rimary Indicato Surface Wa High Water Saturation	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3)	quired; check	all that apply) Salt Crus Aquatic Ii Hydroger	t (B11) nvertebrates (n Sulfide Odor	B13) • (C1)		Secondary Surface Spars Draina	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10)
Vetland Hydro rimary Indicato Surface Wa High Water Saturation Water Mark	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) ks (B1)	quired; check	all that apply) Salt Crus Aquatic II Hydroger Dry-Seas	t (B11) nvertebrates (I n Sulfide Odor son Water Tab	B13) (C1) le (C2)		Secondary Surfac Spars Draina Oxidiz	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) ced Rhizospheres on Living Roots (C
Vetland Hydro Primary Indicato Surface Wa High Water Saturation Water Mark Sediment [logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2)	quired; check	all that apply) Salt Crus Aquatic Iu Hydroger Dry-Seas Oxidized	t (B11) nvertebrates (I n Sulfide Odor son Water Tab Rhizospheres	B13) (C1) le (C2) s along Livin	g Roots (C	Secondary Surfac Spars Draina Oxidiz 3) (wh	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) red Rhizospheres on Living Roots (C ere tilled)
Vetland Hydro 'rimary Indicato Surface Wa High Water Saturation Water Mark Sediment I Drift Depos	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3)	quired; check	all that apply) Salt Crus Aquatic Iu Hydroger Dry-Seas Oxidized (where	t (B11) nvertebrates (I n Sulfide Odor son Water Tab Rhizospheres not tilled)	B13) · (C1) le (C2) s along Livin	g Roots (C	Secondary Surfac Spars Draina Oxidiz 3) (who Crayfi	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) red Rhizospheres on Living Roots (C ere tilled) sh Burrows (C8)
Vetland Hydro Primary Indicato Surface Wa High Water Saturation Water Mark Sediment [Drift Depos Algal Mat o	logy Indicators: prs (minimum of one re ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)	quired; check	all that apply) Salt Crus Aquatic lu Hydroger Dry-Seas Oxidized (where Presence	t (B11) nvertebrates (I n Sulfide Odor son Water Tab Rhizospheres not tilled) e of Reduced I	B13) · (C1) le (C2) s along Livin ron (C4)	g Roots (C	Secondary Surfac Spars Draina Oxidiz 3) (wh Crayfi Satura	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) red Rhizospheres on Living Roots (C ere tilled) sh Burrows (C8) ation Visible on Aerial Imagery (C9)
Vetland Hydro rimary Indicato Surface Wa High Water Saturation Water Mark Sediment D Drift Depos Algal Mat o Iron Depos	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	quired; check	all that apply) Salt Crus Aquatic lı Hydroger Dry-Seas Oxidized (where Presence Thin Muc	t (B11) nvertebrates (I on Sulfide Odor son Water Tab Rhizospheres not tilled) e of Reduced I k Surface (C7	B13) · (C1) le (C2) s along Livin ron (C4) ·)	g Roots (C	Secondary Surfac Spars Draina Oxidiz 3) (wh Crayfi Satura X Geom	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) ted Rhizospheres on Living Roots (C ere tilled) sh Burrows (C8) ation Visible on Aerial Imagery (C9) iorphic Position (D2)
Vetland Hydro rimary Indicato Surface Wa High Water Saturation Water Mark Sediment I Drift Depos Algal Mat c Iron Depos Inundation	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) (A5) (A3) (A5)	quired; check	all that apply) Salt Crus Aquatic lı Hydroger Dry-Seas Oxidized Where Presence Thin Muc	t (B11) nvertebrates (i on Sulfide Odor son Water Tab Rhizospheres not tilled) e of Reduced I sk Surface (C7 cplain in Rema	B13) (C1) le (C2) s along Livin ron (C4)) arks)	g Roots (C	Secondary Surfac Spars Draina Oxidiz 3) (wh Crayfi Satura X Geom FAC-N	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) ted Rhizospheres on Living Roots (C ere tilled) sh Burrows (C8) ation Visible on Aerial Imagery (C9) iorphic Position (D2) Neutral Test (D5)
Vetland Hydro rimary Indicato Surface Wa High Water Saturation Water Marl Sediment I Drift Depos Algal Mat o Iron Depos Inundation Water-Stain	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	quired; check	all that apply) Salt Crus Aquatic lu Hydroger Dry-Seas Oxidized Where Presence Thin Muc Other (E)	t (B11) nvertebrates (I on Sulfide Odor son Water Tab Rhizospheres not tilled) e of Reduced I ck Surface (C7 cplain in Rema	B13) (C1) le (C2) along Livin ron (C4)) arks)	g Roots (C	Secondary Surface Spars Draina Oxidiz Satura X Geom FAC-N Frost-	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) ted Rhizospheres on Living Roots (C ere tilled) sh Burrows (C8) ation Visible on Aerial Imagery (C9) orphic Position (D2) Neutral Test (D5) Heave Hummocks (D7)(LRR F)
Vetland Hydro rrimary Indicato Surface Wa High Water Saturation Water Marl Sediment I Drift Depos Algal Mat o Iron Depos Inundation Water-Stair	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) (A3) (A3) (A3) Solution (B2) Sits (B3) or Crust (B4) Sits (B5) Visible on Aerial Image ned Leaves (B9) ions:	quired; check ery (B7)	all that apply) Salt Crus Aquatic lı Hydroger Dry-Seas Oxidized (where Presence Thin Muc Other (E)	t (B11) nvertebrates (I n Sulfide Odor son Water Tab Rhizospheres not tilled) e of Reduced I k Surface (C7 kplain in Rema	B13) · (C1) le (C2) s along Livin ron (C4) ·) arks)	g Roots (C	Secondary Surface Spars Draina Oxidiz 3) (who Crayfi Satura X Geom FAC-N Frost-	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) ted Rhizospheres on Living Roots (C ere tilled) sh Burrows (C8) ation Visible on Aerial Imagery (C9) iorphic Position (D2) Veutral Test (D5) Heave Hummocks (D7) (LRR F)
Vetland Hydro Primary Indicato Surface Wa High Water Saturation Water Marl Sediment [Drift Depos Algal Mat o Iron Depos Inundation Water-Stain ield Observati urface Water F	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) (A4) (A5)	ery (B7)	all that apply) Salt Crus Aquatic li Hydroger Dry-Seas Oxidized Where Presence Thin Muc Other (E) X Depth (t (B11) nvertebrates (i n Sulfide Odor son Water Tab Rhizospheres not tilled) e of Reduced I k Surface (C7 kplain in Rema inches):	B13) (C1) le (C2) s along Livin ron (C4)) arks)	g Roots (C	Secondary Surface Spars Draina Oxidiz 3) (who Crayfi Satura X Geom FAC-N Frost-	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) ted Rhizospheres on Living Roots (C ere tilled) sh Burrows (C8) ation Visible on Aerial Imagery (C9) iorphic Position (D2) Neutral Test (D5) Heave Hummocks (D7)(LRR F)
Vetland Hydro Primary Indicato Surface Wa High Water Saturation Water Marl Sediment I Drift Depos Algal Mat o Iron Depos Inundation Water-Stain ield Observati urface Water Freder Vater Table Pre	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) (A4) (A4) (A5) (A4) (A5) (A4) (A5) (A4) (A5) (A4) (A5)	ery (B7)	all that apply) Salt Crus Aquatic li Hydroger Dry-Seas Oxidized Versence Presence Thin Muc Other (E) X Depth (X Depth (t (B11) nvertebrates (i n Sulfide Odor son Water Tabi Rhizospheres not tilled) e of Reduced I k Surface (C7 cplain in Rema inches):	B13) (C1) le (C2) e along Livin ron (C4)) arks)	g Roots (C	Secondary Surface Spars Draina Oxidiz 3) Crayfi Satura X Geom FAC-N Frost	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) red Rhizospheres on Living Roots (C ere tilled) sh Burrows (C8) ation Visible on Aerial Imagery (C9) iorphic Position (D2) Neutral Test (D5) Heave Hummocks (D7) (LRR F)
Vetland Hydro Primary Indicato Surface Wa High Water Saturation Water Marl Sediment I Drift Depos Algal Mat o Iron Depos Inundation Water-Stain ield Observati urface Water F vater Table Present	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) (A4) (A4) (A5) (A4) (A5) (A4) (A5)	ery (B7)	all that apply) Salt Crus Aquatic li Hydroger Dry-Seas Oxidized Versence Thin Muc Other (E) X Depth (X Depth (X Depth (it (B11) nvertebrates (i n Sulfide Odor son Water Tabi Rhizospheres not tilled) e of Reduced I kk Surface (C7 cplain in Rema inches):	B13) (C1) le (C2) s along Livin ron (C4)) arks)	g Roots (C	Secondary Surfac Spars Draina Oxidiz 33) (who Crayfi Satura X Geom FAC-N Frost-	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) red Rhizospheres on Living Roots (C ere tilled) sh Burrows (C8) ation Visible on Aerial Imagery (C9) orphic Position (D2) Neutral Test (D5) Heave Hummocks (D7) (LRR F)
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Vetland Hydro	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) (A4)	ery (B7)	all that apply) Salt Crus Aquatic II Hydroger Dry-Seas Oxidized Where Presence Thin Muc Other (E) X Depth (X Depth (X Depth (it (B11) nvertebrates (i n Sulfide Odor son Water Tabi Rhizospheres not tilled) e of Reduced I k Surface (C7 cplain in Rema inches): inches): os, previous in	B13) (C1) le (C2) s along Livin ron (C4)) arks) spections),	g Roots (C	Secondary Surfac Spars Draina Oxidiz Oxidiz Oxidiz Crayfi Satura X Geom FAC-N Frost-	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) red Rhizospheres on Living Roots (C ere tilled) sh Burrows (C8) ation Visible on Aerial Imagery (C9) orphic Position (D2) Neutral Test (D5) Heave Hummocks (D7) (LRR F) ent? Yes NoX
Vetland Hydro	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagened Leaves (B9) ions: Present? Yes sent? Yes ent? Yes ort? Yes ort? Yes ort? Yes ort? Yes	ery (B7)	all that apply) Salt Crus Aquatic li Hydroger Dry-Seas Oxidized (where Presence Thin Muc Other (E) X Depth (X Depth (X Depth (X Depth (X Depth (t (B11) nvertebrates (i n Sulfide Odor son Water Tab Rhizospheres not tilled) e of Reduced I k Surface (C7 cplain in Rema inches): inches): os, previous in	B13) (C1) le (C2) along Livin ron (C4)) arks) arks)	g Roots (C Wetla if available	Secondary Surfac Spars Draina Oxidiz Oxidiz Crayfi Satura Fac-t Frost-	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) ted Rhizospheres on Living Roots (C ere tilled) sh Burrows (C8) ation Visible on Aerial Imagery (C9) torphic Position (D2) Veutral Test (D5) Heave Hummocks (D7) (LRR F)
Vetland Hydro Primary Indicato Surface Wi High Water Saturation Water Marl Sediment [Drift Depos Algal Mat c Iron Depos Inundation Water-Stain ield Observati urface Water Fr /ater Table Preson aturation Preson ncludes capilla escribe Record emarks: Hydro	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Image ned Leaves (B9) ions: Present? Yes esent? Yes ent? Yes intropy fringe) ded Data (stream gauge rology indicators are p	ery (B7)	all that apply) Salt Crus Aquatic li Hydroger Dry-Seas Oxidized (where Presence Thin Muc Other (E) X Depth (X Depth (X Depth (Well, aerial phote	t (B11) nvertebrates (i n Sulfide Odor con Water Tab Rhizospheres not tilled) e of Reduced I k Surface (C7 cplain in Rema inches): inches): ps, previous in	B13) (C1) le (C2) s along Livin ron (C4)) arks) arks)	g Roots (C Wetla if available	Secondary Surfac Spars Draina Oxidiz Oxidiz Crayfi Satura X Geom FAC-N Frost-	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) ted Rhizospheres on Living Roots (C ere tilled) sh Burrows (C8) ation Visible on Aerial Imagery (C9) iorphic Position (D2) Veutral Test (D5) Heave Hummocks (D7) (LRR F)
Vetland Hydro rimary Indicato Surface Wa High Water Saturation Water Marl Sediment I Drift Depos Algal Mat c Iron Depos Inundation Water-Stain ield Observati urface Water F Vater Table Preson ncludes capilla escribe Record emarks: Hyd	logy Indicators: ors (minimum of one re ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagened Leaves (B9) ions: Present? Yes esent? Yes ent? Yes ent? Yes ory fringe) ded Data (stream gaugened rology indicators are negative.	ery (B7)	all that apply) Salt Crus Aquatic li Hydroger Dry-Seas Oxidized (where Presence Thin Muc Other (E) X Depth (X Depth (x well, aerial phote	t (B11) nvertebrates (i n Sulfide Odor son Water Tabi Rhizospheres not tilled) e of Reduced I k Surface (C7 cplain in Rema inches):	B13) (C1) le (C2) s along Livin ron (C4)) arks) arks)	g Roots (C Wetla if available	Secondary Surface Surface Spars Draina Oxidiz Oxidiz Oxidiz Oxidiz Oxidiz Oxidiz Oxidiz Satura X Geom FAC-N Frost- nd Hydrology Pres State	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) red Rhizospheres on Living Roots (C ere tilled) sh Burrows (C8) ation Visible on Aerial Imagery (C9) orphic Position (D2) Neutral Test (D5) Heave Hummocks (D7) (LRR F)

Project/Site:	FM 741 EA	(City/County:	К	aufman County	Sampling Date:	04/14/2022		
Applicant/Owner:	Texas Departmen	t of Transpor	tation		State: Texas	Sampling Point:	WDP15		
Investigator(s):	CW and CP		Section, Town	ship, Range:		N/A			
Landform (hillslope, terrace,	, etc): depression	I	_ocal relief (co	oncave, conve	ex, none): c	oncave	Slope (%): 0-1		
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.66814	1541	Long: -96.447	96467 Datu	m: NAD 83		
Soil Map Unit Name: Fer	ris clay, 5 to 12 percent slopes, erod	ed			NWI classifi	cation: NA			
Are climatic / hydrologic con	nditions on the site typical for this time	e of year?	res	No X	(If no, explain in Ren	narks.)			
Are Vegetation , S	Soil , or Hydrology	significantly	disturbed?	Are "N	Normal Circumstances" p	resent? Yes	X No		
Are Vegetation , S	Soil , or Hydrology	naturally pro	blematic?	(If nee	eded, explain any answer	s in Remarks.)			
SUMMARY OF FINDI	NGS - Attach site map show	ving same	lina point	locations.	transects, importa	int features, etc.			
	recent? Vec V		<u> </u>		·····	,			
		NU		he Compled	A ****				
Wetland Hydrology Dropp	res <u> </u>	NU	IS L	hin e Wetlen		X No			
		NU	WIL			<u> </u>	_		
Remarks: All of the three wetland indicators were present. This point is located within a wetland. The Antecedent Precipitation Tool scored a 9, indicating conditions during the site investigations were drier than normal.									
VEGETATION - 056 5	cientine names of plants.								
					Dominance Test wor	rksheet:			
		Absolute	Dominant	Indicator	Number of Dominant	Species			
Tree Stratum (Plot size)	% Cover	Species?	Status	That Are OBL, FACW	, or FAC:	<u>4</u> (A)		
1									
2				·	Iotal Number of Dom	inant			
3				·	Species Across All St	rata:	<u>4</u> (B)		
4				·	Demonstrat Demoissant	0			
	20' rodius	0	= Total Cove	er	Percent of Dominant				
Sapling/Shrub Stratum	(Plot size: <u>50 fadius</u>)				That Are OBL, FACW	, of FAC: <u>10</u>	<u>0.0</u> (A/B)		
1. <u>Salix nigra</u>		15	Yes	FACW	Prevalence Index wo	orksheet:			
2. Fraxinus pennsylvanic	a	10	Yes	FAC	Total % Cover o	f: Multir	olv by:		
3. Ulmus crassifolia			Yes	FAC	OBL species	80 x 1 =	80		
4. Populus deitoldes		5	NO	FAC	FACW species	15 x 2 =	30		
o			- Tatal Cau		FAC species	45 x 3 =	135		
Horb Stratum (Dist size)		40		-1	FACU species	5 x 4 =	20		
1 Eloocharic palustris		80	Voc		UPL species	0 x 5 =	0		
2 Phyla fruticosa		10	No	EAC	Column Totals:	145 (A)	265 (B)		
2. Filyla Ilulicosa		10	No	FAC					
Ambrosia osilostachva	5	5	No	EACU	Prevalence Inde	ex = B/A = 1	.83		
4. Ambrosia psilostacitya	1		110	1700					
6					Hydrophytic Vegetat	tion Indicators:			
7				·	1 - Rapid Test for	r Hydrophytic Vegetati	on		
8					X 2 - Dominance T	est is >50%			
9				·	X 3 - Prevalence In	idex ≤3.01			
10.					4 - Morphologica	Adaptations' (Provide	e supporting		
		105	= Total Cove	er	Problematic Hyd	rophytic Vegetation ¹ (E	-xplain)		
Woody Vine Stratum (F	Plot size:								
<u>1.</u>	,				'Indicators of hydric s	oil and wetland hydrol	ogy must		
2.					be present, unless dis	sturbed or problematic			
		0	= Total Cove	er	Hydrophytic				
% Bare Ground in Herb S	Stratum 0				Vegetation				
					Present?	Yes X No			
					Troomer				
Remarks: Hydrophytic ve	egetation is present.								

SOIL	
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	IVIAUIX		Redux	Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 3/1	85	10YR 8/1	15	D	M	Clay	
		·						
		• •						
ype: C=Cond	entration, D=Depletic	on, RM=Reduc	ed Matrix, CS=Cove	red or Coat	ted Sand Gr	ains.	² Locat	ion: PL=Pore Lining, M=Matrix.
dric Soil In	dicators: (Applicable	e to all LRRs,	unless otherwise n	oted.)			Indicators	for Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gley	/ed Marix (S	S4)		1 c	m Muck (A9) (LRR I, J)
Histic Epi	pedon (A2)		Sandy Red	ox (S5)			Co	ast Prairie Redox (A16) (LRR F, G, H)
Black His	ic (A3)		Stripped Ma	atrix (S6)			Da	rk Surface (S7) (LRR G)
_ Hydrogen	Sulfide (A4)		Loamy Muc	ky Mineral	(F1)		Hig	h Plains Depressions (F16)
_ Stratified	Layers (A5) (LRR F)		Loamy Gle	yed Matrix ((F2)		(LI	RR H outside of MLRA 72 & 73)
_ 1 cm Muc	K (A9) (LRR F, G, H)	Depleted M	latrix (F3)			Re	duced Vertic (F18)
_ Depleted	Below Dark Surface (A	ATT)		Courlace (F	F0) 5 (E7)		Re	u Parent Material (TF2)
Sandy Mi	r Sullace (A12)		<u> </u>	ark Surrace	= (F7) = 8)			ner (Explain in Remarks)
2.5 cm M	icky Peat or Peat (S2		High Plains	Denressio	o) ins (E16)		3Indi	cators of hydrophytic vegetation and
5 cm Muc	kv Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LR	(R H)		wetla	and hydrology must be present.
	.,	((,		unle	ss disturbed or problematic.
etrictivo I a	ver (if present):							
Type [.]	yer (ii present).							
Depth (inc emarks: Hyd	hes): Iric soil indicators are	present.					Hydric Soil Pr	resent? Yes X No
Depth (inc	hes):	present.					Hydric Soil Pr	resent? Yes X No
Depth (inc emarks: Hyc	hes): Iric soil indicators are	present.					Hydric Soil Pr	resent? Yes X No
Depth (inc emarks: Hyd DROLOG [*] letland Hydr	hes): fric soil indicators are f plogy Indicators: prs (minimum of one	present.					Hydric Soil Pr	esent? Yes X No
Depth (inc emarks: Hyd DROLOG` etland Hydr imary Indica Surface V	hes): Iric soil indicators are f ology Indicators: ors (minimum of one (ater (A1)	present.		 			Hydric Soil Pr	esent? Yes X No
Depth (inc emarks: Hyd DROLOG etland Hydr imary Indica Surface V High Wat	hes): Iric soil indicators are f ology Indicators: tors (minimum of one /ater (A1) 27 Table (A2)	present.	<u></u>	B11) ertebrates ((B13)		Hydric Soil Pr	esent? Yes X No ary Indicators (minimum of two required rface Soil Cracks (B6) arsely Vegetated Concave Surface (B8
Depth (inc emarks: Hyd DROLOG etland Hydr imary Indica Surface V High Watu Saturation	hes): fric soil indicators are f ology Indicators: cors (minimum of one /ater (A1) rr Table (A2) I (A3)	present.	<u></u>	B11) ertebrates ((B13) (C1)		Hydric Soil Pr	esent? Yes X No ary Indicators (minimum of two required rface Soil Cracks (B6) arsely Vegetated Concave Surface (B8 ainage Patterns (B10)
Depth (inc emarks: Hyd DROLOG etland Hydr imary Indica Surface V High Wate Saturation Water Ma	hes): Iric soil indicators are f ology Indicators: ors (minimum of one /ater (A1) Pr Table (A2) I (A3) rks (B1)	present.	<u></u>	B11) ertebrates (Sulfide Odo 1 Water Tab	(B13) r (C1) ble (C2)		Hydric Soil Pr	resent? Yes X No ary Indicators (minimum of two required rface Soil Cracks (B6) arsely Vegetated Concave Surface (B8 ainage Patterns (B10) idized Rhizospheres on Living Roots (0
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DEROLOG PROLOG PROLOG Patiand Hydr imary Indica Surface V High Wate Saturation Water Ma Sediment C Drift Depo Algal Mat Iron Depo Inundation Water-Sta Priace Water aturation Pre Includes capil Basediment Secribe Reco	hes): dric soil indicators are f ology Indicators: tors (minimum of one /ater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) usits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye esent? Ye ary fringe) rded Data (stream ga	present. required; che agery (B7) es No es No uge, monitorir	ck all that apply)	B11) ertebrates (Sulfide Odo n Water Tat hizospheres ot tilled) if Reduced Surface (C7 lain in Rema ches): ches): ;hes):	(B13) or (C1) ole (C2) s along Livir Iron (C4) 7) arks) nspections),	ng Roots (C	Hydric Soil Pr	resent? Yes X No
Depth (inc Depth (inc Emarks: Hyd PROLOG etland Hydr imary Indica Surface V High Wate Saturatior Water Ma Sediment Drift Depc Algal Mat Iron Depc Inundation Water-Sta eld Observa Inface Water ater Table Pri turation Pre cludes capil escribe Recc	hes): dric soil indicators are f ology Indicators: tors (minimum of one /ater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) h (Ka) or Crust (B4) sits (B5) h Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye esent? Ye ary fringe) rded Data (stream ga	present. required; che agery (B7) es No es No uge, monitorir	ck all that apply)	B11) ertebrates (Sulfide Odo n Water Tat hizosphere: ot tilled) if Reduced Surface (Cf lain in Remain ches): ches): ches): ches):	(B13) r (C1) ble (C2) s along Livir Iron (C4) 7) harks) nspections),	ug Roots (C	Hydric Soil Pr	esent? Yes X No
DROLOG PROLOG etland Hydr imary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Drift Depo Algal Mat Inon Depo Algal Mat Algal	hes): dric soil indicators are fology Indicators: tors (minimum of one /ater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) nsits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye sent? Ye sent? Ye sent? Ye ary fringe) rded Data (stream ga	present. required; che agery (B7) es No es No uge, monitorir	ck all that apply)	B11) ertebrates (Sulfide Odo n Water Tat hizosphere: ot tilled) if Reduced Surface (C7 lain in Rem ches): ches): ches): , previous in	(B13) r (C1) ble (C2) s along Livir lron (C4) 7) arks) nspections),	ng Roots (C	Hydric Soil Pr	resent? Yes X No

Applicant/Cover: Tease Begartment of Transportation State: Tease Services NUDES Landform (histops, terrace, etc): Not of P Section, Township, Range: Not Not operative states State (Township, Range: Not operative states	Project/Site:	FM 741 EA	(City/County:	к	Kaufman County Sampling Date: 04/14/2022				
Investigation(s): CV and CP Section. Travelap, Respect NA Landrom (hildings transe, cit): Nillaging Local will (concret, concers, concers, Solger (concret, concers, solger (concers, concers, solger (concers, concers, solger (concers, solger (concers, concers, solger)) Soldmate inducators were pre	Applicant/Owner:	Texas Department	t of Transpor	tation		State: Tex	kas Samp	oling Point:	WDP16	
Landom (hilaspe, terrace, etc); Initiation Local wile (concerve, corvex, none); corvex Sole (%); 5-55 Sole Map Unit Name: Initiation Black day, 1:a Jaccent alones: Name:	Investigator(s):	CW and CP	ç	Section, Towr	ship, Range:	N/A				
Subregion (LRR): LRR_MIRA 88A Lat 32.08493774 Long:	Landform (hillslope, terrace, etc)): hillslope	l	_ocal relief (c	oncave, conve	x, none):	convex	S	Slope (%): 3-5	
Sol Map Unit Nume:	Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6684	3774	Long: -96.4	44768604	Datum	n: NAD 83	
Deck No X (Inc. explain in Remarks) Are Vegetation Soil or Hydrology input and the start start in the start in the start start start in the start in the start start in the start start in the start start in the start in the start start in the start in th	Soil Map Unit Name: Housto	n Black clay, 1 to 3 percent slope	<u> </u>			NWI clas	ssification:	NA		
Are 'Negration Soil or 'Hydrology significantly disulter? Are 'Negration Yes No SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Important features, etc. Hydrodynjic Vogetation Present? Yes No X Is the Sampled Area within a Wetland? Yes No X Hydrodynjic Vogetation Present? Yes No X Is the Sampled Area within a Wetland? Yes No X Remarks: No X Is the Sampled Area within a Wetland? Yes No X Remarks: No X Is the Sampled Area within a Wetland? Yes No X Remarks: No X Is the Sampled Area within a Wetland? Yes No X Remarks: No X Absolute Dominant Indicator Multin Breakes No X No X 1 Yes Absolute Dominant Indicator No No Yes (A) 2 Sample Area wither of Dominant Indicator No Yes FACU No Yes (A) 3	Are climatic / hydrologic conditio	ons on the site typical for this time	e of vear?	Yes	No x	(If no, explain in I	Remarks.)			
Are Vegetation Sol or Hydroby: multiply problematic? (if needed, explain any answers in Remarks.) image: constraint of the stature in the st	Are Vegetation Soil	or Hydrology	significantly	disturbed?	Are "N	Normal Circumstances	s" present?	Yes X	K No	
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transacts, important features, etc. Hydrophylic Vegitation Present? Yes No X is the Sampled Area within a Wetland? Yes No X Remarks: No X is the Sampled Area within a Wetland? Yes No X Remarks: No of the three wetland indicators were present. This point is not located within a wetland? No X No X Remarks: Absolute Dominant Indicator No X No X The Stratum (Pot size: 0 = Total Cover Total Number of Dominant Species Total Number of Dominant Species (A) 1 O = Total Cover Total Number of Dominant Species 2.00 (A) 2 Display/Shub Stratum Pot size: 30' radius 0 = Total Cover Total Number of Dominant Species 2.00 (A) 3 <i>Pursua mericana</i> 15 Yes FAC Total Number of Dominant Species 2.00 (A) 2 Display/Shub Stratum 90 = Total Cover Total Number of Dominant Species 2.00 (A)<	Are Vegetation Soil	or Hydrology	naturally pro	blematic?	(If nee	eded explain any ans	wers in Rema	rks)	<u> </u>	
Privative Control of Present? Yes No X Is the Sampled Area Hydro Sol Present? Yes No X Is the Sampled Area Wetland Hydroby Present? Yes No X Is the Sampled Area Wetland Hydroby Present? Yes No X Is the Sampled Area Wetland Hydroby Present? Yes No X Is the Sampled Area Wetland Hydroby Present? Yes No X Is the Sampled Area Wetland Hydroby Present? Yes No X Image: Sampled Area Vetland Hydroby Network Wetland? Yes No X Image: Sampled Area Vetland Hydroby Network Wetland? Yes No X Image: Sampled Area Vetland Hydroby Network Wetland? Yes No X Image: Sampled Area Image: Sampled Area Image: Sampled Area Image: Sampled Area Image: Sampled Area Image: Sampled Area Image: Sampled Area Image: Sampled Area Image: Sampled Area Image: Sampled Area Image: Sampled Area Image: Sampled Area Image: Sampled Area Image: Sampled Area Image: Sampled Area	SUMMARY OF FINDING	S - Attach site man show	vina samr	lina noint	locations	transects impo	rtant featu	res etc		
Prydorphylo Vegetation Present? Yes No X Is the Sampled Area Wetland Hydrology Present? Yes No X Is the Sampled Area Wetland Hydrology Present? Yes No X Is the Sampled Area Wetland Hydrology Present? Yes No X Is the Sampled Area Wetland Hydrology Present? Yes No X Remarks: No of the Investigations were drife fram normal. The Antecedent Presipitation Tool scored a 9, indicating control to the scored at the westigations were drife fram normal. YEGETATION - Use scientific names of plants. Dominant Indicator The Area Obst, FACW, or FAC: 1 (A) 1 Scorer Species? Status Total Number of Dominant Species Total Number of Dominant Species (B) 2 Species? Status Total Number of Dominant Species (B) 3 Corer Species? Species? (A) 4 Species? Species? (A) (A) 5 Species? Species? (A) (A) 6 Yes FACU O FACU (A)					locations,	transcets, impo		100, 010.		
Pryce No X white samples Area Wetland Hydrody Present? Yes No X Remarks: None of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 9, indicating conditions during the site investigations were drier than normal. VEGETATION - Use scientific names of plants. Dominant Indicator Image: Stratum (Plot size:	Hydrophytic Vegetation Prese	ent? Yes N								
Wetand Hydrology Present? Yes No X within a Wetland? Yes No X Remarks: No of the time wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 9, indicating conditions during the stel investigations were drier than normal. The Antecedent Precipitation Tool scored a 9, indicating conditions during the stel investigations were drier than normal. VEGETATION - Use scientific names of plants. Ominant Indicator Dominant Indicator The Stratum (Plot size:	Hydric Soil Present?	Yes N		ISI	the Sampled A	Area				
Remarks: None of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 9, indicating conditions during the site investigations were dref than normal. VEGETATION - Use scientific names of plants. Tree Stratum (Plot size:) Absolute Scientific names of plants. Dominant Indicator Number of Dominant Species That Are OBL, FACW, or FAC: (A) 1. 2.	Wetland Hydrology Present?	Yes <u> </u>	lo <u>X</u>	wit	thin a Wetland	d? Yes		No X	-	
VEGETATION - Use scientific names of plants. Dominant Indicator Image: Indicator Stratum Indicator Stratum Image: Indicator Stratum Indicator Stratum Image: Indicator Stratum Image: Indicator Stratum Image: Indicator Stratum Image: Indicator Stratum Inditent to Hydrophytic Vegetation <td colspan="10">Remarks: None of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 9, indicating conditions during the site investigations were drier than normal.</td>	Remarks: None of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 9, indicating conditions during the site investigations were drier than normal.									
Image:	VEGETATION - Use scie	ntific names of plants.				-				
Absolute Dominant Indicator Number of Dominant Species 1.						Dominance Test	worksheet:			
Tree Stratum (Plot size:			Absolute	Dominant	Indicator	Number of Domina	ant Species			
1	Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FA	CW, or FAC:	1	(A)	
2.	1.	,								
3.	2.					Total Number of D	ominant			
4.	3					Species Across Al	II Strata:	5	5 (B)	
0 = Total Cover Saping/Shrub Stratum (Plot size:30' radius) 1. Cettis laevigata 15 Yes FACU 2. Oleditisia triacanthos 10 Yes FACU 3. Prunus mexicana 5 No NI 4. 5	4					•			()	
Sapling/Shrub Stratum (Plot size:30' radius	···		0	= Total Cov	er	Percent of Domina	ant Species			
Operating Units description (in the desc	Sanling/Shrub Stratum (Plo	ot size 30' radius			01	That Are OBL, FA	CW. or FAC:	20	.0 (A/B)	
1 13 140 16 <th< td=""><td></td><td>)</td><td>15</td><td>Ves</td><td>FAC</td><td></td><td>,</td><td></td><td>(•==)</td></th<>)	15	Ves	FAC		,		(•==)	
2. Operations inscribing 10	2 Gleditsia triacanthos		10	Yes	EACU	Prevalence Index	worksheet:			
0. IND IN IN IN OBL species 0 x 1 = 0 4. 5.	2. Gleditsia triacantinos		5	No		Total % Cove	er of:	Multip	ly by:	
*.			5	INU		OBL species	0	x 1 =	0	
o.	4					FACW species	0	x 2 =	0	
Herb Stratum (Plot size:	o					FAC species	35	x 3 =	105	
Herb Stratum (Plot size:	Userta Otastana (Distaina)		30		er	FACU species	95	x 4 =	380	
1. Endmus arvensis 50 Yes FACU 2. Openothera speciosa 30 Yes NI 3. Loilum perenne 20 No FACU 4. Lactuca serriola 20 No FACU 5. Polytaenia texana 20 No FAC 6.	Herb Stratum (Plot size:	30 [°] radius)	-0		54.011	UPL species	55	x 5 =	275	
2. Uenother's speciosa 30 Yes Ni 3. Lotium perenne 20 No FAC 4. Lactuce serricla 20 No FAC 5. Polytaenia texana 20 No NI 6.	1. Bromus arvensis		50	Yes	FACU	Column Totals:	185	(A)	760 (B)	
3. Laduca serriola 20 No FACU 4. Lactuca serriola 20 No FAC 5. Polytaenia texana 20 No FAC 6.	2. Oenotnera speciosa		30	Yes		-			()	
4 Lactuce service 20 No PAC 5. Polytaenia texana 20 No Ni 6.	3. Lollum perenne		20		FACU	Prevalence	Index = B/A =	4.1	11	
5. Polytaenia texana 20 No NI 6	4. Lactuca serriola		20	<u>N0</u>	FAC					
6.	5. Polytaenia texana		20	No	NI	Hydrophytic Veg	etation Indica	ators:		
7.	6					1 - Rapid Tes	t for Hydrophy	/tic Vegetatio	'n	
8.	7					2 - Dominanc	e Test is >50%	6		
9.	8					3 - Prevalenc	e Index ≤3.0¹			
10	9					4 - Morpholog	gical Adaptatio	ons1 (Provide	supporting	
Woody Vine Stratum (Plot size: 30' radius) 1. <u>Toxicodendron radicans</u> 2. 15	10					Problematic H	Hydrophytic Ve	egetation1 (E	xplain)	
Woody Vine Stratum (Plot size:30 radius) 1. Toxicodendron radicans 15 215 = Total Cover % Bare Ground in Herb Stratum0 15 Remarks: Hydrophytic vegetation is not present.			140	= Total Cov	er					
1. Toxicodendron radicans 15 No FACU be present, unless disturbed or problematic. 2. 15 = Total Cover Hydrophytic % Bare Ground in Herb Stratum 0 Vegetation Present? Yes No X Yes No Yes No X	Woody Vine Stratum (Plot :	size: 30 [°] radius)				¹ Indicators of hydr	ic soil and we	tland hydrolo	ogy must	
2.	1. Toxicodendron radicans		15	No	FACU	be present, unless	s disturbed or	problematic.		
15 = Total Cover Hydrophytic % Bare Ground in Herb Stratum 0 Yes No Remarks: Hydrophytic vegetation is not present. No X	2									
% Bare Ground in Herb Stratum 0 Vegetation Present? Yes No X Remarks: Hydrophytic vegetation is not present. No X			15	= Total Cov	er	Hydrophytic				
Present? Yes No X Remarks: Hydrophytic vegetation is not present. Hydrophytic vegetation is not present. Hydrophytic vegetation is not present.	% Bare Ground in Herb Stratu	um <u>0</u>				Vegetation				
Remarks: Hydrophytic vegetation is not present.						Present?	Yes	No	Х	
Remarks: Hydrophytic vegetation is not present.										
Hydrophytic vegetation is not present.	Remarks:									
	Hydrophytic vegetation is no	ot present.								

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J	J		-

Profile Descr	iption: (Describe to t	he depth neede	d to document th	e indicator o	or confirm	the absen	ce of indicators.)		
(inchos)		0/	Color (maint)	reatures		1.002	Texture	Domert	6
		100		70	туре	LUC		Remark	3
0-10	1011 4/1	100		·	<u> </u>		Jiay		
				·			··		
		·		·	<u> </u>				
		· ·		·					
		· ·		·					
				·			·		
¹ Type: C=Con	centration, D=Depletion	on, RM=Reduced	I Matrix, CS=Cove	red or Coate	d Sand Gra	ains.	² Locatior	n: PL=Pore Lining, M	=Matrix.
Hydric Soil Ir	ndicators: (Applicable	e to all LRRs, ur	nless otherwise n	oted.)			Indicators fo	r Problematic Hydri	c Soils³:
Histosol	(A1)		Sandy Gley	ed Marix (S4	4)		1 cm	Muck (A9) (LRR I,	J)
Histic Ep	ipedon (A2)		Sandy Red	ox (S5)			Coas	t Prairie Redox (A16)) (LRR F, G, H)
Black His	stic (A3)		Stripped Ma	atrix (S6)			Dark	Surface (S7) (LRR	G)
Hydroge	n Sulfide (A4)		Loamy Muc	ky Mineral (F	=1)		High	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)		Loamy Gle	ed Matrix (F	2)		(LRR	H outside of MLRA	72 & 73)
1 cm Mu	ск (А9) (LRR F, G, H)	Depleted M	atrix (F3)			Redu	ced Vertic (F18)	
Depleted	Below Dark Surface (ATT)	Redox Darl	surface (F6)) (EZ)			-arent Material (TF2)	(TE12)
	usky Minoral (81)			ark SUITACE ((F/)		very :	Shallow Dark Sufface	= (IF IZ)
	ucky Mineral (ST) lucky Peat or Peat (S2		High Plains	Depressions) 5 (E16)			tors of bydropbytic ve	o) actation and
2.5 cm Mu	cky Peat or Peat (S3)		(MI RA 72	& 73 of I RR	H)		wetland	d hydrology must be i	present
					,		unless	disturbed or problem	atic
Postrictivo I	avor (if procent):								
Type ⁻	ayer (il present).								
Depth (inc	ches):						Hvdric Soil Pres	ent? Yes	No X
. 、	,						•		
Remarks:									
Hydric soil ir	idicators are not prese	nt.							
	Y								
Wetland Hvd	rology Indicators								
Primary Indica	ators (minimum of one	required: check	all that apply)				Secondary	/ Indicators (minimum	n of two required)
Surface V	Water (A1)		Salt Crust (B11)			Surfa	ce Soil Cracks (B6)	
High Wa	ter Table (A2)		Aquatic Inv	ertebrates (B	(13)		Spars	selv Vegetated Conca	ave Surface (B8)
Saturatio	n (A3)		Hydrogen S	Sulfide Odor ((C1)		 Drain	age Patterns (B10)	()
Water Ma	arks (B1)		Dry-Seasor	Water Table	e (C2)		Oxidiz	zed Rhizospheres on	Living Roots (C3)
Sedimen	t Deposits (B2)		Oxidized R	hizospheres	along Living	g Roots (C	3) (wh	ere tilled)	
Drift Dep	osits (B3)		(where ne	ot tilled)			Crayf	ish Burrows (C8)	
Algal Ma	t or Crust (B4)		Presence o	f Reduced Ire	on (C4)		Satur	ation Visible on Aeria	al Imagery (C9)
Iron Dep	osits (B5)		Thin Muck	Surface (C7)			Geom	norphic Position (D2)	
Inundatio	on Visible on Aerial Ima	agery (B7)	Other (Expl	ain in Remar	ˈks)		FAC-I	Neutral Test (D5)	
Water-St	ained Leaves (B9)						Frost-	-Heave Hummocks (I	D7) (LRR F)
Field Observ	ations:								
Surface Wate	r Present? Y	es No	X Depth (ind	ches):					
Water Table F	Present? Y	es No	X Depth (inc	ches):					
Saturation Pre	esent? Y	es No _	X Depth (inc	ches):		Wetlan	nd Hydrology Pres	sent? Yes	No X
(includes capi	llary fringe)								
Describe Rec	orded Data (stream ga	uge, monitoring	well, aerial photos	, previous ins	spections),	if available:	:		
Remarks:									
Hydrology in	dicators are not prese	nt.							

Project/Site: FM	741 EA		City/Count	v:	Kaufman C	ounty	Sampling D	Date: 0	4/14/2022
Applicant/Owner:	Texas Department of	Transpo	rtation		St	State: Texas		Point:	WDP17
Investigator(s):	N and CP	•	Section, To	wnship, Rang	e:	-			
Landform (hillslope, terrace, etc):	terrace		Local relief	f (concave, cor	nvex, none):	C	onvex	Slope	e (%): 1-2
Subregion (LRR): LRR J M	ILRA 86A	Lat:	32.6	720962	Long:	-96.4436	9245	Datum:	NAD 83
Soil Map Unit Name: Trinity clay, 0 to 1	percent slopes, frequently	y flooded	1			NWI classific	ation: PFO	1C	
Are climatic / hydrologic conditions on the	site typical for this time of	year?	Yes	No	x (If no	, explain in Rem	arks.)		
Are Vegetation, Soil,	or Hydrologysig	nificantly	disturbed?	P Are	e "Normal Cir	cumstances" pre	esent? Ye	s X	No
Are Vegetation, Soil,	or Hydrologynat	turally pro	oblematic?	(If i	needed, expl	ain any answers	in Remarks.)		
SUMMARY OF FINDINGS - Attac	ch site map showin	g sam	pling poi	int location	is, transed	cts, importar	nt features,	etc.	
Hydrophytic Vegetation Present?	Yes X No								
Hydric Soil Present?	Yes No	Х	-	Is the Sample	ed Area				
Wetland Hydrology Present?	Yes No	X	-	within a Wetla	and?	Yes	No	х	
Remarks: One of the three wetland india conditions during the site inve	cators was present. This pestigations were drier than	point is no normal.	ot located v	vithin a wetland	d. The Antec	edent Precipitati	on Tool scored	a 9, indica	iting
VEGETATION - Use scientific ha	imes of plants.								
					Domin	ance Test work	ksheet:		
	A	Absolute	Dominar	nt Indicator	Numbe	er of Dominant S	Species		
Tree Stratum (Plot size: 30' radiu	<u>s</u>) <u>9</u>	% Cover	Species	? Status	That A	re OBL, FACW,	or FAC:	7	(A)
1. <u>Ulmus americana</u>		15	Yes	FAC					
2. Fraxinus pennsylvanica		15	Yes	FAC	Total N	lumber of Domir	nant		
3. <u>Salix nigra</u>		10	Yes	FACW	_ Specie	es Across All Stra	ata:	11	(B)
4. Carya illinoinensis		5	No	FAC					
	-	45	_ = Total C	Cover	Percer	nt of Dominant S	pecies		
Sapling/Shrub Stratum (Plot size:	30' radius				That A	re OBL, FACW,	or FAC:	63.6	(A/B)
1. <u>Ulmus americana</u>		15	Yes	FAC	Preva	ence Index wo	rksheet:		
2. <u>Acer negundo</u>		10	Yes	FAC	- T	otal % Cover of	inchiot.	Multiply by	<i>v</i> .
3. Gleditsia triacanthos		5	No	FACU	OBL s	pecies	0 x 1 :	= 0	<u>. </u>
4. <u>Celtis laevigata</u>		5	NO	FAC	FACW	species	10 x 2	= 20)
5		25			FAC s	pecies	100 x 3	= 300	0
Horb Stratum (Plat aiza: 201 radi		35		Jover	FACU	species	90 x 4	= 360	0
<u>Herb Stratum</u> (Flot size. <u>30 fadit</u>	<u>15)</u>	25	Voc	EACU	UPL s	pecies	10 x 5	= 50)
1. Chasmanunum nauronum 2. Solidago canadensis		20		FACU	Colum	n Totals:	210 (A)	730	0 (B)
2. Solidago canadensis		15		EACU	-				
4		15	103	1700	- F	Prevalence Index	x = B/A =	3.48	
т 5									
6					– Hydro	phytic Vegetati	on Indicators:		
7					1	- Rapid Test for	Hydrophytic Ve	egetation	
8.					$- \frac{x^2}{2}$	- Dominance le	st is >50%		
9.					3	- Prevalence Inc	lex ≤3.0'	Dravida av	
10.					4	- worphological		Flovide sup	oponing
		60	= Total C	Cover	- r		opriylic vegetai	lon (Expla	un)
Woody Vine Stratum (Plot size:	30' radius)		_		Indica	tors of hydric co	il and wotland	hydrology r	muet
1. Smilax rotundifolia		20	Yes	FAC	ho pro	cont unloss dist	urbod or proble	inyuruluyy r	nust
2. Vitis rotundifolia		15	Yes	FAC	be pie	sent, unless dist		mauc.	
		35	= Total C	Cover	Hydro	phytic			
% Bare Ground in Herb Stratum	40				Vegeta Prese	ation nt?	Yes X	No	
Remarks: Hydrophytic vegetation is pre	isent.								

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Profile Desci	ription: (Describe to	the depth need	led to document	t the indicator	or confirm	the absen	ce of indicators.)	
(inches)		0/_	Color (moist)		Tupol		Texture	Pemarke
			COIOI (MOISE)	<u> </u>	Type.	LUC		remarks
0-10	10115 4/1	100			· ·		Ciay	
					· ·			
					· ·			
					· ·			
					· ·			
					· ·			
					· ·			
¹ Type: C=Cor	ncentration, D=Depleti	on, RM=Reduce	ed Matrix, CS=Co	overed or Coate	ed Sand Gra	ains.	² Location	: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applicabl	e to all LRRs, i	unless otherwis	e noted.)			Indicators for	Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy G	Bleyed Marix (S	64)		1 cm I	Muck (A9) (LRR I, J)
Histic Ep	ipedon (A2)		Sandy F	Redox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Black Hi	stic (A3)		Stripped	Matrix (S6)			Dark S	Surface (S7) (LRR G)
Hydroge	n Sulfide (A4)		Loamy M	Mucky Mineral ((F1)		High F	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)	Loamy C	Gleyed Matrix (F2)		(LRR	H outside of MLRA 72 & 73)
1 cm Mu	ck (A9) (LRR F, G, H	1)	Depleted	d Matrix (F3)			Reduc	ced Vertic (F18)
Depleted	Below Dark Surface	(A11)	Redox D	ark Surface (F	6)		Red P	Parent Material (TF2)
Thick Da	rk Surface (A12)		Depleted	d Dark Surface	(F7)		Very S	Shallow Dark Surface (TF12)
Sandy M	lucky Mineral (S1)		Redox L	Depressions (F8	8)		Other	(Explain in Remarks)
2.5 cm N	lucky Peat or Peat (S2	2) (LRR G, H)	High Pla	Ins Depression	ns (F16)		^s Indicate	ors of hydrophytic vegetation and
	cky Peat of Peat (S3)	(LRR F)	(MLRA	/2 & /3 OT LRF	К Н)		wetiand	l nydrology must be present,
							uniess	
Restrictive L	ayer (if present):							
Туре:								
Depth (in	ches):						Hydric Soil Prese	ent? Yes <u>No X</u>
Bomorkoj								
Hydria coil in	diastora ara nat proce	nt						
Tryunc soinn	lucators are not prese							
HYDROLOG	iΥ							
Wetland Hyd	rology Indicators:							
Primary Indica	ators (minimum of one	required; checl	k all that apply)				Secondary	Indicators (minimum of two required)
Surface	Water (A1)		Salt Cru	st (B11)			Surfac	ce Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic	Invertebrates (B13)		Spars	ely Vegetated Concave Surface (B8)
Saturatio	on (A3)		Hydroge	en Sulfide Odor	· (C1)		X Draina	age Patterns (B10)
Water M	arks (B1)		Dry-Sea	son Water Tab	le (C2)		Oxidiz	zed Rhizospheres on Living Roots (C3)
Sedimer	t Deposits (B2)		Oxidized	d Rhizospheres	along Livin	g Roots (C3	3) (wh e	ere tilled)
Drift Dep	oosits (B3)		(where	e not tilled)			Crayfi	sh Burrows (C8)
Algal Ma	t or Crust (B4)		Presenc	e of Reduced I	ron (C4)		Satura	ation Visible on Aerial Imagery (C9)
Iron Dep	osits (B5)		Thin Mu	ck Surface (C7	')		Geom	orphic Position (D2)
Inundatio	on Visible on Aerial Im	agery (B7)	Other (E	xplain in Rema	arks)		FAC-N	Neutral Test (D5)
Water-St	tained Leaves (B9)						Frost-	Heave Hummocks (D7) (LRR F)
Field Observ	ations:							
Surface Wate	r Present?	res No	X Depth	(inches):				
Water Table F	Present?	/es No	X Depth	(inches):				
Saturation Pro	esent?	/es No	X Depth	(inches):		Wetlan	d Hydrology Pres	ent? Yes <u>No X</u>
(includes cap	illary fringe)							
Describe Rec	orded Data (stream or	auge, monitoring	g well, aerial pho	tos, previous in	spections).	if available:	:	
	, со с	0 / (<i>.</i> .	. ,,			
Remarks [.]								
Hydroloav in	dicators are not prese	nt.						
,	p. 500							

Project/Site:	FM 741 EA	(City/County:	к	Kaufman County Sampling Date: 04/14/2022				
Applicant/Owner:	Texas Departmen	t of Transpor	tation		State: Tex	xas Sam	oling Point:	WDP18	
Investigator(s):	CW and CP	Ś	Section, Towr	nship, Range:		N/A	- <u>-</u>		
Landform (hillslope, terrace, etc):	terrace	I	Local relief (c	oncave, conve	ex, none):	convex	c.	Slope (%): 2-3	
Subregion (LRR):	S J MLRA 86A	Lat:	32.6719	9247	Lona: -96.4	44354059	Datur	n: NAD 83	
Soil Map Unit Name: Trinity clay 0	to 1 percent slopes freque	ently flooded			NWI clas	ssification:	ΝΔ		
Are climatic / hydrologic conditions on	the site typical for this time	e of vear?	Yes	No v	(If no explain in	Remarks)			
Are Vegetation Soil	or Hydrology	significantly	disturbed?		Vormal Circumstance	s" present?	Yes	X No	
Are Vegetation Soil	or Hydrology	naturally pro	hlematic?	(If ner	eded explain any ans	wers in Rema	rks)		
	, or righteningy	vina com		locations	trancasta impo		roc oto		
SUMMART OF FINDINGS - A	litach site map show	ving samp		. 100/0115,	transects, impo		ires, etc.		
Hydrophytic Vegetation Present?	Yes N	No X			_				
Hydric Soil Present?	Yes N	No X	ls	the Sampled	Area				
Wetland Hydrology Present?	Yes N	No X	wi	thin a Wetland	d? Yes		No X	_	
Remarks: None of the three wetla	Remarks: None of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 9, indicating								
conditions during the sit	te investigations were drier	than normal	•						
VEGETATION - Use scientific	c names of plants.								
	•				Dominance Test	worksheet:			
		Abcoluto	Dominant	Indicator	Number of Domin	ant Species			
Trop Strotum (Dist size:	N N		Dominant Species2	Statua	That Are OBL FA	CW or FAC		1 (Δ)	
Thee Stratum (Piot size:)	% Cover	Species?	Status	That Are Obl., I A	CW, OFTAC.		<u> </u>	
1					Total Number of D	ominant			
2		_						C (D)	
3		_			Species Acioss A	li Stiata.		<u> </u>	
4					Demonst of Demin	ant Creation			
	0.01	0	= Iotal Cov	ver	Percent of Domina				
Sapling/Shrub Stratum (Plot size	: <u>30° radius</u>)				That Are OBL, FA	CVV, OF FAC:	16	<u>).7</u> (A/B)	
1. <u>Rubus trivialis</u>		15	Yes	FACU	Prevalence Index	worksheet.			
2. Ulmus crassifolia		15	Yes	FAC	Total % Cov	er of	Multin	ly by:	
3. Ulmus americana		10	No	FAC				<u>ny Dy.</u>	
4. Carya illinoinensis		7	No	FAC		0	x1- x2-		
5. <u>Acer negundo</u>		5	No	FAC	FACVV species	0	x 2		
		52	= Total Cov	/er	FAC species	37	x 3 =	111	
Herb Stratum (Plot size: 30'	<u>radius</u>)				FACU species	110	x 4 =	440	
1. <i>Lolium perenne</i>		20	Yes	FACU	UPL species	15	x 5 =	<u>75</u>	
2. Bromus arvensis		20	Yes	FACU	Column Totals:	162	(A)	626 (B)	
3. Solidago canadensis		20	Yes	FACU					
4. Vicia sativa		15	No	FACU	Prevalence	Index = B/A =	3.	86	
5. Carex planostachys		15	No	NI	Hydrophytic Vog	otation Indic	atore		
6. Sorghum halepense		10	No	FACU	1 Danid Too		utio Vogotatio	.	
7.							viic vegetatit		
8.					2 - Dominance	$\sim 100 \times 10^{-2}$	/0		
9.					3 - Flevalenc	e inuex ≤3.0	nal (Dravida	aupporting	
10.			-		4 - Morpholog				
		100	= Total Cov	ver			egetation (E	.xpiain)	
Woody Vine Stratum (Plot size:	30' radius)		_						
1. Smilax bona-nox		10	Yes	FACU	'indicators of hydr	ric soli and we	tiand nydroid	ogy must	
2.		_			be present, unless	s disturbed or	problematic.		
		10	= Total Cov	/er	Hydrophytic				
% Bare Ground in Herb Stratum	0			-	Vocotation				
					Prosont2	Vec	No	Y	
					i resent :	100		<u></u>	
Remarks:									
Hydrophytic vegetation is not pres	ent								

S	0	IL	
J	J		-

Profile Descr	iption: (Describe to t	he depth neede	d to document th	e indicator o	or confirm	the absen	ce of indicators.)		
(inchos)		0/	Color (moist)		Typo1		Texture	Domortes	
				70	Type.	LUC		Remarks	
0-10	1011 4/1	100		·	<u> </u>		Jiay		
				·	·		·		
					·		·		
				·					
				·					
				·					
¹ Type: C=Con	centration, D=Depletion	on, RM=Reduced	Matrix, CS=Cove	red or Coated	d Sand Gra	ains.	² Location	: PL=Pore Lining, M=	Matrix.
Hydric Soil Ir	ndicators: (Applicabl	e to all LRRs, ur	nless otherwise n	oted.)			Indicators for	r Problematic Hydrid	c Soils³:
Histosol	(A1)		Sandy Gley	ed Marix (S4	-)		1 cm	Muck (A9) (LRR I, .	J)
Histic Ep	ipedon (A2)		Sandy Red	ox (S5)			Coast	Prairie Redox (A16)	(LRR F, G, H)
Black His	stic (A3)		Stripped Ma	atrix (S6)			Dark \$	Surface (S7) (LRR C	G)
Hydroge	n Sulfide (A4)		Loamy Muc	ky Mineral (F	-1)		High F	Plains Depressions (F	-16)
Stratified	Layers (A5) (LRR F		Loamy Gley	ed Matrix (F	2)		(LRR	H outside of MLRA	72 & 73)
1 cm Mu	ск (А9) (LRR F, G, F	l)	Depleted M	atrix (F3)			Reduc	ced Vertic (F18)	
Depleted	Below Dark Surface	AII)	Redox Dark	surface (F6)				(TE12)
	ik Sullace (A12)			ark SUITACE (г <i>()</i>		very s	Evolution in Domestic	· (F ∠)
	ucky Milleral (ST) lucky Post or Post (S'		Redux Dep	Doprossions) (E16)		Olliei 3Indicat) actation and
2.5 CIT IV	nucky Feat of Feat (32 cky Peat or Peat (83)			8 73 of I RR	H)		wetland	l hydrology must be r	
5 cm Mu					,		unless	disturbed or problem:	atic
								· · · · · · · · · · · · · · · · · · ·	
Restrictive L	ayer (if present):								
Type:			_					(a)) (
Depth (ind	cnes):		_				Hydric Soil Pres	ent? Yes	NOX
Remarks:									
Hydric soil in	dicators are not prese	nt.							
HYDROLOG	Y								
Wetland Hyd	rology Indicators:								
Primary Indica	ators (minimum of one	required; check	all that apply)				Secondary	Indicators (minimum	of two required)
Surface	Water (A1)		Salt Crust (B11)			Surfac	ce Soil Cracks (B6)	
High Wa	ter Table (A2)		Aquatic Inv	ertebrates (B	13)		Spars	ely Vegetated Conca	ve Surface (B8)
Saturatio	n (A3)		Hydrogen S	Sulfide Odor ((C1)		X Draina	age Patterns (B10)	
Water Ma	arks (B1)		Dry-Seasor	Water lable	e (C2)			zed Rhizospheres on	Living Roots (C3)
Sedimen				nizospheres a	along Livin	ig Roots (C.	3) (Whi	ere tillea)	
	usits (B3) t or Cruct (P4)		(where he	f Roducod Irr	n(C4)		Crayii	stion Visible on Aeria	
Aigai ivia	osite (B5)		Thin Muck	Surface (C7)	511 (C4)		Satura	according Position (D2)	i iiliagely (C9)
Inundatio	osiis (DS) on Visible on Aerial Im	agery (B7)	Other (Evol	ain in Remar	ke)			Neutral Test (D5)	
Water-St	ained Leaves (B9)	agery (D7)		ann in recinar	K3)		Frost-	Heave Hummocks ()7) (I RR F)
Field Observ	ations:								
Surface Wate	r Present?	es No	X Depth (inc	ches):					
Water Table F	resent? Y	res No	X Depth (inc	hes):					
Saturation Pre	esent?	res No _	X Depth (inc	ches):	<u> </u>	Wetlar	nd Hydrology Pres	ent? Yes	No <u>X</u>
(includes capi	liary fringe)								
Describe Rec	orded Data (stream ga	uge, monitoring	well, aerial photos	, previous ins	pections),	if available	:		
	-	-							
Pemarka									
Hydrology in	dicators are not press	nt							
i iyurology III									

Project/Site: FM 741 EA		City/County:	к	aufman County	Sampling Date:	04/14/2022
Applicant/Owner: Texa	s Department of Transp	ortation		State: Texas	Sampling Point:	WDP19
Investigator(s):		Section, Tov	vnship, Range:		N/A	
Landform (hillslope, terrace, etc): forest	ed depression	Local relief (concave, conve	ex, none): co	oncave	Slope (%): 1-2
Subregion (LRR): LRR J MLRA 86A	Lat:	32.671	61382	Long: -96.4444	1963 Datu	m: NAD 83
Soil Map Unit Name: Trinity clay. 0 to 1 percent s	lopes, frequently flooded	ł		NWI classific	ation: NA	
Are climatic / hydrologic conditions on the site typic	al for this time of vear?	Yes	No 🗸	(If no. explain in Rem	arks.)	
Are Vegetation . Soil . or Hvdrol	loav significant	v disturbed?	Are "N	Normal Circumstances" pre	esent? Yes	X No
Are Vegetation . Soil . or Hydrol	logy naturally p	roblematic?	(If nee	eded. explain any answers	in Remarks.)	
SUMMARY OF FINDINGS - Attach site	map showing sam	nolina poir	t locations	transects, importa	nt features, etc.	
Hudronbutio Vagetation Bragent?	V No	<u>.p</u>				
Hydrophytic Vegetation Present? Yes	<u> </u>	- .	the Compled	A		
Hydric Soli Present? Yes			s the Sampled A		Х N-	
Wettand Hydrology Present? Yes	<u> </u>		Athin a wetland		<u>X</u> INO	
Remarks: All of the three wetland indicators we conditions during the site investigation	ere present. This point is ons were drier than norm	located within nal.	n a wetland. The	e Antecedent Precipitation	Tool scored a 9, indi	icating
VEGETATION - Use scientific names o	f plants.					-
				Dominance Test worl	ksheet:	
	Absolute	e Dominant	Indicator	Number of Dominant S	Species	
Tree Stratum (Plot size: 30' radius)	% Cover	r Species?	Status	That Are OBL, FACW,	or FAC:	5 (A)
1. <u>Salix nigra</u>	20	Yes	FACW			
2. <u>Celtis laevigata</u>	15	Yes	FAC	Total Number of Domir	nant	
3. <u>Populus deltoides</u>	15	Yes	FAC	Species Across All Str	ata:	6 (B)
4. Fraxinus pennsylvanica	12	No	FAC			
	62	= Total Co	over	Percent of Dominant S	pecies	
Sapling/Shrub Stratum (Plot size: 30' rad	lius)			That Are OBL, FACW,	or FAC: 8	3.3 (A/B)
1. Ulmus americana	25	Yes	FAC			
2. Acer negundo	10	Yes	FAC	Prevalence Index wo	rksheet:	
3.				Total % Cover of:	Multi	ply by:
4.				OBL species	<u>0</u> x 1 =	0
5.				FACW species	20 x 2 =	40
	35	= Total Co	over	FAC species	<u>77</u> x 3 =	231
Herb Stratum (Plot size:)				FACU species	<u>20</u> x 4 =	80
1.				UPL species	0 x 5 =	0
2.				Column Totals:	<u>117</u> (A)	351 (B)
3.						
4.				Prevalence Inde	x = B/A =	3.0
5.						
6.				A Daniel Test for	on indicators:	1
7.					Hydrophylic vegetali	ion
8.				X 2 - Dominance le	st is >50%	
9.				X 3 - Prevalence Inc	lex ≤3.0'	
10.				4 - Morphological	Adaptations' (Provid	e supporting
	0	= Total Co	over	Problematic Hydro	opnytic vegetation' (E	Explain)
Woody Vine Stratum (Plot size: 30' radius	·)					
1 Toxicodendron radicans	/ 20	Yes	FACU	'Indicators of hydric so	and wetland hydrol	logy must
2				be present, unless dist	urbed or problematic	
	20	= Total Co	ver	Hydrophytic		
% Bare Ground in Herb Stratum 100				Vegetation		
, 2 2 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_			Present?	Ves X No	
				Flesent:		
Remarks: Hydrophytic vegetation is present.						

S	0	I	L
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Profile Descrip	otion: (Describe to t Matrix	he depth need	ed to document th Redox	e indicator o	or confirm	the absen	nce of indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	N 4/	100					Clay	
¹ Type: C=Conc	entration, D=Depletio	n, RM=Reduce	d Matrix, CS=Cover	ed or Coated	d Sand Gra	ins.	² Location	: PL=Pore Lining, M=Matrix.
Hydric Soil Inc	licators: (Applicable	to all LRRs, ι	Inless otherwise n	oted.)			Indicators for	r Problematic Hydric Soils ³ :
Histosol (A	A1)		Sandy Gley	ed Marix (S4	l)		1 cm	Muck (A9) (LRR I, J)
Histic Epip	edon (A2)		Sandy Red	ox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Black Hist	ic (A3)		Stripped Ma	atrix (S6)			Dark	Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Muc	ky Mineral (F	-1)		High I	Plains Depressions (F16)
Stratified L	ayers (A5) (LRR F)		X Loamy Gley	ed Matrix (F	2)		(LRR	H outside of MLRA 72 & 73)
1 cm Mucl	(A9) (LRR F, G, H)	Depleted M	atrix (F3)			Redu	ced Vertic (F18)
Depleted I	Below Dark Surface (A	A11)	Redox Dark	Surface (F6	5)		Red F	Parent Material (TF2)
Thick Dark	s Surface (A12)		Depleted Da	ark Surface (F7)		Very S	Shallow Dark Surface (TF12)
Sandy Mu	cky Mineral (S1)		Redox Dep	ressions (F8))		Other	(Explain in Remarks)
2.5 cm Mu	icky Peat or Peat (S2) (LRR G, H)	High Plains	Depressions	s (F16)		³ Indicat	ors of hydrophytic vegetation and
5 cm Mucl	ky Peat or Peat (S3)	(LRR F)	(MLRA 72 8	& 73 of LRR	H)		wetland	I hydrology must be present,
							unless	disturbed or problematic.
Restrictive La	ver (if present):							
Type [.]	yer (in present).							
Denth (inch	ies).						Hydric Soil Pres	ent? Yes X No
Boptil (illoi								
Remarks:								
Hydric soil ind	icators are present.							
HYDROLOGY	/							
Wetland Hydro	ology Indicators:							
Primary Indicat	ors (minimum of one	required; check	all that apply)				Secondary	Indicators (minimum of two required)
X Surface W	/ater (A1)		Salt Crust (B11)			Surfa	ce Soil Cracks (B6)
High Wate	r Table (A2)		Aquatic Inve	ertebrates (B	13)		Spars	ely Vegetated Concave Surface (B8)
Saturation	(A3)		Hydrogen S	ulfide Odor ((C1)		X Draina	age Patterns (B10)
X Water Mar	'ks (B1)		Dry-Season	Water Table	e (C2)		Oxidiz	zed Rhizospheres on Living Roots (C3)
Sediment	Deposits (B2)		Oxidized R	nizospheres a	along Living	Roots (C	3) (wh	ere tilled)
Drift Depo	sits (B3)		(where no	ot tilled)			Crayfi	sh Burrows (C8)
X Algal Mat	or Crust (B4)		Presence of	f Reduced Iro	on (C4)		Satura	ation Visible on Aerial Imagery (C9)
Iron Depo:	sits (B5)		Thin Muck S	Surface (C7)			X Geom	orphic Position (D2)
Inundation	Visible on Aerial Ima	igery (B7)	Other (Expl	ain in Remar	ks)		FAC-1	Neutral Test (D5)
X Water-Sta	ined Leaves (B9)						Frost-	Heave Hummocks (D7) (LRR F)
Field Observa	tions:		Danth (inc	h	4			
Surface Water	Present?		Depth (inc	hee).	1			
Valer Table Pro	esent?		X Depth (inc	hes):		Wetley	n d Lludvala av Duca	
(includes capill	or fringe)			nes).		vvetia	nu nyurology Pres	
(includes capilla	ary ininge/							
Describe Reco	rded Data (stream ga	uge, monitoring	well, aerial photos,	previous ins	spections), i	f available	:	
Demerilie								
Remarks:	icators are present							
r iyarology indi	icators die present.							

Project/Site:	FM 741 EA	(City/County:	к	aufman County	Sam	pling Date:	04/14	/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Te	xas Sam	plina Point:	WD	P20
Investigator(s)	CW and CP	Section Township Range:				N/A	. <u></u>		
l andform (billslope terrace et	c): flat woodland	`	ocal relief (r	concave conve	v none).	none		Slone (%). 0
Subregion (LRR):		Lat.	32 6716	3403		44431846	 Datur	n. N.	<u>י ס</u> וע. 10 83 סע
Soil Man Unit Name: Trinity	alay 0 to 1 percent clopes, freque		52.07 10	00400	Long	seification:		n. <u> </u>	
Are elimatic / hydrologic conditi	ions on the site typical for this time	of yoar?	Voc	No x		Bomarka)	INA		
Are Manatetian		ionificantly	diaturhad 0			c" procept2			_
Are vegetation, Soil	, of Hydrology	significantiy	disturbed?	Are r	Normal Circumstance	s present?	res		
Are vegetation, Soil	, or Hydrology	naturally pro	biematic?	(If nee	eded, explain any ans	swers in Rema	arks.)		
SUMMARY OF FINDING	SS - Attach site map show	ing samp	bling poin	t locations,	, transects, impo	ortant featu	ires, etc.		
Hydrophytic Vegetation Pres	ent? Yes X N	0							
Hydric Soil Present?	Yes N	o <u>X</u>	ls	the Sampled	Area				
Wetland Hydrology Present?	Yes N	o X	wi	ithin a Wetland	d? Yes	3	No X		
Remarks: One of the three	wetland indicators was present. T	his point is n	not located w	ithin a wetland	. The Antecedent Pre	cipitation Tool	l scored a 9,	indicating	g
conditions during	the site investigations were drier	than normal	•						
	ontific names of plants								
VEGETATION - USE SCI	entine names of plants.								
					Dominance Test	worksheet:			
		Absolute	Dominant	Indicator	Number of Domin	ant Species			
Tree Stratum (Plot size:	30' radius)	% Cover	Species?	Status	That Are OBL, FA	CW, or FAC:		3	(A)
1. Salix nigra		20	Yes	FACW					
2. Fraxinus pennsylvanica		20	Yes	FAC	Total Number of I	Dominant			
3. Celtis laevigata		15	Yes	FAC	Species Across A	II Strata:	1	3	(B)
4									. ,
		55	= Total Co	ver	Percent of Domin	ant Species			
Sapling/Shrub Stratum (P	lot size: 30' radius				That Are OBL FA	CW or FAC	61	15	(A/B)
	j	15	Vee	FAC					(100)
1. Olimus americana		10			Prevalence Inde	x worksheet:			
2. Symphoricarpos orbiculat	us	10	Yes	FACU	Total % Cov	er of:	Multip	olv by:	
3. <u>Celtis laevigata</u>		10	Yes	FAC	OBL species	0	x 1 =	0	_
4. <u>Acer negundo</u>		10	Yes	FAC	EACW species	20	x2=	40	
5					FAC species	100	×3-	300	—
		45	= Total Co	ver	FACIL aposico	100		220	
Herb Stratum (Plot size:	30' radius)					20	_ <u></u>	100	
1. Carex planostachys		20	Yes	NI	OPL species	20	× o =	700	(D)
2. Chasmanthium latifolium		20	Yes	FACU	Column Totals:	220	(A)	760	(B)
3. Solidago canadensis		20	Yes	FACU			_		
4. Elymus virginicus		20	Yes	FAC	Prevalence	Index = B/A =	3.	45	
5. Symphyotrichum ericoide	s	10	No	FACU	Hudrophytic Vec	etation India	otoro		
6.									
7.		-				st for Hydroph	ylic vegetatio	חכ	
8.					X 2 - Dominan	ce lest is >50	%		
9.			_		3 - Prevalence	ce Index ≤3.0'			
10					4 - Morpholo	gical Adaptation	ons' (Provide	support	ing
10		90	= Total Co	ver	Problematic	Hydrophytic V	egetation ¹ (E	xplain)	
Woody Vine Stratum (Plot	t size: 30' radius	0							
)	20	Voc	EACU	¹ Indicators of hyd	ric soil and we	tland hydrolo	ogy must	
		20			be present, unles	s disturbed or	problematic.		
				FAC					
		30	= 10tal Co	ver	Hydrophytic				
% Bare Ground in Herb Strat	tum <u>10</u>				Vegetation				
					Present?	Yes 2	X No		
Remarks:									
Hydrophytic vegetation is p	resent.								

S	0	IL	
J	J		-

Profile Descr	iption: (Describe to	the depth neede	ed to document t	he indicator	or confirm	the absen	ce of indicators.)	
(inches)		%	Color (moist)		Type ¹		Texture	Remarks
0_18		100		/0	iype:		Clay	i cilidikə
0-10	10111 4/1						Jiay	
							·	
							·	
¹ Type: C=Con	centration, D=Deplet	ion, RM=Reduce	d Matrix, CS=Cov	ered or Coate	d Sand Gra	ains.	² Locatior	n: PL=Pore Lining, M=Matrix.
Hydric Soil In	dicators: (Applicab	le to all LRRs, u	nless otherwise	noted.)			Indicators fo	r Problematic Hydric Soils ³ :
Histosol ((A1)		Sandy Gle	eyed Marix (Se	4)		1 cm	Muck (A9) (LRR I, J)
Histic Ep	ipedon (A2)		Sandy Re	dox (S5)			Coas	t Prairie Redox (A16) (LRR F, G, H)
Black His	tic (A3)		Stripped N	Aatrix (S6)			Dark	Surface (S7) (LRR G)
Hydroger	n Sulfide (A4)		Loamy Mu	icky Mineral (F1)		High	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F	-)	Loamy Gl	eyed Matrix (F	-2)		(LRR	H outside of MLRA 72 & 73)
1 cm Muo	ck (A9) (LRR F, G, I	H)	Depleted	Matrix (F3)			Redu	iced Vertic (F18)
Depleted	Below Dark Surface	(A11)	Redox Da	rk Surface (F6	6)		Red F	Parent Material (TF2)
Thick Da	rk Surface (A12)		Depleted	Dark Surface	(F7)		Very	Shallow Dark Surface (TF12)
Sandy M	ucky Mineral (S1)		Redox De	pressions (F8	5) (= 1 0)		Other	r (Explain in Remarks)
2.5 cm M	ucky Peat or Peat (S	2) (LRR G, H)	High Plain	s Depression	s (F16)		³ Indicat	tors of hydrophytic vegetation and
5 cm Mud	cky Peat or Peat (S3)	(LRR F)	(MLRA /2	& /3 OF LRR	(H)		wetiand	a nyarology must be present,
							uniess	disturbed of problematic.
Restrictive La	ayer (if present):							
Туре:								
Depth (inc	hes):						Hydric Soil Pres	ent? Yes <u>No X</u>
Demerker								
Hydric soil in	dicators are not press	ant						
Tryunc son m	dicators are not prese	5111.						
	v							
Wetland Hvd	rology Indicators:							
Primary Indica	itors (minimum of one	e required: check	all that apply)				Secondary	v Indicators (minimum of two required)
Surface \	Vater (A1)		Salt Crust	(B11)			Surfa	ice Soil Cracks (B6)
High Wat	er Table (A2)		Aquatic In	vertebrates (E	313)		Spars	selv Vegetated Concave Surface (B8)
Saturatio	n (A3)		Hydrogen	Sulfide Odor	, (C1)		Drain	age Patterns (B10)
Water Ma	arks (B1)		Dry-Seaso	on Water Table	e (C2)		Oxidi	zed Rhizospheres on Living Roots (C3)
Sedimen	t Deposits (B2)		Oxidized F	Rhizospheres	along Livin	ng Roots (C	3) (wh	nere tilled)
Drift Dep	osits (B3)		(where i	not tilled)	-		Crayf	fish Burrows (C8)
Algal Mat	t or Crust (B4)		Presence	of Reduced Ir	on (C4)		Satur	ration Visible on Aerial Imagery (C9)
Iron Depo	osits (B5)		Thin Muck	Surface (C7))		Geon	norphic Position (D2)
Inundatio	n Visible on Aerial Im	nagery (B7)	Other (Ex	olain in Rema	rks)		FAC-	Neutral Test (D5)
Water-Sta	ained Leaves (B9)						Frost	-Heave Hummocks (D7)(LRR F)
Field Observa	ations:							
Surface Water	Present?	Yes No	X Denth (ir	nches).				
Water Table P	resent?	Yes No	X Depth (ir	nches):		•		
Saturation Pre	sent?	Yes No	X Depth (ir	nches):		Wetlar	nd Hydrology Pres	sent? Yes No X
(includes capi	llary fringe)							
Describe Reco	orded Data (stream g	auge, monitoring	well, aerial photo	s, previous in:	spections),	if available	:	
Remarks:								
Hydrology ind	licators are not prese	ent.						
Applicant/Owner: Texas Department Investigator(s): CW and JK Landform (hillslope, terrace, etc): Streamside	t of Transpor S	tation Section, Towr	iship, Range:	State: Texa	is Sampl N/A	ing Point:	WDP	21
---	---------------------------------	-------------------------	----------------	---	---------------------------------	----------------------------	------------	--------------
Investigator(s): CW and JK Landform (hillslope, terrace, etc): Streamside	§	Section, Towr	iship, Range:		N/A	-		
Landform (hillslope, terrace, etc): Streamside	L	ocal relief (c	-	,				
			oncave, conve	ex, none):	concave	ę	Slope (%):	0-1
Subregion (LRR): LRR J MLRA 86A	Lat:	32.6778	9812	Long: -96.44	1257426	Datun	n: NAI	D 83
Soil Map Unit Name: Trinity clay, 0 to 1 percent slopes, frequer	ntly flooded			NWI class	ification:			
Are climatic / hydrologic conditions on the site typical for this time	e of year?	/es	No X	(If no, explain in R	emarks.)	NA		
Are Vegetation , Soil , or Hydrology	significantly	disturbed?	Are "I	Normal Circumstances"	present?	Yes >	K No	
Are Vegetation , Soil , or Hydrology	naturally pro	blematic?	(If nee	eded, explain any answ	ers in Remarl	(s.)		
SUMMARY OF FINDINGS - Attach site map show	ing samp	ling point	locations.	transects, impor	tant featur	es, etc.		
Hydrophytic Vegetation Present? Yes X	lo		,	· · ·				
Hydric Soil Present? Yes	lo X	ls f	the Sampled	Area				
Wetland Hydrology Present? Yes		wi	hin a Wetland	d? Yes No X				
	<u> </u>			<u> </u>		<u></u>	_	
Remarks: One of the three wetland indicators was present. conditions during the site investigations were wett	his point is n er than norma	ot located wi al.	thin a wetland	. The Antecedent Preci	pitation Tool s	scored a 15	indicating	l
VEGETATION - Use scientific names of plants								
				Deminent Testu				
		D		Number of Demiser	orksneet:			
	Absolute	Dominant	Indicator	Number of Dominal	nt Species			(a)
Tree Stratum (Plot size: 30 radius)	% Cover	Species?	Status	That Are OBL, FAC	VV, OF FAC:		<u>s</u>	(A)
1. Ulmus crassifolia	15	Yes	FAC	Tatal Number of Da				
2. Ulmus americana	15	Yes	FAC		minant			
3. Celtis laevigata	10	Yes	FAC	Species Across All	Strata:	1	1 ((B)
4. <u>Carya illinoinensis</u>	10	Yes	FAC					
	50	= Total Cov	er	Percent of Dominar	nt Species		_	
Sapling/Shrub Stratum (Plot size: 30' radius)				That Are OBL, FAC	W, or FAC:	72	7	(A/B)
1. Fraxinus pennsylvanica	10	Yes	FAC	Provalonco Indox	workshoot:			
2. <u>Celtis laevigata</u>	10	Yes	FAC	Total % Cover of: Multiply by:			ly by:	
3. <u>Ulmus americana</u>	10	Yes	FAC		0		<u>o</u>	-
4. Diospyros virginiana	10	Yes	FAC		0	×1- ×2-	0	-
5				FAC v species	105	×2	215	-
	40	= Total Cov	er	EACL species	60	× J =	240	-
Herb Stratum (Plot size: <u>30' radius</u>)					25	×+- ×5-	125	-
1. <u>Oenothera speciosa</u>	25	Yes	NI	Column Totals:	100	(A)	680	- (B)
2. Lolium perenne	25	Yes	FACU		190	(^)	000	_ (D)
3. Allium canadense	25	Yes	FACU	Prevalence Ir	$dex = B/\Lambda =$	3	58	
4. Ambrosia trifida	15	No	FAC	T TOVAICTICO II			50	-
5. <u>Solidago canadensis</u>	10	No	FACU	Hydrophytic Vege	tation Indicat	ors:		
6				1 - Rapid Test	for Hydrophyt	ic Vegetatio	n	
7				X 2 - Dominance	Test is >50%	U U		
8				3 - Prevalence	Index ≤3.0 ¹			
9				4 - Morphologi	cal Adaptatior	ns¹ (Provide	supportin	ıg
10				Problematic H	drophytic Ve	getation ¹ (E	xplain)	0
	100	= Total Cov	er				• •	
Woody Vine Stratum (Plot size:) 1.)				¹ Indicators of hydric be present, unless	soil and wetl disturbed or p	and hydrolo roblematic.	ogy must	
2								
	0	= Total Cov	er	Hydrophytic				
% Bare Ground in Herb Stratum0				Vegetation				
				Present?	Yes X	NO		
Remarks:				·				
Hydrophytic vegetation is present.								
L								

S	0	IL	
J	J		-

Profile Descri	ption: (Describe to	o the depth nee	ded to doo	cument the	e indicator o	or confirm	the absen	nce of indica	ators.)			
(inchas)		0/	Color (=	RedOX		Turcal	1 002	Touture		Domost		
				ioist)	70	Type.	LUC	Clav		Remark	19	
0-10	101 K 4/1	100						Ciay				
·												
¹ Type: C=Con	centration, D=Deple	tion, RM=Reduc	ed Matrix,	CS=Cover	ed or Coate	d Sand Gra	ains.	2	ocation: PL	=Pore Lining, N	1=Matrix.	
Hydric Soil In	dicators: (Applical	ble to all LRRs,	unless ot	herwise n	oted.)			Indica	tors for Pro	oblematic Hydr	ic Soils ³ :	
Histosol (A1)		s	andy Gley	ed Marix (S4	4)			1 cm Muc	k (A9) (LRR I ,	J)	
Histic Epi	pedon (A2)	S	andy Redo	ox (S5)				Coast Pra	irie Redox (A16	6) (LRR F, G, H))	
Black His	tic (A3)		s	stripped Ma	atrix (S6)				Dark Surf	ace (S7) (LRR	G)	
Hydroger	Sulfide (A4)		L	oamy Muc	ky Mineral (F	=1)			High Plair	ns Depressions	(F16)	
Stratified	Layers (A5) (LRR	F)	L	oamy Gley	ed Matrix (F	2)			(LRR H o	utside of MLRA	A 72 & 73)	
1 cm Muc	ck (A9) (LRR F, G,	H)		epleted M	atrix (F3)				Reduced	Vertic (F18)		
Depleted	Below Dark Surface	e (A11)	R	edox Dark	Surface (F6	S)			Red Pare	nt Material (TF2	(
Thick Dar	k Surface (A12)		D	epleted Da	ark Surface ((F7)		Very Shallow Dark Surface (TF12)				
Sandy Mi	иску Mineral (S1)		R	kedox Depi	ressions (F8)				Other (Ex	piain in Remark	S)	
2.5 cm M	ucky Peat or Peat ((LKKG, H)	— H	iign Plains		ы (F1б) Ц		³ Indicators of hydrophytic vegetation and				
	ry Pear of Pear (Sc) (LKK F)	(1	VILKA /2 (x / 3 OT LKR	п)		unless disturbed or problematic.				
							r				natio.	
Restrictive La	iyer (if present):											
Туре:												
Depth (inc	hes):							Hydric Sc	DI Present?	Yes	No	
Remarks:												
Hydric soil ind	dicators are not pres	sent.										
HYDROLOG	Y											
Wetland Hydr	ology Indicators:											
Primary Indica	tors (minimum of or	ne required; cheo	ck all that a	ipply)				Sec	condary Ind	icators (minimu	m of two required	d)
Surface V	Vater (A1)		s	alt Crust (I	B11)				Surface S	oil Cracks (B6)	.	
High Wat	er Table (A2)		A	quatic Inve	ertebrates (B	(13)			Sparsely	Vegetated Conc	ave Surface (B8)
Saturation	1 (A3)		— H	iyarogen S	ulfide Odor (Drainage	Patterns (B10)	n Liuden Die 1. (2	201
vvater Ma	IKS (B1)			vidiacal D	vvater lable	elong Linde	a Docto (O	<u> </u>	Uxidized		n Living Roots (C	(در
Seaiment	Deposits (B2)			where re	ii∠ospneres :	aiong Livin	IN ROOTS (C	,3)	(wnere			
	or Crust (BA)		n		f Reduced In	on (CA)			Seturation	Nisible on Acri	al Imagery (CO)	
	sits (B5)		— ^P	hin Muck 9	Surface (C7)	011 (04)		Y	Geomorp	hic Position (D2	a inagery (C9)	
	n Visible on Δerial II	magery (R7)	'	ther (Expl	ain in Remar	·ks)		<u>^</u>	FAC-Neut	ral Test (D5)	/	
Water_St	ained Leaves (R9)	magery (D7)				1.3)			Frost-Hes	ive Hummocks /	(D7) (LRR F)	
									-		(-·/(-···· /	
Field Observa	ations:											
Surface Water	Present?	Yes No	<u>X</u>	Depth (inc	hes):							
Water Table P	resent?	Yes No	<u> X </u>	Depth (inc	hes):							
Saturation Pre	sent?	Yes No	<u>Х</u>	Depth (inc	hes):		Wetlar	nd Hydrolog	gy Present	? Yes	NoX	<u> </u>
(includes capil	lary fringe)											
Describe Reco	orded Data (stream	gauge, monitorir	ng well, aer	ial photos,	previous ins	spections),	if available	:				
Remarks:												
Hydroloav ind	licators are not pres	sent.										
, -3,												

Applicant/Owner: Texas Department of Transportation State: Texas Sampling Point: Investigator(s): CW and JK Section, Township, Range: N/A Landform (hildisope, terrace, etc): Terrace Local relief (concave, convex, none): convex Slo Soil Map Unit Name: Trinity clay, 0 to 1 percent slopes, frequently flooded No X (If no, explain in Remarks.) Are climate/ hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrologic conditions on the site hydrologic maturally problematic? If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrologic maturally problematic? If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrologic matures, No X If are Sampled Area Wetland Hydrology Present? Yes No X Is the Sampled Area No X Remarks: None of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool	WDP22								
Investigator(s): CW and JK Section, Township, Range: N/A Landform (hillslope, terrace, etc): Terrace Local relief (concave, convex, none): convex Slo Soli Map Unit Name: LRR J MLR 86A Lat: 32.67779938 Long: -96.44269512 Datum: Soli Map Unit Name: Trinity clay, 0 to 1 percent slopes, frequently flooded No X (If no, explain in Remarks.) Are vegetation Soli , or Hydrology significantly disturbed? No X (If no, explain in Remarks.) Are Vegetation , Soli , 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. Hydrology Present? Yes No X Hydrology Present? Yes No X Is the Sampled Area within a Wetland? Yes No X Remarks: No of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 15, in conditions during the site investigations were wetter than normal. Indicator Number of Dominant Species 1.									
Landform (hillslope, terrace, etc): Terrace Local relief (concave, convex, none):									
Subregion (LRR): LRR J MLRA 86A Lat: 32.67779938 Long: -96.44269512 Datum: Soli Map Unit Name: Trinity clay, 0 to 1 percent slopes, frequently flooded NVI classification: NA Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks.) 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. Hydrohydic Vegetation Present? Yes No X Hydrohydic Vegetation Present? Yes No X Is the Sampled Area within a Wetland? Yes No X Wetland Hydrology Present? Yes No X Is the Sampled Area within a Wetland? No X Remarks: No of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 15, it conditions during the site investigations were wetter than normal. Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 3 1.	pe (%): 2-3								
Soil Map Unit Name: Trinity clay, 0 to 1 percent slopes, frequently flooded NWI classification: NA Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (If no, explain in Remarks.) Are Vegetation	NAD 83								
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No X (ff no, explain in Remarks.) Are vegetation									
Are Vegetation									
No revegetation Soil or Hydrology	No								
No									
Soliwina are of priority in the intervention of the three wetland indicators were present. This point is not located within a Wetland? Yes No X Hydric Soil Present? Yes No X Is the Sampled Area within a Wetland? Yes No X Wetland Hydrology Present? Yes No X within a Wetland? Yes No X No X Remarks: None of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 15, i conditions during the site investigations were wetter than normal. Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: 3 Tree Stratum (Plot size:) Absolute Dominant Indicator 1.									
Hydrophytic Vegetation Present? Yes No X Is the Sampled Area Wetland Hydrology Present? Yes No X Is the Sampled Area Wetland Hydrology Present? Yes No X within a Wetland? Yes No X Remarks: None of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 15, i conditions during the site investigations were wetter than normal. Dominante Test worksheet: Number of Dominant Species VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Number of Dominant Species 1.									
Hydric Soil Present? Yes No X Is the Sampled Area Wetland Hydrology Present? Yes No X within a Wetland? Yes No X Remarks: None of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 15, i conditions during the site investigations were wetter than normal. Ves No X VEGETATION - Use scientific names of plants. Dominant Indicator Dominance Test worksheet: Number of Dominant Species 1									
Wetland Hydrology Present? Yes No X within a Wetland? Yes No X Remarks: None of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 15, i conditions during the site investigations were wetter than normal. The Antecedent Precipitation Tool scored a 15, i conditions during the site investigations were wetter than normal. VEGETATION - Use scientific names of plants. Dominant Indicator Tree Stratum (Plot size:) Absolute Dominant Indicator 1.									
Remarks: None of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 15, is conditions during the site investigations were wetter than normal. VEGETATION - Use scientific names of plants. Tree Stratum (Plot size:) Absolute Dominant Indicator Dominant Species Number of Dominant Species 1.									
Originality of the integration of which w	Remarks: None of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 15, indicating								
VEGETATION - Use scientific names of plants. Image: Colspan="2">Dominant of Dominant Species Tree Stratum (Plot size:) Absolute Species? Status Dominant Species Number of Dominant Species 1. That Are OBL, FACW, or FAC: 2. Total Number of Dominant Species 3.									
VEGETATION - Use scientific names of plants. Image: Constraint of the size: Im									
Tree Stratum (Plot size:) Absolute % Cover Dominant Species? Indicator Status Dominance Test worksheet: Number of Dominant Species 1.									
Absolute Dominant Indicator Tree Stratum (Plot size:) % Cover Species? Status That Are OBL, FACW, or FAC:3 3 1. Total Number of Dominant Species? That Are OBL, FACW, or FAC: 3 2.									
Absolute Dominant Indicator Tree Stratum (Plot size:) % Cover Species? Status That Are OBL, FACW, or FAC:3 3 2.									
Irree stratum (Plot size:) % Cover Species? Status Intal Ale OBL, FACW, of FAC. 3 2.	(A)								
1.	(A)								
2.									
3.									
4. 0 = Total Cover Sapling/Shrub Stratum (Plot size: 30' radius)) 0 = Total Cover 1. Acer negundo 25 Yes FAC 2. Cornus drummondii 15 Yes FAC 3. Carya illinoinensis 10 Yes FAC 4.	(B)								
0 = Total Cover Percent of Dominant Species Sapling/Shrub Stratum (Plot size: 30' radius) 25 Yes FAC 1. Acer negundo 25 Yes FAC 2. Cornus drummondii 15 Yes FAC 3. Carya illinoinensis 10 Yes FAC 4.									
Sapling/Shrub Stratum (Plot size: 30' radius) That Are OBL, FACW, or FAC: 50.0 1. Acer negundo 25 Yes FAC 2. Cornus drummondii 15 Yes FAC 3. Carya illinoinensis 10 Yes FAC 4.									
1. Acer negundo 25 Yes FAC 2. Cornus drummondii 15 Yes FAC 3. Carya illinoinensis 10 Yes FAC 4.	(A/B)								
2. Cornus drummondii 15 Yes FAC FAC Total % Cover of: Multiply b 3. Carya illinoinensis 10 Yes FAC OBL species 0 x 1 = 0 4.									
3. Carya illinoinensis 10 Yes FAC Iotal % Cover of: Initial % Cover of: <t< td=""><td>b. //</td></t<>	b. //								
4. \bigcirc OBL species \bigcirc X1 = \bigcirc 5. \bigcirc FACW species \bigcirc X2 = \bigcirc FACW species \bigcirc X3 = \bigcirc	by:								
5 FACW species X2 =	0								
	0								
$50 = \text{Total Cover} \qquad 70 \text{ species} \qquad 00 \text{ species} \\qquad 00 \text{ species} \qquad 00 \text{ species} \qquad 00 \text{ species} $	80								
Herb Stratum (Plot size: 30' radius)	-20								
1. Bromus arvensis 30YesFACU UPL species0 x 5 =5	50								
2. Lolium perenne 30 Yes FACU Column Totals: 175 (A) 65	50 (B)								
3. Allium canadense 20 No FACU									
4. Plantago rhodosperma 15 No FACU Prevalence Index = B/A = 3.71									
5. Geranium dissectum 10 No NI Hudronbutio Versetation Indicatore									
6. Ambrosia trifida 10 No FAC 1 Danid Test for Lludrophytic Vegetation Indicators.									
8 2 - Dominance rest is >50%									
9 3 - Prevalence index <3.0*									
	upporting								
115 = Total Cover	nan)								
Woody Vine Stratum (Plot size: 30' radius)									
1. Smilay hona-nov 10. Yes EACU	y must								
be present, unless disturbed or problematic.									
10 = Total Cover									
¹⁰ - Iolai Cover Hydrophytic									
Present? Yes <u>NO X</u>	<u>× </u>								
Remarke:									
Hydrophytic vegetation is not present.									

S	0	IL	
J	J		-

Profile Descri	ption: (Describe to Matrix	the depth nee	eded to d	ocument th	e indicator	or confirm	the abser	nce of indicators.)	
(inches)	Color (moist)	%	Color	(moist)	%	Type ¹		Texture	Remarks
	10VR 4/1	/0	000	(moist)	/0	- ype	200		
0-10	1011(4/1				·				
					·				
·					·				
·					·			·	
·					·				
					·				
					·				
¹ Type: C=Cond	centration, D=Deplet	tion, RM=Redu	ced Matrix	x, CS=Cove	red or Coate	d Sand Gra	ains.	² Location	: PL=Pore Lining, M=Matrix.
Hudric Soil In	diastore: (Applicat		unloss	thorwise n	otod)			Indicators for	r Problematic Hydric Spile ³
Historol (11015. (Applicat		, uniess (Sandy Cloy	oleu.) od Mariy (Si	4)			
Histosol ((A2)			Sandy Ded		+)			
				Sanuy Reu	UX (35)			Coasi	
					all'ix (50)				Sunace (S7) (LRR G)
Hydrogen		-			ky Mineral (I	F I)			Plains Depressions (FT6)
Stratified		F)		Loamy Gley	yed Matrix (F	-2)			H outside of MLRA /2 & /3)
	(A9) (LRR F, G,	н)		Depleted M	atrix (F3)	2)		Redu	cea vertic (F18)
	Below Dark Surface	(A11)		Redox Dark	surface (F6) ()		Red F	
I hick Dar	K Surface (A12)			Depleted D	ark Surface	(- 7)		Very S	Snallow Dark Surface (TF12)
Sandy Mu	аску Mineral (S1)			Redox Dep	ressions (F8)		Other	(Explain in Remarks)
2.5 cm M	ucky Peat or Peat (S	62) (LRR G, H)		High Plains	Depression	s (F16)		³ Indicat	ors of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3) (LRR F)		(MLRA 72	& 73 of LRR	: H)		wetland	hydrology must be present,
								unless	disturbed or problematic.
Restrictive La	yer (if present):								
Туре:									
Depth (inc	hes):							Hydric Soil Pres	ent? Yes No X
HYDROLOG	Y								
Wetland Hydr	ology Indicators:								
Primary Indica	tors (minimum of on	e required; che	ck all that	apply)				Secondary	Indicators (minimum of two required)
Surface V	Vater (A1)			Salt Crust (B11)			Surfa	ce Soil Cracks (B6)
High Wate	er Table (A2)			Aquatic Inv	ertebrates (E	313)		Spars	ely Vegetated Concave Surface (B8)
Saturation	ו (A3)			Hydrogen S	Sulfide Odor	(C1)		Draina	age Patterns (B10)
Water Ma	rks (B1)			Dry-Seasor	n Water Table	e (C2)		Oxidiz	zed Rhizospheres on Living Roots (C3
Sediment	Deposits (B2)			Oxidized R	hizospheres	along Livin	g Roots (C	3) (wh	ere tilled)
Drift Depo	osits (B3)			(where ne	ot tilled)			Crayfi	ish Burrows (C8)
Algal Mat	or Crust (B4)			Presence o	f Reduced Ir	on (C4)		Satura	ation Visible on Aerial Imagery (C9)
Iron Depo	osits (B5)			Thin Muck	Surface (C7))		Geom	norphic Position (D2)
Inundatio	n Visible on Aerial Ir	nagery (B7)		Other (Expl	ain in Rema	rks)		FAC-N	Neutral Test (D5)
Water-Sta	ained Leaves (B9)							Frost-	Heave Hummocks (D7)(LRR F)
Field Observa	itions:								
Surface Water	Present?	Yes N	o X	Depth (inc	ches):				
Water Table Pi	resent?	Yes N	o X	Depth (inc	ches):				
Saturation Pre	sent?	Yes N	o X	Depth (inc	ches):		Wetla	nd Hydrology Pres	ent? Yes No X
(includes capil	lary fringe)								
Describe Reco	orded Data (stream o	gauge, monitori	ng well, a	erial photos	, previous in	spections),	if available		
Domortics									
Remarks: Hydroloav ind	licators are not pres	ent.							
,									

Project/Site:	FM 741 EA		City/County:	ĸ	Kaufman County	Sampling Date:	04/28/2022
Applicant/Owner:	Texas Department	of Transpo	nsportation		State: Texas	Sampling Point:	WDP23
Investigator(s):	CW and JK	•	Section, Town	ship, Range:		N/A	
Landform (hillslope, terrace, e	etc): Depression		Local relief (co	oncave, conve	ex, none): cor	ncave	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6781	7042	Long: -96.44310)532 Datur	m: NAD 83
Soil Map Unit Name: Trinity	clay, 0 to 1 percent slopes, frequen	tly flooded			NWI classifica	ation: NA	
Are climatic / hydrologic cond	itions on the site typical for this time	of year?	Yes	No X	(If no, explain in Rema	arks.)	
Are Vegetation , So	il , or Hydrology s	significantly	disturbed?	Are "I	Normal Circumstances" pre	sent? Yes	X No
Are Vegetation , So	il, or Hydrologyr	naturally pro	oblematic?	(If ne	eded, explain any answers	in Remarks.)	
SUMMARY OF FINDIN	GS - Attach site map show	ing sam	oling point	locations,	, transects, importan	t features, etc.	
Hydrophytic Vegetation Pre	esent? Yes X N	0					
Hydric Soil Present?	Yes X N	0	ls t	the Sampled	Area		
Wetland Hydrology Present	t? Yes X N	0	wit	hin a Wetlan	d? Yes 2	X No	
			<u> </u>				
Remarks: All of the three v	vetland indicators were present. This a the site investigations were wetter	s point is lo	cated within a	wetland. The	Antecedent Precipitation To	ool scored a 15, indi	cating
conditions during	g the site investigations were wetter	ulan norma	ai.				
VEGETATION - Use sc	ientific names of plants.						
					Dominance Test work	sheet:	
		Absolute	Dominant	Indicator	Number of Dominant Sp	pecies	
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW, o	or FAC:	2 (A)
1.							
2.					Total Number of Domina	ant	
3.					Species Across All Stra	ita:	2 (B)
4.							
		0	= Total Cov	er	Percent of Dominant Sp	pecies	
Sapling/Shrub Stratum (I	Plot size:)				That Are OBL, FACW, o	or FAC: 10	0.0 (A/B)
1							
2					Prevalence Index wor	KSNEET:	
3					Iotal % Cover of:		
4.						100 XI=	100
5					FAC vv species	<u>15</u> X2- 15 X2-	<u> </u>
		0	= Total Cov	er	FACU species	<u>15</u> x 5 =	45
Herb Stratum (Plot size:	30' radius)					0 x5=	0
1. Eleocharis palustris		50	Yes	OBL	Column Totals: 1	130 (A)	175 (B)
2. Potamogeton nodosus		30	Yes	OBL		(,,)	
3. Typha angustifolia		20	<u>No</u>	OBL	Prevalence Index	:= B/A = 1.	35
4. Rumex crispus		15	<u>No</u>	FAC			
5. Juncus marginatus		15	NO	FACW	Hydrophytic Vegetatic	on Indicators:	
0					X 1 - Rapid Test for H	Hydrophytic Vegetation	on
/					X 2 - Dominance Tes	st is >50%	
0					X 3 - Prevalence Inde	ex ≤3.0¹	
0: 10					4 - Morphological A	Adaptations ¹ (Provide	e supporting
10		130	= Total Cov	er	Problematic Hydro	phytic Vegetation ¹ (E	Explain)
Woody Vine Stratum (Pl	ot size:	100					
1)				¹ Indicators of hydric soi	I and wetland hydrol	ogy must
2.					be present, unless distu	urbed or problematic.	
		0	= Total Cov	er	Hydrophytic		
% Bare Ground in Herb Str	atum 0		_		Vegetation		
					Present?	res X No	
Remarks:							
Hydrophytic vegetation is	present.						
l							

S	0	IL	
J	J		-

Profile Descr	iption: (Describe to tl Matrix	he depth need	led to document th	e indicator	or confirm	the abser	nce of indicators.)			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-18	N 3/	100					Clay			
		· ·								
¹ Type: C=Con	centration, D=Depletio	n, RM=Reduce	ed Matrix, CS=Cove	red or Coate	ed Sand Gra	ains.	² Location	: PL=Pore Lining, M=Matrix.		
Hydric Soil Ir	dicators: (Applicable	e to all LRRs,	unless otherwise n	oted.)			Indicators for	Problematic Hydric Soils ³ :		
Histosol	(A1)		Sandy Gley	ved Marix (Se	4)		1 cm I	Muck (A9) (LRR I, J)		
Histic Ep	ipedon (A2)		Sandy Red	ox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)		
Black His	stic (A3)		Stripped Ma	atrix (S6)			Dark S	Surface (S7) (LRR G)		
X Hydroge	n Sulfide (A4)		Loamy Muc	ky Mineral (F1)		High F	Plains Depressions (F16)		
Stratified	Layers (A5) (LRR F)		X Loamy Gle	yed Matrix (F	-2)		(LRR	H outside of MLRA 72 & 73)		
1 cm Mu	ck (A9) (LRR F, G, H)	Depleted M	latrix (F3)			Reduc	ced Vertic (F18)		
Depleted	Below Dark Surface (A	A11)	Redox Darl	k Surface (Fe	6)		Red P	arent Material (TF2)		
Thick Da	rk Surface (A12)		Depleted D	ark Surface	(F7)		Very S	Shallow Dark Surface (TF12)		
Sandy M	ucky Mineral (S1)		Redox Dep	ressions (F8	3)		Other	(Explain in Remarks)		
2.5 cm N	lucky Peat or Peat (S2) (LRR G, H)	High Plains	Depression	s (F16)		³ Indicat	ors of hydrophytic vegetation and		
5 cm Mu	cky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LRR	R H)		wetland hydrology must be present,			
							unless	disturbed or problematic.		
Restrictive L	aver (if present):									
Type:	J (P (P)									
Depth (ind	ches):						Hydric Soil Prese	ent? Yes X No		
	·						-			
Remarks:	diaatara ara pragant									
Hydric soli in	uicators are present.									
HYDROLOG	Y									
Wetland Hyd	rology Indicators:									
Primary Indica	ators (minimum of one	required; chec	k all that apply)				Secondary	Indicators (minimum of two required)		
X Surface	Nater (A1)		Salt Crust (B11)			Surfac	ce Soil Cracks (B6)		
X High Wa	er Table (A2)		Aquatic Inv	ertebrates (E	313)		Spars	ely Vegetated Concave Surface (B8)		
X Saturatio	n (A3)		Hydrogen S	Sulfide Odor	(C1)		X Draina	age Patterns (B10)		
Water Ma	arks (B1)		Dry-Seasor	n Water Tabl	e (C2)		Oxidiz	ed Rhizospheres on Living Roots (C3)		
Sedimen	t Deposits (B2)		Oxidized R	hizospheres	along Living	g Roots (C	(who):	ere tilled)		
Drift Dep	osits (B3)		(where ne	ot tilled)			Crayfi	sh Burrows (C8)		
Algal Ma	t or Crust (B4)		Presence o	f Reduced Ir	ron (C4)		X Satura	ation Visible on Aerial Imagery (C9)		
Iron Dep	osits (B5)		Thin Muck	Surface (C7))		X Geom	orphic Position (D2)		
	on Visible on Aerial Ima	agery (B7)	Other (Expl	ain in Rema	rks)		X FAC-N	Neutral Test (D5)		
Water-St	ained Leaves (B9)						Frost-	Heave Hummocks (D7)(LRR F)		
Field Observ	ations:									
Surface Wate	r Present? Ye	es X No	Depth (ind	ches):	2					
Water Table F	resent? Ye	es X No	Depth (ind	ches):	12					
Saturation Pre	esent? Ye	es X No	Depth (ind	ches):	12	Wetla	nd Hydrology Pres	ent? Yes X No		
(includes capi	llary fringe)									
Describe Rec	orded Data (stream ga	uge, monitoring	g well, aerial photos	, previous in:	spections), i	if available):			
			-		,.					
Remarke [.]										
Hydrology in	dicators are present.									

Project/Site:	FM 741 EA	/ 741 EA City/County: Ka		aufman County	Sampling Date:	04/28/2022	
Applicant/Owner:	Texas Department	of Transpor	ortation		State: Texas	Sampling Point:	WDP24
Investigator(s):	CW and JK	:	Section, Towr	nship, Range:		N/A	
Landform (hillslope, terrace, etc):	Terrace		Local relief (c	oncave, conve	ex, none):	convex	Slope (%): 1-2
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6781	8036	Long: -96.443	311328 Datur	n: NAD 83
Soil Map Unit Name: Trinity clay	y, 0 to 1 percent slopes, frequen	tly flooded			NWI classif	ication: NA	
Are climatic / hydrologic condition	is on the site typical for this time	of year?	Yes	No X	(If no, explain in Re	marks.)	
Are Vegetation , Soil	, or Hydrology	significantly	disturbed?	Are "N	Normal Circumstances" p	present? Yes	X No
Are Vegetation , Soil	, or Hydrology	naturally pro	blematic?	(If nee	eded, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS	- Attach site map show	ing samp	oling point	locations,	transects, importa	ant features, etc.	
Hydrophytic Vegetation Presen	t? Yes N	<u> </u>		-		· · · · ·	
Hydric Soil Present?	Yes N	0 <u>X</u>	Is	the Sampled	Δrea		
Wetland Hydrology Present?	Yes N	0 <u>X</u>	wi	thin a Wetland	d? Yes	No X	
Wedding Hydrology Procent:		• <u> </u>			<u> </u>		_
Remarks: None of the three we conditions during the	etland indicators were present. The site investigations were wetter	This point is than norma	not located w II.	vithin a wetland	d. The Antecedent Precip	bitation Tool scored a 1	5, indicating
VEGETATION - Use scien	itilite names of plants.						
					Dominance Test wo	orksheet:	
		Absolute	Dominant	Indicator	Number of Dominant	Species	a (a)
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACV	v, or FAC:	0 (A)
1					Tatal Number of Dam	ainant	
2							<u>م</u>) (D)
3					Species Across Air S		<u> </u>
4			Tatal Oa		Porcent of Dominant	Species	
Operations (Observe Observerson (Dist	·	0	= 10tal Cov	/er		Opecies	0 (A/P)
Sapling/Shrub Stratum (Plot	(size:)				That Ale OBL, FACV	v, of FAC. <u>0</u>	.0 (A/B)
1					Prevalence Index w	orksheet:	
2					Total % Cover of	of: Multip	bly by:
3					OBL species	0 x 1 =	0
4					FACW species	0 x 2 =	0
J			- Total Cov		FAC species	35 x 3 =	105
Herb Stratum (Plot size:	30' radius	0	10(a) 000		FACU species	85 x 4 =	340
1 Cynodon dactylon	<u> </u>	40	Yes	FACU	UPL species	15 x 5 =	75
2 Sorahum halepense		35	Yes	FACU	Column Totals:	135 (A)	520 (B)
3 Rumex crispus		20	No	FAC			
4 Ambrosia trifida		15	No	FAC	Prevalence Inc	lex = B/A =3.	85
5. Geranium dissectum		15	No	NI			
6. Lolium perenne		10	No	FACU	Hydrophytic Vegeta	ition Indicators:	
7.						or Hydrophytic Vegetatio	on
8.					2 - Dominance	rest is >50%	
9.					3 - Plevalence i	nuex ≥3.0° al Adaptationa1 (Dravida	oupporting
10.					Problematic Hyr	di Audplations (Frovide	
		135	= Total Cov	/er			
Woody Vine Stratum (Plot si	ize:)				Indicators of hydric a	soil and wetland bydrol	av muet
1.					he present unless di	isturbed or problematic	bgy musi
2.					be present, unless u		
		0	= Total Cov	ver	Hydrophytic		
% Bare Ground in Herb Stratur	m0		_		Vegetation		
					Present?	Yes No	Х
Remarks: Hydrophytic vegetation is not	present.						

S	0	IL	
J	J		-

Profile Descr	iption: (Describe to tl Matrix	ne depth need	led to document th	e indicator	or confirm	the abser	nce of indicators.)				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc2	Texture	Remarks			
0-18	10YR 4/1	100		/0		200	Clav	Remains			
				·							
				. <u></u>	·						
¹ Type: C=Con	centration, D=Depletio	n, RM=Reduce	ed Matrix, CS=Cove	red or Coate	d Sand Gra	ains.	² Location	: PL=Pore Lining, M=Matrix.			
Hydric Soil Ir	ndicators: (Applicable	to all LRRs.	unless otherwise n	oted.)			Indicators for	Problematic Hydric Soils ³ :			
Histosol	(A1)		Sandy Gley	ved Marix (S4	4)		1 cm N	Muck (A9) (LRR I, J)			
Histic Ep	ipedon (A2)		Sandy Red	ox (S5)	,		Coast	Prairie Redox (A16) (LRR F, G, H)			
Black His	stic (A3)		Stripped Ma	atrix (S6)			Dark S	Surface (S7) (LRR G)			
Hydroge	n Sulfide (A4)		Loamy Muc	ky Mineral (I	F1)		High F	Plains Depressions (F16)			
Stratified	Layers (A5) (LRR F)		Loamy Gle	yed Matrix (F	-2)		(LRR	H outside of MLRA 72 & 73)			
1 cm Mu	ck (A9) (LRR F, G, H)		Depleted M	latrix (F3)			Reduc	ed Vertic (F18)			
Depleted	Below Dark Surface (A11)	Redox Dark	k Surface (F6	6)		Red P	arent Material (TF2)			
Thick Da	rk Surface (A12)		Depleted D	ark Surface	(F7)		Very S	shallow Dark Surface (TF12)			
Sandy M	ucky Mineral (S1)		Redox Dep	ressions (F8	5) (F10)		Other (Explain in Remarks)				
2.5 cm M	lucky Peat or Peat (S2)				S (F16)		³ Indicators of hydrophytic vegetation and				
5 cm wu	cky Peal of Peal (53)	LKK F)	(WILKA /2)	& / 3 OT LRR	(П)		wetland hydrology must be present,				
Restrictive L	ayer (if present):										
Type:											
Depth (ind	ches):						Hydric Soil Prese	ent? Yes <u>No X</u>			
Remarks:											
Hydric soil in	dicators are not presen	t.									
HYDROLOG	Y										
Wetland Hyd	rology Indicators:										
Primary Indica	ators (minimum of one	required; chec	k all that apply)				Secondary	Indicators (minimum of two required)			
Surface	Water (A1)		Salt Crust (B11)			Surfac	e Soil Cracks (B6)			
High Wa	ter Table (A2)		Aquatic Inv	ertebrates (E	313)		Sparse	ely Vegetated Concave Surface (B8)			
Saturatio	n (A3)		Hydrogen S	Sulfide Odor	(C1)		Draina	ige Patterns (B10)			
Water Ma	arks (B1)		Dry-Seasor	n Water Table	e (C2)		Oxidiz	ed Rhizospheres on Living Roots (C3)			
Sedimen	t Deposits (B2)		Oxidized R	hizospheres	along Living	g Roots (C	(whe	ere tilled)			
Drift Dep	osits (B3)		(where no	ot tilled) (Dealward la	(04)		Crayfis	sh Burrows (C8)			
	t or Crust (B4)		Presence o	r Reduced Ir	on (C4)		Satura	arphic Desition (D2)			
Iron Dep	USIIS (DD) Na Visible on Aerial Ima	geny (B7)		ain in Pema) rke)			leutral Test (D5)			
Water-St	ained Leaves (B9)	gery (D7)			11(3)		Frost-l	Heave Hummocks (D7)(LRR F)			
Eiold Obacas	ations										
Field Observ	ations: r Procent? V	No. No.	V Dopth (in	aboa):							
Water Table F	Present? Ye	-s No	X Depth (inc	ches):							
Saturation Pre	sent? Ye	-s No	X Depth (inc	ches):		Wetla	nd Hydrology Prese	ant? Yes No X			
(includes capi	llary fringe)					iioiiu	na nyalology i loot				
Deser'' D											
Describe Rec	orded Data (stream ga	uge, monitorin	g well, aerial photos	, previous in	spections),	if available	2:				
Remarks:	dicators are not procon	+									
nyurulugy In	uicators are not presen	ι.									

Project/Site:	FM 741 EA		City/County:	ĸ	Kaufman County	Sampling Date:	04/28/2022
Applicant/Owner:	Texas Department	of Transpo	rtation		State: Texas	Sampling Point:	WDP25
Investigator(s):	CW and JK	•	Section, Town	ship, Range:		N/A	
Landform (hillslope terrace etc)	Ditch		Local relief (co	oncave conve	ex none): con	cave S	Slope (%): 3-5
Subregion (LRR):		Lat [.]	32 6788	7042	long: -96 44386	485 Datum	n: NAD 83
Soil Man Unit Name: Earris Hei	iden complex 2 to 5 percent slo		02.0700	1042	NW/L classificat	tion: NA	
Are elimatic / hydrologi	a on the site typical for this time	of year?	Voc	No X	/If no_overlain in Roma		
Are Vegetation Soil	or Hydrology	, or year :	dicturbod?	Aro "	Normal Circumstancos" proc	No.)	
Are Vegetation, Soli	, or Hydrology	noturally pr	blomatic?	Ale i (If por		n Romarka)	
	, of Hydrology	ing com		leastione			
SUMMART OF FINDINGS	- Attach site map show	ing sam		locations,	, transects, importan	l lealures, etc.	
Hydrophytic Vegetation Preser	nt? Yes X N	0	-				
Hydric Soil Present?	Yes <u>X</u> N	0	Is t	the Sampled	Area		
Wetland Hydrology Present?	Yes X N	0	wit	hin a Wetlan	d? Yes X	<u> </u>	_
Remarks: All of the three wet conditions during th	and indicators were present. Th he site investigations were wette	is point is lo r than norm	ocated within a al.	wetland. The	Antecedent Precipitation To	ool scored a 15, indio	cating
VEGETATION - Use scier	itific names of plants.						
					Dominance Test works	sheet:	
		Absolute	Dominant	Indicator	Number of Dominant Sp	ecies	
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW, o	r FAC: 3	3 (A)
1					Total Number of Domina	nt	
2.					Species Across All Strat	a: 3	8 (B)
3.					Species Across Air Strai	a) (B)
4					Porcent of Dominant Sn	onion	
		0		er	That Are OBL EACW/ e		
Sapling/Shrub Stratum (Plot	(SIZE:)				That Are OBL, FACVV, 0	100 THE	<u>J.0</u> (A/B)
1					Prevalence Index work	sheet:	
2					Total % Cover of	Multip	lv bv
3					OBL species	$x_1 = \frac{1}{x_1}$	30
4					FACW species	20 x 2 =	40
5					FAC species	5 x3=	45
		0	_ = Total Cov	er		0 x4=	0
Herb Stratum (Plot size:	<u>30' radius</u>)					0 x5=	0
1. Juncus effusus		20	Yes	OBL	Column Totals:	<u>δ</u> (Λ)	115 (B)
2. Juncus marginatus		20	Yes	FACW		JJ (A)	<u> </u>
3. Rumex crispus		15	Yes	FAC	Drovalance Index	- D/A - 1	77
4. Eleocharis palustris		10	No	OBL	Prevalence index	- D/A - 1.	<u> </u>
5					Hydrophytic Vegetatio	n Indicators:	
6		_			1 - Ranid Test for H	vdronhytic Vegetatic	'n
7		_			X 2 - Dominance Test	tis >50%	
8		_			X 3 - Prevalence Inde	× <3 Ω ¹	
9					4 - Morphological A	dantations ¹ (Provide	supporting
10.					Problematic Hydror	hytic Vegetation ¹ (E	volain)
		65	= Total Cov	er			xpiairi)
Woody Vine Stratum (Plot s	ize:)		_		Indiantors of hydrin soil	and watland bydrola	av must
1.							igy must
2.					be present, unless distu	rbed or problematic.	
		0	= Total Cov	er	Hydrophytic		
% Bare Ground in Herb Stratu	m 35				Vegetation		
	····				Present? V	es X No	
					Tresent:		
Remarks: Hydrophytic vegetation is pres	sent.						

SOIL	
------	--

Depth	Maana	·	Reut	x i cutures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10Y 6/1	90	2.5Y 7/3	10	C	M,PL	Clay	
ype: C=Conc	entration, D=Depletio	n, RM=Reduc	ed Matrix, CS=Cov	ered or Coa	ted Sand G	rains.	2Loca	tion: PL=Pore Lining, M=Matrix.
vdric Soil Inc	dicators: (Applicable	e to all LRRs,	unless otherwise	noted.)			Indicators	for Problematic Hydric Soils ³ :
Histosol (A	A1)		Sandy Gle	yed Marix (S4)		1 c	cm Muck (A9) (LRR I, J)
Histic Epip	bedon (A2)		Sandy Re	dox (S5)	,		Cc	ast Prairie Redox (A16) (LRR F, G, H)
Black Hist	ic (A3)		Stripped N	Aatrix (S6)			Da	irk Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Mu	icky Mineral	(F1)		Hig	gh Plains Depressions (F16)
Stratified L	_avers (A5) (LRR F)		X Loamy Gl	eyed Matrix	(F2)		(Li	RR H outside of MLRA 72 & 73)
 1 cm Mucl	k (A9) (LRR F, G, H)	X Depleted	Matrix (F3)	. ,		Re	duced Vertic (F18)
Depleted E	Below Dark Surface (A11)	Redox Da	rk Surface (I	F6)		Re	d Parent Material (TF2)
Thick Dark	k Surface (A12)		Depleted	Dark Surface	e (F7)		Ve	ry Shallow Dark Surface (TF12)
Sandy Mu	cky Mineral (S1)		Redox De	pressions (F	-8)		Ot	her (Explain in Remarks)
2.5 cm Mu	icky Peat or Peat (S2) (LRR G, H)	High Plair	s Depressio	ons (F16)		³ Indi	cators of hydrophytic vegetation and
5 cm Mucl	ky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LR	RH)		wetl	and hydrology must be present,
							unle	ss disturbed or problematic.
estrictive La	ver (if present):							
Type [.]								
1,900.	Hardnan d	lav						
Depth (inch emarks: lydric soil ind	Hardpan cl	lay 6					Hydric Soil Pi	resent? Yes X No
Depth (inch emarks: Hydric soil ind	Hardpan cl	lay6					Hydric Soil Pr	resent? Yes <u>X</u> No
Depth (inch emarks: Hydric soil ind DROLOGY Vetland Hydro	Hardpan cl	6					Hydric Soil Pi	resent? Yes <u>X</u> No
Depth (inch emarks: lydric soil ind DROLOGY /etland Hydro rimary Indicat	Hardpan cl nes): icators are present. / / plogy Indicators: ors (minimum of one	6 required; cher	ck all that apply)				Hydric Soil Pr	resent? Yes X No
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat Surface W	Hardpan cl nes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1)	6 required; chee	 ck all that apply) Salt Crust	(B11)			Hydric Soil Pr	resent? Yes X No
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat <u>C</u> Surface W High Wate	Hardpan cl hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2)	lay 6 required; cheo	 ck all that apply) Salt Crust X Aquatic In	(B11) vertebrates	(B13)		Hydric Soil Pr	resent? Yes X No ary Indicators (minimum of two required rface Soil Cracks (B6) arsely Vegetated Concave Surface (B8)
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat (Hardpan cl hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3)	lay 6 required; cheo	<u></u> <u>Salt Crust</u> Salt Crust Aquatic In Hydrogen	(B11) vertebrates Sulfide Odo	(B13) or (C1)		Hydric Soil Pr	resent? Yes X No ary Indicators (minimum of two required rface Soil Cracks (B6) varsely Vegetated Concave Surface (B8) ainage Patterns (B10)
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat Surface W High Wate Saturation Water Mar	Hardpan cl hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1)	6 required; chee	<u>ck all that apply)</u> <u>Salt Crust</u> <u>X</u> Aquatic In <u>Hydrogen</u> Dry-Seaso	(B11) vertebrates Sulfide Odo on Water Tat	(B13) or (C1) ble (C2)		Hydric Soil Pr	resent? Yes X No lary Indicators (minimum of two required rface Soil Cracks (B6) larsely Vegetated Concave Surface (B8) ainage Patterns (B10) tidized Rhizospheres on Living Roots (C
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat C Surface W High Wate Saturation Water Mar Sediment	Hardpan ci hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2)	lay 6 required; chea	ck all that apply) Salt Crust X Aquatic In Dry-Sease Oxidized I	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere	(B13) or (C1) ole (C2) es along Livi	ng Roots (C	Hydric Soil Pr	resent? Yes X No lary Indicators (minimum of two required rface Soil Cracks (B6) arsely Vegetated Concave Surface (B8) ainage Patterns (B10) tidized Rhizospheres on Living Roots (C where tilled)
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat C Surface W High Wate Saturation Water Mar Sediment Drift Depo	Hardpan cl hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3)	lay 6 required; cheo	ck all that apply) Salt Crust X Aquatic In Hydrogen Dry-Seaso Oxidized I	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled)	(B13) or (C1) ole (C2) es along Livi	ng Roots (C	Hydric Soil Pr	resent? Yes X No lary Indicators (minimum of two required rface Soil Cracks (B6) ansely Vegetated Concave Surface (B8) ainage Patterns (B10) didized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8)
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat C Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat	Hardpan cl hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)	lay 6 required; cheo	ck all that apply) Salt Crust X Aquatic In Hydrogen Dry-Seaso Oxidized I (where the sence of the senc	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced	(B13) or (C1) ole (C2) ole salong Livi Iron (C4)	ng Roots (C	Hydric Soil Pr 	resent? Yes X No ary Indicators (minimum of two required rface Soil Cracks (B6) arsely Vegetated Concave Surface (B8) ainage Patterns (B10) didized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9)
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat C Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mate Iron Depos	Hardpan c hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	lay 6 required; cheo	ck all that apply) Salt Crust X Aquatic In Hydrogen Dry-Sease Oxidized I Presence Presence Thin Muck	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced : Surface (C	(B13) or (C1) ole (C2) is along Livi Iron (C4) 7)	ng Roots (C	Hydric Soil Pr 	resent? Yes X No ary Indicators (minimum of two required inface Soil Cracks (B6) arsely Vegetated Concave Surface (B8) ainage Patterns (B10) didized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) comorphic Position (D2)
Depth (inch emarks: lydric soil ind DROLOGY fetland Hydro rimary Indicat (Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation	Hardpan ci hes): icators are present. f plogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) h Visible on Aerial Ima	agery (B7)	ck all that apply) Salt Crust X Aquatic In Dry-Sease Oxidized I (where I Presence Thin Muck	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced : Surface (C oblain in Rem	(B13) or (C1) ole (C2) s along Livi Iron (C4) 7) narks)	ng Roots (C	Hydric Soil Pr Second Second Su Sp X Dr Sa Si Cr X Sa X Ge X FA	resent? Yes X No ary Indicators (minimum of two required rface Soil Cracks (B6) arsely Vegetated Concave Surface (B8) ainage Patterns (B10) tidized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) comorphic Position (D2) C-Neutral Test (D5)
Depth (inch emarks: lydric soil ind DROLOGY retland Hydro rimary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta	Hardpan cl hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9)	agery (B7)	ck all that apply) Salt Crust X Aquatic In Dry-Sease Oxidized I (where Presence Thin Muck Other (Ex	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced c Surface (C olain in Rem	(B13) or (C1) ble (C2) is along Livi Iron (C4) 7) aarks)	ng Roots (C	Hydric Soil Pr	resent? Yes X No ary Indicators (minimum of two required Iface Soil Cracks (B6) arsely Vegetated Concave Surface (B8) ainage Patterns (B10) tidized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) comorphic Position (D2) C-Neutral Test (D5) pst-Heave Hummocks (D7) (LRR F)
Depth (inch emarks: lydric soil ind DROLOGY /etland Hydro rimary Indicat (Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta	Hardpan ci hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions:	ay 6 required; chea	ck all that apply) Salt Crust X Aquatic In Hydrogen Dry-Sease Oxidized I (where Presence Thin Muck Other (Ex	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced Surface (C olain in Rem	(B13) or (C1) ole (C2) es along Livi Iron (C4) 7) narks)	ng Roots (C	Hydric Soil Pr 	resent? Yes X No ary Indicators (minimum of two required rface Soil Cracks (B6) arsely Vegetated Concave Surface (B8) ainage Patterns (B10) didized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) comorphic Position (D2) .C-Neutral Test (D5) ost-Heave Hummocks (D7) (LRR F)
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat C Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta	Hardpan cl hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) /ater (A1) er Table (A2) /ater (A1) er Table (A2) /ater (A1) beposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions: Present?	agery (B7)	ck all that apply) Salt Crust X Aquatic In Hydrogen Dry-Sease Oxidized I (where in Presence Thin Muck Other (Exp	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced Surface (C plain in Rem	(B13) or (C1) ole (C2) is along Livi lron (C4) 7) iarks)	ng Roots (C	Hydric Soil Pr	resent? Yes X No ary Indicators (minimum of two required rface Soil Cracks (B6) anage Patterns (B10) didized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) comorphic Position (D2) C-Neutral Test (D5) ost-Heave Hummocks (D7) (LRR F)
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat C Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta ield Observar urface Water	Hardpan cl hes): icators are present. f plogy Indicators: ors (minimum of one /ater (A1) er Table (A2) /ater (A1) er Table (A2) /ater (A1) er Table (A2) /ater (A1) er Table (A2) /ater (A1) or Crust (B4) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye	agery (B7)	ck all that apply)	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced : Surface (C blain in Rem aches):	(B13) pr (C1) ple (C2) is along Livi Iron (C4) 7) iarks) 1	ng Roots (C	Hydric Soil Pr Second Su Sp X Dr X Dr X Dr Cr X Sa X Ge X FA X FA	resent? Yes X No
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat (Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta ield Observat vater Table Pre	Hardpan cl hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye esent? Ye	lay 6 required; cheat agery (B7) es X No es No	ck all that apply)	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced : Surface (C oblain in Rem inches): nches):	(B13) or (C1) ble (C2) s along Livi Iron (C4) 7) barks) 1	ng Roots (C	Hydric Soil Pr Second Su Su X Dr X Dr X Dr X Sa X Ge X FA X FA Fr T	resent? Yes X No
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat (Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta ield Observat urface Water /ater Table Pro aturation Pres	Hardpan cl hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye esent? Ye sent? Ye ary fringe)	lay 6 required; cher agery (B7) es X No es No	ck all that apply)	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced : Surface (C oblain in Rem nches): nches):	(B13) or (C1) ole (C2) is along Livi Iron (C4) 7) narks) 1	ng Roots (C	Hydric Soil Pr	resent? Yes X No
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat G Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta ield Observal urface Water /ater Table Pre aturation Pres ncludes capilla	Hardpan cl hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye sent? Ye sent? Ye ary fringe)	agery (B7) es <u>X</u> No es <u>No</u> es <u>No</u>	ck all that apply) Salt Crust X Aquatic In Hydrogen Dry-Seaso Oxidized I (where I Presence Thin Muck Other (Exponent) Depth (in X Depth (in X Depth (in	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced : Surface (C oblain in Rem nches): nches):	(B13) or (C1) oble (C2) is along Livi Iron (C4) 7) harks) 1	ng Roots (C	Hydric Soil Pr	resent? Yes X No
Depth (inch emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indicat C Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta ield Observar urface Water /ater Table Pre aturation Press includes capilla	Hardpan ci hes):	agery (B7) es X No es No es No uge, monitorir	ck all that apply)	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced : Surface (C plain in Rem nches): nches): s, previous i	(B13) or (C1) ole (C2) is along Livi Iron (C4) 7) iarks) 1 1	ng Roots (C	Hydric Soil Pr	resent? Yes X No
Depth (inch emarks: lydric soil ind DROLOGY fetland Hydro fimary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta eld Observat urface Water fater Table Pro aturation Pres ncludes capilla escribe Record	Hardpan cl hes): icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye sent? Ye sent ? Ye sent? Ye sent ? Ye sent ? Ye sen	agery (B7) es X No es No uge, monitorir	ck all that apply)	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced : Surface (C polain in Rem nches): nches): nches): s, previous i	(B13) or (C1) oble (C2) is along Livi Iron (C4) 7) narks) 1 1	ng Roots (C	Hydric Soil Pr	resent? Yes X No
Depth (inch emarks: lydric soil ind DROLOGY fetland Hydro rimary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inon Depos Inon Depos Inon Depos Inon Depos Inon Depos Cater Table Pro aturation Press neludes capilla escribe Record	Hardpan ci hes):	agery (B7) es X No es No es No uge, monitorir	ck all that apply)	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced c Surface (C plain in Rem nches): nches): s, previous i	(B13) or (C1) ole (C2) es along Livi Iron (C4) 7) larks) 1 inspections)	ng Roots (C	Hydric Soil Pr	resent? Yes X No

Project/Site:	FM 741 EA	City/County:			aufman County	Sampling Date:	04/28/2022
Applicant/Owner:	Texas Departmer	nt of Transpor	tation		State: Texas	Sampling Point:	WDP26
Investigator(s):	CW and JK	Ş	Section, Tow	nship, Range:		N/A	
Landform (hillslope, terrace, etc):	Roadside dip		_ocal relief (o	concave, conve	x, none): cond	ave S	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6789	97088	Long: -96.443993	34 Datur	n: NAD 83
Soil Map Unit Name: Ferris-Hei	den complex, 2 to 5 percent slo	opes			NWI classificati	on: NA	
Are climatic / hydrologic condition	is on the site typical for this tim	e of vear?	Yes	No X	(If no. explain in Remark	(s.)	
Are Vegetation . Soil	. or Hydrology	significantly	disturbed?	Are "N	Jormal Circumstances" pres	ent? Yes X	K No
Are Vegetation . Soil	. or Hydrology	naturally pro	blematic?	(If nee	eded. explain any answers in	Remarks.)	
SUMMARY OF FINDINGS	- Attach site map show	ving same	nina poin	t locations.	transects, important	features, etc.	
Hydrophytic Vogotation Propor	t2 Voc						
Hydric Soil Present?	Ves 1		le	the Sampled /	Aroa		
Wotland Hydrology Propert2	Yog		13	ithin a Wotland	10 Voc	No V	
Wettand Hydrology Present?	163		vv				-
Remarks: None of the three we conditions during the	etland indicators were present. e site investigations were wette	This point is r than normal	not located v	vithin a wetland	. The Antecedent Precipitati	on Tool scored a 15	5, indicating
	tine names of plants.				Deminente Testurater	4.	
			_		Dominance lest works	neet:	
T OL (TT T		Absolute	Dominant	Indicator	That Are ODL 54014		
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW, or	FAC: () (A)
1					Total Number of Demine		
2				<u> </u>		n	
3					Species Across All Strata	l	<u>z</u> (B)
4					Dereent of Dominant Spa		
		0	= 10tal Co	ver	That Are OBL EACW or		0 (A/D)
Sapling/Shrub Stratum (Plot	SIZE:)				That Are Obl, FACW, OF	FAC. <u>0</u>	. <u>о </u>
1					Prevalence Index works	sheet:	
2				<u> </u>	Total % Cover of:	Multip	ly by:
3					OBL species 0	x 1 =	0
4				<u> </u>	FACW species 10) x 2 =	20
5			- Total Ca		FAC species 10) x 3 =	30
Horb Stratum (Plot size:	20' rodius	0	_ = 101al CO	vei	FACU species 8) x 4 =	320
	<u> </u>	50	Voc	FACU	UPL species 1	5 x 5 =	75
1. Lonum perenne			Vee	FACU	Column Totals: 11	5 (A)	445 (B)
			tes				
		10			Prevalence Index =	= B/A = 3.	87
		10	No				
6		10	110	FAC	Hydrophytic Vegetation	Indicators:	
7					1 - Rapid Test for Hy	drophytic Vegetatio	on
8					2 - Dominance Test	is >50%	
0					3 - Prevalence Index	< ≤3.0¹	
10					4 - Morphological Ac	laptations ¹ (Provide	supporting
10		115	= Total Co		Problematic Hydrop	hytic Vegetation ¹ (E	xplain)
Woody Vine Stratum (Plot s	ize [.])		_ 10(a) 00	VCI			
)				¹ Indicators of hydric soil a	and wetland hydrold	ogy must
2					be present, unless distur	bed or problematic.	
Z			= Total Co	ver	Hydrophytic		
% Bare Ground in Herb Stratur	m 0				Vogotation		
					Procent?	No.	v
						······································	<u> </u>
Remarks: Hydrophytic vegetation is not	present.						

S	0	IL	
J	J		-

Profile Desci	ription: (Describe to	the depth need	ed to document t	he indicator	or confirm	the absen	nce of indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹		Texture	Remarks
0-18	10YR 3/1			/0	туре	LUC	Clay	Remarks
0-10	1011(0/1						Oldy	
							·	
						<u> </u>		
							·	
¹ Type: C=Cor	ncentration, D=Depleti	on, RM=Reduce	d Matrix, CS=Cov	ered or Coate	d Sand Gra	ains.	² Location	: PL=Pore Lining, M=Matrix.
Hydric Soil li	ndicators: (Applicab	le to all LRRs, u	nless otherwise	noted.)			Indicators for	Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gle	eyed Marix (S4	4)		1 cm I	Muck (A9) (LRR I, J)
Histic Ep	pipedon (A2)		Sandy Re	dox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Black Hi	stic (A3)		Stripped N	Aatrix (S6)			Dark S	Surface (S7) (LRR G)
Hydroge	n Sulfide (A4)		Loamy Mu	icky Mineral (I	F1)		High F	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F	;)	Loamy Gle	eyed Matrix (F	2)		(LRR	H outside of MLRA 72 & 73)
1 cm Mu	ck (A9) (LRR F, G, I	H)	Depleted I	Matrix (F3)			Reduc	ced Vertic (F18)
Depleted	Below Dark Surface	(A11)	Redox Da	rk Surface (F6	6)		Red P	Parent Material (TF2)
Thick Da	rk Surface (A12)		Depleted I	Dark Surface	(F7)		Very S	Shallow Dark Surface (TF12)
Sandy M	lucky Mineral (S1)		Redox De	pressions (F8)		Other	(Explain in Remarks)
2.5 cm N	lucky Peat or Peat (S	2) (LRR G, H)	High Plain	s Depression	s (F16)		³ Indicat	ors of hydrophytic vegetation and
5 cm Mu	cky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LRR	(H)		wetland	hydrology must be present,
							uniess	disturbed or problematic.
Restrictive L	ayer (if present):							
Туре:								
Depth (in	ches):						Hydric Soil Prese	ent? Yes <u>No X</u>
Hydric soil in	dicators are not prese	ent.						
HYDROLOG	iΥ							
Wetland Hyd	rology Indicators:							
Primary Indica	ators (minimum of one	e required; check	all that apply)				Secondary	Indicators (minimum of two required)
Surface	Water (A1)	•	Salt Crust	(B11)			Surfac	ce Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic In	vertebrates (E	313)		Spars	ely Vegetated Concave Surface (B8)
Saturatio	on (A3)		Hydrogen	Sulfide Odor	(C1)		Draina	age Patterns (B10)
Water M	arks (B1)		Dry-Seaso	on Water Table	e (C2)		Oxidiz	ed Rhizospheres on Living Roots (C3)
Sedimer	it Deposits (B2)		Oxidized F	Rhizospheres	along Livin	g Roots (C	3) (wh	ere tilled)
Drift Dep	oosits (B3)		(where i	not tilled)			Crayfi	sh Burrows (C8)
Algal Ma	t or Crust (B4)		Presence	of Reduced Ir	on (C4)		Satura	ation Visible on Aerial Imagery (C9)
Iron Dep	osits (B5)		Thin Muck	Surface (C7))		X Geom	orphic Position (D2)
Inundatio	on Visible on Aerial Im	agery (B7)	Other (Exp	olain in Rema	rks)		FAC-N	Neutral Test (D5)
Water-St	ained Leaves (B9)						Frost-	Heave Hummocks (D7) (LRR F)
Field Observ	ations:							
Surface Wate	r Present?	Yes No	X Depth (ir	nches):				
Water Table F	Present?	Yes No	X Depth (ir	nches):				
Saturation Pro	esent?	Yes No	X Depth (ir	nches):		Wetla	nd Hydrology Pres	ent? Yes No X
(includes cap	illary fringe)		、					
Describe Rec	orded Data (stream g	auge, monitoring	well, aerial photo	s, previous ins	spections),	if available	:	
Remarks:								
Hydrology in	dicators are not prese	nt.						

Project/Site: FM 741 EA	(City/County:	K	aufman County	Sampling Date:	04/28/2022
Applicant/Owner: Texas Departmer	t of Transpor	rtation		State: Texas	Sampling Point:	WDP27
Investigator(s): CW and JK	Ś	Section, Towr	ship, Range:		N/A	
Landform (hillslope, terrace, etc): Terrace	l	_ocal relief (c	oncave, conve	x, none): co	onvex	Slope (%): 1-2
Subregion (LRR): LRR J MLRA 86A	Lat:	32.6810	6766	Long: -96.44618	3874 Datur	n: NAD 83
Soil Map Unit Name: Houston Black clay, 3 to 5 percent slope	s			NWI classifica	ation: NA	
Are climatic / hydrologic conditions on the site typical for this tim	e of year?	/es	No_X	(If no, explain in Rema	arks.)	
Are Vegetation, Soil, or Hydrology	significantly	disturbed?	Are "N	Normal Circumstances" pre	esent? Yes	X No
Are Vegetation, Soil, or Hydrology	naturally pro	blematic?	(If nee	eded, explain any answers	in Remarks.)	
SUMMARY OF FINDINGS - Attach site map show	ving samp	ling point	locations,	transects, importan	t features, etc.	
Hydrophytic Vegetation Present? Yes	No X					
Hydric Soil Present? Yes	No X	ls	the Sampled /	Area		
Wetland Hydrology Present? Yes	No X	wit	thin a Wetland	d? Yes	No X	
						_
Remarks: None of the three wetland indicators were present	. This point is	not located v	within a wetlan	d. The Antecedent Precipi	tation Tool scored a ´	15, indicating
conditions during the site investigations were wette	er than norma	al.				
VEGETATION - Use scientific names of plants.						
· · ·				Dominance Test work	sheet.	
	Abcoluto	Dominant	Indicator	Number of Dominant S	necies	
Trop Stratum (Plot size:		Species?	Status	That Are OBL FACW	or FAC:	з (А)
	76 COVEI	Species?	Status			<u> </u>
2				Total Number of Domin	ant	
3				Species Across All Stra	anta:	6 (B)
4						<u> </u>
T	0	= Total Cov	er	Percent of Dominant S	pecies	
Sapling/Shrub Stratum (Plot size: 30' radius)				That Are OBL, FACW.	or FAC: 50).0 (A/B)
1 Salix nigra	20	Yes	FACW	,,		()
2 Cornus drummondii	20	Yes	FAC	Prevalence Index worksheet:		
3 Celtis laevigata	20	Yes	FAC	Total % Cover of:	Multip	ly by:
4.				OBL species	15 x 1 =	15
5.				FACW species	20 x 2 =	40
	60	= Total Cov	er	FAC species	40 x 3 =	120
Herb Stratum (Plot size: 30' radius)		-		FACU species	90 x 4 =	360
1. Bromus arvensis	50	Yes	FACU	UPL species	10 x 5 =	50
2. Lolium perenne	20	Yes	FACU	Column Totals:	175 (A)	585 (B)
3. Eleocharis palustris	15	No	OBL			
4. Geranium carolinianum	10	No	NI	Prevalence Index	(= B/A =3.	34
5.				Hydronbytic Vegetati	on Indicators:	
6.				1 - Rapid Test for	Hydronhytic Vegetatic	חר
7				2 - Dominance Tes	st is >50%	
8				3 - Prevalence Ind	ex ≤3 0 ¹	
9				4 - Morphological	Adaptations ¹ (Provide	e supporting
10				Problematic Hydro	phytic Vegetation ¹ (E	Explain)
	95	= Total Cov	er		, , , , , , , , , , , , , , , , , , , ,	r - ,
Woody Vine Stratum (Plot size: 30' radius)				¹ Indicators of hydric so	il and wetland hvdrold	pav must
1. Toxicodendron radicans	20	Yes	FACU	be present, unless dist	urbed or problematic.	3, 11
2					•	
	20	= Total Cov	er	Hydrophytic		
% Bare Ground in Herb Stratum 5				Vegetation		
				Present?	Yes No	Х
Remarks: Hydrophytic vegetation is not present.						

S	0	IL	
J	J		-

Profile Descri	ption: (Describe to th	e depth need	ed to document th	e indicator	or confirm	the absen	ice of indicators.)	
(inchos)	Color (moist)	0/	Color (moist)		Tupol	1 002	Toxturo	Bomarka
		100		/0	туре	LUC		Rellidiks
0-18	101K 3/1	100				<u> </u>		
						<u> </u>		
				·				
				·				
				· . <u> </u>		<u> </u>		
				· . <u> </u>			<u> </u>	
				·		<u> </u>		
¹ Type: C=Con	centration, D=Depletion	n, RM=Reduce	d Matrix, CS=Cove	red or Coate	d Sand Gra	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil In	dicators: (Applicable	to all LRRs, ι	Inless otherwise n	oted.)			Indicators for	Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gley	ed Marix (S4	4)		1 cm N	luck (A9) (LRR I, J)
Histic Epi	pedon (A2)		Sandy Red	ox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Black His	tic (A3)		Stripped Ma	atrix (S6)			Dark S	urface (S7) (LRR G)
Hydroger	Sulfide (A4)		Loamy Muc	ky Mineral (F1)		High P	lains Depressions (F16)
Stratified	Layers (A5) (LRR F)		Loamy Gley	/ed Matrix (F	2)		(LRR I	I outside of MLRA 72 & 73)
1 cm Muc	k (A9) (LRR F, G, H)		Depleted M	atrix (F3)			Reduc	ed Vertic (F18)
Depleted	Below Dark Surface (A	(11)	Redox Dark	Surface (F6	6)		Red Pa	arent Material (TF2)
Thick Dar	k Surface (A12)		Depleted D	ark Surface	(F7)		Very S	hallow Dark Surface (TF12)
Sandy Mu	ucky Mineral (S1)		Redox Dep	ressions (F8)		Other	Explain in Remarks)
2.5 cm M	ucky Peat or Peat (S2)	(LRR G, H)	High Plains	Depression	s (F16)		³ Indicato	rs of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3)	LRR F)	(MLRA 72	& 73 of LRR	: H)		wetland	hydrology must be present,
							unless d	isturbed or problematic.
Restrictive La	yer (if present):							• • • • •
Depth (Inc	nes):						Hydric Soli Prese	nt? Yes <u>NO X</u>
HYDROLOG	Y							
Wetland Hydr	ology Indicators:							
Primary Indica	tors (minimum of one r	equired; check	call that apply)				Secondary	Indicators (minimum of two required)
Surface V	Vater (A1)		Salt Crust (B11)			Surfac	e Soil Cracks (B6)
High Wat	er Table (A2)		Aquatic Inv	ertebrates (E	313)		Sparse	ly Vegetated Concave Surface (B8)
Saturation	n (A3)		Hydrogen S	Sulfide Odor	(C1)		X Draina	ge Patterns (B10)
Water Ma	ırks (B1)		Dry-Seasor	Water Table	e (C2)		Oxidize	ed Rhizospheres on Living Roots (C3)
Sediment	Deposits (B2)		Oxidized RI	nizospheres	along Living	g Roots (C	3) (whe	re tilled)
Drift Depo	osits (B3)		(where no	ot tilled)			Crayfis	h Burrows (C8)
Algal Mat	or Crust (B4)		Presence o	f Reduced Ir	on (C4)		Satura	tion Visible on Aerial Imagery (C9)
Iron Depo	osits (B5)		Thin Muck	Surface (C7))		Geomo	orphic Position (D2)
Inundatio	n Visible on Aerial Ima	gery (B7)	Other (Expl	ain in Rema	rks)		FAC-N	eutral Test (D5)
Water-Sta	ained Leaves (B9)						Frost-H	leave Hummocks (D7) (LRR F)
Field Observa	ations:							
Surface Water	Present? Ye	s No	X Depth (inc	hes):				
Water Table P	resent? Ye	s No	X Depth (inc	hes):				
Saturation Pre	sent? Ye	s No	X Depth (inc	hes):		Wetla	nd Hydrology Prese	nt? Yes No X
(includes capil	lary fringe)			·				
Describe Reco	orded Data (stream gau	ıge, monitoring	y well, aerial photos,	previous in	spections), i	if available	:	
Remarks:								
Hydrology inc	licators are not presen	t.						

Project/Site:	FM 741 EA	(City/County:	к	aufman County	San	npling Date:	04/2	8/2022
Applicant/Owner:	Texas Departmer	nt of Transpor	tation		State: Te	xas Sar	npling Point:	WE	JP28
Investigator(s):	CW and JK	5	Section, Towr	nship, Range:		N/	A		
Landform (hillslope, terrace, etc):	Depression	I	Local relief (c	oncave, conve	ex, none):	concave		Slope (%	6): 0-1
Subregion (LRR):	RR J MLRA 86A	Lat:	32.6812	2574	Long: -96.	44689415	Datu	m: N	IAD 83
Soil Map Unit Name: Houston Bla	ack clay. 3 to 5 percent slopes				NWI cla	ssification:	NA		
Are climatic / hydrologic conditions	s on the site typical for this tim	e of year?	Yes	No X	(If no, explain in	Remarks.)			
Are Vegetation , Soil	, or Hydrology	significantly	disturbed?	Are "N	Normal Circumstance	s" present?	Yes	X N	0
Are Vegetation , Soil	, or Hydrology	naturally pro	blematic?	(If nee	eded, explain any ans	wers in Rem	arks.)		
SUMMARY OF FINDINGS	- Attach site map show	ving samp	ling point	locations,	transects, impo	ortant feat	ures, etc.		
Hydrophytic Vegetation Present	? Yes X	No .			•				
Hvdric Soil Present?	Yes X	No	ls	the Sampled	Area				
Wetland Hydrology Present?	Yes X	No	wi	thin a Wetland	d? Yes	х	No		
Remarks: All of the three wetlan	nd indicators were present. Th	nis point is loc	ated within a	wetland. The	Antecedent Precipita	tion Tool sco	red a 15, indi	cating	
conditions during the	site investigations were wette	er than norma	ll.						
VEGETATION - Use scient	tific names of plants.								
					Dominanco Tost	workshoot:			
		A In a shuta	Densinent	la dia atau	Number of Domin	ant Species			
		Absolute	Dominant	Indicator				0	(A)
Iree Stratum (Plot size:	30 [°] radius j	% Cover	Species?	Status	That Are OBL, FA	CW, OF FAC		8	_ (A)
1. <u>Salix nigra</u>		20	Yes	FACW	Tatal Neurals an of F				
2. <u>Celtis laevigata</u>		20	Yes	FAC		Jominant		•	
3					Species Across A	li Strata:		9	_ (B)
4									
		40	= Total Cov	/er	Percent of Domin	ant Species			
Sapling/Shrub Stratum (Plot s	size: <u>30 radius</u>)				That Are OBL, FA	CW, or FAC	8	8.9	_ (A/B)
1. <u>Celtis laevigata</u>		40	Yes	FAC	Drovalance Index	workshaat			
2. <u>Salix nigra</u>		20	Yes	FACW		k worksneet	• • • • • • • • • • • • • • • • • • • •	بر جا بر ا	
3. Ulmus crassifolia		15	No	FAC					
4. Amorpha fruticosa		10	No	FACW	OBL species	20	_ x1=	20	
5					FACVV species	95	_ x 2 =	190	
		85	= Total Cov	/er	FAC species	110	x3 =	330	
Herb Stratum (Plot size:	<u>30' radius</u>)				FACU species	/5	_ ×4 =	300	
1. Carex tetrastachya		25	Yes	FACW	UPL species	0	_ x5=	0	(D)
2. Typha angustifolia		20	Yes	OBL	Column Totals:	300	(A)	840	(B)
3. Rumex crispus		20	Yes	FAC					
4. Juncus marginatus		20	Yes	FACW	Prevalence	Index = B/A	=2	2.8	
5. Solidago canadensis		15	No	FACU	Hydrophytic Veg	etation Indi	cators:		
6. Ambrosia trifida		15	No	FAC	1 Panid Tes	t for Hydron	butic Vegetati	on	
7.					X 2 Dominan	no Toet ie 550		on	
8.					X 3 - Prevalence	- Index <3 (1		
9.					4 - Morpholo	nical Adapta	tions ¹ (Provid		tina
10.					Problematic	Hydronhytic '		E Suppor	ung
		115	= Total Cov	/er		riyuropriyuc	vegetation (t	_xpiairi)	
Woody Vine Stratum (Plot siz	ze: 30' radius)		_		Indicators of hyd	ria cail and w	otland bydral		.+
1. Toxicodendron radicans		60	Yes	FACU	he present uples	nc son anu w		ogy mus	ı
2.					be present, unles	s uistui beu u	rproblematic	•	
		60	= Total Cov	/er	Hydrophytic				
% Bare Ground in Herb Stratum	n 0		-		Vegetation				
					Present?	Yes	X No		
Remarks:									
Hydrophytic vegetation is prese	ent.								

SOIL	
------	--

Profile Desc Depth	ription: (Describe to tl Matrix	he depth need	ded to document th Redox	e indicator Features	or confirm	the abse	nce of indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Tvpe ¹	Loc ²	Texture	Remarks
0-18	10YR 3/1	90	10YR 3/4	10	<u> </u>	M	Silty Clay	
							<u> </u>	
					·			
¹ Type: C=Cor	ncentration, D=Depletio	n, RM=Reduc	ed Matrix, CS=Cover	red or Coate	ed Sand Gra	ains.	² Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applicable	to all LRRs.	unless otherwise n	oted.)			Indicators fo	or Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gley	ed Marix (S	4)		1 cm	Muck (A9) (LRR I, J)
Histic Ep	pipedon (A2)		Sandy Red	ox (S5)			Coas	t Prairie Redox (A16) (LRR F, G, H)
Black Hi	stic (A3)		Stripped Ma	atrix (S6)			Dark	Surface (S7) (LRR G)
Hydroge	n Sulfide (A4)		Loamy Muc	ky Mineral (F1)		High	Plains Depressions (F16)
Stratified	d Layers (A5) (LRR F)		Loamy Gley	ed Matrix (F	-2)		(LRR	R H outside of MLRA 72 & 73)
1 cm Mu	ick (A9) (LRR F, G, H))	Depleted M	atrix (F3)			Redu	uced Vertic (F18)
Depleted	d Below Dark Surface (/	A11)	X Redox Dark	Surface (F	6)		Red I	Parent Material (TF2)
Thick Da	ark Surface (A12)		Depleted Da	ark Surface	(F7)		Very	Shallow Dark Surface (TF12)
Sandy N	lucky Mineral (S1)		Redox Depi	Denreasions (F8	5) a (E16)		Otne	r (Explain in Remarks)
2.5 Cm M	NUCKY Peat of Peat (52)) (LKK G, H)		Depression	S(ГЮ) ЭЦ)		-Indica wetlan	d bydrology must be present
5 cm wit	icky reactor reac(33)				,		unless	disturbed or problematic.
Restrictive I	aver (if present):							
Type [.]	ayer (il present).							
Depth (in	ches):						Hydric Soil Pres	sent? Yes X No
	·						_	
Remarks: Hvdric soil ir	ndicators are present.							
,	·							
HYDROLOG	<u>SY</u>							
Wetland Hvo	Irology Indicators:							
Primary Indic	ators (minimum of one	required; chec	k all that apply)				Secondar	y Indicators (minimum of two required)
X Surface	Water (A1)		Salt Crust (B11)			Surfa	ace Soil Cracks (B6)
X High Wa	iter Table (A2)		Aquatic Inve	ertebrates (E	313)		Spars	sely Vegetated Concave Surface (B8)
X Saturatio	on (A3)		Hydrogen S	ulfide Odor	(C1)		X Drain	nage Patterns (B10)
Water M	arks (B1)		Dry-Season	Water Tabl	e (C2)		Oxidi	ized Rhizospheres on Living Roots (C3)
Sedimer	nt Deposits (B2)		Oxidized R	nizospheres	along Livin	g Roots (C	C3) (wh	nere tilled)
Drift Dep	posits (B3)		(where no	ot tilled)			Cray	fish Burrows (C8)
Algal Ma	at or Crust (B4)		Presence or	f Reduced Ir	ron (C4)		Satu	ration Visible on Aerial Imagery (C9)
Iron Dep	oosits (B5)	(07)	Thin Muck S	Surface (C7))		X Geor	norphic Position (D2)
	on Visible on Aerial Ima	igery (B7)	Other (Expl	ain in Rema	rks)		X FAC-	Neutral lest (D5)
water-s	tained Leaves (B9)					_	FIOSI	-Heave Hummocks (D7)(LKR F)
Field Observ	vations:							
Surface Wate	er Present? Ye	es <u>X</u> No	Depth (inc	hes):	1			
Water Table I	Present? Ye	es <u>X</u> No	Depth (inc	hes):	12			
Saturation Pr	esent? Ye	es <u>X</u> No	Depth (inc	nes):	12	wetia	ind Hydrology Pres	sent? Yes X NO
(includes cap	illary ininge)							
Describe Rec	corded Data (stream ga	uge, monitorin	g well, aerial photos,	previous in	spections),	if available	9:	
Remarks: Hydroloav in	dicators are present.							
, ,,								

Project/Site:	FM 741 EA	(Citv/Countv:	к	aufman Countv	Sam	pling Date:	04/28	/2022
Applicant/Owner:	Texas Departmen	t of Transpor	tation		State: Te	xas Sam	pling Point:	WD	P29
Investigator(s):	CW and JK	<u>()</u>	Section Tow	nshin Range	0.0.0.0	N/A	4		
Landform (hillslone, terrace, etc.):	Terrace	`	local relief (concave conve		none	<u>,</u>	Slope (%)	<u>).</u> 0
Subrogion (LPD):		'	22 601	00050		14690649	Datur	510pc (70)) <u>. 0</u>
Soil Man Unit Name: Houston Bla	rr J MLRA 60A	Lai	32.0012	20230	LUNG90.	44009040		II. <u>IN</u> -	10 05
Son Map Onit Name. Houston Bia	ick clay, 5 to 5 percent slopes	,	/	N ₂ X			NA		
Are climatic / nydrologic conditions	on the site typical for this tim	e of year?	res			Remarks.)		V N	
Are vegetation, Soil	, or Hydrology	significantly	disturbed?	Are "N		s" present?	Yes	X NO	·
Are vegetation, Soil	, or Hydrology	naturally pro	blematic?	(If nee	eded, explain any ans	swers in Rem	arks.)		
SUMMARY OF FINDINGS -	Attach site map show	ving samp	oling poin	t locations,	transects, impo	ortant feat	ures, etc.		
Hydrophytic Vegetation Present?	Yes X	No							
Hydric Soil Present?	Yes	No X	ls	the Sampled	Area				
Wetland Hydrology Present?	Yes	No X	w	ithin a Wetland	d? Yes		No X	_	
Remarks: One of the three wetla	and indicators waspresent. If	nis point is no	ot located wit	hin a wetland.	The Antecedent Prec	ipitation I ool	scored a 15,	indicating	ł
conditions during the	site investigations were welle	er inan norma	11.						
VEGETATION - Use scienti	fic names of plants								
					.				
					Dominance Test	worksheet:			
		Absolute	Dominant	Indicator	Number of Domin	ant Species			
Tree Stratum (Plot size: 30	0' radius)	% Cover	Species?	Status	That Are OBL, FA	CW, or FAC:		7	(A)
1. <u>Celtis laevigata</u>		60	Yes	FAC					
2. <u>Carya illinoinensis</u>		20	Yes	FAC	Total Number of D	Dominant			
3. <u>Salix nigra</u>		20	Yes	FACW	Species Across A	II Strata:		9	(B)
4									
		100	= Total Co	ver	Percent of Domin	ant Species			
Sapling/Shrub Stratum (Plot s	ize: 30' radius)				That Are OBL, FA	CW, or FAC:	77	7.8	(A/B)
1. Ulmus crassifolia		30	Yes	FAC					
2. Celtis laevigata		25	Yes	FAC	Prevalence Inde	x worksheet:			
3. Salix nigra		15	Yes	FACW	Total % Cov	er of:	Multip	oly by:	
4.		_			OBL species	0	x 1 =	0	
5					FACW species	45	x 2 =	90	
		70	= Total Co	ver	FAC species	195	x 3 =	585	
Herb Stratum (Plot size: 3	RO' radius)				FACU species	100	x 4 =	400	
1 Elymus virginicus	<u>) (140103)</u>	45	Ves	FAC	UPL species	15	x 5 =	75	
2 Symphoricarpos orbiculatus		25	Ves	FACU	Column Totals:	355	(A)	1150	(B)
3 Allium canadense		20	No	EACU					
A Ambrosia trifida		15	No	<u> </u>	Prevalence	Index = B/A =	= 3.	.24	
4. Ambrosia tinida		15	No						
5. Calex planoslachys		10			Hydrophytic Veg	etation Indic	ators:		
		10			1 - Rapid Tes	st for Hydroph	ytic Vegetation	on	
7. Symphyotrichum ericoides		10	NO	FACU	X 2 - Dominan	ce Test is >50	%		
8		_			3 - Prevalence	ce Index ≤3.0	1		
9					4 - Morpholo	gical Adaptati	ions ¹ (Provide	e supporti	ing
10					Problematic	Hydrophytic \	/egetation1 (E	Explain)	
	201 rediue	140	= Total Co	ver					
Woody Vine Stratum (Plot size	: <u> </u>				¹ Indicators of hyd	ric soil and we	etland hydrolo	ogy must	
1. Toxicodendron radicans		45	Yes	FACU	be present, unles	s disturbed or	problematic.		
2					· · ·		•		
		45	= Total Co	ver	Hydrophytic				
% Bare Ground in Herb Stratum	0				Vegetation				
					Present?	Yes	X No		
Remarks:									
Hydrophytic vegetation is prese	nt.								

S	0	IL	
J	J		-

Profile Description: (Describe to the	depth needed	to document the	e indicator o	or confirm	the absen	ice of indicators.)	
	0/ C	Color (moist)		Tupol	1.002	Toxturo	Bomarka
	100		/0	туре	LUC		Reliaiks
0-18 101R 3/1	100			<u> </u>			
				<u> </u>			
				<u> </u>			
			·				
				<u> </u>	<u> </u>		
			<u> </u>	<u> </u>		<u> </u>	
				<u> </u>	<u> </u>		
¹ Type: C=Concentration, D=Depletion,	RM=Reduced I	Matrix, CS=Cover	ed or Coate	d Sand Gra	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to	o all LRRs, uni	ess otherwise n	oted.)			Indicators for	Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gley	ed Marix (S4	+)		1 cm N	/luck (A9) (LRR I, J)
Histic Epipedon (A2)		Sandy Redo	ox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Black Histic (A3)		Stripped Ma	atrix (S6)			Dark S	Surface (S7) (LRR G)
Hydrogen Sulfide (A4)		Loamy Muc	ky Mineral (F	-1)		High P	lains Depressions (F16)
Stratified Layers (A5) (LRR F)		Loamy Gley	ed Matrix (F	2)		(LRR I	H outside of MLRA 72 & 73)
1 cm Muck (A9) (LRR F, G, H)		Depleted Ma	atrix (F3)			Reduc	ed Vertic (F18)
Depleted Below Dark Surface (A1	1)	Redox Dark	Surface (F6	5)		Red Pa	arent Material (TF2)
Thick Dark Surface (A12)		Depleted Da	ark Surface (F7)		Very S	hallow Dark Surface (TF12)
Sandy Mucky Mineral (S1)		Redox Depr	ressions (F8))		Other	(Explain in Remarks)
2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	High Plains	Depressions	s (F16)		³ Indicato	ors of hydrophytic vegetation and
5 cm Mucky Peat or Peat (S3) (L	RR F)	(MLRA 72 8	3 73 of LRR	H)		wetland	hydrology must be present,
	-			-		unless d	listurbed or problematic.
Restrictive Layer (if present): Type:							
Depth (inches):		-				Hydric Soil Prese	nt? Yes No X
HYDROLOGY							
Wetland Hydrology Indicators:							
Primary Indicators (minimum of one rec	quired; check al	ll that apply)				Secondary	Indicators (minimum of two required)
Surface Water (A1)		Salt Crust (I	B11)			Surfac	e Soil Cracks (B6)
High Water Table (A2)		Aquatic Inve	ertebrates (B	13)		Sparse	ely Vegetated Concave Surface (B8)
Saturation (A3)		Hydrogen S	ulfide Odor (C1)		X Draina	ge Patterns (B10)
Water Marks (B1)		Dry-Season	Water Table	e (C2)		Oxidize	ed Rhizospheres on Living Roots (C3)
Sediment Deposits (B2)		Oxidized Rh	nizospheres	along Living	g Roots (C	3) (whe	ere tilled)
Drift Deposits (B3)		(where no	ot tilled)			Crayfis	sh Burrows (C8)
Algal Mat or Crust (B4)		Presence of	f Reduced Ire	on (C4)		Satura	tion Visible on Aerial Imagery (C9)
Iron Deposits (B5)		Thin Muck S	Surface (C7)			Geomo	orphic Position (D2)
Inundation Visible on Aerial Image	ery (B7)	Other (Expla	ain in Remar	ks)		FAC-N	leutral Test (D5)
Water-Stained Leaves (B9)						Frost-H	Heave Hummocks (D7) (LRR F)
Field Observations:							
Surface Water Present? Yes	No	X Depth (inc	hes):				
Water Table Present? Yes	No	X Depth (inc	hes):				
Saturation Present? Yes	No	X Depth (inc	hes):		Wetlar	nd Hydrology Prese	ent? Yes No X
(includes capillary fringe)							
Describe Recorded Data (stream gaug	e, monitoring w	ell, aerial photos,	previous ins	pections), i	if available	:	
Remarks:							
Hydrology indicators are not present.							

Project/Site:	FM 741 EA	(City/County:	К	aufman County	Sa	mpling Date:	04/28	8/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Te	exas Sa	mpling Point:	WE	JP30
Investigator(s):	CW and JK	ç	Section, Town	ship, Range:		N	/A		
Landform (hillslope, terrace, etc	c): Depression		Local relief (co	oncave, conve	ex, none):	concave		Slope (%	6): 1-3
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.68238	3743	Long: -96	.44889376	Datur	m: N	IAD 83
Soil Map Unit Name: Houston	Black clay, 3 to 5 percent slopes				NWI cla	assification:	NA		
Are climatic / hydrologic condition	ons on the site typical for this time	of year?	Yes	No X	(If no, explain in	Remarks.)			
Are Vegetation , Soil	, or Hydrology	significantly	disturbed?	Are "N	Normal Circumstance	es" present?	Yes	X N	0
Are Vegetation , Soil	, or Hydrology r	naturally pro	blematic?	(If nee	eded, explain any an	swers in Rer	narks.)		
SUMMARY OF FINDING	S - Attach site map show	ing samp	oling point	locations,	transects, imp	ortant fea	tures, etc.		
Hydrophytic Vegetation Prese	ent? Yes X N	• <u>•</u> •			•				
Hydric Soil Present?	Yes X N	0	ls t	he Sampled	Area				
Wetland Hydrology Present?	Yes X N	0	wit	hin a Wetland	d? Ye	s X	No		
								<u> </u>	
Remarks: All of the three we	tland indicators were present. This	s point is loc	ated within a	wetland. The	Antecedent Precipita	ation Tool sco	ored a 15, indi	cating	
conditions during t	the site investigations were wetter	than norma	ıl.						
VEGETATION - Use scie	entific names of plants.								
					Dominance Test	worksheet			
		Absolute	Dominant	Indicator	Number of Domi	hant Species			
Troo Stratum (Plot size:	30' radius		Species?	Status	That Are OBL EA	ACW or FAC		5	(A)
		20	Species :		matric OBE, 17		·	0	_ (/ ()
1. Salix Higra		20	165	FACW	Total Number of	Dominant			
2.						All Strata		5	(B)
3				·	Opecies Acioss P	an Otrata.		5	_ (D)
4			- Tatal Cau		Percent of Domin	ant Species			
Cooling/Chruh Strature (DI	at size: 30' radius	20		-1	That Are OBL E	$\Lambda C M$ or EAC	· 10		(A/B)
Sapling/Shrub Stratum (Pi	ot size: <u>50 radius</u>)	50	M = -	EA 0)4/	That Are OBL, F		<u> </u>	0.0	_ (AVB)
		50	Yes	FACW	Prevalence Inde	x workshee	t:		
2. Ulmus crassifolia		10	NO	FAC	Total % Cov	/er of:	Multin	olv bv:	
3				·	OBL species	80	x 1 =	80	—
4.				·	FACW species	80	x 2 =	160	—
5					FAC species	20	x 3 =	60	—
		60	= Total Cove	er	FACU species	25	x 4 =	100	—
Herb Stratum (Plot size:	30' radius)				UPL species	0	x 5 =	0	—
1. Eleocharis palustris		40	Yes	OBL	Column Totals	205	(A)	400	(B)
2. Typha angustifolia		40	Yes	OBL					(=)
3. Solidago canadensis		15	No	FACU	Prevalence	Index = B/A	= 1	95	
4. Symphyotrichum lanceola	tum	10	No	FACW					
5. Rubus trivialis		10	No	FACU	Hydrophytic Veg	getation Ind	icators:		
6				·	1 - Rapid Te	st for Hydrop	hytic Vegetati	on	
7.				·	X 2 - Dominan	ce Test is >5	0%		
8				·	X 3 - Prevalen	ce Index ≤3.	D1		
9				·	4 - Morpholo	ogical Adapta	tions ¹ (Provide	e suppor	ting
10					Problematic	Hydrophytic	Vegetation ¹ (E	Explain)	
		115	_ = Total Cove	er					
Woody Vine Stratum (Plot	size: <u>30 radius</u>)				¹ Indicators of hyd	Iric soil and v	vetland hydrol	ogy mus	t
1. <u>Vitis rotundifolia</u>		10	Yes	FAC	be present, unles	s disturbed	or problematic		
2									
		10	_ = Total Cove	er	Hydrophytic				
% Bare Ground in Herb Strat	um <u>0</u>				Vegetation				
					Present?	Yes	X No		
Demortica									
Remarks: Hydrophytic vegetation is pr	resent								

SOIL	
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Depth	Matrix	ne deptri need	Redox	Features	or contirm	ule absel	nce of indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	N 4/	90	10YR 3/6	10	C	PL	Clay	
		·						
·		·			<u> </u>		·	
		·					<u> </u>	
¹ Type: C=Cond	centration, D=Depletio	n, RM=Reduc	ed Matrix, CS=Cove	red or Coate	ed Sand Gra	ains.	² Locatio	n: PL=Pore Lining, M=Matrix.
Hydric Soil In	dicators: (Applicable	e to all LRRs,	unless otherwise n	oted.)			Indicators for	or Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gley	ed Marix (S	4)		1 cm	Muck (A9) (LRR I, J)
Histic Epi	pedon (A2)		Sandy Red	ox (S5)			Coas	st Prairie Redox (A16) (LRR F, G, H)
Black Hist	tic (A3)		Stripped Ma	atrix (S6)			Dark	Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Muc	ky Mineral ((F1)		High	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)		X Loamy Gle	yed Matrix (I	F2)		(LRF	R H outside of MLRA 72 & 73)
1 cm Muc	K (A9) (LRR F, G, H)	Depleted M	atrix (F3)	0)		Redu	Jced Vertic (F18)
Depleted	Below Dark Surface (A	A11)	Redox Dari	C Surface (F	6) (EZ)			Shellow Dark Surface (TE12)
Sandy Mi	K Sullace (A12)		Depieted D	ressions (Ef	(<i>Г1)</i> 3)		Very	r (Explain in Remarks)
2.5 cm Mi	ucky Peat or Peat (S2		High Plains	Denression	y is (F16)		³ Indica	ators of hydrophytic vegetation and
5 cm Muc	kv Peat or Peat (S3)	(LRR F)	(MLRA 72)	& 73 of LRF	R H)		wetlan	d hydrology must be present.
	,,	. ,	,		,		unless	disturbed or problematic.
Restrictive La	yer (if present):							
Туре:								
Depth (inc	hes):						Hydric Soil Pres	sent? Yes <u>X</u> No
IYDROLOG	Y							
Wetland Hydr	ology Indicators:	required: aboa	k all that apply)				Secondar	v Indiantora (minimum of two required)
Primary Indica	tors (minimum of one	requirea; cnec	K all that apply)	D11)			Secondar	y Indicators (minimum of two required)
X High Wate	$\frac{Valer(AT)}{Pr}$			o II) ertebrates (F	R13)		Suite	selv Vegetated Concave Surface (B8)
X Saturation	n (A3)		Hydrogen S	Sulfide Odor	(C1)		X Drain	hage Patterns (B10)
Water Ma	rks (B1)		Dry-Seasor	Water Tabl	e (C2)		Oxidi	ized Rhizospheres on Living Roots (C3)
Sediment	Deposits (B2)		Oxidized R	hizospheres	along Livin	g Roots (C	C3) (wł	nere tilled)
Drift Depo	osits (B3)		(where ne	ot tilled)			Cray	fish Burrows (C8)
Algal Mat	or Crust (B4)		Presence o	f Reduced I	ron (C4)		X Satu	ration Visible on Aerial Imagery (C9)
Iron Depo	osits (B5)		Thin Muck	Surface (C7)		X Geor	morphic Position (D2)
Inundation	n Visible on Aerial Ima	agery (B7)	Other (Expl	ain in Rema	ırks)		X FAC-	Neutral Test (D5)
Water-Sta	ained Leaves (B9)						Frost	t-Heave Hummocks (D7) (LRR F)
Field Observa	itions:							
Surface Water	Present? Yo	es No	X Depth (ind	nes):				
Saturation Bro	resent? Y	es <u>X</u> NO	Depth (inc	cnes):	6	Wotla		cont? You Y No
(includes capil	lary fringe)				0	Wella	ind Hydrology Fres	
Describe Reco	orded Data (stream ga	uge, monitorin	g well, aerial photos	, previous in	spections),	if available	e:	
Remarks:								
inguiology ind	icators are present.							

Project/Site:	FM 741 EA	(City/County:	к	aufman County	Sa	mpling Date:	04/28/2022
Applicant/Owner:	Texas Departmen	t of Transpor	tation		State: Tex	as Sa	mpling Point:	WDP31
Investigator(s):	CW and JK	ę	Section, Tow	nship, Range:		N	I/A	
Landform (hillslope, terra	ce, etc): Hillsope	I	Local relief (c	concave, conve	ex, none):	convex	:	Slope (%): 2-3
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6827	1724	Long: -96.4	4934445	Datur	m: NAD 83
Soil Map Unit Name: H	louston Black clay, 1 to 3 percent slope	s			NWI class	sification:	NA	
Are climatic / hydrologic o	conditions on the site typical for this time	e of year? `	Yes	No X	(If no, explain in F	≀emarks.)		
Are Vegetation	, Soil, or Hydrology	significantly	disturbed?	Are "N	Normal Circumstances	" present?	Yes	X No
Are Vegetation	, Soil, or Hydrology	naturally pro	blematic?	(If nee	eded, explain any answ	vers in Rer	marks.)	
SUMMARY OF FINI	DINGS - Attach site map show	ving samp	oling point	t locations,	transects, impor	rtant fea	tures, etc.	
Hydrophytic Vegetation	Present? Yes N	lo X						
Hydric Soil Present?	Yes	lo X	ls	the Sampled	Area			
Wetland Hydrology Pre	esent? Yes N	No X	wi	thin a Wetland	d? Yes		No X	
Remarks:	land indicators were present. This point		بيريم منطقات م	atland The And	te ee de at Dae einitetien '		d o 15 indiaati	
conditions during the	site investigations were wetter than nor	ns not locate mal	ed within a we	eliand. The Ani	lecedent Precipitation	Tool score	d a 15, Indicau	ng
g								
VEGETATION - Use	e scientific names of plants.							
					Dominance Test v	vorksheet	:	
		Absolute	Dominant	Indicator	Number of Domina	int Species	-	
Tree Stratum (Plot si	ize.)	% Cover	Snecies?	Status	That Are OBL. FAC	CW. or FAC		0 (A)
<u>1.</u>	/	<u>// 00/01</u>			,	,		
2.					Total Number of Do	ominant		
3.					Species Across All	Strata:	:	3 (B)
4.								
		0	= Total Cov	/er	Percent of Domina	nt Species		
Sapling/Shrub Stratum	(Plot size: 30' radius)		-		That Are OBL, FAC	CW, or FAC	: 0	.0 (A/B)
1. Maclura pomifera		30	Yes	FACU				
2. Gleditsia triacanthos	S	25	Yes	FACU	Prevalence Index	workshee	et:	
3.					Total % Cove	r of:	Multip	bly by:
4.					OBL species	0	x 1 =	0
5.					FACW species	5	x 2 =	10
		55	= Total Cov	/er	FAC species	0	x3 =	0
Herb Stratum (Plot si	ize: <u>30' radius</u>)				FACU species	150	x 4 =	600
1. Ambrosia artemisiifo	olia	80	Yes	FACU	OPL species	155	X5=	<u> </u>
2. Solidago canadensi	is	15	No	FACU	Column Totals:	100	(A)	<u>610</u> (B)
3. Valerianella radiata		5	No	FACW	Brovalanca I	ndoy = P/A	- 2	04
4					Flevalence			.94
5					Hydrophytic Vege	atation Ind	icators:	
6					1 - Rapid Test	for Hydrop	ohytic Vegetati	on
7					2 - Dominance	e Test is >5	50%	
8					3 - Prevalence	e Index ≤3.	0 ¹	
9					4 - Morpholog	ical Adapta	ations ¹ (Provide	e supporting
10			- Tatal Ca		Problematic H	lydrophytic	Vegetation ¹ (E	Explain)
Maadu Vina Chratum		100		/er				
					¹ Indicators of hydri	c soil and v	wetland hydrole	ogy must
1					be present, unless	disturbed of	or problematic.	
Z			= Total Cov	/or	Hudrophytic			
% Bare Ground in Hert	Stratum 0	0	_ 10(a) 000		Vegetation			
					Procent?	Voc	No	Y
					FIESCHL	100		
Remarks:								
Hydric soil indicators	are not present.							

S	0	IL	
J	J		-

Profile Descri	ption: (Describe to th	le depth neede	d to document th	e indicator o	or confirm	the absen	nce of indicator	rs.)	
			Color (moiot)	reatures	Ture a1	1.0.2	Touture		Domorko
(inches)		<u> </u>	Color (moist)	%	туре	LOC	iexture	. <u> </u>	Remarks
0-18	10YR 4/1	100					Clay		
						<u> </u>			
					<u> </u>			·	
							-		
		<u> </u>						. <u></u>	
¹ Type: C=Con	centration, D=Depletion	n, RM=Reduced	I Matrix, CS=Cover	ed or Coated	d Sand Gra	ains.	² Loca	ation: PL=Pore	Lining, M=Matrix.
Hydric Soil In	dicators: (Applicable	to all LRRs, u	nless otherwise n	oted.)			Indicator	s for Problema	atic Hydric Soils ³ :
Histosol (A1)		Sandy Gley	ed Marix (S4)		1	cm Muck (A9)	(LRR I, J)
Histic Epi	pedon (A2)		Sandy Red	ox (S5)			C	oast Prairie Re	dox (A16) (LRR F, G, H)
Black His	tic (A3)		Stripped Ma	atrix (S6)			D	ark Surface (S	7) (LRR G)
Hydroger	Sulfide (A4)		Loamy Muc	ky Mineral (F	1)		— н	igh Plains Dep	ressions (F16)
Stratified	Lavers (A5) (LRR F)		Loamy Glev	ed Matrix (F2	2)		(_RR H outside	of MLRA 72 & 73)
1 cm Muc	k (A9) (LRR F. G. H)		Depleted M	atrix (F3)	_,		R	educed Vertic	(F18)
Depleted	Below Dark Surface (A	A11)	Redox Dark	Surface (F6))		R	ed Parent Mate	erial (TF2)
Thick Day	k Surface (A12)	,	Denleted D	ark Surface (, F7)			erv Shallow Da	rk Surface (TF12)
Sandy Mi	icky Mineral (S1)		Reday Depicted Di	ressions (FR)	,		— `	ther (Explain in	Remarks)
35 om M	ucky Milleral (31)		Ligh Plains	Doprossions	(E16)		3lp/	dicators of bydr	onbytic vocatation and
2.0 CIT W	why Post or Post (S2)				ы ы			flond bydrology	
5 cm Mut	ky real of real (33)		(IVILICA / 2 C		пј		we	and figurology	must be present,
							un		i problematic.
Restrictive La	ayer (if present):								
Type:									
Depth (inc	hes):		_				Hydric Soil F	Present?	Yes No X
	·						-		
Remarks:									
Hydric soli ind	licators are present.								
HYDROLOG	Y								
Wetland Hvdr	ology Indicators:								
Primary Indica	tors (minimum of one i	equired: check	all that apply)				Secon	dary Indicators	(minimum of two required)
Surface V	Vater (A1)	oquirou, oncon	Salt Crust (R11)				urface Soil Cra	cks (B6)
High Wat	er Table (A2)			ortobratos (R	13)			narsely Vegeta	ted Concave Surface (B8)
Ngr Wat	$(\Lambda 3)$		Hydrogen S	ulfide Odor (C1)		0	rainage Patter	as (B10)
Saturation	(A3)			Mater Table					nharaa an Living Doota (C2)
	Denesite (D2)		Dry-Season		(02) Nana Livin	a Daata (C			prieres on Living Roots (CS)
						y Roois (C	,3)	(where theu)	(00)
			(wnere no	ot tillea)	(0.1)			raytish Burrows	S (C8)
Algal Mat	or Crust (B4)		Presence of	Reduced Irc	on (C4)		S	aturation Visibl	e on Aerial Imagery (C9)
Iron Depo	osits (B5)		Thin Muck S	Surface (C7)			G	eomorphic Pos	sition (D2)
Inundatio	n Visible on Aerial Ima	gery (B7)	Other (Expl	ain in Remarl	ks)		E	AC-Neutral Tes	t (D5)
Water-Sta	ained Leaves (B9)						F	rost-Heave Hu	nmocks (D7) (LRR F)
Field Observa	ations								
Surface Water	Present? Vz	s No	X Denth (inc	hes).					
Water Table D	recent? ∇		X Depth (inc	hes):					
Saturation Dra	cont? Y		X Dopth (inc	hee):		Motio	nd Hydrology I	Proconto	
(includes series	lony fringe)	55 <u>INU</u>				vvetial	na nyurology i	-16261111	
(includes capil	ary mige)								
Describe Reco	orded Data (stream gau	uge, monitoring	well, aerial photos,	previous ins	pections),	if available):		
Remarks:									
Hydrology inc	dicators are present.								

Project/Site:	FM 741 EA	(City/County:	К	aufman County	5	Sampling Date:	04/28	/2022
Applicant/Owner:	Texas Department	t of Transpor	tation		State:	Texas S	Sampling Point:	WD	P32
Investigator(s):	CW and JK	Ś	Section, Town	ship, Range:			N/A		
Landform (hillslope, terrace, etc):	Depression	I	Local relief (co	oncave, conve	x, none):	conca	ve	Slope (%): 1-2
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.68348	8008	Long: -9	6.45067297	7 Dati	um: N/	AD 83
Soil Map Unit Name: Houston F	Black clay 1 to 3 percent slopes				NWI c	lassificatior			
Are climatic / hvdrologic condition	is on the site typical for this time	e of vear?	Yes	No X	(If no, explain i	n Remarks.	.)		
Are Vegetation Soil	or Hydrology	significantly	disturbed?	Are "N	Normal Circumstance	ces" presen	t? Yes	X No	,
Are Vegetation Soil	or Hydrology	naturally pro	blematic?	(If nee	eded explain any a	nswers in R	Remarks)	<u></u>	·
SUMMARY OF FINDINGS	- Attach site man show	vina samr	ling point	locations	transects imr	ortant fe	eatures etc.		
		ing sump		iocations,	transcets, imp			<u>.</u>	
Hydrophylic Vegetation Presen					A				
Hydric Soll Present?	Yes <u>X</u> N		IS T	ine Sampled /	Area	X			
Wetland Hydrology Present?	Yes X N		wit	inin a wetiand		es <u>X</u>	NO		
Remarks: All of the three wetla	and indicators were present. Thi	s point is loc	ated within a	wetland. The	Antecedent Precipit	tation Tool	scored a 15, ind	licating	
VEGETATION - Use scien	tific names of plants.								
					Dominance Tes	st workshe	et:		
		Absolute	Dominant	Indicator	Number of Dom	inant Speci	ies		
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL	ACW or F	AC [.]	3	(A)
1 (1 lot 3ize.)	70 00001	opecies:	Otatus		,			(, ,)
2					Total Number of	f Dominant			
2					Species Across	All Strata		4	(B)
3					00000071010000	/ in Otrata.			(8)
4			- Total Cav		Percent of Dom	inant Snoci	95		
Oralia - Ohash Otastura (Dist	30' radius	0		er	That Are OPL		es AC· -	75.0	(A/D)
Sapling/Shrub Stratum (Plot	size: <u> </u>	40		54.014	mat Are Obl., r		AC	75.0	(A/D)
1. Salix nigra		40	Yes	FACW	Prevalence Ind	lex worksh	eet:		
2. Ulmus americana		10	<u>No</u>	FAC	Total % Co	over of	Mult	tiply by:	
3. <u>Celtis laevigata</u>		10	No	FAC		85	x 1 =	85	—
4					FACW species	60		120	
5					FAC species	35	x 3 =	105	
		60	= Total Cov	er	FACIL species	45		180	
Herb Stratum (Plot size:	<u>30' radius</u>)					0		0	
1. Eleocharis palustris		60	Yes	OBL	Column Totals:	225	(A)	490	(B)
2. <u>Typha angustifolia</u>		25	Yes	OBL	Column rotals.		(/)	400	_ (B)
3. <u>Rumex crispus</u>		15	No	FAC	Prevalenc	o Index = F	R/Δ =	2 18	
4. <u>Solidago canadensis</u>		10	No	FACU	Trevalence			2.10	
5. <u>Carex tetrastachya</u>		10	No	FACW	Hydrophytic Ve	egetation li	ndicators:		
6. Ambrosia psilostachya		10	No	FACU	1 - Rapid T	est for Hydi	rophytic Vegeta	tion	
7. <u>Verbena bonariensis</u>		10	No	FACW	X 2 - Domina	nce Test is	>50%		
8			_		X 3 - Prevale	nce Index ≤	≤3.0¹		
9					4 - Morpho	logical Ada	ptations ¹ (Provid	de support	ing
10		_			Problemati	c Hvdrophv	tic Vegetation ¹ ((Explain)	0
		140	= Total Cov	er		, , ,	0	、 I	
Woody Vine Stratum (Plot si	ze: <u>30' radius</u>)				¹ Indicators of hy	dric soil an	d wetland hvdro	oloav must	
1. Toxicodendron radicans		25	Yes	FACU	be present unle	ess disturbe	d or problemati	c	
2									
		25	= Total Cov	er	Hydrophytic				
% Bare Ground in Herb Stratur	n <u> 0 </u>				Vegetation				
					Present?	Yes	X No		
Remarks:									
Hydrophytic vegetation is pres	sent.								

SOIL	
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Color (molet) % Type Loc' Toture Remarks 0-18 10YR 511 80 10YR 78 20 D M Clay 0 10YR 511 80 10YR 78 20 D M Clay 0 10YR 78 20 D M Clay M Clay 0 10YR 511 80 10YR 78 20 D M Clay 0 10YR 511 80 10YR 51 80 M Clay M		IVIALITX		Redux realures				
0-18 10YR 51 60 10YR 7/6 20 D M Clay 1 10YR 51 60 10YR 7/6 20 D M Clay yet: C=Concentration. D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. ************************************	(inches)	Color (moist) %	6 Color (m	oist) %	Type ¹	Loc ²	Texture	Remarks
yre: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=-Covered or Coated Sand Grains. *Location: PL=Pare Lining, M=Matrix, yre: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=-Covered or Coated Sand Grains. *Location: PL=Pare Lining, M=Matrix, yre: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=-Covered or Coated Sand Grains. *Location: PL=Pare Lining, M=Matrix, yre: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=-Covered or Coated Sand Grains. *Location: PL=Pare Lining, M=Matrix, yre: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=-Covered or Coated Sand Grains. *Location: PL=Pare Lining, M=Matrix, yre: G=Concentration, D=Depletion, RM=Reduced Matrix, CS=-Covered or Coated Sand Grains. *Location: PL=Pare Lining, M=Matrix, yre: G=Concentration, D=Depletion, RM=Reduced Vertic, CIS, D=Depletion, RM, Watry, Mineral (F1) Loany Gleged Matrix, (F2) -Inter Matrix, GN=-Covered Or Matrix, (F2)	0-18	10YR 5/1 8	30 10YR	7/6 20	D	М	Clay	
yet: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Histics (A1)							·	
ype: C+Concentration, D-Depletion, RM+Reduced Matrix, CS+Covered or Coaled Sand Grains. *Locaton: PL=Pore Lining, M+Matrix. ype: C+Concentration, D-Depletion, RM+Reduced Matrix, CS+Covered or Coaled Sand Grains. *Locaton: PL=Pore Lining, M+Matrix. ypd: C Soil Indicators: (Applicable to all LRRs, unless othorwise noted.) Indicators for Problematic Hydric Soils': Histic Epleption (A2) Sandy Reduce (S5) Stratified Layers (A5) (LRR F, H) Loamy Mucky Mineral (F1) Opeleted Matrix (S4) Cases Prairie Reduc (A5) Depleted Matrix (S4) Reduce Matrix (F2) Tam Muck (A) (LRR F, G, H) Depleted Matrix (F2) Depleted Below Dark Surface (A1) Reduce Matrix (F2) Sandy Mucky Mineral (S1) Reduce Depressions (F6) 2 5 cm Mucky Peat or Peat (S2) (LRR F, H) High Plains Depressions (F6) Sandy Mucky Mineral (S1) Reduce Depressions (F6) 2 5 cm Mucky Peat or Peat (S2) (LRR F, H) High Plains Depressions (F6) WLRA 72 & 73 of LRR H unless disturbed or problematic. Sandy Cleaver (If present): Type: Type: Depleted Matrix (B11) Surface 8 Coll Crack (C12) Sandrace Water (A1) Sandra Undicators (Intermum of one required; check all that apply) Surface 8 Coll Crack (C12) Sandr							······································	
ype: C-Concentration. D-Depletion. RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix. ype: C-Concentration. D-Depletion. RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. Indicators for Problematic Hydric Solis): Histos (A1) Sandy Redox (S5) Histos (A2) Sandy Redox (S5) Strafted Layor (A2) Sandy Redox (S5) Strafted Layor (A3) Strapped Matrix (S6) Strafted Layor (A3) Strapped Matrix (S6) Depleted Balox Dark Surface (A1) Redox Dark Surface (F1) Depleted Balox Dark Surface (A1) Redox Dark Surface (F1) Depleted Balox Dark Surface (A1) Redox Dark Surface (F1) Sort Mucky Mineral (S1) Redox Dark Surface (F1) Sort Mucky Peat or Peat (S2) (LRR 6, H) High Plans Depressions (F16) Sort Mucky Mineral (S1) Redox Dark Surface (F1) Sort Mucky Peat or Peat (S2) (LRR 7, H) Micatatros d'nydrophytic vegletation and wetland hytrocym match be prostent. Updatic Soil (Minimum d'on one regulared , check all that apply) Secondary Indicators (minimum of two required Surface (S1) Surface View Marks (B1) Dy-Seasan Water Table (C2) Oxidare Ritespheres and Quring Roots (C3) Ord Code V Matrix Marks (B1) Dy-Seasan Water Table (C2) Oxidare Rites		·						
ype: C=Concentration, D=Deptetion, RM=Reduced Matrix, C5=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix. ype: C=Concentration, D=Deptetion, RM=Reduced Matrix, C5=Covered or Coaled Sand Grains. *Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solis': i=Histic Dipletion (A2) Sandy Redox (S5) Coast Praine Redox (A9) (LRR F, G) Despited Matrix (S0) Coast Praine Redox (A9) (LRR G, G) Stratified Layers (A5) (LRR F, D) Loany Mucky Matrix (F1) Despited Matrix (F2) CLR R Houtsido of MLRA 72 & 73 (LRR G) Depleted Below Dark Surface (A1) Redox Depresions (F6) Redox Depresions (F6) Redox Depresions (F6) 2 5 cm Mucky Pator Potal (F2) Redox Depresions (F6) Redox Depresions (F6) Redox Depresions (F6) 2 5 cm Mucky Pator Potal (F2) Redox Depresions (F6) Redox Depresions (F6) Redox Depresions (F6) 2 5 cm Mucky Pator Potal (F2) Redox Depresions (F6) Redox Depresions (F6) Redox Depresions (F6) 2 5 cm Mucky Pator Potal (F2) Redox Depresions (F6) Redox Depresions (F6) Redox Depresions (F6) 1 beptied Matrix (Matrix C S 7 of LRR H) Hydric Soil Present? Yes							· ·	
yre: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix. yrdr Soil Indicators: (Applicable to all LRRe, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Histos (A1) Sandy Glayed Matrix (S4) Iom Muck (A9) (LRR F, G, H) Histos (A2) Sandy Redox (S5) Coast Surface (S7) (LRR G) Synthet Layers (A5) (LRR F, G, H) Depleted Matrix (F2) Redox Dark Surface (S7) Depleted Baby Care (A5) (LRR F, G, H) Depleted Dark Surface (F1) Redox Dark Surface (F7) Sandy Muck (Marca (A1)) Depleted Dark Surface (S1) Redox Dark Surface (F12) Sandy Muck (Marca (A1)) Depleted Dark Surface (F12) Other (Explain in Remarks) Sandy Muck (Marca (A1)) Depleted Dark Surface (F12) Other (Explain in Remarks) Sandy Muck (Marca (A1)) Depleted Dark Surface (F12) Other (Explain in Remarks) Sandy Muck (Marca (A1)) Redox Dark Surface (F16) "Indicators (Inminum of two required: (Increas)" Sandy Muck (Marca (A1)) Sand Course Surface (S10) "Surface Soil Cracks (B6) Sandy Muck (Marca (A1)) Sand Course Surface (S10) "Surface Soil Cracks (B6) Surface (A1) Sand Course Surface (C1) Depleted Elowed Surface (C1) Depleted E		·						
ype: C-Concentration, D-Depletion, RM-Reduced Matrix, CS-Covered or Coaled Sand Grains. ************************************		,,				<u> </u>		
drife Soil Indicators : (Applicable to all LRRs, unless otherwise noted.) Indicators (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Hitsic Epipedon (A2) Sandy Redox (S5) Coast Praine Redox (A15) (LRR F, O, H) Black Histic (A3) Stripped Matrix (S6) Dark Surface (A7) (LRR F, O, H) 1 cm Muck (A6) (LRR F, O, H) Loamy Glayed Matrix (F2) Learny Glayed Matrix (F2) 1 cm Muck (A6) (LRR F, O, H) Depieted Dark Surface (F7) Redox Dark Surface (F7) 2 S mn Mucky Peat or Peat (S2) (LRR O, H) High Plains Depressions (F16) Wetland Hydrica of Hydrophytic vegetation and wetland hydricage (TF12) 2 S on Mucky Peat or Peat (S2) (LRR O, H) High Plains Depressions (F16) Wetland Hydricage A11 (M2) Wetland Hydricage A11 (M2) 2 S on Mucky Peat or Peat (S2) (LRR O, H) (MLRA 72 & 73 of LRR H) Wetland Hydricage A11 (M2) Secondary Indicators (M1) 2 S on Mucky Peat or Peat (S2) (LRR O, H) Salar Crust (B11) Salar Crust (B1) Surface Soil Present? Yes	Type: C=Cond	centration, D=Depletion, RM	=Reduced Matrix, (CS=Covered or Coat	ted Sand Gra	ins.	² Location:	PL=Pore Lining, M=Matrix.
Histic Epiped Mark (S4) 1 cm Muck (A9) CRR I, J Histic Epiped Mark (S3) Coast Pariet Redex (A16) Coast Pariet Redex (A16) Coast Pariet Redex (A16) Cast Pariet Redex (A16) Red Paret Matrix (F2) Red Paret Matrix (F1) Peleted Bark Surface (F7) Peleted Paret S12 Paret Paret Matrix (F1) Red Paret Matrix (F2) Red Paret Matrix (F1) Peleted Paret S12 Paret S12 Paret Matrix (F1) Peleted Paret S12 Paret Paret Matrix (F1) Peleted Paret S12 Paret Paret Matrix (F1) Paret Paret S12 Paret Paret Matrix (F1) Paret Paret Paret Matrix (F1) Paret Paret	ydric Soil In	dicators: (Applicable to all	LRRs, unless oth	erwise noted.)			Indicators for	Problematic Hydric Soils ³ :
Histic Explored on (A2) Sandy Redox (S5) Coast Prairie Redox A16) (LRR F, G, H) Black Histic (A3) Stripped Matrix (S6) Dark Sufface (A16) LRR F, G, H) Stratified Layers (A5) (LRR F, G, H) Loamy Mucky Mineral (F1) High Plains Depressions (F16) High Plains Depressions (F16) 1 om Muck (A0) (LRR F, G, H) Depleted Matrix (F2) Reduce Vertic (F18) Reduce Vertic (F18) Depleted Below Dark Surface (A11) Redox Operessions (F16) Reduce Vertic (F18) Reduce Vertic (F18) 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) Thidicators of hydrophytic vegetation and wetand hydrophydic vegetation and wetand hydrophydic vegetation and wetand hydrophydic vegetation and wetand hydrophytic vegetation and wetand hyd	Histosol (A1)	Sa	andy Gleyed Marix (S	S4)		1 cm N	luck (A9) (LRR I, J)
Biack Hatic (A3) Stripped Matrix (S6) Dark Surface (S7) (LRR 6) Hydroge Sutfield Layers (A5) (LRR F) Loamy Mucky (Mineral (F1) High Plans Depressions (F10) 1 om Muck (A9) (LRR F, G, H) X Depleted Matrix (F2) Redv Dark Surface (A12) Depleted Boot Dark Surface (A12) Depleted Boot Dark Surface (F7) Very Shallow Dark Surface (T12) 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plans Depressions (F16) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if present): Type: Peat (S2) (LRR G, H) High Plans Depressions (F16) Papth Indicators are present. Mucky Peat or Peat (S2) (LRR G, H) High Plans Depressions (F16) "Indicators disturbed or problematic. estrictive Layer (if present): Type: Peat (A11) Sat Crust (B11) Secondary Indicators (minimum of two required that apply) service Vetra (A11) Sat Crust (B11) Sat Crust (B11) Secondary Indicators (B10) Sufface Vetra (A11) Sat Crust (B11) Secondary Indicators (B10) Solide Cdor (C1) Water Mark (B1) Dry-Season Vetra Table (C2) Oxidized Rhozopheres and Living Roots (C3) Crust (B10) Saturation (K3) Hydrogen Suffde Cdor (C1) Saturation Visible on Aeri	Histic Epi	pedon (A2)	Sa	andy Redox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Hydrogen Suttice (A4)	Black His	tic (A3)	St	ripped Matrix (S6)			Dark S	surface (S7) (LRR G)
Stratified Layers (A5) (LRR F) Loamy Gleyed Matrix (F2) (LRR H outside of MLRA 72 & 73) 1 cm Muck (A9) (LRR F, G, H) X Depleted Matrix (F3) Reduced Vertic (F16) 2 Sond Wucky Neat (A12) Depleted Dark Surface (F7) Wery Shallow Dark Surface (T12) Other (Erplain in Remarks) 2 Son Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) *Indicators of hydrophytic vegetation and wetann hydrology must be present, unless disturbed or problematic. strictive Layer (if present): Uppet (inches): High Plains Depressions (F16) *Hydric Soil Present? Yes_X_ No	Hydrogen	ı Sulfide (A4)	Lc	amy Mucky Mineral	(F1)		High P	lains Depressions (F16)
1 mukck (A9) (LRR F, G, H) Image: Completed Matrix (F3) Reduced Vertic (F16) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) Very Shallow Dark Surface (F17) Very Shallow Dark Surface (F17) Sand Mucky Mineral (S1) Redox Dark Surface (F7) Very Shallow Dark Surface (TF12) Urbox Cark Surface (TF12) Sand Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) Image:	Stratified	Layers (A5) (LRR F)	Lc	amy Gleyed Matrix	(F2)		(LRR I	Houtside of MLRA 72 & 73)
Depleted Below Dark Surface (A11) Redox Dark Surface (F2) Redox Dark Surface (F2) Thick Dark Surface (A12) Depleted Dark Surface (F7) Very Shallow Dark Surface (F12) Sandy Mucky Mineral (S1) Redox Depressions (F16) "Indicators of hydrophylic vegetation and weltand hydrology must be present. So m Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) "Indicators of hydrophylic vegetation and weltand hydrology must be present. strictive Layer (if present): Type:	1 cm Muc	ck (A9) (LRR F, G, H)	X D	epleted Matrix (F3)			Reduc	ed Vertic (F18)
Thick Dark Surface (12) Depleted Dark Surface (17) Very Shaltow Dark Surface (1712) Sandy Mucky Mineral (S1) Redox Depressions (F8) Other (Explain in Remarks) 2.5 cm Mucky Peat or Peat (S2) (LRR 6, H) High Plains Depressions (F16) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. estrictive Layer (if present): Type:	Depleted	Below Dark Surface (A11)	R	edox Dark Surface (F	F6)		Red Pa	arent Material (TF2)
Sandy Mucky Mineral (S1) Redox Depressions (F8) Other (Explain in Remarks) 2.5 cm Mucky Peat or Peat (S2) (LRR F) High Plains Depressions (F16) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. satrictive Layer (If present): Type:	Thick Dar	k Surface (A12)	De	epleted Dark Surface	e (F7)		Very S	hallow Dark Surface (TF12)
2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. astrictive Layer (If present):	Sandy Mu	ucky Mineral (S1)	R	edox Depressions (F	8)		Other	(Explain in Remarks)
5 cm Mucky Peat or Peat (S3) (LRR F) (MLRA 72 & 73 of LRR H) wetland hydrology must be present, unless disturbed or problematic. sstrictive Layer (If present): ''ypo:	2.5 cm M	ucky Peat or Peat (S2) (LRF	₹ G, H) Hi	gh Plains Depressio	ns (F16)		³ Indicato	ors of hydrophytic vegetation and
unless disturbed or problematic. strictive Layer (if present): Type:	5 cm Muc	ky Peat or Peat (S3) (LRR	F) (N	ILRA 72 & 73 of LR	RH)		wetland	hydrology must be present,
setrictive Layer (if present): Type: Type:							unless d	isturbed or problematic.
Type:	estrictive La	ayer (if present):						
Depth (inches):	Туре:							
marks: tydric soil indicators are present. DROLOGY ettand Hydrology Indicators: imary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of two required; Surface Water (A1) Salt Crust (B11) Surface Soil Cracks (86) Startace Water (A1) Aquatic Invertebrates (B13) Sparsely Vegetated Concave Surface (B8 Startace Noil (A3) Hydrogen Suffde Odor (C1) Drainage Patterns (B10) Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres along Living Roots (C3) Ohft Deposits (B3) (where not tilled) Crafysihs Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) X Saturation Visible on Aerial Imagery (C9) Innuation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X FAC-Neutral Test (D5) Inface Water Present? Yes No Depth (inches): 12 utartation Present? Yes No Depth (inches): 12 utartar on Present? Yes No Depth (inches): 12 utaration Present? Yes	Depth (inc	hes):					Hydric Soil Prese	nt? Yes X No
prarks: tydric soil indicators are present. DROLOGY etland Hydrology Indicators: timary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of two required; Surface Valuer (A1) Salt Crust (B11) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Invertebrates (B13) Sparsely Vegetated Concave Surface (B8) Saturation (A3) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Oxidized Rhizospheres along Living Roots (C3) Sediment Deposits (B2) Oxidized Rhizospheres along Living Roots (C3) Owhere tilled) Orarjish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) X Saturation Visible on Aerial Imagery (C9) Inon Deposits (B5) Thin Muck Surface (C7) X Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Y Foct-Neutral Test (D5) Water-Stained Leaves (B9) Fost-Heave Hummocks (D7)(LRR F) eld Observations: 12 Wetland Hydrology Present? Yes X No Depth (inches): utration Present? Yes X No Depth (inches): 12 Wetland Hydrology Present? Yes X No uscribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections),								
DROLOGY ettand Hydrology Indicators: imary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of two required; Sufface Water (A1)								
ettland Hydrology Indicators: Secondary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of two required; surface Soil Cracks (B6) Surface Water (A1) Salt Crust (B11) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Invertebrates (B13) Drainage Patterns (B10) Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres along Living Roots (C3) Water Marks (B2) Oxidized Rhizospheres along Living Roots (C3) (where tilled) Irin Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Crafish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) X Saturation Visible on Aerial Imagery (C9) Iron Deposits (B5) Thin Muck Surface (C7) X Geomorphic Position (D2) Water-Stained Leaves (B9) Other (Explain in Remarks) X FAC-Neutral Test (D5) Irrace Water Present? Yes X No Depth (inches): Iatration Present? Yes X No Depth (inches): 12 Wetland Hydrology Present? Yes X No Metal Photos, previous Inspections), if available: escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous Inspections), if available: Image: Stress and Stress are present.	DROLOG	Y						
imary indicators (minimum of one required; check all that apply) Secondary indicators (minimum of two required; check all that apply) Surface Water (A1) Salt Crust (B11) Secondary indicators (minimum of two required; check all that apply) Surface Water (A1) Salt Crust (B11) Surface Soil Cracks (B6) (High Water Table (A2) Aquatic Invertebrates (B13) Sparsely Vegetated Concave Surface (B8) (Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (C3) (where not tilled) Oxidized Rhizospheres on C(4) Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) X Saturation Visible on Aerial Imagery (C9) Innudation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X FAC-Neutral Test (D5) Water Table Present? Yes No Depth (inches): urface Water Present? Yes No Depth (inches): includes capillary fringe) Depth (inches): 12 Wetland Hydrology Present? Yes X escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous Inspections), if available: satistable: satistable	etland Hydr	ology Indicators:						
Sufface Water (A1)	rimon, londi			and v)			- ·	
Aquatic Invertebrates (B13)	innary indica	tors (minimum of one require	ed; check all that a				Secondary	Indicators (minimum of two required
C Saturation (A3)	Surface V	tors (minimum of one require Vater (A1)	ed; check all that a Sa	alt Crust (B11)			Secondary Surfac	Indicators (minimum of two required e Soil Cracks (B6)
Water Marks (B1)	Surface V	tors (minimum of one require Vater (A1) er Table (A2)	ed; check all that aj Sa Ao	alt Crust (B11) quatic Invertebrates ((B13)		Secondary Surfac Sparse	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8
Sediment Deposits (B2) Oxidized Rhizospheres along Living Roots (C3) (where tilled) Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) X Saturation Visible on Aerial Imagery (B7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X FAC-Neutral Test (D5) Frost-Heave Hummocks (D7)(LRR F) eld Observations: urface Water Present? Yes X No Depth (inches): 12 Wetland Hydrology Present? Yes X No Depth (inches): 12 Wetland Hydrology Present? Yes X No Depth (inches): includes capillary fringe) escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Surface V Surface V High Wate Saturation	tors (minimum of one require Vater (A1) er Table (A2) n (A3)	ed; check all that aj Sa Ad Hy	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo	(B13) r (C1)		Secondary Surfac Sparse Draina	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8 ge Patterns (B10)
Drift Deposits (B3) (where not tilled) Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) X Saturation Visible on Aerial Imagery (C9) Iron Deposits (B5) Thin Muck Surface (C7) X Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X FAC-Neutral Test (D5) Water-Stained Leaves (B9) Thin Muck Surface (C7) X Geomorphic Position (D2) eld Observations: Intrade Vater Present? Yes No X Depth (inches): 12 urface Water Present? Yes X No Depth (inches): 12 Wetland Hydrology Present? Yes X No aturation Present? Yes X No Depth (inches): 12 Wetland Hydrology Present? Yes X No escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: If available: If available: If available:	Surface V Surface V High Wate Saturation Water Ma	tors (minimum of one requin Vater (A1) er Table (A2) n (A3) rks (B1)	ed; check all that a; Sa Ac Hy Dr	alt Crust (B11) quatic Invertebrates (/drogen Sulfide Odo y-Season Water Tab	(B13) r (C1) ble (C2)		Secondary Surfac Sparse Draina Oxidiz	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C
Algal Mat or Crust (B4) Presence of Reduced Iron (C4) X Saturation Visible on Aerial Imagery (C9) Iron Deposits (B5) Thin Muck Surface (C7) X Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X FAC-Neutral Test (D5) Water-Stained Leaves (B9) Thin Muck Surface (C7) X Geomorphic Position (D2) eld Observations: Thin Muck Surface (C7) X FAC-Neutral Test (D5) urface Water Present? Yes X Depth (inches): 12 aturation Present? Yes X No Depth (inches): 12 aturation Present? Yes X No Depth (inches): 12 meludes capillary fringe) Escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Wetland Hydrology Present. Yes X No	Surface V Surface V High Wate Saturation Water Ma Sediment	tors (minimum of one requin Vater (A1) er Table (A2) n (A3) ırks (B1) Deposits (B2)	ed; check all that a Sa Ac Hy Dr O:	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo y-Season Water Tat xidized Rhizosphere	(B13) r (C1) ble (C2) s along Living	g Roots (C	Secondary Surfac Sparse Draina Oxidiz 3) (whe	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled)
Iron Deposits (B5) Thin Muck Surface (C7)X Geomorphic Position (D2)X FAC-Neutral Test (D5) Frost-Heave Hummocks (D7)(LRR F) eld Observations: No Depth (inches): atter Table Present? YesNo Depth (inches):	Surface V Surface V High Wate Saturation Water Ma Sediment Drift Depo	tors (minimum of one require Vater (A1) er Table (A2) n (A3) irks (B1) Deposits (B2) psits (B3)	ed; check all that a Sa Ac Dr Dr O: O: O: O: O: O: O: O: O: O: O: O: O:	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo ry-Season Water Tab xidized Rhizosphere: (where not tilled)	(B13) r (C1) ble (C2) s along Living) Roots (C	Secondary Surfac Sparse Draina Oxidiz 3) (whe Crayfis	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X FAC-Neutral Test (D5) Frost-Heave Hummocks (D7)(LRR F) eld Observations: Intervention of the second seco	Surface V Surface V High Wate Saturation Water Ma Sediment Drift Depo	tors (minimum of one require Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) osits (B3) or Crust (B4)	ed; check all that a Sa Aa Pi Di O O O Pr	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo ry-Season Water Tab xidized Rhizosphere: (where not tilled) resence of Reduced	(B13) r (C1) ble (C2) s along Living Iron (C4)	I Roots (C	3) Secondary Surfac Sparse Draina Oxidize (whe Crayfis X Satura	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9)
	Surface V Surface V Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo	tors (minimum of one requin Vater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) psits (B3) or Crust (B4) usits (B5)	ed; check all that a Sa Aa H! Di 0: 0: 0: Pr Th	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo ry-Season Water Tab kidized Rhizosphere: (where not tilled) resence of Reduced hin Muck Surface (C)	(B13) r (C1) ble (C2) s along Living Iron (C4) 7)) Roots (C	3) Secondary Sparse Draina (whe X Satura X Geome	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2)
eld Observations: Ves No X Depth (inches): 12 vater Table Present? Yes X No Depth (inches): 12 vaturation Present? Yes X No Depth (inches): 12 vaturation Present? Yes X No Depth (inches): 12 ncludes capillary fringe) Ves X No Depth (inches): 12 escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: valiable: valiable:	Surface V Surface V Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation	Vater (A1) er Table (A2) n (A3) rrks (B1) Deposits (B2) osits (B3) or Crust (B4) ssits (B5) n Visible on Aerial Imagery (ed; check all that a Si Ac Ht Di C O C O C O C O C O C O C O C O C O C	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo ry-Season Water Tab xidized Rhizosphere: (where not tilled) resence of Reduced hin Muck Surface (C ther (Explain in Rem	(B13) r (C1) ble (C2) s along Living Iron (C4) 7) arks)) Roots (C	3) Secondary Surfac Draina Oxidiza (whe X Satura X FAC-N	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2) eutral Test (D5)
urface Water Present? Yes No X Depth (inches):	Surface V Surface V Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta	Vater (A1) er Table (A2) n (A3) rtks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial Imagery (ained Leaves (B9)	ed; check all that a Si Ac Pi O: O: O: Tr B7)Of	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo ry-Season Water Tab xidized Rhizosphere: (where not tilled) resence of Reduced hin Muck Surface (C ther (Explain in Rem	(B13) r (C1) ble (C2) s along Living Iron (C4) 7) arks)	Roots (C	3) Secondary Surfac Sparse Draina Oxidiz (whe Crayfis X Satura X Geomu X FAC-N Frost-H	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2) eutral Test (D5) Heave Hummocks (D7)(LRR F)
Vater Table Present? Yes X No Depth (inches): 12 aturation Present? Yes X No Depth (inches): 12 mcludes capillary fringe) Wetland Hydrology Present? Yes X No escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Wetland Hydrology indicators are present.	Surface V Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta	Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery (ained Leaves (B9) utions:	ed; check all that a Si Ac H! Di O: O: 0: Pr Th B7) Of	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo ry-Season Water Tab xidized Rhizosphere: (where not tilled) resence of Reduced hin Muck Surface (C ther (Explain in Rem	(B13) r (C1) ble (C2) s along Living Iron (C4) 7) arks)	Roots (C	3) Secondary Sparse Draina Oxidize (whe X Satura X Geome X FAC-N Frost-F	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8) ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2) eutral Test (D5) Heave Hummocks (D7) (LRR F)
aturation Present? Yes X No Depth (inches): 12 Wetland Hydrology Present? Yes X No Sections includes capillary fringe) Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks: Hydrology indicators are present.	Surface V Surface V High Water Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta ield Observa urface Water	Vater (A1) er Table (A2) n (A3) rrks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery (ained Leaves (B9) 	ed; check all that a Si Ac H! Di O: O: Pr Tr B7) Of Of 	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo ry-Season Water Tab xidized Rhizosphere: (where not tilled) resence of Reduced hin Muck Surface (C ther (Explain in Rem	(B13) r (C1) ble (C2) s along Living Iron (C4) 7) arks)	9 Roots (C	3) Secondary Sparse Draina Oxidizi (whe X Satura X Geome X FAC-N Frost-F	Indicators (minimum of two required e Soil Cracks (B6) sly Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2) eutral Test (D5) Heave Hummocks (D7) (LRR F)
escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks: lydrology indicators are present.	Surface V Surface V Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta Sediment Iron Depo Inundation Water-Sta Surface Water Vater Table Po	Vater (A1) er Table (A2) n (A3) rrks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery (ained Leaves (B9) ttions: Present? Yes	ed; check all that a Si Ac H! Di Di Di O: (Pr B7) Di Di O: (Pr Tr B7) O: (X_No X_No X_No X_No	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo ry-Season Water Tab xidized Rhizosphere: (where not tilled) resence of Reduced hin Muck Surface (C ther (Explain in Rem	(B13) r (C1) ble (C2) s along Living Iron (C4) 7) arks) 12	9 Roots (C	3) Secondary Sparse Draina Oxidizi (whe X Satura X Geome X FAC-N Frost-F	Indicators (minimum of two required e Soil Cracks (B6) sly Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2) eutral Test (D5) Heave Hummocks (D7) (LRR F)
escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks: lydrology indicators are present.	Surface V Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta ield Observa urface Water /ater Table Pr aturation Pre	Vater (A1) er Table (A2) n (A3) rrks (B1) Deposits (B2) Deposits (B3) or Crust (B4) Dists (B5) n Visible on Aerial Imagery (ained Leaves (B9) tions: Present? Yes resent? Yes	ed; check all that a Si Au H! Di Di Di O: (Pi B7) B7) No X No X No X No C C C C C C C C C C C C C C C C C C	Appy) alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo ry-Season Water Tab xidized Rhizosphere: (where not tilled) resence of Reduced in Muck Surface (C: ther (Explain in Rem Depth (inches): Depth (inches):	(B13) r (C1) ble (C2) s along Living Iron (C4) 7) arks) <u>12</u> 12	Roots (C	Secondary Secondary Surfac Sparse Draina Oxidizion (whee) Crayfis X Satura X X FAC-N Frost-H	Indicators (minimum of two required e Soil Cracks (B6) sly Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2) eutral Test (D5) Heave Hummocks (D7) (LRR F)
emarks: Iydrology indicators are present.	Surface V Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta ield Observa urface Water vater Table Pr aturation Pre ncludes capil	Vater (A1) er Table (A2) n (A3) rrks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial Imagery (ained Leaves (B9) tions: Present? Yes resent? Yes sent? Yes lary fringe)	ed; check all that a	Appy) alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo ry-Season Water Tab kidized Rhizosphere: (where not tilled) resence of Reduced in Muck Surface (C3 ther (Explain in Rem Depth (inches): Depth (inches): Depth (inches):	(B13) r (C1) ble (C2) s along Living Iron (C4) 7) arks) <u>12</u> 12	Roots (C	Secondary Surfac Sparse Draina Oxidiz 3) (whe Crayfis X Satura X Geome X FAC-N Frost-ł	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2) eutral Test (D5) Heave Hummocks (D7) (LRR F)
emarks: lydrology indicators are present.	Surface V Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta ield Observa urface Water /ater Table Pr aturation Pre ncludes capil vescribe Reco	tors (minimum of one requir. Vater (A1) er Table (A2) n (A3) irks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial Imagery (ained Leaves (B9)	ed; check all that a	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo ry-Season Water Tab xidized Rhizosphere: (where not tilled) resence of Reduced nin Muck Surface (C) ther (Explain in Rem Depth (inches): Depth (inches): Depth (inches): Depth (inches):	(B13) r (C1) ble (C2) s along Living lron (C4) 7) arks) <u>12</u> 12 nspections), i	g Roots (C Wetlar	Secondary Surfac Sparse Draina Oxidiz 3) (whe Crayfis X Satura X Geome X FAC-N Frost-H	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2) eutral Test (D5) Heave Hummocks (D7) (LRR F)
lydrology indicators are present.	Surface V Surface V Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta Selid Observa urface Water Vater Table Pre aturation Pre ncludes capil escribe Reco	Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial Imagery (ained Leaves (B9) itions: Present? Yes sent? Yes sent? Yes lary fringe)	ed; check all that a	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo y-Season Water Tat kidized Rhizosphere: (where not tilled) resence of Reduced nin Muck Surface (C: ther (Explain in Rem Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches):	(B13) r (C1) ble (C2) s along Living Iron (C4) 7) arks) <u>12</u> 12 nspections), i	Roots (C Wetlar	Secondary Surfac Sparse Sparse Draina Oxidize (whe X Satura X Geome X FAC-N Frost-F	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2) eutral Test (D5) Heave Hummocks (D7) (LRR F)
	Surface V Surface V Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta Seld Observa urface Water Vater Table Pre aturation Pre ncludes capil escribe Reco	Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery (ained Leaves (B9) 	ed; check all that a	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo ry-Season Water Tab xidized Rhizosphere: (where not tilled) resence of Reduced nin Muck Surface (C: ther (Explain in Rem Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches):	(B13) r (C1) ble (C2) s along Living Iron (C4) 7) arks) <u>12</u> 12 nspections), i	Roots (C Wetlar	Secondary Surfac Sparse Sparse Draina Oxidiz (whe X Satura X Geome X FAC-N Frost-F	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2) eutral Test (D5) Heave Hummocks (D7) (LRR F)
	Surface V Surface V High Wate Saturation Water Ma Sediment Drift Depc Algal Mat Iron Depc Inundation Inundation race Water Table Pr aturation Pre cludes capil escribe Recco emarks: lydrology ind	tors (minimum of one requir. Vater (A1) er Table (A2) n (A3) irks (B1) : Deposits (B2) posits (B3) : or Crust (B4) posits (B5) n Visible on Aerial Imagery (ained Leaves (B9)	ed; check all that a	alt Crust (B11) quatic Invertebrates (ydrogen Sulfide Odo ry-Season Water Tat xidized Rhizosphere: (where not tilled) resence of Reduced nin Muck Surface (C) ther (Explain in Rem Depth (inches): Depth (inches): Depth (inches): Depth (inches):	(B13) r (C1) ble (C2) s along Living Iron (C4) 7) arks) <u>12</u> 12 nspections), i	Roots (C Wetlar	Secondary Surfac Sparse Draina Oxidiz 3) (whe X Satura X Geome X FAC-N Frost-f	Indicators (minimum of two required e Soil Cracks (B6) ely Vegetated Concave Surface (B8 ge Patterns (B10) ed Rhizospheres on Living Roots (C re tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2) eutral Test (D5) Heave Hummocks (D7) (LRR F)

Project/Site:	FM 741 EA		City/County:	к	aufman County	Sam	pling Date:	04/28/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Te	xas Sam	pling Point:	WDP33
Investigator(s):	CW and JK		Section, Town	ship, Range:		N/A	· · · <u>-</u>	
Landform (hillslope, terrace, etc)): Hillslope		Local relief (co	oncave, conve	ex, none):	convex	5	Slope (%): 1-2
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.68353	3751	Long: -96	.45063359	Datum	n: NAD 83
Soil Map Unit Name: Houston	Black clay, 1 to 3 percent slopes				NWI cla	ssification:	NA	
Are climatic / hydrologic conditio	ons on the site typical for this time	of year?	Yes	No X	(If no, explain in	Remarks.)		
Are Vegetation , Soil	, or Hydrology s	significantly	disturbed?	Are "I	Normal Circumstance	es" present?	Yes >	K No
Are Vegetation , Soil	, or Hydrology r	naturally pro	blematic?	(If nee	eded, explain any an	swers in Rema	arks.)	
SUMMARY OF FINDING	S - Attach site map show	ing sam	olina point	locations.	transects, imp	ortant featu	ires. etc.	
Hydrophytic Vegetation Prese	unt? Ves N						,	
Hydric Soil Present?	Yes X N		Is f	he Sampled	Aroa			
Wetland Hydrology Present?	Yes N		wit	hin a Wetland	d? Ve		No X	
wettand Hydrology Fresents	103 10	<u> </u>	WIL			·		_
Remarks: One of the three w conditions during t	retland indicators was present. The site investigations were wetter	is point is n than norma	ot located with al.	nin a wetland.	The Antecedent Pre	cipitation Tool	scored a 15,	indicating
VEGETATION - USe SCIE	ntific names of plants.							
			_		Dominance Test	worksheet:		
		Absolute	Dominant	Indicator	Number of Domin	hant Species		
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FA	ACW, or FAC:	() (A)
1				·	Total Number of I	Deminent		
2				·		Jominant		
3				·	Species Across A	All Strata:		(B)
4			Tatal Oau		Porcent of Domin	ant Species		
		0	= 10tal Cov	er	That Are OPL E		0	0 (A/P)
Sapling/Shrub Stratum (Pic	ot size:)				That Are OBL, FA	ACW, OF FAC.	0.	<u>о</u> (АВ)
1					Prevalence Inde	x worksheet:		
2					Total % Cov	ver of:	Multip	ly by:
3				·	OBL species	0	x 1 =	0
4					FACW species	0	x 2 =	0
J			= Total Cov		FAC species	5	x 3 =	15
Herb Stratum (Plot size:	30' radius)				FACU species	95	x 4 =	380
1 Cynodon dactylon		90	Yes	FACU	UPL species	0	x 5 =	0
2. Plantago rhodosperma		5	No	FACU	Column Totals:	100	(A)	395 (B)
3 Rumex crispus		5	No	FAC				
4.		- <u> </u>			Prevalence	Index = B/A =	3.9	95
5.								
6.					Hydrophytic Veg	getation indic	ators:	
7.						st for Hydroph	ytic vegetatio	n
8.					2 - Dominan	ce lest is >50	%	
9.					3 - Prevalen	ce index ≤3.0"	anal (Dravida	o un nontin a
10.					4 - Morphoid		ons' (Provide	supporting
		100	= Total Cov	er				xpiairi)
Woody Vine Stratum (Plot	size:)		_		Indiactors of by	Iria agil and wa	tland hydrolo	av must
1.					he present uples	nic son and we		igy must
2.					be present, unles		problematic.	
		0	= Total Cov	er	Hydrophytic			
% Bare Ground in Herb Stratu	um <u>0</u>				Vegetation Present?	Yes	No	х
Remarks: Hydrophytic vegetation is no	t present.				J			

SOIL	
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Depth	Matrix	ne deptit neet	Redox	Features		are ausei	ice of mulcators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 4/1	85	10YR 7/2	15	D	М	Clay	
							·	
. <u> </u>								
<u> </u>					·			
		·						
¹ Type: C=Cond	centration, D=Depletio	n, RM=Reduce	ed Matrix, CS=Cove	red or Coate	ed Sand Gra	ains.	² Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil In	dicators: (Applicable	e to all LRRs,	unless otherwise r	oted.)			Indicators fo	or Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gle	ed Marix (S	4)		1 cm	Muck (A9) (LRR I, J)
Histic Epi	pedon (A2)		Sandy Red	ox (S5)			Coas	t Prairie Redox (A16) (LRR F, G, H)
Black His	tic (A3)		Stripped M	atrix (S6)			Dark	Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Mue	cky Mineral (F1)		High	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)		Loamy Gle	yed Matrix (I	-2)		(LRR	t H outside of MLRA 72 & 73)
1 cm Muc	k (A9) (LRR F, G, H)	X Depleted N	latrix (F3)	0)		Redu	Iced Vertic (F18)
Depleted		ATT)	Redox Dar	K Surface (F	0) (E7)			Shallow Dark Surface (TE12)
Nick Dai	r Sullace (A12)		Depieteu L Redox Der	ressions (FS	(<i>Г1)</i> 8)		Very	r (Explain in Remarks)
2.5 cm M	icky Millerar (01)		High Plains	Depression	, (F16)		³ Indica	tors of hydrophytic vegetation and
5 cm Muc	kv Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LRF	R H)		wetlan	d hydrology must be present.
	.,	(,	(,		unless	disturbed or problematic.
Restrictive La	yer (if present):							
Туре:								
Depth (inc	hes):						Hydric Soil Pres	sent? Yes X No
Hyaric soil ind	licators are present.							
IYDROLOG	Y							
Wetland Hydr	ology Indicators:							
Primary Indica	tors (minimum of one	required; chec	k all that apply)				Secondary	y Indicators (minimum of two required)
	valer (AT)			BII) ortobratos (l	212)		Suria	ace Soli Clacks (BO)
Ngli Wat	$(\Delta 3)$		Hydrogen 9		(C1)		Opais	age Patterns (B10)
Water Ma	rks (B1)		Dry-Seaso	n Water Tabl	(C2)		Oxidi	ized Rhizospheres on Living Roots (C
Sediment	Deposits (B2)		Oxidized R	hizospheres	along Livin	a Roots (C	(wh	nere tilled)
Drift Depo	osits (B3)		(where n	ot tilled)		3	Cray	fish Burrows (C8)
Algal Mat	or Crust (B4)		Presence d	, of Reduced I	ron (C4)		Satur	ration Visible on Aerial Imagery (C9)
Iron Depo	sits (B5)		Thin Muck	Surface (C7)		Geor	norphic Position (D2)
Inundatio	n Visible on Aerial Ima	agery (B7)	Other (Exp	lain in Rema	ırks)		FAC-	Neutral Test (D5)
Water-Sta	ined Leaves (B9)						Frost	-Heave Hummocks (D7)(LRR F)
Field Observa	tions:							
Surface Water	Present? Ye	es <u>No</u>	X Depth (in	ches):				
Water Table Pi	resent? Ye	es <u>No</u> No	X Depth (in	ches):		M-41-	and the sheet same Days	
Saturation Pre	sent? Y	es No		cnes):		vvetia	na Hydrology Pres	sent? Yes NOX
(includes capit	ary mige)							
Describe Reco	rded Data (stream ga	uge, monitorin	g well, aerial photos	, previous in	spections),	if available	2:	
Remarks:								
Hydrology inc	licators are not preser	nt.						

Project/Site:	FM 741 EA		City/County:	к	aufman County	Samplin	g Date:	04/28/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Tex	as Samplin	g Point: _	WDP34
Investigator(s):	CW and JK	:	Section, Town	iship, Range:		N/A		
Landform (hillslope, terrad	ce, etc): Depression		Local relief (co	oncave, conve	ex, none):	concave	S	lope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.68462	2717	Long: -96.4	5233585	Datum	: NAD 83
Soil Map Unit Name:	louston Black clay, 1 to 3 percent slopes	S			NWI clas	sification: R4	SBC	
Are climatic / hydrologic c	conditions on the site typical for this time	of year?	Yes	No <u>X</u>	(If no, explain in F	Remarks.)		
Are Vegetation	, Soil, or Hydrologys	significantly	disturbed?	Are "N	Normal Circumstances	" present?	Yes X	No
Are Vegetation	, Soil, or Hydrologyr	naturally pro	blematic?	(If nee	eded, explain any answ	wers in Remarks	.)	
SUMMARY OF FIND	DINGS - Attach site map show	ing samp	oling point	locations,	transects, impoi	rtant feature	s, etc.	
Hydrophytic Vegetation	Present? Yes N	o X						
Hydric Soil Present?	Yes X N	0	lst	the Sampled	Area			
Wetland Hydrology Pre	esent? Yes N	o X	wit	hin a Wetland	d? Yes	No	х	
	·····							-
Remarks: One of the	three wetland indicators was present. The	his point is r	not located wit	thin a wetland	. The Antecedent Prec	ipitation Tool sc	ored a 15,	indicating
conditions of	during the site investigations were wette	r than norm	al.					
	scientific names of plants							
	scientine names of plants.							
					Dominance lest v	worksneet:		
		Absolute	Dominant	Indicator	Number of Domina	ant Species		(•)
Tree Stratum (Plot si	ze:)	% Cover	Species?	Status	That Are OBL, FAC	SW, or FAC:	1	(A)
1					T ()) ()			
2.					Total Number of Do	ominant	0	
3.					Species Across All	Strata:	3	(B)
4					Demonst of Demine	at On a size		
		0	_ = Total Cov	er	Percent of Domina	Int Species	00	
Sapling/Shrub Stratum	(Plot size:)				That Are OBL, FAC	SW, or FAC:	33.	<u>3</u> (A/B)
1					Prevalence Index	worksheet:		
2.					Total % Cove	r of	Multipl	v bv
3.					OBL species	20 x	1 =	20
4.					FACW species	<u> </u>	2 =	0
5					FAC species	10 x	3 =	30
		0	= Total Cov	er	FACU species	50 x	4 =	200
Herb Stratum (Plot si	ize: <u>30' radius</u>)			0.51	UPL species	40 x	5 =	200
1. Eleocharis palustris		20	Yes		Column Totals:	120 (A)	450 (B)
2. Houstonia micrantha	a	20	Yes	<u>NI</u>		(-/	(=)
3. Geranium dissectur	n	20	Yes		Prevalence I	ndex = B/A =	3.7	'5
4. Sorghum halepense	9	15	No	FACU				
5. Plantago rhodosper	ma	15	No	FACU	Hydrophytic Vege	etation Indicato	rs:	
6. Rumex crispus		10	NO	FAC	1 - Rapid Test	for Hydrophytic	Vegetation	n
7. Oxalis corniculata		10	No	FACU	2 - Dominance	e Test is >50%		
8. Ambrosia artemisiito	DIIA	10	NO	FACU	3 - Prevalence	e Index ≤3.0¹		
9					4 - Morpholog	ical Adaptations	¹ (Provide	supporting
10		400			Problematic H	lydrophytic Vege	tation ¹ (Ex	(plain)
Marshu Mirra Otratura		120	= 10tal Cov	er				
					¹ Indicators of hydri	c soil and wetla	nd hydrolog	gy must
l					be present, unless	disturbed or pro	blematic.	
Z								
0/ Dava Craund in Llark	Ctratum 0	0	= 10tal Cov	er	Hydrophytic			
% Bare Ground in Herc	o Stratum				Vegetation			
					Present?	Yes	No	X
Remarks [.]								
Hydrophytic vegetation	n is not present.							
, , ,	·							

SOIL	
------	--

Depth	Matrix			Redox	⊢eatures						
(inches)	Color (moist)	%	Color	(moist)	%	Type ¹	Loc ²	Texture		Remarks	;
0-18	10YR 3/1	90	10\	′R 7/2	10	D	М	Clay			
'Type: C=Conc	entration, D=Depletio	on, RM=Reduc	ed Matri	k, CS=Cover	ed or Coate	ed Sand Gr	ains.	²Lo	cation: PL=F	ore Lining, M=	Matrix.
Hydric Soil Inc	licators: (Applicabl	e to all LRRs,	unless (otherwise no	oted.)			Indicato	rs for Probl	ematic Hydrid	: Soils³:
Histosol (A	41)			Sandy Gleye	ed Marix (Se	4)			1 cm Muck (A9) (LRR I, 、	1)
Histic Epip	bedon (A2)			Sandy Redo	ox (S5)			'	Coast Prairie	e Redox (A16)	(LRR F, G, H)
Black Hist	ic (A3)			Stripped Ma	trix (S6)				Dark Surface	e (S7) (LRR (3)
Hydrogen	Sulfide (A4)			Loamy Much	ky Mineral (⊢1)			High Plains I	Jepressions (F	-16)
Stratified L	ayers (A5) (LRR F)	—	Loamy Gley	ed Matrix (F	-2)			LRR H outs	side of MLRA	/2 & 73)
1 cm Mucl	k (A9) (LRR F, G, H	l) (A.4.4.)	<u> </u>	Depleted Ma	atrix (F3)	2)					
Depleted I	Selow Dark Surface (A11)	<u>X</u>	Redox Dark	Surface (Fe	0) (FZ)			Ked Parent I	viaterial (1+2)	(TE40)
	Surrace (A12)			Depleted Da	IK SUITACE	(- /)		—	very Shallov	i Dark Sufface	(11-12)
Sandy Mu	cky Mineral (ST)				Depressions (F8	9) a (E16)		31,	Jiner (Expla	in in Remarks) notation and
2.5 CIT IVIU	w Post or Post (S2					S(FIO)		-11	tland bydro	logy must be r	
	ky Peal Of Peal (53)			(IVILKA / 2 0		с п)		W	elianu nyuro	od or problem	neseni,
Restrictive Lag	yer (if present):										
Type:											
Type.											
Depth (inch Remarks: Hydric soil ind	icators are present.							Hydric Soil	Present?	Yes <u>X</u>	No
Depth (inch Remarks: Hydric soil ind	icators are present.							Hydric Soil	Present?	Yes <u>X</u>	No
Depth (inch Remarks: Hydric soil ind	nes):							Hydric Soil	Present?	Yes X	No
Pype Depth (inch Remarks: Hydric soil ind YDROLOGY Wetland Hydro	nes): icators are present. / plogy Indicators:							Hydric Soil	Present?	Yes X	No
Pepth (inch Remarks: Hydric soil ind YDROLOGY Wetland Hydro Primary Indicat	nes): icators are present. / / plogy Indicators: ors (minimum of one	required; chec	k all that	apply)				Hydric Soil	Present?	Yes X	No
Pepth (inch Remarks: Hydric soil ind YDROLOGY Wetland Hydro Primary Indicat Surface W	nes): icators are present. / plogy Indicators: ors (minimum of one /ater (A1)	required; chec	k all that	apply) Salt Crust (E	311)			Hydric Soil	Present? ndary Indica Surface Soil	Yes X	No
Pepth (inch Remarks: Hydric soil ind YDROLOGY Wetland Hydro Primary Indicat Surface W High Wate	icators are present.	required; chec	k all that	apply) Salt Crust (E Aquatic Inve	311) ertebrates (E	313)		Hydric Soil	Present? ndary Indica Surface Soil Sparsely Ve	Yes X	No of two required) ve Surface (B8)
Pepth (inch Remarks: Hydric soil ind YDROLOGY Wetland Hydro Primary Indicat Surface W High Wate Saturation	icators are present.	required; chec	 k all that 	apply) Salt Crust (E Aquatic Inve Hydrogen S	311) ertebrates (E ulfide Odor	313) (C1)		Hydric Soil	Present? ndary Indica Surface Soil Sparsely Ve Drainage Pa	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10)	No of two required) ve Surface (B8)
Pepth (inch Remarks: Hydric soil ind YDROLOGY Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar	icators are present.	required; chec	<u>k all that</u>	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season	311) ertebrates (E ulfide Odor Water Table	313) (C1) e (C2)		Hydric Soil	Present? ndary Indica Surface Soil Sparsely Veg Drainage Pa Dxidized Rh	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) izospheres on	No of two required) ve Surface (B8) Living Roots (C3
Primary Indicat Surface W High Wate Saturation Water Mar Sediment	icators are present.	required; chec	k all that	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh	311) rtebrates (E ulfide Odor Water Table izospheres	313) (C1) e (C2) along Livir	ng Roots (C	Hydric Soil	Present? ndary Indica Surface Soil Sparsely Veg Drainage Pa Dxidized Rh (where till	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) izospheres on ed)	No of two required) ve Surface (B8) Living Roots (C3
Primary Indicat Saturation Water Mar Sediment Drift Deport	icators are present.	required; chec	k all that	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no	311) ertebrates (E ulfide Odor Water Table izospheres t tilled)	313) (C1) e (C2) along Livir	ng Roots (C	Hydric Soil	Present? Indary Indica Surface Soil Sparsely Veg Drainage Pa Dxidized Rh (where till Crayfish Bur	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) izospheres on ed) rows (C8)	No of two required) ve Surface (B8) Living Roots (C3
Primary Indicat Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat	icators are present.	required; chec	k all that	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of	B11) ertebrates (E ulfide Odor Water Table izospheres it tilled) Reduced Ir	313) (C1) e (C2) along Livir ron (C4)	ng Roots (C	Hydric Soil	Present? ndary Indica Surface Soil Sparsely Veg Drainage Pa Dxidized Rh (where till Crayfish Bur Saturation V	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) zospheres on ad) rows (C8) isible on Aeria	No of two required) ve Surface (B8) Living Roots (C3
Pepth (inch Remarks: Hydric soil ind YDROLOGY Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos	icators are present.	required; chec	k all that	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of Thin Muck S	B11) ertebrates (E ulfide Odor Water Table izospheres it tilled) Reduced Ir Surface (C7)	313) (C1) e (C2) along Livir ron (C4)	ng Roots (C	Hydric Soil	Present? ndary Indica Surface Soil Sparsely Ver Drainage Pa Dxidized Rh (where till Crayfish Bur Saturation V Geomorphic	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) zospheres on ed) rows (C8) isible on Aeria Position (D2)	No of two required) ve Surface (B8) Living Roots (C3
Primary Indicat Primary Indicat Surface W High Water Saturation Water Mar Sediment Drift Depo Algal Mat Inundation Water Oto	res): icators are present. // blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Im.	required; chec	<u>k all that</u>	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of Thin Muck S Other (Expla	311) ertebrates (E ulfide Odor Water Table izospheres at tilled) F Reduced Ir Surface (C7) ain in Rema	313) (C1) e (C2) along Livir ron (C4)) rks)	ng Roots (C	Hydric Soil	Present? ndary Indica Surface Soil Sparsely Veg Drainage Pa Dxidized Rh (where till Crayfish Bur Saturation V Geomorphic FAC-Neutral	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) zospheres on ed) rows (C8) isible on Aeria Position (D2) Test (D5)	No of two required) ve Surface (B8) Living Roots (C3 I Imagery (C9)
Perimary Indicat Primary Indicat VDROLOGY Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta	icators are present. plogy Indicators: ors (minimum of one /ater (A1) rr Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Im- ined Leaves (B9)	required; chec	<u>k all that</u>	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of Thin Muck S Other (Expla	311) ertebrates (E ulfide Odor Water Table izospheres it tilled) F Reduced Ir Surface (C7) ain in Rema	313) (C1) e (C2) along Livir ron (C4)) rks)	ng Roots (C	Hydric Soil	Present? ndary Indica Surface Soil Sparsely Ve Drainage Pa Drainage Pa Drainage Pa Crayfish Bur Crayfish Bur Saturation V Geomorphic FAC-Neutral Frost-Heave	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) izospheres on ed) rows (C8) isible on Aeria Position (D2) Test (D5) Hummocks (C	No of two required) ve Surface (B8) Living Roots (C3 I Imagery (C9)
Primary Indicat Primary Indicat Surface W High Water Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta Field Observat	icators are present. icators are present. f blogy Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Im- ined Leaves (B9) tions:	required; chec	k all that	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of Thin Muck S Other (Expla	311) rtebrates (E ulfide Odor Water Table izospheres t tilled) Reduced Ir Surface (C7) ain in Rema	313) (C1) e (C2) along Livir ron (C4)) rks)	ng Roots (C	Hydric Soil	Present? ndary Indica Surface Soil Sparsely Veg Drainage Pa Drainage Pa Oxidized Rh (where till Crayfish Bur Saturation V Geomorphic FAC-Neutral Frost-Heave	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) izospheres on ed) rows (C8) isible on Aeria Position (D2) Test (D5) Hummocks (E	No of two required) ve Surface (B8) Living Roots (C3 Himagery (C9) 07) (LRR F)
Primary Indicat Primary Indicat Surface W High Water Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depo: Inundation Water-Sta Field Observar Surface Water	icators are present. icators are present. f ology Indicators: ors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Im- ined Leaves (B9) tions: Present?	required; chec	k all that	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of Thin Muck S Other (Expla Depth (incl	311) ertebrates (E ulfide Odor Water Table izospheres t tilled) i Reduced Ir Surface (C7) ain in Rema hes):	313) (C1) e (C2) along Livir ron (C4)) rks)	ng Roots (C	Hydric Soil	Present? Indary Indica Surface Soil Sparsely Veg Drainage Pa Dxidized Rh (where till Crayfish Bur Saturation V Geomorphic FAC-Neutral Frost-Heave	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) zospheres on ad) rows (C8) isible on Aeria Position (D2) Test (D5) Hummocks (D	No of two required) ve Surface (B8) Living Roots (C3 Umagery (C9) 07) (LRR F)
The second seco	icators are present. icators are present. icators are present. icators (minimum of one icater (A1) ir Table (A2) i (A3) ir Table (A2) i (A3) i (B2) i (B4) i (B4)	required; chec agery (B7) 'es Nc 'es Nc	k all that	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of Thin Muck S Other (Expla Depth (incl Depth (incl	B11) ertebrates (E ulfide Odor Water Table izospheres it tilled) Reduced Ir Surface (C7) ain in Rema hes):	313) (C1) e (C2) along Livir ron (C4)) rks)	ng Roots (C	Hydric Soil	Present? Indary Indica Surface Soil Sparsely Veg Drainage Pa Dxidized Rh (where till Crayfish Bur Saturation V Geomorphic FAC-Neutral Frost-Heave	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) zospheres on ad) rows (C8) isible on Aeria Position (D2) Test (D5) Hummocks (D	No of two required) ve Surface (B8) Living Roots (C3 Hmagery (C9) 07) (LRR F)
Primary Indicat Primary Indicat Surface W High Water Mar Sediment Drift Depo Algal Mat Iron Depos Inundation Water-Sta Field Observar Surface Water Table Pre Saturation Pres	icators are present. icators are present. icators are present. icators are present. icators: ors (minimum of one /ater (A1) frable (A2) (A3) icks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) in Visible on Aerial Im- ined Leaves (B9) tions: Present? Sent? Yesent?	required; chec agery (B7) /es No /es No /es No	k all that	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of Thin Muck S Other (Expla Depth (incl Depth (incl Depth (incl Depth (incl	B11) ertebrates (E ulfide Odor Water Table izospheres t tilled) ^c Reduced Ir Surface (C7) ain in Rema hes): hes): hes):	313) (C1) e (C2) along Livir ron (C4)) rks)	ng Roots (C	Hydric Soil	Present? ndary Indica Surface Soil Sparsely Ver Drainage Pa Drainage Pa Drainage Pa Drainage Pa Crayfish Bur Saturation V Geomorphic FAC-Neutral Frost-Heave Present?	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) zospheres on ed) rows (C8) isible on Aeria Position (D2) Test (D5) Hummocks (D Yes	No of two required) ve Surface (B8) Living Roots (C3 I Imagery (C9) 07) (LRR F)
Primary Indicat Primary Indicat Surface W High Water Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depo: Inundation Water-Sta Field Observar Surface Water Water Table Pro Saturation Pres (includes capilla	res):	required; chec agery (B7) /es No /es No /es No	k all that	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of Thin Muck S Other (Expla	311) ertebrates (E ulfide Odor Water Table izospheres it tilled) Reduced Ir Surface (C7) ain in Rema hes): hes):	313) (C1) e (C2) along Livir ron (C4)) rks)	ng Roots (C	Hydric Soil	Present? Indary Indica Surface Soil Sparsely Ver Drainage Pa Dividized Rh (where till Crayfish Bur Saturation V Geomorphic FAC-Neutral Frost-Heave Present?	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) izospheres on ed) rows (C8) isible on Aeria Position (D2) Test (D5) Hummocks (D Yes	No of two required) ve Surface (B8) Living Roots (C3 I Imagery (C9) 07) (LRR F)
Pipe. Depth (incl Remarks: Hydric soil ind YDROLOGY Wetland Hydro Primary Indicat Surface W High Water Saturation Water Mar Sediment Drift Depo Iron Depo: Inundation Water-Sta Field Observar Surface Water Water Table Pros Saturation Press (includes capilla) Describe Record	icators are present. icators are present. icators are present. icators are present. icators: ors (minimum of one /ater (A1) ir Table (A2) (A3) iks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) or Visible on Aerial Im- ined Leaves (B9) itions: Present? Sent? yesent?	required; chec agery (B7) 'es Nc 'es Nc 'es Nc auge, monitorin	<u>k all that</u>	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of Thin Muck S Other (Expla Depth (incl Depth (incl Depth (incl Depth (incl erial photos,	311) ertebrates (E ulfide Odor Water Table izospheres t tilled) Reduced Ir Surface (C7) ain in Rema hes): hes): hes): previous in:	313) (C1) e (C2) along Livir ron (C4)) rks) spections),	ng Roots (C	Hydric Soil	Present? Indary Indica Surface Soil Sparsely Veg Drainage Pa Dxidized Rh (where till Crayfish Bur Saturation V Geomorphic FAC-Neutral Frost-Heave Present?	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) zospheres on ad) rows (C8) isible on Aeria Position (D2) Test (D5) Hummocks (D Yes	No of two required) ve Surface (B8) Living Roots (C3 I Imagery (C9) 07) (LRR F)
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Primary Indicat Primary Indicat Surface W High Water Saturation Water Mar Sediment Drift Depo Algal Mat 4 Iron Depo: Inundation Water Table Pri Saturation Pres Surface Water Field Observar Surface Water Cater Table Pri Saturation Pres Cincludes capilla Describe Recon Remarks: Hydrology indi	icators are present.	required; chec agery (B7) /es Nc /es Nc /es Nc auge, monitorin	<u>k all that</u>	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of Thin Muck S Other (Expla	311) ertebrates (E ulfide Odor Water Tabl izospheres it tilled) Reduced Ir Surface (C7) ain in Rema hes): hes): previous in:	313) (C1) e (C2) along Livir ron (C4)) rks) spections),	ng Roots (C	Hydric Soil	Present? ndary Indica Surface Soil Sparsely Veg Drainage Pa Dxidized Rh (where till Crayfish Bur Saturation V Geomorphic FAC-Neutral Frost-Heave Present?	Yes X tors (minimum Cracks (B6) getated Conca tterns (B10) zospheres on ed) rows (C8) isible on Aeria Position (D2) Test (D5) Hummocks (D Yes	No of two required) ve Surface (B8) Living Roots (C3 I Imagery (C9) D7) (LRR F) NoX
Primary Indicat Primary Indicat VDROLOGY Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment Drift Depo Algal Mat Iron Depo: Inundation Water-Sta Field Observar Surface Water Field Observar Saturation Press (includes capilla Describe Recon Remarks: Hydrology indi	icators are present.	required; chec agery (B7) fes Nc fes Nc auge, monitorin	<u>k all that</u>	apply) Salt Crust (E Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of Thin Muck S Other (Expla Depth (incl Depth (incl Depth (incl erial photos,	311) ertebrates (E ulfide Odor Water Table izospheres t tilled) Reduced Ir Surface (C7) ain in Rema hes): hes): previous in:	313) (C1) e (C2) along Livir ron (C4)) rks) spections),	ng Roots (C	Hydric Soil	Present? ndary Indica Surface Soil Sparsely Veg Drainage Pa Dxidized Rh (where till Crayfish Bur Saturation V Geomorphic FAC-Neutral Frost-Heave Present?	Yes X	No of two required) ve Surface (B8) Living Roots (C3 I Imagery (C9) D7) (LRR F) NoX

Project/Site:	FM 741 EA	(City/County:	ĸ	aufman County	Sam	pling Date:	04/28/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Tex:	as Sam	pling Point:	WDP35
Investigator(s):	CW and JK		Section, Town	ship, Range:		 N/A	<u> </u>	
Landform (hillslope, terrace,	etc): Depression	I	Local relief (co	ncave, conve	ex, none):	concave	S	Slope (%): 1-2
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6841	93	Long: -96.4	15118195	Datum	n: NAD 83
Soil Map Unit Name: Hous	ston Black clay, 1 to 3 percent slopes				NWI class	sification:	NA	
Are climatic / hydrologic cond	ditions on the site typical for this time	of year?	Yes	No X	(If no, explain in R	Remarks.)		
Are Vegetation , So	oil , or Hydrology s	significantly	disturbed?	Are "I	Normal Circumstances	" present?	Yes X	< No
Are Vegetation , So	oil , or Hydrology r	naturally pro	blematic?	(If ne	eded, explain any ansv	wers in Rema	arks.)	
SUMMARY OF FINDIN	IGS - Attach site map show	ing same	olina point	locations.	transects. impor	rtant featu	ires. etc.	
Hydrophytic Vegetation Br	recent? Vec V N			,				
Hydrio Soil Prosont?		°		ha Samplad	Ar00			
Wotland Hydrology Prosor	$1 \text{es} \underline{X}$ No	°	is t	hin a Wotlan	d2 Voo	v	No	
weiland Hydrology Preser		·	WIL		u: 165			-
Remarks: All of the three conditions duri	wetland indicators were present. Thi ng the site investigations were wetter	is point is lo r than norma	cated within a al.	wetland. The	Antecedent Precipitati	ion Tool scor.	ed a 15, indic	cating
VEGETATION - Use so	cientific names of plants.							
					Dominance Test v	worksheet:		
		Absolute	Dominant	Indicator	Number of Domina	ant Species		
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FAC	CW, or FAC:	1	(A)
1 2				·	Total Number of Dr	ominant		
3				·	Species Across All	l Strata	1	l (B)
<i>4</i>				·		- on one	·	(=)
т			= Total Cove		Percent of Domina	ant Species		
Sanling/Shrub Stratum	(Plot size:				That Are OBL, FAC	CW. or FAC:	100	0.0 (A/B)
1	/					- ,		
2					Prevalence Index	worksheet:		
3					Total % Cover	r of:	Multipl	ly by:
4				·	OBL species	95	x 1 =	95
5.			<u> </u>	·	FACW species	0	x 2 =	0
		0	= Total Cove	er	FAC species	5	x 3 =	15
Herb Stratum (Plot size:	30' radius)		_		FACU species	0	x 4 =	0
1. Eleocharis palustris		85	Yes	OBL	UPL species	0	x 5 =	0
2. Ludwigia peploides		10	No	OBL	Column Totals:	100	(A)	110 (B)
3. Rumex crispus		5	No	FAC				
4.					Prevalence Ir	ndex = B/A =	1.	.1
5.					Hydrophytic Voca	atation India	atore	
6.			_		Y 1 Papid Test	t for Hydroph	utic Vegetatio	ND
7.					X 2 - Dominance	• Test is >50'		11
8					X 3 - Prevalence	e Index <3 01	/0	
9					4 - Morpholog	vical Adaptati	ons¹ (Provide	supporting
10					Problematic H	lvdrophytic V	egetation ¹ (E:	xplain)
		100	= Total Cove	er		.) a. op) ao 1	ogotation (2)	(piani)
Woody Vine Stratum (P	lot size:)				¹ Indicators of hydric	ic soil and we	tland hydrolo	av must
1					be present unless	disturbed or	problematic	g)
2								
		0	= Total Cove	er	Hydrophytic			
% Bare Ground in Herb St	ratum 0				Vegetation			
					Present?	Yes 📝	X No _	
Remarks:	present							
nyuropriyuc vegetation is								

SOIL	
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Doptil	Maula	·	Redo	x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 5/1	90	10YR 6/3	10	C	М	Clay	
		· ·						
		· ·						
		· · · · · ·						
		· ·						
Type: C=Cond	centration, D=Depletio	n, RM=Reduc	ced Matrix, CS=Cov	ered or Coat	ted Sand Gra	ains.	² Loca	tion: PL=Pore Lining, M=Matrix.
lydric Soil In	dicators: (Applicable	to all LRRs,	, unless otherwise	noted.)			Indicators	for Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gle	yed Marix (S4)		1	cm Muck (A9) (LRR I, J)
Histic Epi	pedon (A2)		Sandy Re	dox (S5)			Co	bast Prairie Redox (A16) (LRR F, G, H)
Black His	tic (A3)		Stripped M	1atrix (S6)			Da	ark Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Mu	icky Mineral	(F1)		Hi	gh Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)		Loamy Gle	eyed Matrix	(F2)		(L	RR H outside of MLRA 72 & 73)
I cm wuc Doplotod	к (А9) (LKK F, G, П) Bolow Dark Surface (/	/ A 11)	<u>X</u> Depleted I	vialitix (F3)	E6)		Re	auced vertic (F18)
Depleted Thick Dar	k Surface (A12)	1 11)	Depleted 2	Dark Surface	F0) ⊇ (F7)			ry Shallow Dark Surface (TE12)
Sandy Mi	icky Mineral (S1)		Bedox De	pressions (F			0	her (Explain in Remarks)
2.5 cm Mi	ucky Peat or Peat (S2) (LRR G. H)	High Plain	s Depressio	ons (F16)		3Ind	icators of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LR	RH)		wetl	and hydrology must be present,
_	, , ,	. ,	,		,		unle	ess disturbed or problematic.
estrictive La	ver (if present):							
Type:	J ei (p. eee).							
J1= -								
Depth (incl emarks: Hydric soil inc	hes):		<u> </u>				Hydric Soil P	resent? Yes X No
Depth (incl Remarks: Hydric soil inc	hes):						Hydric Soil P	resent? Yes <u>X</u> No
Depth (incl Remarks: Hydric soil inc DROLOG	hes):						Hydric Soil P	resent? Yes <u>X</u> No
Depth (incl Remarks: Hydric soil inc (DROLOG) Vetland Hydr Primary Indica	hes): licators are present. / ology Indicators: tors (minimum of one	required: che	ck all that apply)				Hydric Soil P	resent? Yes <u>X</u> No
Depth (incl Remarks: Hydric soil incl ZDROLOG Vetland Hydr Primary Indica X Surface V	hes): licators are present. Y ology Indicators: tors (minimum of one Vater (A1)	required; che		(B11)			Hydric Soil P	resent? Yes X No
Depth (incl temarks: Hydric soil incl DROLOG Vetland Hydr trimary Indica X Surface V X High Wate	hes): licators are present. Y ology Indicators: tors (minimum of one Vater (A1) er Table (A2)	required; che	 <u>ck all that apply)</u> Salt Crust Aquatic In	(B11) vertebrates	(B13)		Hydric Soil P	resent? Yes X No lary Indicators (minimum of two required urface Soil Cracks (B6) parsely Vegetated Concave Surface (B8)
Depth (incl Remarks: Hydric soil incl DROLOG Vetland Hydr rrimary Indica X Surface V X High Wate X Saturatior	hes): licators are present. f ology Indicators: tors (minimum of one Vater (A1) er Table (A2) n (A3)	required; che	<u></u>	(B11) vertebrates Sulfide Odo	(B13) r (C1)		Hydric Soil P	resent? Yes X No lary Indicators (minimum of two required inface Soil Cracks (B6) parsely Vegetated Concave Surface (B8) ainage Patterns (B10)
Depth (incl temarks: Hydric soil inc DROLOG Vetland Hydr Vetland Hydr <u>Yetland Hydr</u> <u>X</u> Surface V <u>X</u> High Wate X Saturatior Water Ma	hes): licators are present. f ology Indicators: tors (minimum of one Vater (A1) er Table (A2) n (A3) rks (B1)	required; che	<u></u> <u>Salt Crust</u> Aquatic In Hydrogen Dry-Seaso	(B11) vertebrates Sulfide Odo in Water Tat	(B13) rr (C1) ble (C2)		Hydric Soil P	resent? Yes X No lary Indicators (minimum of two required inface Soil Cracks (B6) varsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C
Depth (incl Remarks: Hydric soil incl Zemarks: Hydric soil incl Zemarks: Hydric soil incl Zemarks: Vetland Hydr Yetland Hydr Yetland Hydr Yata Surface V X High Wate X Saturation Water Ma Sediment	hes): licators are present. f ology Indicators: tors (minimum of one Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2)	required; che	<u>ck all that apply)</u> <u>Salt Crust</u> <u>Aquatic In</u> <u>Hydrogen</u> <u>Dry-Seaso</u> <u>Oxidized F</u>	(B11) vertebrates Sulfide Odo in Water Tat Rhizosphere	(B13) r (C1) ble (C2) s along Livin	g Roots (C	Hydric Soil P	resent? Yes X No lary Indicators (minimum of two required inface Soil Cracks (B6) parsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C where tilled)
Depth (incl emarks: Hydric soil incl DROLOG Vetland Hydr Vetland Hydr Vetland Hydr K Surface V X High Wate X Saturatior Water Ma Sediment Drift Depo	hes): licators are present. f ology Indicators: tors (minimum of one Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3)	required; che	<u>ck all that apply)</u> Salt Crust Aquatic In Hydrogen Dry-Seaso Oxidized F (where n	(B11) vertebrates Sulfide Odo in Water Tab Rhizosphere 1ot tilled)	(B13) r (C1) ble (C2) s along Livin	g Roots (C	Hydric Soil P	resent? Yes X No lary Indicators (minimum of two required inface Soil Cracks (B6) barsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8)
Depth (incl temarks: Hydric soil incl DROLOG Vetland Hydr Vetland Hydr trimary Indica X Surface V X High Wate X Saturation Water Ma Sediment Drift Depo Algal Mat	hes): licators are present. Y ology Indicators: tors (minimum of one Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4)	required; che	<u>ck all that apply)</u> Salt Crust Aquatic In Hydrogen Dry-Seasc Oxidized F (where r Presence	(B11) vertebrates i Sulfide Odo on Water Tat Rhizosphere 1ot tilled) of Reduced	(B13) r (C1) ole (C2) s along Livin Iron (C4)	g Roots (C	Hydric Soil P	resent? Yes X No lary Indicators (minimum of two required inface Soil Cracks (B6) barsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) ituration Visible on Aerial Imagery (C9)
Depth (incl temarks: Hydric soil incl DROLOG Vetland Hydr Vetland Hydr trimary Indica X Surface V X High Wate X Saturation Water Ma Sediment Drift Depc Algal Mat Iron Depc	hes): licators are present. Y ology Indicators: tors (minimum of one Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) isits (B5)	required; che	<u>ck all that apply)</u> Salt Crust Aquatic In Hydrogen Dry-Seaso Oxidized F (where r Presence Thin Muck	(B11) vertebrates of Sulfide Odo on Water Tat Rhizosphere tot tilled) of Reduced Surface (C	(B13) r (C1) ble (C2) s along Livin Iron (C4) 7)	g Roots (C	Hydric Soil P	resent? Yes X No Analysis Yes X No Analysis Burrows (C8) semantic Solution (C2) where tilled anagery (C9) semorphic Position (D2)
Depth (incl temarks: Hydric soil inc DROLOG Vetland Hydr trimary Indica X Surface V X High Water X Saturatior Water Ma Sediment Drift Depc Algal Mat Iron Depc Inundation	hes): licators are present. f ology Indicators: tors (minimum of one Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) ssits (B5) n Visible on Aerial Ima	required; che gery (B7)	<u>ck all that apply)</u> Salt Crust Aquatic In Hydrogen Dry-Seaso Oxidized F (where n Presence Thin Muck Other (Exp	(B11) vertebrates of Sulfide Odo on Water Tab Rhizosphere not tilled) of Reduced Surface (C olain in Rem	(B13) r (C1) ble (C2) s along Livin Iron (C4) 7) iarks)	g Roots (C	Hydric Soil P	resent? Yes X No lary Indicators (minimum of two required inface Soil Cracks (B6) barsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) ecomorphic Position (D2) (C-Neutral Test (D5)
Depth (incl emarks: Hydric soil incl DROLOG Vetland Hydr <u>rimary Indica</u> <u>X</u> Surface V <u>X</u> High Wate <u>X</u> Saturation Water Ma <u>Sediment</u> Drift Depo Algal Mat Iron Depo Inundation Water-Sta	hes): licators are present. f ology Indicators: tors (minimum of one Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sists (B5) n Visible on Aerial Ima ined Leaves (B9)	required; che	<u>ck all that apply)</u> Salt Crust Aquatic In Hydrogen Dry-Seaso Oxidized F (where r Presence Thin Muck Other (Exp	(B11) vertebrates Sulfide Odo m Water Tat Rhizosphere not tilled) of Reduced Surface (C plain in Rem	(B13) or (C1) ole (C2) s along Livin Iron (C4) 7) arks)	g Roots (C	Hydric Soil P	resent? Yes X No lary Indicators (minimum of two required urface Soil Cracks (B6) parsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) kC-Neutral Test (D5) ost-Heave Hummocks (D7) (LRR F)
Depth (incl Temarks: Hydric soil incl DROLOG Vetland Hydr Trimary Indica X Surface V X High Wate X Saturation Water Ma Drift Depo Algal Mat Iron Depo Inundation Water-Sta ield Observa	hes): licators are present. f ology Indicators: tors (minimum of one Vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) usits (B5) h Visible on Aerial Ima ined Leaves (B9) ttions:	required; che gery (B7)	<u>ck all that apply)</u> Salt Crust Aquatic In Hydrogen Dry-Seasc Oxidized F (where r Presence Thin Muck Other (Exp	(B11) vertebrates i Sulfide Odo on Water Tat Rhizosphere tot tilled) of Reduced Surface (C plain in Rem	(B13) r (C1) ble (C2) s along Livin Iron (C4) 7) iarks)	g Roots (C	Hydric Soil P	A resent? Yes X No A reserve Yes X No A reserve Yes X No A reserve Yes A
Depth (inc) Remarks: Hydric soil inc TDROLOG TOROLOG Tormary Indica X Surface V X High Wate X Saturation Water Ma Sediment Drift Depc Algal Mat Iron Depc Inundation Water-Sta Surface Water	hes): licators are present. Y ology Indicators: tors (minimum of one Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye	 required; che gery (B7) 	ck all that apply)	(B11) vertebrates i Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced : Surface (C olain in Rem 	(B13) r (C1) ble (C2) s along Livin lron (C4) 7) arks) <u>1</u>	g Roots (C	Hydric Soil P	resent? Yes X No Anti- No No Anti- Iary Indicators (minimum of two required Inface Soil Cracks (B6) barsely Vegetated Concave Surface (B8) ainage Patterns (B10) (idized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) comorphic Position (D2) AC-Neutral Test (D5) ost-Heave Hummocks (D7) (LRR F)
Depth (inc) Remarks: Hydric soil inc	hes): licators are present. f ology Indicators: tors (minimum of one Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) ttions: Present? Ye	gery (B7)	ck all that apply)	(B11) vertebrates i Sulfide Odo in Water Tat Rhizosphere not tilled) of Reduced : Surface (C plain in Rem 	(B13) r (C1) ble (C2) s along Livin lron (C4) 7) arks) <u>1</u> 12	g Roots (C	Hydric Soil P	resent? Yes X No lary Indicators (minimum of two required urface Soil Cracks (B6) parsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) eomorphic Position (D2) kC-Neutral Test (D5) ost-Heave Hummocks (D7) (LRR F)
Depth (incl Remarks: Hydric soil inc DROLOG Vetland Hydr Primary Indica X Surface V X High Water X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta Surface Water Vater Table Pr Saturation Pre	hes): licators are present. fology Indicators: tors (minimum of one) Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) usits (B5) n Visible on Aerial Ima ined Leaves (B9) ttions: Present? Ye sent? Ye	gery (B7)	ck all that apply)	(B11) vertebrates Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced Surface (C olain in Rem iches): iches):	(B13) or (C1) ole (C2) s along Livin lron (C4) 7) iarks) <u>1</u> 12 12	g Roots (C	Second	resent? Yes X No
Depth (incl Remarks: Hydric soil incl Zemarks: Hydric soil incl Zemarks: Hydric soil incl Zemarks: Vetland Hydr Primary Indica X Surface V X High Wate X Surface V X High Wate X Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta Surface Water Vater Table Pr Saturation Pre- includes capill	hes):	gery (B7)	ck all that apply)	(B11) vertebrates of Sulfide Odo on Water Tat Rhizosphere tot tilled) of Reduced Surface (C plain in Rem iches): iches):	(B13) r (C1) ble (C2) s along Livin lron (C4) 7) arks) <u>1</u> <u>12</u> 12	g Roots (C	Hydric Soil P	resent? Yes X No lary Indicators (minimum of two required urface Soil Cracks (B6) barsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C where tilled) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) kC-Neutral Test (D5) ost-Heave Hummocks (D7) (LRR F) resent? Yes X No
Depth (incl emarks: lydric soil incl PROLOG Vetland Hydr rimary Indica Surface V Surface V Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta ield Observa urface Water /ater Table Pr aturation Pre- ncludes capill escribe Reco	hes):	gery (B7)	ck all that apply)	(B11) vertebrates i Sulfide Odo on Water Tat Rhizosphere tot tilled) of Reduced Surface (C blain in Rem iches): iches): iches): s, previous i	(B13) r (C1) ble (C2) s along Livin Iron (C4) 7) larks) <u>1</u> <u>12</u> 12 nspections),	g Roots (C	Hydric Soil P	resent? Yes X No
Depth (incl emarks: lydric soil incl PROLOG /etland Hydr rimary Indica Surface V Surface V High Water Sediment Sediment Sediment Iron Depc Algal Mat Iron Depc Inundation Water-Sta ield Observa urface Water /ater Table Pr aturation Pre- ncludes capill escribe Reco	hes): licators are present. f ology Indicators: tors (minimum of one Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) or Crust (B4) sits (B5) n Visible on Aerial Ima ined Leaves (B9) ttions: Present? Ye sent? Ye sent? Ye lary fringe) rded Data (stream gat	gery (B7)	ck all that apply)	(B11) vertebrates / Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced : Surface (C olain in Rem inches): inches): inches): s, previous i	(B13) r (C1) ble (C2) s along Livin Iron (C4) 7) arks) <u>1</u> 12 12 nspections),	g Roots (C	Hydric Soil P	resent? Yes X No
Depth (incl emarks: lydric soil incl PROLOG Vetland Hydr rimary Indica Surface V Surface V Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta ield Observa urface Water later Table Pr aturation Pre- ncludes capill escribe Reco	hes):	gery (B7)	ck all that apply)	(B11) vertebrates i Sulfide Odo on Water Tat Rhizosphere not tilled) of Reduced : Surface (C blain in Rem inches): inches): s, previous i	(B13) or (C1) ole (C2) s along Livin Iron (C4) 7) iarks) 1 12 12 nspections),	g Roots (C	Hydric Soil P	resent? Yes X No

Project/Site:	FM 7	741 EA		City/County:	ŀ	Kaufman County	ξ	Sampling Date:	04/28/2022
Applicant/Owner:		Texas Departr	ment of Transpo	ortation		State: T	exas §	Sampling Point:	WDP36
Investigator(s):	CV	V and JK	•	Section, Towr	ship, Range:			N/A	
Landform (hillslope, terra	ce, etc):	Depressior	<u>ו</u>	Local relief (c	oncave, conve	ex, none):	concav	/e	Slope (%): 1-2
Subregion (LRR):	LRR J MI	LRA 86A	Lat:	32.6830	4608	Long: -96	6.44924434	Datur	n: NAD 83
Soil Map Unit Name: F	louston Black clay	, 1 to 3 percent sl	opes			NWI cl	lassification	: NATh	
Are climatic / hydrologic o	conditions on the s	site typical for this	time of year?	Yes	No X	(If no, explain i	n Remarks.	.)	
Are Vegetation	, Soil , c	or Hydrology	significantly	disturbed?	Are "	Normal Circumstanc	es" present	t? Yes	X No
Are Vegetation	, Soil , c	or Hydrology	naturally pr	oblematic?	(If ne	eded, explain any ar	nswers in R	emarks.)	
SUMMARY OF FIN	DINGS - Attac	h site map sh	nowing sam	pling point	locations	, transects, imp	ortant fe	eatures, etc.	
Hydrophytic Vegetation	n Present?	Yes X	No			•		•	
Hydric Soil Present?		Yes X	No	- si	the Sampled	Δrea			
Wetland Hydrology Pre	esent?	Yes X	No		thin a Wetlan	d? Ye	≥s X	No	
				-			<u> </u>		_
Remarks: All of the th	ree wetland indica	ators were present	t. This point is lo	ocated within a	wetland. The	Antecedent Precipit	tation Tool	scored a 15, indi	cating
Conditions		esugations were w		ai.					
VEGETATION - Use	e scientific na	mes of plants	5.						
		•				Dominance Tes	st workshe	et:	
			Absolute	Dominant	Indicator	Number of Dom	inant Speci	es	
Tree Stratum (Plot s	izo.)		Species?	Status	That Are OBL F	ACW or F/	4C·	2 (A)
)	<u>/// Cover</u>	opecies:	Status	matrio obe, i	, 1011, 0117		(//)
2						Total Number of	Dominant		
3						Species Across	All Strata:		2 (B)
4									(-)
			0	= Total Cov		Percent of Domi	inant Specie	es	
Sapling/Shrub Stratum	(Plot size [.])				That Are OBL. F	ACW. or F/	AC: 10	0.0 (A/B)
1	(11010120.	/				,	- , -		
2.			·			Prevalence Ind	ex worksh	eet:	
3.			·			Total % Co	over of:	Multip	bly by:
4.			·			OBL species	70	x 1 =	70
5.						FACW species	0	x 2 =	0
			0	= Total Cov	er	FAC species	50	x 3 =	150
Herb Stratum (Plot s	ize: 30' radiu	s)				FACU species	0	x 4 =	0
1. Eleocharis palustris			70	Yes	OBL	UPL species	0	x 5 =	0
2. Phyla fruticosa			40	Yes	FAC	Column Totals:	120	(A)	220 (B)
3. Rumex crispus			10	No	FAC				
4.						Prevalenc	e Index = B	B/A = <u>1.</u>	83
5.						Hydrophytic Ve	enetation Ir	ndicators:	
6.						1 - Rapid Te	est for Hvdr	ophytic Vegetatio	on
7			·			X 2 - Domina	nce Test is	>50%	
8						X 3 - Prevaler	nce Index ≤	3.0 ¹	
9						4 - Morphol	logical Adar	ptations ¹ (Provide	e supporting
10						Problematio	c Hydrophy	tic Vegetation1 (E	Explain)
			120	= Total Cov	er			C (. ,
Woody Vine Stratum	(Plot size:)				¹ Indicators of hy	dric soil and	d wetland hydrold	ogy must
1						be present, unle	ess disturbe	d or problematic.	
2									
			0	_ = Total Cov	er	Hydrophytic			
% Bare Ground in Her	b Stratum	0				Vegetation			
						Present?	Yes	<u> X No </u>	
Demendent									
Remarks: Hydrophytic vegetation	n is present								

SO	IL	
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Inchesity Color (molat) % Type Loc Technice Remarks 0.18 10YR 5Y1 90 10YR 38 10 C PL Clay Clay 0.18 10YR 5Y1 90 10YR 38 10 C PL Clay	Depth	Matrix		Redox	Features				
0-18 10YR 5/1 00 10YR 3/8 10 C PL Clay 0-18 10YR 5/1 00 10YR 3/8 10 C PL Clay 0-18 10YR 5/1 00 10YR 3/8 10 C PL Clay 0-18 10 C PL Clay 10 Clay 10 0-16 10 <	(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
ge: C=Concentration. D=Depletion. RM=Reduced Matrix. CS=Covered or Coaled Sand Grains. "Location: (PL=Pare Lining. M=Matrix. rdrc Soll indicators: (Applicable to all LRRs. unlies otherwise noted.) Indicators for Problematic Hydric Solls": Hister Cipcion (A2) Sandy Glayed Matrix (S4) Indicators for Problematic Hydric Solls": Hister Cipcion (A2) Sandy Clayed Matrix (S4) Indicators for Problematic Hydric Solls": Hister Cipcion (A2) Sandy Redox (S5) Caser Praine Redox (A16) (LRR F, G, H) Degleted Datws (S6) Learny Glaged Matrix (F2) High Planin Depressions (F16) Degleted Datws Mutrix (Mineral (F1)) Redox Dath Surface (F7) Hydrogen Sufface (A12) Thick Dark Surface (X1) Redox Depressions (F16) Onter Cipcipin In Remarks. Sandy Mucky Mineral (S1) Redox Dath Surface (F7) Wry Shallow Dath Surface (T12) Sandy Mucky Mineral (S1) Redox Dath Surface (F7) Wry Shallow Dath Surface (T12) Sandy Mucky Mineral (S1) Redox Dath Surface (F7) Wry Shallow Dath Surface (T12) There: Mucky Peat or Paat (S2) (LRR G, H) Hydro Batter (F18) Statute (F18) Sandrace Matrix (A1) Satutace Value (Matrix (F2) August (Matrix (F2) Satutace Value (Matrix (F2) Surface Value (A2) <t< td=""><td>0-18</td><td>10YR 5/1</td><td>90</td><td>10YR 3/6</td><td>10</td><td>C</td><td>PL</td><td>Clay</td><td></td></t<>	0-18	10YR 5/1	90	10YR 3/6	10	C	PL	Clay	
gen: C=Ccncentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coarded Sand Grains. *Location: PL=Pare Lining, M=Matrix. ric Soil Indicators: (Applicable to all LRR, unless ofterwise noted.) Indicators for Problematic Hydric Soils*. risboot (A1)					·	·			
ype: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. *Locator: PL=Pore Lining, M=Matrix. ype: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. *Locator: PL=Pore Lining, M=Matrix. yhdrog Sulfide (A)						·		·	
ge: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Locaton: PL=Pore Lining, M=Matrix. rdr C Sol indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solis*: Histos (N1) Sandy Redox (S5) Histos (N2) Simped Matrix (S2) Straffed Layser (S4) Loary Mudcy Mineral (F1) Hydrogen Suffice (A4) Loary Mudcy Mineral (F1) Depleted Below Dark Surface (A1) Redox Dark Surface (F8) Tinck Dark Surface (A1) Redox Dark Surface (F6) Tinck Dark Surface (A1) Redox Dark Surface (F6) Sort Mudcy Mineral (F1) Redox Dark Surface (F6) Sort Mudcy Paet or Peat (S2) (LRR 6, H) Mineral (F1) Sort Mudcy Peat or Peat (S2) (LRR 6, H) Mineral (F1) Sort Mudcy Peat or Peat (S2) (LRR 7, H) Mineral (F1) Depleted Dark Surface (F8) Tridicators of hydrophytic wegletian and wetland hydrology must be present. Sort Mudcy Peat or Peat (S2) (LRR 7, H) Mineral (F1) Depth indicators are present. Mineral (F1) Sort Mudcy Mineral (F1) Sort Mudcy Mineral (F1) Sort Mudcy Paet or Peat (S2) (LRR 7, H) Mineral (F1) Sort Mudcy Peat or Peat (S2) (LRR 7, H) Mineral (F1)					·	·			
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, C5=Covered or Coaled Sand Grains. *Locator: PL=Pore Lining, M=Matrix. ype: C=Concentration, D=Depletion, RM=Reduced Matrix, C5=Covered or Coaled Sand Grains. *Idocator: PL=Pore Lining, M=Matrix. yhisto: Epipedon (X2)					·				
get: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coalled Sand Grains. *Locator: PL=Pore Lining, M=Matrix. rdir: Soil Indicators: (Applicable to all LRRe, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Histicse (IA1)						·		·	
pp:: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix, rdic Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators (Applicable to all LRRs, unless otherwise noted.) Indicators (Applicable to all LRRs, unless otherwise noted.) Histic Epipedin (A2) Sandy Redo, (S5) 1 cm Muck (A9) (LRR F, G, H) Strained Layers (A5) (LRR F, H) Coarny Mucky Mineral (F1) Depleted Matrix (F2) Tom Muck (A9) (LRR F, G, H) Coarny Mucky Mineral (F1) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Redox Depressions (F16) Sandy Mucky (Past or Peet (S2) (LRR G, H) High Plains Depressions (F16) Meta Abydrology must be present. Strictive Layer (If present): Type: Depleted Matrix (F3) Present Attria (T72) Depleted Matrix (S1) Sand Y Redo (S1) Secondary Indicators (minimum of two requires disturbed or problematic. Strictive Layer (If present): Type: Mydro Soil Present? Yes					·	·		·	
rdric Soil Indicators : (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: 1 cm Muck (A) LRR F, G, H Bisch (Field) Stradped Matrix (S6) Stradped Matrix (S6) Stradped Matrix (S7) Coast Praine Reaction (A1) Damy Mucky Mineral (F1) Damy Mucky Mineral (F2) Coast Praine Reaction (F16) High Plans Depresions (F16) High Plans Depresions (F16) Redox Darks Surface (F6) Straduce All (F12) Depleted Dark Surface (F6) Stradius Plans Surface (A11) Depleted Dark Surface (F7) Stradius Mineral (S1) Depleted Dark Surface (F6) Straduce All watrix (F12) Depleted Dark Surface (F12) Straduce Vest or Peat (S2) (LRR F, H) High Plans Depressions (F16) (MLRA 72 & 73 of LRR H) High Plans Depressions (F16) Mucky Peat or Peat (S2) (LRR F, H) High Plans Depressions (F16) Mucky Peat or Peat (S2) (LRR F, H) High Plans Depressions (F16) Mucky Peat or Peat (S2) (LRR F, H) High Plans Depressions (F16) Mucky Peat or Peat (S2) (LRR F, H) High Plans Depressions (F16) Mucky Peat or Peat (S2) (LRR F, H) High Plans Depressions (F16) Straduce Matrix (F12) Straduce Matrix (F12) Straduce Matrix (F12) Straduce Matrix (F12) Straduce Matrix	ype: C=Con	centration, D=Depletio	n, RM=Redu	ced Matrix, CS=Cove	red or Coate	ed Sand Gra	ains.	²Locati	on: PL=Pore Lining, M=Matrix.
Histex Epipedon (A2) Sandy Cleyed Mark (S4) I cm Muck (A9) CRR F, J, J Histex Epipedon (A2) Sandy Redox (S5) Coast Pairie Redox (A16) Coast Pairie Redox (A16) CRR F, G, H Black Histe (A3) Loamy Mucky Mineral (F1) High Plains Depressions (F16) High Plains Depressions (F16) Red Pairie Redox (A16) Red Pairie Redox (A16) CRR F, G, H Oppleted Black (A12) Depleted Mark (F2) Red Variate (A12) Red Variate (A12) Red Variate (A12) Red Variate (A12) Red Variate (A17) Red Variate (A17) Red Variate (A17) Red Variate (A17) Very Shallow Dark Surface (T12) User Shall Miderial (T2) User S	dric Soil In	dicators: (Applicable	to all LRRs	, unless otherwise r	oted.)			Indicators	for Problematic Hydric Soils ³ :
Histic Epipedon (A2)	Histosol ((A1)		Sandy Gley	ved Marix (S	64)		1 ci	m Muck (A9) (LRR I, J)
Bitsch Hstic (A3)	Histic Epi	ipedon (A2)		Sandy Red	ox (S5)			Coa	ast Prairie Redox (A16) (LRR F, G, H)
Hydrogen Sulfide (A4)	Black His	tic (A3)		Stripped M	atrix (S6)			Dar	k Surface (S7) (LRR G)
Straffied Layers (A5) (LRR F) Lamy Gleyed Matrix (F2) (LRR + nutside of MLRA 72 & 73) 1 orn Muck (A9) (LRR F, C, H) X Depleted Matrix (F2)	Hydroger	n Sulfide (A4)		Loamy Muc	ky Mineral	(F1)		Hig	h Plains Depressions (F16)
1 cm Muck (A9) (LRR 5, 6, H)	Stratified	Layers (A5) (LRR F)		Loamy Gle	yed Matrix (F2)		(LR	R H outside of MLRA 72 & 73)
Depleted Below Dark Surface (A11)	1 cm Muc	ck (A9) (LRR F, G, H))	X Depleted N	latrix (F3)			Rec	duced Vertic (F18)
Thick Dark Surface (R12)	_ Depleted	Below Dark Surface (A	411)	Redox Dar	< Surface (F	6)		Rec	d Parent Material (TF2)
Sardy Mucky Mineral (S1)	_ Thick Dar	rk Surface (A12)		Depleted D	ark Surface	(F7)		Ver	y Shallow Dark Surface (TF12)
2.5 cm Mucky Peat or Peat (S2) (LRR 6, H) High Plans Depressions (F16) "indicators of hydrophytic vegetation and unless disturbed or problematic. 5 cm Mucky Peat or Peat (S3) (LRR F) (MLRA 72 & 73 of LRR H) welfand hydrology must be present, unless disturbed or problematic. strictive Layer (if present):	_ Sandy Mi	ucky Mineral (S1)		Redox Dep	ressions (F	8)		Oth	er (Explain in Remarks)
_ b cm Mucky Peat of Peat (S3) (LRK F) (MLKA 72 & 73 of LRK H) wetland hydrology must be present, unless disturbed or problematic. strictive Layer (if present): Type: Depth (inches): Type: Depth (inches): Type: Depth (inches): Brandard Hydrology Indicators are present. PROLOGY etiand Hydrology Indicators are present. PROLOGY etiand Hydrology Indicators (minimum of one required; check all that apply) Surface Water (A1)Salt Crust (B11)Sparsely Vegetated Concave Surface (B8 Surface Water (A1)Salt Crust (B11)Sparsely Vegetated Concave Surface (B8 Surface Soil Cracks (B6)Sparsely Vegetated Concave Surface (B8 Surface Soil Cracks (B1)Dry.Season Water Table (C2)Ovidized Rhizospheres ano Living Roots (C3)Ovidized Rhizospheres ano Living Roots (C3)Ovidized Rhizospheres and Living Roots (C4)Saturation Visible on Aerial Imagery (B7)Other not tilled)	_ 2.5 cm M	ucky Peat or Peat (S2)	(LRR G, H)	High Plains	Depression	ns (F16)		*Indic	cators of hydrophytic vegetation and
Satisfield of prodefination. Type: Depth (inches):		cky Peat of Peat (53)	LKK F)	(MLRA /2	& / 3 OF LRI	К Н)		wetia	nd hydrology must be present,
bestrictive Layer (ir present):									
Type: Hydric Soil Present? Yes X No marks: gydric soil indicators are present. <		ayer (if present):							
Depth (inches):	Type:								
Bernarks: By Control State		hae).						Hydric Soil Pre	sent? Ves X No
Choice of Test Hydrology Indicators: imary Indicators (minimum of one required; check all that apply) Surface Water (A1)	emarks: Hydric soil ind	dicators are present.						Hydric Soil Pre	esent? Yes <u>X</u> No
Build region by indicators. Secondary Indicators. imary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of two required; final apply) Surface Water (A1) Salt Crust (B11) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Invertebrates (B13) Sparsely Vegetated Concave Surface (B8) Saturation (A3) Hydrogen Sulfide Odor (C1) X Drainage Patterns (B10) Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (C3) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B2) Oxidized Rhizospheres of Reduced Iron (C4) X Crayfish Burrows (C8) Algal Mar Crust (B4) Presence of Reduced Iron (C4) X Saturation Visible on Aerial Imagery (C9) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X FAC-Neutral Test (D5) Water-Stained Leaves (B9) Thin Muck Surface (C7) X Geomorphic Position (D2) Inundation Present? Yes No X Depth (inches): Frost-Heave Hummocks (D7) (LRR F) etcludes capillary fringe) No X Depth (inches): Wetland Hydrology Present? Yes No escribe Recorded Data (stream gauge, monitor	emarks: lydric soil ind	dicators are present.						Hydric Soil Pre	esent? Yes <u>X</u> No
Surface Water (A1) Salt Crust (B11) Surface Vater (A1) Surface Vater (A1) Surface (A1) Surfa	Deptil (inc emarks: ydric soil inc DROLOG	dicators are present. Y						Hydric Soil Pre	esent? Yes X No
Solid Order (ST)	Depth (inc emarks: ydric soil inc DROLOG etland Hydr	dicators are present. Y rology Indicators:						Hydric Soil Pre	esent? Yes X No
Instruction (A2) Addate inforteended S(D) Implementation (A2) Implementation (A2) Saturation (A3) Hydrogen Sulfide Odor (C1) X Drainage Patterns (B10) Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) (where not tilled) X Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) X Saturation Visible on Aerial Imagery (C9) Inondation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X Crayfish Burrows (C8) Water-Stained Leaves (B9) Thin Muck Surface (C7) X Geomorphic Position (D2) Indictor Present? Yes No X Depth (inches): Inface Water Present? Yes No X Depth (inches): Includes capillary fringe) No X Depth (inches): Methand Hydrology Present? Yes No escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Methand Hydrology indicators are present. Methand Hydrology indicators are present.	DROLOG DROLOG	dicators are present. Y rology Indicators: ttors (minimum of one i	equired; che		D 111			Hydric Soil Pro	ary Indicators (minimum of two required
Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Oxidized Rhizospheres along Living Roots (C3) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) (where not tilled) X Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) X Saturation Visible on Aerial Imagery (C9) Iron Deposits (B5) Thin Muck Surface (C7) X Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X FAC-Neutral Test (D5) Water Table Present? Yes No X Depth (inches):	bepti (inc emarks: lydric soil inc DROLOG /etland Hydr rimary Indica Surface V High Wat	ticators are present. Y rology Indicators: ttors (minimum of one i Water (A1) er Table (A2)	required; che	<u>:ck all that apply)</u> Salt Crust (B11)			Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6)
Index matrix (b)?	Depth (inc emarks: lydric soil ind DROLOG /etland Hydr rimary Indica Surface V High Wat Saturatio	thes): dicators are present. Y rology Indicators: ntors (minimum of one i Nater (A1) er Table (A2) n (A3)	required; che	<u>:ck all that apply)</u> Salt Crust (Aquatic Inv	B11) ertebrates (B13)		Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10)
Ordificed versions (E2)	DROLOG DROLOG /etland Hydr rimary Indica Surface V High Wat Saturation Water Ma	thes): dicators are present. Y rology Indicators: ttors (minimum of one in Nater (A1) er Table (A2) n (A3) arks (B1)	required; che	<u>:ck all that apply)</u> Salt Crust (Aquatic Inv Dry Sasson	B11) ertebrates (Sulfide Odor	B13) • (C1)		Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizosphares on Living Roots (C
Algal Mat or Crust (B4) Presence of Reduced Iron (C4) X Saturation Visible on Aerial Imagery (C9) Iron Deposits (B5) Thin Muck Surface (C7) X Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X FAC-Neutral Test (D5) Water-Stained Leaves (B9) Thin Muck Surface (C7) X Geomorphic Position (D2) eld Observations: Frost-Heave Hummocks (D7)(LRR F) urface Water Present? Yes No X Depth (inches): aturation Present? Yes No X Depth (inches): aturation Present? Yes No X Depth (inches): icludes capillary fringe) Wetland Hydrology Present? Yes X No escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Image: stream second se	DEptil (Inc emarks: Hydric soil inc Metland Hydr rimary Indica Surface V High Wat Saturation Water Ma Sediment	thes): dicators are present. Y rology Indicators: htors (minimum of one i Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2)		<u>:ck all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Season Ovidized B	B11) ertebrates (Sulfide Odor n Water Tab	B13) · (C1) le (C2)	in Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C
Iron Deposits (B5)	DEptil (inc emarks: Hydric soil inc Hydric soil inc Metland Hydr imary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo	dicators are present. Y rology Indicators: ttors (minimum of one I Vater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3)	required; che	:ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R	B11) ertebrates (Sulfide Odor n Water Tab hizospheres	B13) ∙ (C1) le (C2) s along Livin	g Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled)
Invit det Control (DC) Invit det Control (DC) Invit det Control (DC) <td>DEput (inc emarks: lydric soil inc inc fetland Hydr rimary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat</td> <td>Arks (B1) to posits (B2) osits (B3) to recrupt (B4) to recrupt (B4) to recrupt (B4)</td> <td>required; che</td> <td> :ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Season Oxidized R (where n Presence c </td> <td>B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) f Reduced I</td> <td>B13) • (C1) le (C2) s along Livin</td> <td>g Roots (C</td> <td>Hydric Soil Pro</td> <td>ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)</td>	DEput (inc emarks: lydric soil inc inc fetland Hydr rimary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat	Arks (B1) to posits (B2) osits (B3) to recrupt (B4) to recrupt (B4) to recrupt (B4)	required; che	 :ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Season Oxidized R (where n Presence c 	B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) f Reduced I	B13) • (C1) le (C2) s along Livin	g Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
	emarks: Hydric soil ind PROLOG Vetland Hydr rimary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depr Algal Mat Iron Depo	Arron Strand Str	required; che	:ck all that apply) Salt Crust (B11) ertebrates (Sulfide Odor h Water Tab hizospheres ot tilled) f Reduced I Surface (C7	B13) • (C1) le (C2) 3 along Livin (ron (C4)	g Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2)
eld Observations:	DROLOG etland Hydr imary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio	dicators are present. Y rology Indicators: ators (minimum of one in Water (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) n Visible on Aerial Ima	required; che	 <u>eck all that apply</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R (where no presence of Thin Muck Other (Explanation) 	B11) ertebrates (Sulfide Odor h Water Tab hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema	B13) · (C1) le (C2) ₃ along Livin /ron (C4) /) arks)	g Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots ((where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) 2-Neutral Test (D5)
urface Water Present? Yes No X Depth (inches):	DROLOG etland Hydr imary Indica Surface V High Wate Saturation Water Ma Sediment Algal Mat Iron Depo Inundatio Water-Sta	Addicators are present. Adicators are present. Adicators are present. Adicators (minimum of one in Nater (A1) ther Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial Imal ained Leaves (B9)	required; che	eck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R (where n Presence c Thin Muck Other (Exp	B11) ertebrates (Sulfide Odor h Water Tab hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema	B13) · (C1) le (C2) s along Livin ron (C4) ') arks)	g Roots (C	Hydric Soil Pro	ary Indicators (minimum of two require face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (vhere tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F)
ater Table Present? Yes No X Depth (inches):	DROLOG weaks: hydric soil ind wetland Hydr imary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatio Water-Sta eld Observa	dicators are present. Y rology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) n Visible on Aerial Ima ained Leaves (B9) ations:	required; che gery (B7)	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R (where n Presence c Thin Muck Other (Exp	B11) ertebrates (Sulfide Odor h Water Tab hizospheres ot tilled) f Reduced I Surface (C7 lain in Rema	B13) · (C1) le (C2) s along Livin ron (C4) ′) arks)	g Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pomorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Aturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes X No includes capillary fringe) escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: wetland Hydrology Present? Yes X No emarks: indicators are present. indicators are present. indicators are present. indicators are present.	DEPUT (Inc emarks: lydric soil inc emarks: lydric soil inc fetland Hydr rimary Indica Surface V High Wate Saturation Water Ma Saturation Water Ma Sediment Algal Mat Iron Depo Inundatio Water-Sta ield Observa	ches): dicators are present. Y rology Indicators: ttors (minimum of one in Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial Ima ained Leaves (B9) ations: Present? Ye	required; che gery (B7)	eck all that apply)	B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) f Reduced I Surface (C7 lain in Rema	B13) · (C1) le (C2) s along Livin ron (C4) ') arks)	g Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pomorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
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L escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks: lydrology indicators are present.	DEput (inc emarks: lydric soil inc retland Hydr imary Indica Surface V High Wate Saturation Water Ma Saturation Drift Deput Algal Mate Iron Deput Inundatio Water-Sta eld Observa aurface Water face Table P aturation Pre	dicators are present. Y rology Indicators: tors (minimum of one i Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) n Visible on Aerial Ima ained Leaves (B9) ations: Present? Ye esent? Ye esent? Ye	gery (B7)		B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) f Reduced I Surface (C7 lain in Rema ches): ches):	B13) • (C1) le (C2) s along Livin ron (C4) ') arks)	ig Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
emarks: lydrology indicators are present.	Beptin (inc emarks: 	dicators are present. Y rology Indicators: ttors (minimum of one i Vater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial Ima ained Leaves (B9) ations: Present? Ye esent? Ye llary fringe)	gery (B7) s N s N s N	eck all that apply)	B11) ertebrates (Sulfide Odor h Water Tab hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema ches): ches): ches):	B13) • (C1) le (C2) s along Livin ron (C4) *) arks)	ig Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
emarks: lydrology indicators are present.	DROLOG emarks: lydric soil ind lydric soil ind letland Hydr rimary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depr Algal Mat Iron Depo Inundatio Water-Sta eld Observa Aurface Water rable P aturation Pre includes capil escribe Reco	dicators are present. Y rology Indicators: ttors (minimum of one i Vater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) n Visible on Aerial Ima ained Leaves (B9) ations: Present? Ye resent? Ye sent? Ye llary fringe) orded Data (stream gat	gery (B7)	:ck all that apply)	B11) ertebrates (Sulfide Odor h Water Tab hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema ches): ches): ches): , previous ir	B13) • (C1) le (C2) s along Livin (ron (C4) *) arks)	g Roots (C Wetlan	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
lydrology indicators are present.	DEPUT (Inc emarks: lydric soil inc /etland Hydr rimary Indica 	dicators are present. Y rology Indicators: ttors (minimum of one i Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) n Visible on Aerial Ima ained Leaves (B9) ations: Present? Ye resent? Ye resent? Ye lary fringe) orded Data (stream gat	gery (B7)	eck all that apply)	B11) ertebrates (Sulfide Odor h Water Tab hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema ches): ches): ches): , previous ir	B13) (C1) le (C2) along Livin ron (C4)) arks) arks)	ig Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
	DROLOG emarks: lydric soil ind etland Hydr imary Indica Surface V High Wate Saturation Water Ma Sediment Algal Mate Iron Depo Inundatio Water-Sta eld Observa aurface Water face Water aturation Pre- facudes capil escribe Reco	dicators are present. Y rology Indicators: ttors (minimum of one i Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) n Visible on Aerial Ima ained Leaves (B9) ations: Present? Ye resent? Ye esent? Ye lary fringe) orded Data (stream gate	gery (B7)	eck all that apply)	B11) ertebrates (Sulfide Odor h Water Tab hizospheres ot tilled) f Reduced I Surface (C7 lain in Rema ches): ches): ches): , previous ir	B13) · (C1) le (C2) s along Livin ron (C4) ') arks) 	g Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pomorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No

Project/Site:	FM 741 EA	(City/County:	к	aufman County	Samp	ling Date:	04/28/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Tex	as Samp	ling Point:	WDP37
Investigator(s):	CW and JK	. ;	Section, Town	ship, Range:		 N/A		
Landform (hillslope, terrace, etc):	Hillslope		Local relief (co	oncave, conve	ex, none):	convex	5	Slope (%): 3-5
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6835	5193	Long: -96.4	15027213	Datum	1: NAD 83
Soil Map Unit Name: Houston F	Black clay 1 to 3 percent slopes				NWI clas	sification: N	IA	
Are climatic / hydrologic condition	is on the site typical for this time	of year?	Yes	No X	(If no, explain in F	Remarks.)		
Are Vegetation , Soil	, or Hydrology	significantly	disturbed?	Are "N	Normal Circumstances	s" present?	Yes >	(No
Are Vegetation , Soil	, or Hydrology r	naturally pro	blematic?	(If nee	eded, explain any ans	wers in Remar	ks.)	
SUMMARY OF FINDINGS	- Attach site map show	ing sam	olina point	locations.	transects. impo	rtant featu	res. etc.	
Hydrophytic Vegetation Presen	t? Ves N				, , , , , , , , , , , , , , , , , , ,		,	
Hydric Soil Present?	Ves N	0 <u> </u>	Is f	he Sampled	Aroa			
Wetland Hydrology Present?	Ves N		wit	hin a Wotland	Alea d2 Voc			
Wettand Hydrology Fresent:		<u> </u>	WIL		u: 103	'		
Remarks: None of the three w conditions during th	etland indicators were present. e site investigations were wetter	This point is r than norma	not located v al.	vithin a wetlan	d. The Antecedent Pro	ecipitation Toc	l scored a 1	5, indicating
VEGETATION - Use scien	tinc names of plants.							
					Dominance Test	worksheet:		
		Absolute	Dominant	Indicator	Number of Domina	ant Species		
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FA	CW, or FAC:	((A)
1				- <u> </u>	Total Number of D	aminant		
2				- <u> </u>	Total Number of D	ominant		
3					Species Across Al	i Strata:	2	(В)
4				- <u> </u>	Dereent of Demine			
		0	= Iotal Cov	er	Thet Are ODL EA		0	0 (A/D)
Sapling/Shrub Stratum (Plot	SIZE:)				That Are OBL, FA	CW, OF FAC:	0.	<u>0</u> (A/B)
1				<u></u> -	Prevalence Index	worksheet:		
2				<u></u> -	Total % Cove	er of:	Multip	lv bv:
3					OBL species	0	x 1 =	0
4					FACW species	0	x 2 =	0
5		0	- Total Cov		FAC species	10	x 3 =	30
Herb Stratum (Plot size:	30' radius	0			FACU species	80	x 4 =	320
1 Cynodon dactylon	<u> </u>	60	Ves	FACU	UPL species	0	x 5 =	0
2 Veronica anyensis		20	Ves	FACU	Column Totals:	90	(A)	350 (B)
3 Paspalum dilatatum		10	No	FAC	-			
4		10	110	140	Prevalence	Index = B/A =	3.8	39
5								
6					Hydrophytic Vege	etation Indica	tors:	
7					1 - Rapid Tes	t for Hydrophy	tic Vegetatio	'n
8					2 - Dominanc	e Test is >50%	D	
9					3 - Prevalenc	e Index ≤3.0 ¹		
10.					4 - Morpholog	gical Adaptatio	ns ¹ (Provide	supporting
		90	= Total Cov	er	Problematic F	Hydrophytic Ve	getation' (E	xplain)
Woody Vine Stratum (Plot si	ze:)		_					
1.	,				'Indicators of hydr	ic soil and wet	land hydrolo	gy must
2.					be present, unless	s disturbed or p	problematic.	
		0	= Total Cov	er	Hydrophytic			
% Bare Ground in Herb Stratur	n <u>10</u>		-		Vegetation Present?	Yes	No	x
Remarks: Hydrophytic vegetation is not j	present.							

S	0	IL	
J	J		-

Profile Descri	ption: (Describe to t	he depth neede	d to document th	e indicator o	or confirm	the absen	ce of indicators.)		
(inches)	Color (moist)	0/_	Color (moist)	1 caluies	Tupe ¹		Texture	Demarka	
0_18	10YR 3/1	100		/0	Type	LUC	Clay	INCHIGINS	
0-10	10111.0/1				·				
		· ·		·					
		· ·		·					
·		· ·		·					
·		· ·		·					
·		· ·		·					
		·							
¹ Type: C=Cond	centration, D=Depletio	n, RM=Reduced	Matrix, CS=Cove	red or Coate	d Sand Gra	ains.	² Location	: PL=Pore Lining, M=Mat	rix.
Hydric Soil In	dicators: (Applicable	e to all LRRs, ur	nless otherwise n	oted.)			Indicators for	Problematic Hydric Soi	ils³:
Histosol (A1)		Sandy Gley	ed Marix (S4	4)		1 cm M	Muck (A9) (LRR I, J)	
Histic Epi	pedon (A2)		Sandy Red	ox (S5)			Coast	Prairie Redox (A16) (LF	RR F, G, H)
Black His	tic (A3)		Stripped Ma	atrix (S6)			Dark S	Surface (S7) (LRR G)	
Hydrogen	Sulfide (A4)		Loamy Muc	ky Mineral (F	=1)		High F	Plains Depressions (F16)	
Stratified	Layers (A5) (LRR F)		Loamy Gle	ed Matrix (F	2)		(LRR	H outside of MLRA 72 8	. 73)
1 cm Muc	k (A9) (LRR F, G, H)	Depleted M	atrix (F3)			Reduc	ed Vertic (F18)	
Depleted	Below Dark Surface (A11)	Redox Darl	Surface (F6	5) (Red P	arent Material (TF2)	
Thick Dar	K Surface (A12)		Depleted D	ark Surface ((F7)		Very S	Shallow Dark Surface (TF	12)
Sandy Mu	icкy Mineral (S1)		Redox Dep	ressions (F8))		Other	(Explain in Remarks)	
2.5 cm M	ucky Peat or Peat (S2		High Plains		s (F16)			bis of nyorophytic vegetal	uon and
5 CM Muc	ky Peat or Peat (S3)		(IVILKA 72	∝ / 3 OT LRR	п)		wetland	invurbingy must be prese	rit,
							uniess c		
Restrictive La	yer (if present):								
Туре:			_						
Depth (inc	hes):		_				Hydric Soil Prese	ent? Yes	No X
HYDROLOG	Y								
Wetland Hydr	ology Indicators:								
Primary Indica	tors (minimum of one	required; check	all that apply)				Secondary	Indicators (minimum of tw	vo required)
Surface V	Vater (A1)		Salt Crust (B11)			Surfac	e Soil Cracks (B6)	
High Wate	er Table (A2)		Aquatic Inv	ertebrates (B	313)		Spars	ely Vegetated Concave S	urface (B8)
Saturation	n (A3)		Hydrogen S	Sulfide Odor ((C1)		Draina	age Patterns (B10)	
Water Ma	rks (B1)		Dry-Seasor	n Water Table	e (C2)		Oxidiz	ed Rhizospheres on Livir	ig Roots (C3)
Sediment	Deposits (B2)		Oxidized R	hizospheres	along Livin	g Roots (C3	3) (wh e	ere tilled)	
Drift Depo	osits (B3)		(where n	ot tilled)			Crayfi	sh Burrows (C8)	
Algal Mat	or Crust (B4)		Presence o	f Reduced Ir	on (C4)		Satura	tion Visible on Aerial Ima	gery (C9)
Iron Depc	sits (B5)		Thin Muck	Surface (C7)			Geom	orphic Position (D2)	
	n Visible on Aerial Ima	igery (B7)	Other (Expl	ain in Remar	rks)		FAC-N	leutral Test (D5)	
Water-Sta	ined Leaves (B9)						Frost-	Heave Hummocks (D7) (L	.KK F)
Field Observa	tions:								
Surface Water	Present? Ye	es <u> </u>	X Depth (ind	ches):					
Water Table Pi	resent? Ye	es No	X Depth (ind	ches):					
Saturation Pre	sent? Ye	es No	X Depth (ind	ches):		Wetlan	nd Hydrology Prese	ent? Yes	No X
(includes capil	ary fringe)								
Describe Reco	rded Data (stream ga	uge, monitoring	well, aerial photos	, previous ins	spections),	if available:	:		
Remarks: Hydroloav ind	icators are not preser	ıt.							
,									

Project/Site:	FM 741 EA		City/County:	k	Kaufman County	5	Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department	of Transpo	rtation		State: 1	Texas S	Sampling Point:	WDP38
Investigator(s):	CW and JK	•	Section, Town	ship, Range:			N/A	
Landform (hillslope, terrace	e, etc): Depression		Local relief (co	oncave, conve	ex, none):	conca	ve	Slope (%): 2-3
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6894	9111	Long: -90	6.45767373	3 Datur	n: NAD 83
Soil Map Unit Name: Ferr	ris clay, 5 to 12 percent slopes, eroded	· · · ·			NWI c	lassificatior	I: NA	
Are climatic / hydrologic co	onditions on the site typical for this time	of year?	Yes X	No	(If no, explain i	n Remarks.	.)	
Are Vegetation,	Soil, or Hydrologys	significantly	disturbed?	Are "	Normal Circumstand	ces" presen	t? Yes	X No
Are Vegetation,	Soil, or Hydrologyr	naturally pro	blematic?	(If ne	eded, explain any a	nswers in F	Remarks.)	
SUMMARY OF FIND	INGS - Attach site map show	ing sam	oling point	locations	, transects, imp	ortant fe	eatures, etc.	
Hydrophytic Vegetation F	Present? Yes X No	0						
Hydric Soil Present?	Yes X No	0	ls t	he Sampled	Area			
Wetland Hydrology Pres	ent? Yes X No	0	wit	hin a Wetlan	d? Ye	es X	No	
								<u> </u>
Remarks: All of the three	e wetland indicators were present. This	s point is lo	cated within a	wetland. The	Antecedent Precipi	tation Tool	scored a 12 indi	cating
conditions au	ring the site investigations were norma							
VEGETATION - Use	scientific names of plants.							
					Dominance Tes	st workshe	et:	
		Absolute	Dominant	Indicator	Number of Dom	inant Speci	ies	
Tree Stratum (Plot size	e:)	% Cover	Species?	Status	That Are OBL, F	ACW, or F	AC:	1 (A)
<u>1.</u>								、 /
2.		_			Total Number of	Dominant		
3.					Species Across	All Strata:		1 (B)
4.								
		0	= Total Cov	er	Percent of Dom	inant Speci	es	
Sapling/Shrub Stratum	(Plot size:)		_		That Are OBL, F	ACW, or F	AC: 10	0.0 (A/B)
1.	··							
2.					Prevalence Ind	ex worksh	eet:	
3.					Total % Co	over of:	Multip	ly by:
4.					OBL species	60	x 1 =	60
5		_			FACW species	0	x 2 =	0
		0	= Total Cov	er	FAC species	0	x 3 =	90
Herb Stratum (Plot size	e: <u>30' radius</u>)				FACU species	0	X 4 =	
1. Eleocharis palustris		60	Yes	OBL	Column Totals:	0	X 5 =	(P)
2. Rumex crispus		15	No	FAC	Column rotais.		(A)	<u>150</u> (B)
3. Plantago major		15	No	FAC	Prevalenc	e Index = F	$R/\Delta = 1$	67
4								<u></u>
5					Hydrophytic Ve	egetation li	ndicators:	
6					X 1 - Rapid T	est for Hydi	rophytic Vegetati	on
/					X 2 - Domina	nce Test is	>50%	
8					X 3 - Prevale	nce Index ≤	≦3.0¹	
9					4 - Morpho	logical Ada	ptations ¹ (Provide	e supporting
10		00	- Total Cav		Problemati	c Hydrophy	tic Vegetation ¹ (E	Explain)
Woody Vine Stratum	(Plot size:	90	_ = 10(a) C0V					
	(1101 3126)				¹ Indicators of hy	dric soil an	d wetland hydrol	ogy must
2					be present, unle	ess disturbe	d or problematic.	
Z		0	= Total Cov	er	Hydrophytic			
% Bare Ground in Herb 9	Stratum 10	0			Vegetation			
					Present?	Ves	X No	
					Tresent:	103	<u></u>	<u> </u>
Remarks:								
Hydrophytic vegetation	is present.							

SOIL	
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			Redox	reatures						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-10	10YR 2/1	90	10YR 3/6	10	<u> </u>	PL	Clay			
ype: C=Con	centration, D=Depletio	n, RM=Reduc	ed Matrix, CS=Cove	red or Coat	ed Sand Gra	ains.	²Loo	ation: PL=Por	e Lining, M=Matr	ix.
dric Soil In	dicators: (Applicable	to all LRRs,	unless otherwise r	oted.)			Indicato	rs for Problen	natic Hydric Soil	S ³ :
Histosol (A1)		Sandy Gle	/ed Marix (S	64)		·	I cm Muck (A9) (LRR I, J)	
Histic Epi	pedon (A2)		Sandy Red	ox (S5)			(Coast Prairie R	edox (A16) (LR	R F, G, H)
Black His	tic (A3)		Stripped M	atrix (S6)			[Dark Surface (67) (LRR G)	
Hydroger	n Sulfide (A4)		Loamy Muc	cky Mineral	(F1)		I	High Plains De	pressions (F16)	
Stratified	Layers (A5) (LRR F)		Loamy Gle	yed Matrix ((F2)		(LRR H outsid	e of MLRA 72 &	73)
1 cm Muo	ck (A9) (LRR F, G, H)		Depleted N	latrix (F3)			I	Reduced Vertic	: (F18)	
_ Depleted	Below Dark Surface (A	411)	X Redox Dar	к Surface (F	-6)		I	Red Parent Ma	terial (TF2)	
_ Thick Da	k Surface (A12)		Depleted D	ark Surface	e (F7)			/ery Shallow D	ark Surface (TF1	2)
_ Sandy M	ucky Mineral (S1)		Redox Dep	ressions (F	8)			Other (Explain	in Remarks)	
2.5 cm M	ucky Peat or Peat (S2)	(LRR G, H)	High Plains	Depression	ns (F16)		°Ir	dicators of hyd	rophytic vegetati	on and
5 cm Mud	cky Peat or Peat (S3)	LRR F)	(MLRA 72	& 73 of LRI	R H)		We	etland hydrolog	ly must be preser	nt,
							u		or problematic.	
estrictive La	ayer (if present):									
Туре:	Hardpan cl	av								
		<u>~</u> }								
Depth (inc emarks: lydric soil inc	hes):	10					Hydric Soil	Present?	Yes X	No
Depth (inc emarks: lydric soil inc	hes):						Hydric Soil	Present?	Yes X	No
Depth (inc emarks: lydric soil inc DROLOG	hes):						Hydric Soil	Present?	Yes X	No
Depth (inc emarks: lydric soil inc DROLOG fetland Hydr	hes): licators are present. Y rology Indicators:						Hydric Soil	Present?	Yes X	
Depth (inc emarks: łydric soil inc DROLOG /etland Hydr rimary Indica	hes): licators are present. Y ology Indicators: tors (minimum of one i	i0	<u>*k all that apply)</u>				Hydric Soil	Present?	Yes X	No
Depth (inc emarks: łydric soil inc DROLOG /etland Hydr rimary Indica (Surface V Hick Wot	hes): dicators are present. Y rology Indicators: tors (minimum of one I Vater (A1) er Table (A2)	10 required; chec	<u></u>	B11)			Hydric Soil	Present?	Yes X	No
Depth (inc emarks: łydric soil inc DROLOG /etland Hydr rimary Indica < Surface V High Wat Saturatio	hes): dicators are present. Y rology Indicators: tors (minimum of one i Vater (A1) er Table (A2) o (A3)	i0	<u>x all that apply)</u> Salt Crust (Aquatic Inv	B11) ertebrates ((B13)		Hydric Soil	Present? ndary Indicator Surface Soil Cr Sparsely Veget	Yes X s (minimum of tw acks (B6) ated Concave Su	No ro required urface (B8
Depth (inc emarks: lydric soil inc DROLOG /etland Hydr rimary Indica < Surface V High Wat Saturatio Water Ma	hes): dicators are present. Y rology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) urks (B1)	i0	:k all that apply)	B11) ertebrates (3ulfide Odor	(B13) r (C1)		Hydric Soil	Present? hdary Indicator Surface Soil Cr Sparsely Veget Drainage Patte Drainage Patte	Yes X s (minimum of tw acks (B6) ated Concave Su rns (B10) spheres on Livin	vo required
Depth (inc emarks: lydric soil inc DROLOG /etland Hydr rimary Indica (hes): dicators are present. Y rology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) irks (B1) : Deposits (B2)	i0	<u>k all that apply)</u> <u>Salt Crust (</u> Aquatic Inv Hydrogen S Dry-Season	B11) ertebrates (3ulfide Odor 1 Water Tab	(B13) r (C1) ele (C2)	n Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Vegel Drainage Patte Dxidized Rhizo (where tilled	Yes X s (minimum of tw acks (B6) ated Concave Su rns (B10) spheres on Living	No ro required urface (B8 g Roots (C
Depth (inc emarks: lydric soil inc DROLOG /etland Hydr rimary Indica Saturatio High Wat Saturatio Water Ma Sedimen Drift Depo	hes): dicators are present. Y rology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) pasits (B3)	i0	<u>k all that apply)</u> <u>Salt Crust (</u> <u>Aquatic Inv</u> <u>Hydrogen S</u> <u>Dry-Season</u> <u>Oxidized R</u>	B11) ertebrates (Sulfide Odor 1 Water Tab hizospheres ot tilled)	B13) r (C1) ole (C2) s along Livin	g Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Veget Drainage Patte Dxidized Rhizo (where tilled Cravfish Burro	Yes X s (minimum of tw acks (B6) ated Concave Su rns (B10) spheres on Living ws (C8)	No ro required urface (B8 g Roots (C
Depth (inc emarks: lydric soil inc DROLOG /etland Hydr rimary Indica (Surface V High Wat Saturatio Water Ma (Sediment Drift Dep Algal Mat	hes): dicators are present. Y rology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) posits (B3) or Crust (B4)	i0	<u>:k all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Season Oxidized R (where n Presence c	B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) f Reduced I	(B13) r (C1) ole (C2) s along Livin	g Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Vegel Drainage Patte Dxidized Rhizo (where tilled Crayfish Burrov Saturation Visil	Yes X s (minimum of tw acks (B6) ated Concave Su rns (B10) spheres on Living by vs (C8) ble on Aerial Imag	No ro required urface (B8 g Roots (C
Depth (inc emarks: lydric soil inc DROLOG /etland Hydr rimary Indica C Surface V High Wat Saturatio Water Ma C Sediment Drift Depr Algal Mat Iron Depo	hes): dicators are present. Y rology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) posits (B3) or Crust (B4) posits (B5)	required; chec	<u>xk all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Season Oxidized R (where n Presence c Thin Muck	B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7	(B13) r (C1) ole (C2) s along Livin Iron (C4) 7)	g Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Vegel Drainage Patte Dxidized Rhizo (where tilled Crayfish Burrov Saturation Visil Seomorphic Pr	Yes X s (minimum of tw acks (B6) ated Concave Su rns (B10) spheres on Living by vs (C8) ble on Aerial Imag sition (D2)	No ro required urface (B8 g Roots ((gery (C9)
Depth (inc emarks: lydric soil inc production /etland Hydr rimary Indica Saturatio Water Ma Saturatio Water Ma Saturatio Drift Depu Algal Mat Iron Depo Inundatio	hes): dicators are present. Y rology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) irks (B1) : Deposits (B2) posits (B3) : or Crust (B4) posits (B5) n Visible on Aerial Ima	required; chec	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Season Oxidized R (where n Presence c Thin Muck Other (Exp	B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7 jain in Rema	B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks)	g Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Vegel Drainage Patte Drainage Patte Crayfish Burrov Saturation Visil Geomorphic Por FAC-Neutral Te	Yes X s (minimum of tw acks (B6) ated Concave Su rns (B10) spheres on Living ys (C8) ble on Aerial Imag sition (D2) est (D5)	No ro required urface (B8 g Roots (0 gery (C9)
Depth (inc emarks: lydric soil inc DROLOG Vetland Hydr rimary Indica Saturatio Water Ma Saturatio Drift Dep Algal Mat Iron Depo Inundatio Water-St	hes): dicators are present. Y ology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) irks (B1) : Deposits (B2) posits (B3) : or Crust (B4) posits (B5) n Visible on Aerial Ima ained Leaves (B9)	required; chec	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Season Oxidized R (where n Presence c Thin Muck Other (Exp	B11) ertebrates (3ulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7 ain in Rema	(B13) r (C1) ole (C2) s along Livin Iron (C4) 7) arks)	g Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Veget Drainage Patte Dxidized Rhizo (where tilled Crayfish Burrow Saturation Visil Geomorphic Por FAC-Neutral Te Frost-Heave Hi	Yes X s (minimum of tw acks (B6) ated Concave Su rns (B10) spheres on Living ws (C8) ole on Aerial Imag osition (D2) est (D5) ummocks (D7) (L	No ro required urface (B8 g Roots ((gery (C9) RR F)
Depth (inc emarks: lydric soil inc dydric soil inc DROLOG /etland Hydr rimary Indica (Surface V High Wat Saturatio Water Ma (Sediment Drift Dep Algal Mat Iron Depo Inundatio Water-Sta	hes): dicators are present. Y rology Indicators: tors (minimum of one in Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) posits (B2) posits (B3) or Crust (B4) posits (B5) n Visible on Aerial Ima ained Leaves (B9)	required; chec	<u>k all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Season Oxidized R (where n Presence c Thin Muck Other (Exp	B11) ertebrates (Sulfide Odor η Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema	(B13) r (C1) le (C2) s along Livin Iron (C4) 7) arks)	g Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Veget Drainage Patte Dxidized Rhizo (where tilled Crayfish Burrow Saturation Visil Geomorphic Por FAC-Neutral Te Frost-Heave He	Yes X s (minimum of tw acks (B6) ated Concave Su rns (B10) spheres on Living ws (C8) ble on Aerial Imag bition (D2) est (D5) ummocks (D7) (L	No urface (B8 g Roots (C gery (C9) RR F)
Depth (inc emarks: lydric soil inc dydric soil inc DROLOG /etland Hydr rimary Indica C Surface V High Wat Saturatio Water Ma C Sedimeni Drift Depr Algal Mat Iron Depc Inundatio Water-Sta	hes): dicators are present. Y rology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) posits (B3) : or Crust (B4) posits (B5) n Visible on Aerial Ima ained Leaves (B9) ations:	required; chec	<u>Sk all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Season Oxidized R (where n Presence c Thin Muck Other (Exp	B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7 ain in Rema	(B13) r (C1) lle (C2) s along Livin Iron (C4) 7) arks)	ig Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Vegel Drainage Patte Dxidized Rhizo (where tilled Crayfish Burrow Saturation Visil Geomorphic Por FAC-Neutral Te Frost-Heave Hil	Yes X s (minimum of tw acks (B6) ated Concave Su rns (B10) spheres on Living ws (C8) ole on Aerial Imag osition (D2) est (D5) ummocks (D7) (L	No ro required urface (B8 g Roots (C gery (C9) RR F)
Depth (inc emarks: lydric soil inc DROLOG /etland Hydr rimary Indica (Surface V High Wate Saturatio Water Ma (Sedimeni Drift Dep Algal Mat Iron Depo Inundatio Water-Sta ield Observa	hes): dicators are present. Y rology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) posits (B3) : or Crust (B4) posits (B5) n Visible on Aerial Ima ained Leaves (B9) ations: Present? Ye	gery (B7)	<u>ck all that apply)</u>	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7 lain in Rema ches):	(B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks) 2	g Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Vegel Drainage Patte Drainage Patte Drainage Rhizo (where tilled Crayfish Burrov Saturation Visil Geomorphic Po FAC-Neutral Te Frost-Heave Hi	Yes X s (minimum of tw acks (B6) ated Concave Su rns (B10) spheres on Living ws (C8) ole on Aerial Imago osition (D2) est (D5) ummocks (D7) (L	No vo required urface (B8 g Roots (C gery (C9) RR F)
Depth (inc emarks: lydric soil inc DROLOG /etland Hydr rimary Indica C Surface V High Wate Saturatio Water Ma C Sediment Orift Dep Algal Mat Iron Depo Inundatio Water-Sta ield Observa	hes): dicators are present. Y rology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Ima ained Leaves (B9) ations: Present? Ye	gery (B7)	ck all that apply)	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7 lain in Rema ches):	(B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks) 2	g Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Veget Drainage Patte Drainage Patte Drainage Rhizo (where tilled Crayfish Burrov Saturation Visil Geomorphic Po FAC-Neutral Te Frost-Heave Hill	Yes X s (minimum of tw acks (B6) ated Concave Su rns (B10) spheres on Living ws (C8) ole on Aerial Imago osition (D2) est (D5) ummocks (D7) (L	No ro required urface (B8 g Roots (C gery (C9) RR F)
Depth (inc emarks: lydric soil inc production /etland Hydr rimary Indica Saturatio Water Ma Saturatio Water Ma Saturatio Drift Dep Algal Mat Iron Depo Inundatio Water-Sta ield Observa urface Water /ater Table P aturation Pre	hes): dicators are present. Y rology Indicators: tors (minimum of one I Vater (A1) er Table (A2) n (A3) trks (B1) : Deposits (B2) osits (B3) : or Crust (B4) osits (B5) n Visible on Aerial Ima ained Leaves (B9) ations: Present? Ye sent? Ye	gery (B7)	ck all that apply)	B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7 lain in Rema shes): ches):	(B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks) 2	ng Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Vegel Drainage Patte Drainage Patte Drainage Patte Crayfish Burrov Saturation Visil Geomorphic Por FAC-Neutral Te Frost-Heave He Present?	Yes X <u>s (minimum of tw</u> acks (B6) ated Concave Su rns (B10) spheres on Living vs (C8) ble on Aerial Imag bition (D2) est (D5) ummocks (D7) (L Yes X	No ro required urface (B8 g Roots (C gery (C9) RR F) No
Depth (inc emarks: lydric soil inc demarks: lydric soil inc demarks: lydric soil inc demarks: lydric soil inc demarks	hes): dicators are present. Y ology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) irks (B1) : Deposits (B2) posits (B3) : or Crust (B4) posits (B5) n Visible on Aerial Ima ained Leaves (B9) ations: Present? Ye sent? Ye sent? Ye	gery (B7) <u>s X Nc</u> <u>s Nc</u>	ck all that apply)	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7 lain in Rema shes): ches): ches):	(B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks) 2	ig Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Veget Drainage Patte Dxidized Rhizo (where tilled Crayfish Burrow Saturation Visil Geomorphic Por FAC-Neutral Te Frost-Heave Hi Present?	Yes X s (minimum of tw acks (B6) ated Concave Su rns (B10) spheres on Living ys (C8) ole on Aerial Imag sition (D2) est (D5) ummocks (D7) (L Yes X	No ro required urface (B8 g Roots (C gery (C9) RR F) No
Depth (inc emarks: lydric soil inc emarks: lydric soil inc primary Indica C Surface V High Wat Saturatio Water Ma C Sediment Drift Dep Algal Mat Iron Depo Inundatio Water-Sta ield Observa urface Water /ater Table P aturation Pre escribe Reco	hes): dicators are present. Y rology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) irks (B1) : Deposits (B2) posits (B3) : or Crust (B4) posits (B5) n Visible on Aerial Ima ained Leaves (B9) ations: Present? Ye sent? Ye sent? Ye lary fringe)	gery (B7) <u>s X Nc</u> <u>s Nc</u> <u>uge, monitorin</u>	ck all that apply)	B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7 lain in Rema ches): ches): ches): ches):	B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks) 2 	ug Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Veget Drainage Patte Drainage Patte Drainage Patte Drainage Patte Crayfish Burrow Saturation Visil Geomorphic Por FAC-Neutral Te Frost-Heave Hill Present?	Yes X <u>s (minimum of tw</u> acks (B6) ated Concave Su rns (B10) spheres on Living vs (C8) ble on Aerial Imag bition (D2) est (D5) ummocks (D7) (L Yes X	No ro required urface (B8 g Roots ((gery (C9) RR F) No
Depth (inc emarks: lydric soil inc emarks: lydric soil inc DROLOG Vetland Hydr imary Indica C Surface V High Wat Saturatio Water Ma C Sediment Drift Depu Algal Mat Iron Depo Inundatio Water-Sta vater Table P aturation Pre aturation Pre accudes capil escribe Recc	hes): dicators are present. Y rology Indicators: tors (minimum of one I Vater (A1) er Table (A2) n (A3) urks (B1) : Deposits (B2) posits (B3) : or Crust (B4) posits (B5) n Visible on Aerial Ima ained Leaves (B9) ations: : Present? Ye sent? Ye sent? Ye sent? Ye	gery (B7) <u>s X Nc</u> <u>s Nc</u> <u>gery (B7)</u>	ck all that apply)	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches): , previous ir	(B13) r (C1) ble (C2) s along Livin lron (C4) 7) arks) 2 pspections),	g Roots (C Wetlan	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Veget Drainage Patte Dxidized Rhizo (where tilled Crayfish Burrov Saturation Visil Geomorphic Por FAC-Neutral Te Frost-Heave Hi Present?	Yes X s (minimum of tw acks (B6) ated Concave Su rns (B10) spheres on Living ws (C8) ole on Aerial Imag osition (D2) est (D5) ummocks (D7) (L Yes X	No ro required urface (B8 g Roots ((gery (C9) RR F) No
Depth (inc emarks: lydric soil inc DROLOG etland Hydr imary Indica Surface V High Wate Saturatio Water Ma Saturatio Water Ma Saturatio Drift Dep Algal Mat Iron Depo Inundatio Water-Sta eld Observa aurface Water ater Table P aturation Pre acturation Pre	hes): dicators are present. Y rology Indicators: tors (minimum of one i Vater (A1) er Table (A2) n (A3) irks (B1) : Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Ima ained Leaves (B9) ations: Present? Ye isent? Ye isent? Ye isent? Ye isent? Ye isent? Ye isent? Ye	gery (B7)	ck all that apply)	[B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7 lain in Rema ches): 	(B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks) 2 pspections),	g Roots (C	Hydric Soil	Present? Indary Indicator Surface Soil Cr Sparsely Vegel Drainage Patte Drainage Patte Drainage Patte Drainage Patte Crayfish Burrov Saturation Visil Geomorphic Por FAC-Neutral Te Frost-Heave Hil Present?	Yes X <u>s (minimum of tw</u> acks (B6) ated Concave Su rns (B10) spheres on Living vs (C8) ole on Aerial Imago osition (D2) est (D5) ummocks (D7) (L Yes X	No ro required urface (B8 g Roots (C gery (C9) RR F) No
Project/Site:	FM 741 EA	(City/County:	K	aufman County	Sampling Date:	04/29/2022			
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Applicant/Owner:	Texas Department	of Transpor	tation		State: Texas	Sampling Point:	WDP39			
Investigator(s):	Cw and JK	9	Section, Town	ship, Range:		N/A				
Landform (hillslope, terrace, etc):	Terrace	L	ocal relief (co	oncave, conve	ex, none): cor	ivex	Slope (%): 2-3			
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.68942	2293	Long: -96.45766	375 Datur	n: NAD 83			
Soil Map Unit Name: Ferris clay	5 to 12 percent slopes eroded				NWI classificat	ion: NA				
Are climatic / hvdrologic condition	s on the site typical for this time	of vear?	/es X	No	(If no. explain in Remar	ks.)				
Are Vegetation , Soil	, or Hydrology	significantly	disturbed?	Are "N	Normal Circumstances" pres	ent? Yes	X No			
Are Vegetation , Soil	, or Hydrology	naturally pro	blematic?	(If nee	eded, explain any answers i	n Remarks.)				
SUMMARY OF FINDINGS	- Attach site map show	ing samp	lina point	locations.	transects. important	features. etc.				
Hydrophytic Vegetation Presen	t2 Ves N	<u> </u>		,	, p					
Hydrio Soil Prosont?	Voc N		le f	he Sempled	Aroo					
Matland Ludralagy Dresent?			15 1	him a Watland		No. V				
Wettand Hydrology Present?		0	wit	nin a wettand			_			
Remarks: None of the three we conditions during the VEGETATION - Use scien	tiand indicators were present. T site investigations were normal tific names of plants.	his point is ι	not located wi	thin a wetland	I. The Antecedent Precipitat	ion Tool scored a 12	2, indicating			
					Dominance Test works	haat				
		Abaaluta	Dominant	Indianta-	Number of Dominant Sp	eries				
Trop Stratum (Diat size))		Dominari(Statuc	That Are ORL FACW o		Ο (Δ)			
)		Species?	Status	That AIC ODE, I AOW, O					
1					Total Number of Domina	nt				
2					Species Across All Strat	a. ,	3 (B)			
3							<u> </u>			
···			= Total Cov		Percent of Dominant Sp	ecies				
Sanling/Shrub Stratum (Plot	size:	0	_ 10101 000		That Are OBL FACW o	r FAC [.] 0	0 (A/B)			
1)									
2					Prevalence Index work	sheet:				
3				- <u> </u>	Total % Cover of:	Multip	bly by:			
4.					OBL species) x1=	0			
5.					FACW species) x 2 =	0			
		0	= Total Cov	er	FAC species) x 3 =	0			
Herb Stratum (Plot size:	30' radius)		-		FACU species 3	<u> </u>	120			
1. Sherardia arvensis		50	Yes	NI	UPL species 8	<u> </u>	400			
2. Setaria viridis		20	Yes	NI	Column Totals: 1	10 (A)	520 (B)			
3. Medicago lupulina		20	Yes	FACU						
4. Torilis nodosa		10	No	NI	Prevalence Index	= B/A =4.	73			
5. Sorghum halepense		10	No	FACU	Hydrophytic Vegetation	n Indicators:				
6.					1 - Rapid Test for H	vdronhytic Vegetativ	n			
7					2 - Dominance Test	is >50%				
8					3 - Prevalence Inde	x <3 0 ¹				
9					4 - Morphological A	daptations ¹ (Provide	e supporting			
10					Problematic Hydror	hvtic Vegetation ¹ (E	Explain)			
		110	= Total Cov	er						
Woody Vine Stratum (Plot si	ze:)				¹ Indicators of hvdric soil	and wetland hydrold	oav must			
1					be present, unless distu	bed or problematic.				
2					. ,	•				
		0	= Total Cov	er	Hydrophytic					
% Bare Ground in Herb Stratun	n <u> 0 </u>				Vegetation Present? Y	es No	<u>x</u>			
Remarks: Hydrophytic vegetation is not p	present.				1					

S	0	IL	
J	J		-

Profile Desc	ription: (Describe to t	he depth need	led to document the	he indicator	or confirm	the absen	nce of indicators.)	
Depth (inches)	Color (moist)		Color (moint)		Tunol	1 0 0 2	Toyturo	Domorko
			Color (moist)	70	Type	LUC		Remarks
0-18	101R 3/1	100				<u> </u>	Clay	
							·	
					. <u> </u>			
	centration D-Depleti		ad Matrix CS-Cov	ared or Coate	ad Sand Gra	aine	² l ocation	PL-Pore Liping M-Matrix
						amo.		
Hydric Soil I	ndicators: (Applicabl	e to all LRRs, i	unless otherwise	noted.)			Indicators for	r Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gle	yed Marix (S	4)		1 cm	Muck (A9) (LRR I, J)
Histic Ep	pipedon (A2)		Sandy Red	dox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Black Hi	stic (A3)		Stripped N	latrix (S6)			Dark \$	Surface (S7) (LRR G)
Hydroge	n Sulfide (A4)		Loamy Mu	cky Mineral ((F1)		High F	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F		Loamy Gle	eyed Matrix (I	F2)		(LRR	H outside of MLRA 72 & 73)
1 cm Mu	ick (A9) (LRR F, G, H	l)	Depleted N	Aatrix (F3)			Reduc	ced Vertic (F18)
Depleted	d Below Dark Surface (A11)	Redox Da	rk Surface (F	6)		Red F	Parent Material (TF2)
Thick Da	ark Surface (A12)		Depleted [Dark Surface	(F7)		Very S	Shallow Dark Surface (TF12)
Sandy M	lucky Mineral (S1)		Redox De	pressions (F8	3)		Other	(Explain in Remarks)
2.5 cm M	/lucky Peat or Peat (S2	2) (LRR G, H)	High Plain	s Depression	is (F16)		³ Indicat	ors of hydrophytic vegetation and
5 cm Mu	icky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LRF	R H)		wetland	I hydrology must be present,
							unless	disturbed or problematic.
De staistice I								
	ayer (if present):							
Type:								
Depth (In	cnes):						Hydric Soli Pres	ent? Yes <u>NO X</u>
Remarks:								
Hydric soil ir	ndicators are not prese	nt.						
	Y							
Wetland Hvo	Irology Indicators:							
Primary Indic	ators (minimum of one	required: check	k all that apply)				Secondary	Indicators (minimum of two required)
Surface	Water (A1)		Salt Crust	(B11)			Surfac	ce Soil Cracks (B6)
High Wa	ther Table ($\Delta 2$)			(BTT) Vertebrates (F	R13)		Spars	ely Vegetated Concave Surface (B8)
Ngr We	$(\Lambda 3)$		Hydrogen	Sulfide Odor	(C1)		Opens	age Patterns (B10)
Saturation	arka (P1)			ounde Ouor	(C1)			age Fallenis (BTO)
	alks (DT)			hizoonhoroo		a Dooto (C	2) (who	
					along Living	y Roois (C	(WII	ich Durreure (CO)
	DOSILS (B3)		(where r	iot tillea) - (De dues d l	(04)			sin Burrows (C8)
	at or Crust (B4)		Presence		ron (C4)			ation visible on Aerial Imagery (C9)
Iron Dep	OOSITS (B5)			Surface (C7)		Geom	norphic Position (D2)
Inundati	on Visible on Aerial Ima	agery (B7)	Other (Exp	lain in Rema	irks)			Neutral Test (D5)
Water-S	tained Leaves (B9)						Frost-	Heave Hummocks (D7) (LRR F)
Field Observ	vations:							
Surface Wate	er Present? Y	íes No	X Depth (in	ches):				
Water Table F	Present? Y	és No	X Depth (in	ches):				
Saturation Pr	esent? Y	íes No	X Depth (in	ches):		Wetlar	nd Hydroloav Pres	ent? Yes No X
(includes cap	illary fringe)			,			,	
Describe Per	orded Data (stream as				spections)	if available		
Describe Ret	orded Data (Sireall ga	iage, monitorinț	ש איכוו, מכוומו גווטנט:	5, previous III	specii0115), 1	n avallable		
Remarks:								
Hydrology in	dicators are not prese	nt.						

Project/Site:	FM 741 EA		City/County:	ĸ	Kaufman County	Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department	of Transpo	rtation		State: Texas	Sampling Point:	WDP40
Investigator(s):	CW and JK		Section, Town	ship, Range:		N/A	
Landform (hillslope, terrace	e, etc): Swale		Local relief (co	oncave, conve	ex, none): cor	ncave	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.68935	5133	Long: -96.45789	402 Datur	n: NAD 83
Soil Map Unit Name: Ferri	is clay, 5 to 12 percent slopes, eroded				NWI classifica	tion: NA	
Are climatic / hydrologic co	nditions on the site typical for this time	of year?	Yes X	No	(If no, explain in Rema	rks.)	
Are Vegetation ,	Soil , or Hydrology s	ignificantly	disturbed?	Are "I	Normal Circumstances" pres	sent? Yes	X No
Are Vegetation,	Soil, or Hydrologyr	naturally pro	oblematic?	(If ne	eded, explain any answers i	in Remarks.)	
SUMMARY OF FIND	INGS - Attach site map show	ing sam	pling point	locations,	, transects, importan	t features, etc.	
Hydrophytic Vegetation F	Present? Yes X No	0					
Hydric Soil Present?	Yes X No		- Ist	he Sampled	Area		
Wetland Hydrology Prese	ent? Yes X No		wit	hin a Wetlan	d? Yes >	K No	
				wetlend The	Ante codent Dresinitation T	inal accurate 40 indi	_
Remarks: All of the thre	e wetland indicators were present. Ini	s point is id al	ocated within a	wetland. The	e Antecedent Precipitation 1	ool scored a 12, Indi	cating
conditions du		41.					
VEGETATION - Use	scientific names of plants.						
					Dominance Test works	sheet:	
		Absolute	Dominant	Indicator	Number of Dominant Sp	pecies	
Tree Stratum (Plot size	e:)	% Cover	Species?	Status	That Are OBL, FACW, c	or FAC:	1 (A)
<u>1.</u>	,						、 /
2.					Total Number of Domina	ant	
3.					Species Across All Stra	ta:	2 (B)
4.				·			
		0	= Total Cove	er	Percent of Dominant Sp	vecies	
Sapling/Shrub Stratum	(Plot size:)				That Are OBL, FACW, c	or FAC: 50	0.0 (A/B)
1.	· · · · · · · · · · · · · · · · · · ·						
2.					Prevalence Index work	<sheet:< td=""><td></td></sheet:<>	
3.					Total % Cover of:	Multip	ly by:
4.					OBL species	<u>50 </u>	50
5					FACW species	<u>0</u> x 2 =	0
		0	= Total Cove	er	FAC species	<u>0</u> x 3 =	0
Herb Stratum (Plot size	e: <u>30' radius</u>)				FACU species	<u>20 </u>	80
1. Eleocharis palustris		50	Yes	OBL	Column Totals:	<u>20 </u>	220 (P)
2. Erigeron canadensis		20	Yes	FACU		30 (A)	(B)
3. <u>Torilis nodosa</u>		10	No	NI	Prevalence Index	- B/A - 2	56
4. <u>Setaria viridis</u>		10	No	NI		- D/A - 2.	50
5					Hydrophytic Vegetatio	n Indicators:	
6					1 - Rapid Test for H	lydrophytic Vegetatio	on
7					2 - Dominance Tes	t is >50%	
8				·	X 3 - Prevalence Inde	ex ≤3.0¹	
9				·	4 - Morphological A	Adaptations ¹ (Provide	e supporting
10			Tatal Oa	·	Problematic Hydro	phytic Vegetation ¹ (E	Explain)
Mandu Vina Ctratum		90		er			
					¹ Indicators of hydric soil	and wetland hydrold	ogy must
1				·	be present, unless distu	rbed or problematic.	
Z		0	- Total Cov		Undrandutia		
% Bare Cround in Herb 9	Stratum 10	0		51	Hydrophytic		
					Vegetation		
					Present?		
Remarks:							
Hydrophytic vegetation	is present.						

SOIL	
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Depth	Matrix		Redo	x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	10YR 5/2	80	10YR 7/6	20	С	М	Clay	
					·			
17	D. Deviation	DM Daduar					21 41-	PL Dese Lision M Metric
Type: C=Cond	centration, D=Depletio	DN, RIVI=Reduce	d Matrix, CS=Cov	ered or Coate	ed Sand Gra	ains.	-Locatio	n: PL=Pore Lining, M=Matrix.
Hydric Soil In	dicators: (Applicable	e to all LRRs, u	nless otherwise	noted.)			Indicators for	or Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gle	eyed Marix (S	54)		1 cm	n Muck (A9) (LRR I, J)
Histic Epi	pedon (A2)		Sandy Re	dox (S5)			Coas	st Prairie Redox (A16) (LRR F, G, H)
Black His	tic (A3)		Stripped N	Aatrix (S6)			Dark	Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Mu	icky Mineral ((F1)		High	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F))	Loamy Glo	eyed Matrix (F2)		(LRF	R H outside of MLRA 72 & 73)
1 cm Muc	ck (A9) (LRR F, G, H	I)	X Depleted	Matrix (F3)			Redu	uced Vertic (F18)
Depleted	Below Dark Surface ((A11)	Redox Da	rk Surface (F	6)		Red	Parent Material (TF2)
Thick Dar	k Surface (A12)		Depleted	Dark Surface	(F7)		Very	Shallow Dark Surface (TF12)
Sandy Mu	ucky Mineral (S1)		Redox De	pressions (F8	3)		Othe	er (Explain in Remarks)
2.5 cm M	ucky Peat or Peat (S2	2) (LRR G, H)	High Plain	s Depressior	ns (F16)		³Indica	ators of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LRF	R H)		wetlan	nd hydrology must be present,
							unless	s disturbed or problematic.
Restrictive La	yer (if present):							
Type:	Hardpan o	lay						
Depth (inc	hes):	12					Hydric Soil Pres	sent? Yes X No
Hydric soil ind	dicators are present.							
YDROLOG	Y							
Wetland Hydr	ology Indicators:							
Primary Indica	tors (minimum of one	required; check	all that apply)				Secondar	ry Indicators (minimum of two required)
Surface V	Vater (A1)		Salt Crust	(B11)			Surfa	ace Soil Cracks (B6)
High Wat	er Table (A2)		Aquatic In	vertebrates (B13)		Spar	rsely Vegetated Concave Surface (B8)
Saturation	n (A3)		Hydrogen	Sulfide Odor	(C1)		X Draii	nage Patterns (B10)
Water Ma	ırks (B1)		Dry-Seaso	on Water Tab	le (C2)		Oxid	lized Rhizospheres on Living Roots (C3
Sediment	Deposits (B2)		Oxidized F	Rhizospheres	along Livin	g Roots (C	C3) (wi	here tilled)
Drift Depo	osits (B3)		(where i	not tilled)			X Cray	fish Burrows (C8)
Algal Mat	or Crust (B4)		Presence	of Reduced I	ron (C4)		Satu	ration Visible on Aerial Imagery (C9)
Iron Depo	osits (B5)		Thin Muck	Surface (C7)		X Geor	morphic Position (D2)
Inundatio	n Visible on Aerial Ima	agery (B7)	Other (Exp	olain in Rema	arks)		FAC	-Neutral Test (D5)
Water-Sta	ained Leaves (B9)						Fros	t-Heave Hummocks (D7) (LRR F)
Field Observa	ations:							
Surface Water	Present? Y	′es No	X Depth (ir	nches):				
Water Table P	resent? Y	/es No	X Depth (ir	nches):				
Saturation Pre	sent? Y	/es No	X Depth (ir	nches):		Wetla	nd Hydroloav Pre	sent? Yes X No
(includes capil	lary fringe)						,	
Describe Reco	orded Data (stream ga	auge, monitoring	well, aerial photo	s, previous in	spections),	if available	e:	
	. 0	- 0	·	-				
Remarks:								
Hydrology ind	icators are present.							

Project/Site:	FM 741 EA		City/County:	ŀ	Kaufman County	Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department	t of Transpor	tation		State: Texas	Sampling Point:	WDP41
Investigator(s):	CW and JK		Section, Towr	ship, Range:		N/A	
Landform (hillslope, terrace, etc):	Swale		Local relief (c	oncave, conve	ex, none): co	ncave	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6892	4937	Long: -96.45783	3168 Datur	m: NAD 83
Soil Map Unit Name: Ferris clay	. 5 to 12 percent slopes, erode	ed			NWI classifica	ation: NA	-
Are climatic / hydrologic condition	s on the site typical for this time	e of year?	Yes X	No	(If no, explain in Rema	arks.)	
Are Vegetation , Soil	, or Hydrology	significantly	disturbed?	Are "	Normal Circumstances" pre	esent? Yes	X No
Are Vegetation , Soil	, or Hydrology	naturally pro	blematic?	(If ne	eded, explain any answers	in Remarks.)	
SUMMARY OF FINDINGS	- Attach site map show	/ing same	olina point	locations	. transects. importar	nt features. etc.	
Hydrophytic Vegetation Broson	+2 Voc N				,,,	,	
Hydrio Soil Procent?				the Sampled	Aroa		
Wotland Hydrology Procent?		lo		the Sampleu	d2 Voc	No X	
		<u> </u>	WI		u: 165		_
Remarks: Two of the three well conditions during the	tland indicators were present. T e site investigations were norma	This point is r al.	not located wi	thin a wetland	I. The Antecedent Precipita	tion Tool scored a 12	2, indicating
VEGETATION - Use scien	tinc names of plants.						
					Dominance Test work	sheet:	
		Absolute	Dominant	Indicator	Number of Dominant S	pecies	
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW,	or FAC:	1 (A)
1							
2					Iotal Number of Domin	ant	
3					Species Across All Stra	ata:	4 (B)
4					Demonstraf Demois ant O		
		0	_ = Total Cov	er	Percent of Dominant S	pecies	
Sapling/Shrub Stratum (Plot	size:)				That Are OBL, FACW,	or FAC: 25	5.0 (A/B)
1					Prevalence Index wor	ksheet:	
2					Total % Cover of	Multir	ly hy:
3.					OBL species	$0 \times 1 =$	0
4.					FACW species	0 x 2 =	0
5					FAC species	40 x 3 =	120
Llark Strature (Distaire)	001 ma aliana)	0		er	FACU species	90 x 4 =	360
Herb Stratum (Plot size:	30 radius)	40	Vaa		UPL species	0 x 5 =	0
		40	Yes		Column Totals:	130 (A)	480 (B)
		40	Yes	FACU			
3. Bromus arvensis		10			Prevalence Index	κ = B/A = 3.	.69
		10	INO	FACU			
5					Hydrophytic Vegetation	on Indicators:	
0					1 - Rapid Test for	Hydrophytic Vegetati	on
/					2 - Dominance Tes	st is >50%	
8					3 - Prevalence Ind	ex ≤3.0¹	
9 10					4 - Morphological	Adaptations ¹ (Provide	e supporting
10		100	- Total Cov	or	Problematic Hydro	phytic Vegetation ¹ (E	Explain)
Woody Vine Stratum (Plot si	τe: 30' radius	100	_ 10(01 000				
1 Toxicodendron radicans	/	15	Voc	FACU	¹ Indicators of hydric so	il and wetland hydrol	ogy must
		15	Ves	FACU	be present, unless dist	urbed or problematic.	
		30	= Total Cov		Hydrophytic		
% Bare Ground in Herb Stratun	0	0	_ 10(01 000		Vegetation		
7 Bare Ground in Field Stratum					Procent2	Voc No	v
					FIESEIIL?		<u>^</u>
Remarks: Hydrophytic vegetation is not p	present.						

SOIL	
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Doptii			1.000	(T Gataroo				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 3/1	90	10YR 3/4	10	C	PL	Clay	
						·		
						·		
<u> </u>		·						
<u> </u>		·						
					- <u> </u>			
<u> </u>								
ype: C=Conc	entration, D=Depletion	ı, RM=Redu	ced Matrix, CS=Cove	red or Coat	ed Sand Gr	ains.	² Locatio	on: PL=Pore Lining, M=Matrix.
ydric Soil Ind	dicators: (Applicable	to all LRRs.	, unless otherwise r	noted.)			Indicators f	or Problematic Hydric Soils ³ :
Histosol (/	41)		Sandy Gle	yed Marix (S	64)		1 cn	n Muck (A9) (LRR I, J)
Histic Epi	oedon (A2)		Sandy Rec	lox (S5)			Coa	st Prairie Redox (A16) (LRR F, G, H)
Black Hist	ic (A3)		Stripped M	atrix (S6)			Darl	Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Mu	cky Mineral	(F1)		High	Plains Depressions (F16)
Stratified I	_ayers (A5) (LRR F)		Loamy Gle	yed Matrix (F2)		(LR	R H outside of MLRA 72 & 73)
1 cm Muc	k (A9) (LRR F, G, H)		Depleted M	1atrix (F3)			Red	uced Vertic (F18)
_ Depleted	Below Dark Surface (A	\11)	X Redox Dar	k Surface (F	-6)		Red	Parent Material (TF2)
_ Thick Dar	K Surface (A12)		Depleted D	ark Surface	e (F7)		Very	Shallow Dark Surface (TF12)
Sandy Mu	cky Mineral (S1)		Redox Dep	pressions (F	8)		Othe	er (Explain in Remarks)
2.5 cm Mi	Icky Peat or Peat (S2)	(LRR G, H)	High Plains	3 Depression	ns (F16)		sindic	ators of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3) (LRR F)	(MLRA /2	& /3 OF LRI	R H)		wetlar	a hydrology must be present,
estrictive La	yer (if present):							
Turnet								
Type:	105);						Hydric Soil Pro	sont? Vas V No
Type: Depth (incl Remarks: Hydric soil ind	icators are present.						Hydric Soil Pre	sent? Yes <u>X</u> No
Type: Depth (incl emarks: Hydric soil ind	icators are present.						Hydric Soil Pre	sent? Yes <u>X</u> No
Type: Depth (incl emarks: Hydric soil ind	nes): icators are present. / plogy Indicators:						Hydric Soil Pre	sent? Yes <u>X</u> No
Type: Depth (incl Remarks: Hydric soil ind DROLOG Vetland Hydro Primary Indicat	nes): icators are present. / / ology Indicators: ors (minimum of one r	equired; che	ck all that apply)				Hydric Soil Pre	sent? Yes <u>X</u> No
Type: Depth (incl Remarks: Hydric soil ind DROLOG Vetland Hydr rimary Indicat Surface W	icators are present.	equired; che	 	 			Hydric Soil Pre	sent? Yes X No
Type: Depth (incl Remarks: Hydric soil ind DROLOG Vetland Hydro rimary Indicat Surface W High Wate	icators are present.	equired; che	 <u>ck all that apply)</u> Salt Crust in Aquatic Inv	[B11) ertebrates (B13)		Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8
Type: Depth (incl Remarks: Hydric soil ind DROLOG Vetland Hydro rimary Indicat Surface W High Wate Saturatior	icators are present. f plogy Indicators: ors (minimum of one r /ater (A1) r Table (A2) (A3)	equired; che	<u></u> <u></u> Salt Crust Aquatic Inv Hydrogen s	[B11) 'ertebrates (Sulfide Odor	B13) r (C1)		Hydric Soil Pre	sent? Yes X No y Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10)
Type: Depth (incl temarks: Hydric soil ind DROLOG Vetland Hydro rimary Indicat Surface W High Wate Saturatior Water Ma	icators are present. f plogy Indicators: ors (minimum of one r /ater (A1) rr Table (A2) (A3) rks (B1)	equired; che	<u>ck all that apply)</u> Salt Crust (Aquatic Inv Hydrogen 3 Dry-Seaso	(B11) ertebrates (Sulfide Odor n Water Tab	B13) r (C1) le (C2)		Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (0
Type: Depth (incl temarks: Hydric soil ind DROLOG Vetland Hydr Vetland Hydr Surface W High Wate Saturatior Water Ma Sediment	icators are present. icators are present. f ology Indicators: ors (minimum of one r /ater (A1) r Table (A2) (A3) rks (B1) Deposits (B2)	equired; che	<u>ck all that apply)</u> <u>Salt Crust</u> <u>Aquatic Inv</u> <u>Hydrogen 3</u> <u>Dry-Seaso</u> <u>Oxidized R</u>	(B11) (ertebrates (Sulfide Odor n Water Tab hizospheres	B13) r (C1) le (C2) s along Livir	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled)
Type: Depth (incl Remarks: Hydric soil ind DROLOG Vetland Hydre Yrimary Indicat Surface W High Wate Saturatior Water Ma Sediment Drift Depo	icators are present. icators are present. ology Indicators: ors (minimum of one r /ater (A1) rr Table (A2) I (A3) 'ks (B1) Deposits (B2) sits (B3)	equired; che	<u>ck all that apply)</u> <u>Salt Crust</u> Aquatic Inv Hydrogen 3 <u>Dry-Seaso</u> Oxidized R (where n	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled)	B13) r (C1) le (C2) s along Livir	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8)
Type: Depth (incl Remarks: Hydric soil ind DROLOG Vetland Hydr Primary Indicat Surface W High Wate Saturatior Water Ma Sediment Drift Depo Algal Mat	icators are present. f blogy Indicators: ors (minimum of one r /ater (A1) rr Table (A2) I (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)	equired; che	ck all that apply) Salt Crust Aquatic Inv Hydrogen 3 Dry-Seaso Oxidized R (where n Presence c	(B11) 'ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) vf Reduced I	B13) r (C1) ile (C2) s along Livir Iron (C4)	ng Roots (C	Hydric Soil Pre	sent? Yes X No y Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) iration Visible on Aerial Imagery (C9)
Type: Depth (incl emarks: Hydric soil ind DROLOG Vetland Hydro rimary Indicat Gurface W High Wate Saturatior Water Ma Sediment Drift Depo Algal Mat Iron Depo	icators are present. f ology Indicators: ors (minimum of one r /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	equired; che	<u>ck all that apply)</u> Salt Crust Aquatic Inv Hydrogen 3 Dry-Seaso Oxidized R (where n Presence o Thin Muck	(B11) 'ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7	B13) r (C1) le (C2) s along Livir Iron (C4) 7)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8) iration Visible on Aerial Imagery (C9) morphic Position (D2)
Type: Depth (incl emarks: Hydric soil ind DROLOGY /etland Hydro rimary Indical Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation	res): icators are present. f ology Indicators: ors (minimum of one r /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) sits (B5) i Visible on Aerial Image	equired; che	<u>ck all that apply)</u> Salt Crust Aquatic Inv Hydrogen 3 Dry-Seaso Oxidized R (where n Presence o Thin Muck Other (Exp	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema	B13) r (C1) le (C2) s along Livir Iron (C4) r) arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots ((here tilled) rfish Burrows (C8) irration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5)
Type: Depth (incl emarks: Hydric soil ind DROLOG /etland Hydre rimary Indicat Surface W High Wate Saturatior Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta	icators are present. icators are present. f ology Indicators: cors (minimum of one r /ater (A1) rr Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) (Visible on Aerial Imagined Leaves (B9)	equired; che	<u>ck all that apply)</u> Salt Crust Aquatic Inv Hydrogen S Dry-Seaso Oxidized R (where n Presence o Thin Muck Other (Exp	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8) uration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7)(LRR F)
Type: Depth (incl emarks: Hydric soil ind DROLOG Metland Hydro rimary Indicat Surface W High Wate Saturation Water Mal Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta	icators are present. f ology Indicators: ors (minimum of one r /ater (A1) r Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima- ined Leaves (B9) tions:	equired; che	ck all that apply)	(B11) 'ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) iration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7)(LRR F)
Type: Depth (incl emarks: Hydric soil ind DROLOG Vetland Hydra rimary Indicat Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta urface Water	ricators are present.	<u>equired; che</u>	ck all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches):	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No y Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) iration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7) (LRR F)
Type: Depth (incl temarks: Hydric soil ind DROLOG Vetland Hydr Timary Indicat Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta ield Observa urface Water Vater Table Pr	f f f f f f f f f f f f f f	 equired; che gery (B7) s N	ck all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema 	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8) iration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7)(LRR F)
Type: Depth (incl emarks: Hydric soil ind /etland Hydre rimary Indicat Surface W High Wate Saturatior Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta ield Observa urface Water /ater Table Pre	icators are present. f ology Indicators: cors (minimum of one r /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Imag ined Leaves (B9) tions: Present? Ye sent? Ye sent? Ye	gery (B7)	ck all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches):	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8) aration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7)(LRR F) sent? Yes X No
Type: Depth (incl temarks: Hydric soil ind DROLOG Vetland Hydre Trimary Indicat Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta Sturface Water Vater Table Pri aturation Pres ncludes capill	Iicators are present. Iicators are present. Iicators are present. Iicators (minimum of one r /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) visible on Aerial Ima ined Leaves (B9) tions: Present? Ye sent? Ye sent? Ye sent? Ye	gery (B7)	ck all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches):	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8) rration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7) (LRR F) sent? Yes X No
Type: Depth (incl emarks: Hydric soil ind DROLOGY /etland Hydre rimary Indicat Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundation Water-Sta ield Observa urface Water /ater Table Pr aturation Pres ncludes capill escribe Reco	Iicators are present.	gery (B7)	ck all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches): , previous ir	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks) 	ng Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8) rration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7) (LRR F) sent? Yes X No
Type: Depth (incl emarks: Hydric soil ind DROLOGY /etland Hydre rimary Indicat Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta ield Observa urface Water /ater Table Pr aturation Pres ncludes capill escribe Reco	Iicators are present.	gery (B7)	ck all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches): ches):	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks) nspections),	mg Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) iration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7)(LRR F) sent? Yes X No
Type: Depth (incl lemarks: Hydric soil ind DROLOGY /etland Hydro rimary Indical Surface W High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta ield Observa urface Water /ater Table Pr aturation Pres ncludes capill bescribe Reco	Iicators are present.	gery (B7)	ck all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab ches): ches): ches): , previous ir	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks)	ng Roots (C	Hydric Soil Pre	sent? Yes X No y Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) iration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7) (LRR F) sent? Yes X No

Project/Site:	FM 741 EA	(City/County:	k	Kaufman County	Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Texas	Sampling Point:	WDP42
Investigator(s):	CW and JK		Section, Town	ship, Range:		N/A	
Landform (hillslope, terrace, etc	c): Depression		Local relief (co	ncave, conve	ex, none): con	cave S	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6904	565	Long: -96.458857	716 Datun	n: NAD 83
Soil Map Unit Name: Housto	n Black clay, 1 to 3 percent slopes				NWI classificat	ion: NA	
Are climatic / hydrologic conditi	ions on the site typical for this time	of year?	Yes X	No	(If no, explain in Remar	ks.)	
Are Vegetation , Soil	, or Hydrology	significantly	disturbed?	Are "	Normal Circumstances" pres	ent? Yes >	(No
Are Vegetation , Soil	, or Hydrology	naturally pro	blematic?	(If ne	eded, explain any answers ir	n Remarks.)	
SUMMARY OF FINDING	SS - Attach site map show	ing samp	oling point	locations	, transects, important	features, etc.	
Hydrophytic Vegetation Pres	ent? Yes X N	<u> </u>					
Hydric Soil Present?	Yes X N	o	Is t	he Samnled	Area		
Wetland Hydrology Present?	Yes X N	°	wit	hin a Wetlan	d? Yes X	No	
		°			u . 100 <u></u>		_
Remarks: All of the three w conditions during	etland indicators were present. Th the site investigations were norm	is point is lo al.	cated within a	wetland. The	e Antecedent Precipitation To	ool scored a 12, indi	cating
VEGETATION - Use scie	entific names of plants.				-		
					Dominance Test works	heet:	
		Absolute	Dominant	Indicator	Number of Dominant Sp	ecies	
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW, or	FAC: 2	2 (A)
2				·	Total Number of Domina	nt	
3				· <u> </u>	Species Across All Strata	a: 2	2 (B)
4				· <u> </u>			(=)
		0	= Total Cove	er	Percent of Dominant Spe	ecies	
Sapling/Shrub Stratum (P	lot size:				That Are OBL, FACW, or	FAC: 100	0.0 (A/B)
1)						()
2				·	Prevalence Index work	sheet:	
3				·	Total % Cover of:	Multip	ly by:
4.				·	OBL species 7	0 x 1 =	70
5.					FACW species 2	0 x 2 =	40
		0	= Total Cove	er	FAC species) x 3 =	0
Herb Stratum (Plot size:	30' radius)		_		FACU species) x 4 =	0
1. Eleocharis palustris		70	Yes	OBL	UPL species () x 5 =	0
2. Carex cherokeensis		20	Yes	FACW	Column Totals: 9	0 (A)	110 (B)
3.							
4.					Prevalence Index :	= B/A = <u>1.2</u>	22
5.					Hydrophytic Vegetation	Indicators:	
6					X 1 - Rapid Test for H	vdronhytic Vegetatic	n
7					X 2 - Dominance Test	is >50%	
8					X 3 - Prevalence Inde	x ≤3.0 ¹	
9					4 - Morphological A	daptations ¹ (Provide	supporting
10					Problematic Hydrop	hvtic Vegetation ¹ (E	xplain)
		90	= Total Cove	er			· · · · · · · · · · · · · · · · · · ·
Woody Vine Stratum (Plot	t size:)				¹ Indicators of hvdric soil	and wetland hydrold	av must
1					be present, unless distur	bed or problematic.	5,
2						•	
		0	= Total Cove	er	Hydrophytic		
% Bare Ground in Herb Strat	tum <u>10</u>				Vegetation Present? Ye	es X No	
Remarks:							
Hydrophytic vegetation is p	resent.						

SOIL	
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Depth	Matrix	-	Redo	k Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 4/1	95	10YR 7/2	5	D	Μ	Clay	
						,		
ype: C=Conc	entration, D=Depletion	n, RM=Reduc	ed Matrix, CS=Cove	ered or Coat	ed Sand Gra	ains.	²Locat	on: PL=Pore Lining, M=Matrix.
dric Soil Ind	licators: (Applicable	to all LRRs,	unless otherwise ı	noted.)			Indicators	for Problematic Hydric Soils ³ :
Histosol (A	A1)		Sandy Gle	yed Marix (S	64)		1 c	m Muck (A9) (LRR I, J)
Histic Epip	oedon (A2)		Sandy Rec	lox (S5)			Coa	ast Prairie Redox (A16) (LRR F, G, H)
Black Histi	ic (A3)		Stripped M	atrix (S6)			Dai	k Surface (S7) (LRR G)
_ Hydrogen	Sulfide (A4)		Loamy Mu	cky Mineral	(F1)		Hig	h Plains Depressions (F16)
_ Stratified L	ayers (A5) (LRR F)		Loamy Gle	yed Matrix ((F2)		(LF	R H outside of MLRA 72 & 73)
_ 1 cm Muck	k (A9) (LRR F, G, H)		X Depleted N	/latrix (F3)	-0)		Rec	duced Vertic (F18)
_ Depleted E		ATT)	Redox Dar	K Surface (F	-0) (F7)			
_ Thick Dark	(Surface (ATZ)		Depieted L		e (F7)			y Shallow Dark Surface (TFTZ)
	cky Milleral (ST)		Redux Dep		0) na (E16)		0	er (Explain in Remarks)
5 cm Muck	ky Peat or Peat (S2)			8 73 of I P	па (F 10) D Ц)		wetla	addis of hydrophytic vegetation and
					ix iij		unles	es disturbed or problematic.
etrictivo I a	vor (if prosont):							
Type	yei (ii present).							
турс.								
Depth (inch emarks: lydric soil indi	icators are present.						Hydric Soil Pr	esent? Yes X No
Depth (inch emarks: lydric soil indi	nes):						Hydric Soil Pr	esent? Yes <u>X</u> No
Depth (inch emarks: lydric soil indi	nes):						Hydric Soil Pr	esent? Yes X No
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro	nes): icators are present. / / plogy Indicators: ors (minimum of one r	aquired: char	vk all that apply)				Hydric Soil Pro	esent? Yes X No
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicate Surface W	nes): icators are present. / plogy Indicators: ors (minimum of one r	equired; chec	<u></u>	(R11)			Hydric Soil Pro	ary Indicators (minimum of two required
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicate Surface W High Wate	nes): icators are present. / ology Indicators: ors (minimum of one r /ater (A1) or Table (A2)	equired; chec	<u>k all that apply)</u> <u>Salt Crust</u>	(B11)	 		Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6)
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicato Surface W High Wate Saturation	icators are present.	equired; chec	x all that apply) Salt Crust Aquatic Inv Hvdrogen	(B11) ertebrates (Sulfide Odo	(B13) r (C1)		Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10)
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicate Surface W High Wate Saturation Water Mar	nes): icators are present. / blogy Indicators: ors (minimum of one r /ater (A1) er Table (A2) (A3) ks (B1)	equired; chec	:k all that apply)	(B11) vertebrates (Sulfide Odo n Water Tab	(B13) r (C1) ole (C2)		Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicato Surface W High Wate Saturation Water Mar Sediment	nes): icators are present. f blogy Indicators: ors (minimum of one r /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2)	equired; chec	<u>k all that apply)</u> <u>Salt Crust</u> <u>Aquatic Inv</u> <u>Hydrogen 3</u> <u>Dry-Seaso</u> Oxidized R	(B11) rertebrates (Sulfide Odoi n Water Tab	(B13) r (C1) ole (C2) s along Livin	a Roots (Q	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled)
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicato Surface W High Wate Saturation Water Mar Sediment Drift Depos	icators are present.	equired; chec	<u>k all that apply)</u> Salt Crust Aquatic Inv Hydrogen Dry-Seaso Oxidized R	(B11) vertebrates (Sulfide Odor n Water Tab chizospheres ot tilled)	B13) r (C1) ole (C2) s along Livin	g Roots (C	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) ivfish Burrows (C8)
Depth (inch emarks: lydric soil indi DROLOGY fetland Hydro imary Indicato Surface W High Wate Saturation Water Mar Sediment Drift Depos Algal Mat o	icators are present.	equired; chec	<u>k all that apply)</u> Salt Crust Aquatic Inv Ury-Seaso Oxidized R (where n Presence o	(B11) vertebrates (Sulfide Odor n Water Tab hizosphere: ot tilled) of Reduced	(B13) r (C1) ole (C2) s along Livin	g Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) nyfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicate Called High Wate Saturation Water Mar Sediment Drift Depos Algal Mat o Iron Depos	icators are present.	equired; chec	x all that apply) Salt Crust Aquatic Inv Hydrogen 1 Dry-Seaso Oxidized R (where n Presence o Thin Muck	(B11) vertebrates (Sulfide Odoi n Water Tab hizospheres ot tilled) of Reduced Surface (C7	(B13) r (C1) ole (C2) s along Livin Iron (C4) 7)	g Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) nyfish Burrows (C8) uration Visible on Aerial Imagery (C9) pomorphic Position (D2)
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicato Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Inundation	icators are present. icators are present. Plogy Indicators: ors (minimum of one r /ater (A1) er Table (A2) (A3) (Ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) o Visible on Aerial Ima	equired; chec	ck all that apply) Salt Crust Aquatic Inv Hydrogen Dry-Seaso Oxidized R (where n Presence o Thin Muck Other (Exp	(B11) vertebrates (Sulfide Odoi n Water Tab chizospheres ot tilled) of Reduced Surface (C7 lain in Rema	(B13) r (C1) ole (C2) s along Livin Iron (C4) 7) arks)	g Roots (C	Hydric Soil Pro	ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) hyfish Burrows (C8) uration Visible on Aerial Imagery (C9) pomorphic Position (D2) C-Neutral Test (D5)
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicato Surface W High Wate Saturation Water Mar Sediment Drift Depos Algal Mat o Iron Depos Inundation Water-Stai	icators are present. plogy Indicators: ors (minimum of one r /ater (A1) Pr Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Imagine	equired; chec	<u>Sk all that apply)</u> Salt Crust Aquatic Inv Hydrogen Dry-Seaso Oxidized R (where n Presence o Thin Muck Other (Exp	(B11) vertebrates (Sulfide Odoi n Water Tab hizospheres ot tilled) of Reduced Surface (C7 lain in Rema	(B13) r (C1) ble (C2) s along Livin Iron (C4) 7) arks)	g Roots (C	Hydric Soil Pro	esent? Yes X No any Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) nyfish Burrows (C8) uration Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicate Surface W Saturation Water Mar Sediment Drift Depos Algal Mat o Iron Depos Inundation Water-Stai	icators are present. icators are present. ors (minimum of one r ors (minimum of one r (Ater (A1) er Table (A2) (A3) (Ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Imagination ined Leaves (B9) tions:	required; chec	ck all that apply) Salt Crust Aquatic Inv Hydrogen 1 Dry-Seaso Oxidized R Oxidized R Presence o Thin Muck Other (Exp	(B11) rertebrates (Sulfide Odoi n Water Tab hizospheres ot tilled) of Reduced Surface (C7 lain in Rema	(B13) r (C1) ole (C2) s along Livin Iron (C4) 7) arks)	g Roots (C	Hydric Soil Pro- Seconda Sur Sur Sur Sur Sur Sur Sur Sur Sur Sur	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) hyfish Burrows (C8) uration Visible on Aerial Imagery (C9) pomorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicate Surface W Saturation Water Mar Sediment Drift Depo: Algal Mat o Iron Depos Inundation Water-Stai	icators are present. icators are present. ors (minimum of one r ors (minimum of one r /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima- ined Leaves (B9) tions: Present? Ye	gery (B7)	<u>sk all that apply)</u> Salt Crust Aquatic Inv Hydrogen 3 Dry-Seaso Oxidized R (where n Presence of Thin Muck Other (Exp) Depth (in	(B11) vertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced Surface (C7 lain in Rema ches):	(B13) r (C1) ble (C2) s along Livin lron (C4) 7) arks) 2	g Roots (C	Hydric Soil Pro- Seconda Sur Spa Dra Dra Si Sur Si Sur Spa Sur Sur Spa Sur Spa Sur Sur Spa Sur Spa Sur Spa Sur Spa Sur Sur Sur Sur Sur Sur Sur Sur Sur Sur	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) hyfish Burrows (C8) uration Visible on Aerial Imagery (C9) pomorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicate Surface W Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Inundation Water-Stai	icators are present. f f f f f f f f f f f f	gery (B7)	:k all that apply)	(B11) vertebrates (Sulfide Odoi n Water Tab hizospheres ot tilled) of Reduced Surface (C7 lain in Rema ches): ches):	(B13) r (C1) ble (C2) s along Livin lron (C4) 7) arks) <u>2</u> 12	g Roots (C	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) nyfish Burrows (C8) uration Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicato Control Surface W Control High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Inundation Water-Stai eld Observat aturation Pres	icators are present. f f f f f f f f f f f f f	gery (B7)	Sk all that apply)	(B11) vertebrates (Sulfide Odoi n Water Tab hizospheres ot tilled) of Reduced Surface (C7 lain in Rema ches): ches): ches):	(B13) r (C1) le (C2) s along Livin lron (C4) 7) arks) <u>2</u> 12	g Roots (C	Hydric Soil Pro- Seconda Sur Sur Sur Sur Sur Sur Sur Sur Sur Sur	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) nyfish Burrows (C8) uration Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicato Surface W High Water Saturation Water Mar Sediment I Sediment I Drift Depos Algal Mat o Iron Depos Inundation Water-Stai eld Observat aturation Pres includes capilla	icators are present. plogy Indicators: ors (minimum of one r vater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Imagined Leaves (B9) tions: Present? Ye esent? Ye esent? Ye ary fringe)	gery (B7)	2k all that apply)	(B11) vertebrates (Sulfide Odoi n Water Tab chizospheres ot tilled) of Reduced Surface (C7 lain in Rema ches): ches): ches):	(B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks) <u>2</u> 12	g Roots (C	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C vhere tilled) hyfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
Depth (inch marks: ydric soil indi DROLOGY etland Hydro imary Indicato Surface W High Wate Saturation Water Mar Sediment I Sediment I Drift Depos Algal Mat o Iron Depos Inundation Water-Stai eld Observat inface Water I ater Table Pre scludes capilla	icators are present. plogy Indicators: ors (minimum of one r /ater (A1) rr Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Imagined Leaves (B9) tions: Present? Ye esent? Ye	gery (B7) s X No s X No s No ge, monitorin	2k all that apply)	(B11) vertebrates (Sulfide Odoi n Water Tab chizospheres ot tilled) of Reduced Surface (C7 lain in Rema ches): ches): ches): ches):	(B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks) 2 12 nspections),	g Roots (C	Hydric Soil Pro	esent? Yes X No ary Indicators (minimum of two required face Soil Cracks (B6) arsely Vegetated Concave Surface (B8 inage Patterns (B10) dized Rhizospheres on Living Roots (C where tilled) hyfish Burrows (C8) uration Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
Depth (inch marks: ydric soil indi DROLOGY etland Hydro imary Indicate Surface W High Wate Saturation Water Mar Sediment Drift Depos Algal Mat o Iron Depos Inundation Water-Stai eld Observat inface Water I ater Table Pre scludes capilla	icators are present.	gery (B7) :s <u>X</u> No :s <u>X</u> No :s <u>X</u> No :s <u>X</u> No :s <u>X</u> No	Sk all that apply)	(B11) vertebrates (Sulfide Odoi n Water Tab hizospheres ot tilled) of Reduced Surface (C7 lain in Rema ches): ches): ches): ches):	(B13) r (C1) ble (C2) s along Livin lron (C4) 7) arks) 2 12 nspections),	g Roots (C Wetlan	Hydric Soil Pro	esent? Yes X No
Depth (inch emarks: lydric soil indi DROLOGY etland Hydro imary Indicate Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Inundation Water-Stai etd Observat Inface Water I ater Table Pre- scludes capilla escribe Recor	icators are present.	gery (B7) s X No s X No s No ge, monitorin	ck all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab chizospheres ot tilled) of Reduced Surface (C7 lain in Rema ches): ches): ches): ches): ches):	(B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks) 2 12 nspections),	g Roots (C	Hydric Soil Pro	esent? Yes X No

Project/Site:	FM 741 EA	(City/County:	k	Kaufman County	Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Texas	Sampling Point:	WDP43
Investigator(s):	CW and JK	:	Section, Town	ship, Range:		N/A	
Landform (hillslope, terrace, e	tc): Roadside swale		Local relief (co	oncave, conve	ex, none): cor	ncave	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.6908	3652	Long: -96.45918	177 Datu	m: NAD 83
Soil Map Unit Name: Houst	on Black clay. 1 to 3 percent slopes				NWI classifica	tion: NA	
Are climatic / hydrologic condi	tions on the site typical for this time	of year?	Yes X	No	(If no, explain in Rema	rks.)	
Are Vegetation , Soi	il , or Hydrology s	significantly	disturbed?	Are "	Normal Circumstances" pre	sent? Yes	X No
Are Vegetation , Soi	il , or Hydrology r	naturally pro	blematic?	(If ne	eded, explain any answers	in Remarks.)	
SUMMARY OF FINDING	GS - Attach site map show	ing same	olina point	locations	. transects. importan	t features. etc.	
Hydrophytic Vegetation Pre	sent? Ves N	<u> </u>			,		
Hydrophytic Vegetation Fre		0 <u>^</u>		he Sampled	Area		
Wotland Hydrology Property		0 <u> </u>	15 1	hin a Watlan		No Y	
		<u> </u>	WI		u: 163		
Remarks: One of the three conditions during	wetland indicators waspresent. Thi g the site investigations were norma	is point is no al.	ot located with	in a wetland.	The Antecedent Precipitation	on Tool scored a 12	, indicating
VEGETATION - USE SC	lentine names of plants.						1
					Dominance Test work	sneet:	
		Absolute	Dominant	Indicator	Number of Dominant Sp	Decies	a (a)
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW, o	or FAC:	0 (A)
1					Tatal Number of Densis		
2					Iotal Number of Domina	ant	а (D)
3					Species Across All Stra	ta:	<u>3</u> (B)
4					Demonstrat Demoissant Or		
		0	= Total Cov	er	Percent of Dominant Sp		
Sapling/Shrub Stratum (F	Plot size:)				That Are OBL, FACW, o	or FAC:	J.0 (A/B)
1					Prevalence Index wor	ksheet:	
2					Total % Cover of:	Multi	ply by:
3.					OBL species	0 x 1 =	0
4					FACW species	0 x 2 =	0
5					FAC species	0 x 3 =	0
Llark Strature (Distaire)		0		er	FACU species	66 x 4 =	264
<u>Heib Stiatuin</u> (Flot size.	<u> </u>	24	Vaa	NU	UPL species	34 x 5 =	170
1. Setana vinuis		22	Yee		Column Totals: 1	00 (A)	434 (B)
2. Cynodon daetylon			Yee				
			165	FACU	Prevalence Index	= B/A = 4	.34
4. 5							
5					Hydrophytic Vegetatic	on Indicators:	
7					1 - Rapid Test for H	Hydrophytic Vegetat	ion
8					2 - Dominance Tes	t is >50%	
9					3 - Prevalence Inde	ex ≤3.0¹	
10				·	4 - Morphological A	Adaptations ¹ (Provid	e supporting
		100	= Total Cov	er	Problematic Hydro	phytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plo	ot size:	100					
1	,				¹ Indicators of hydric soi	and wetland hydro	logy must
2.					be present, unless distu	irbed or problematic).
		0	= Total Cov	er	Hydrophytic		
% Bare Ground in Herb Stra	atum 0				Vegetation		
					Present?	/es No	x
							<u></u>
Remarks: Hydrophytic vegetation is r	not present.						

SOIL	
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Depth	Matrix	ne deptit need	Redox	Features			nee or maleators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 4/1	95	10YR 7/2	5	D	М	Clay	
		. <u> </u>						
		·						
		·						
·		·			<u> </u>			
·		· ·			· ·		·	
		·			<u> </u>			
¹ Type: C=Cond	centration, D=Depletio	n, RM=Reduce	ed Matrix, CS=Cove	ered or Coate	ed Sand Gra	ains.	² Locatio	n: PL=Pore Lining, M=Matrix.
Hydric Soil In	dicators: (Applicable	e to all LRRs, i	unless otherwise n	noted.)			Indicators for	or Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gley	yed Marix (S	4)		1 cm	Muck (A9) (LRR I, J)
Histic Epi	pedon (A2)		Sandy Red	lox (S5)			Coas	st Prairie Redox (A16) (LRR F, G, H)
Black His	tic (A3)		Stripped M	atrix (S6)			Dark	Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Muo	cky Mineral (F1)		High	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)		Loamy Gle	yed Matrix (F	-2)		(LRF	R H outside of MLRA 72 & 73)
1 cm Muc	k (A9) (LRR F, G, H)	X Depleted N	latrix (F3)	•		Redu	uced Vertic (F18)
Depleted	Below Dark Surface (A11)	Redox Dar	K Sufface (Fi	0) (F7)		Rea	Parent Material (TF2)
Thick Dar	K Sufface (A12)		Depieted D		(F7)		very	Shallow Dark Surface (TFT2)
3anuy Mu	ucky Milleral (ST)		High Plains	Depressions (FC	e (F16)			ators of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3)	(I RR F)	(MI RA 72	& 73 of I RE	2 H)		wetlan	id hydrology must be present
		(=)	(,		unless	disturbed or problematic.
Restrictive La	yer (if present):							
Type:								
Depth (inc	hes):						Hydric Soil Pres	sent? Yes X No
Hydric soil inc	licators are present.							
IYDROLOG	Y							
Wetland Hydr	ology Indicators:	required: check	(all that apply)				Seconder	u Indiactora (minimum of two required)
Surface V	Vater (A1)	required, check	Salt Cruet /	(P11)			Secondal	y indicators (initialitation of two required)
High Wate	er Table (A2)		Aquatic Inv	ertebrates (F	313)		Spar	selv Vegetated Concave Surface (B8)
Saturation	n (A3)		Hydrogen S	Sulfide Odor	(C1)		Oper	hage Patterns (B10)
Water Ma	rks (B1)		Dry-Seaso	n Water Tabl	e (C2)		Oxid	ized Rhizospheres on Living Roots (C3)
Sediment	Deposits (B2)		Oxidized R	hizospheres	along Livin	g Roots (C	(wi	here tilled)
Drift Depo	osits (B3)		(where n	ot tilled)	Ū	. .	Cray	fish Burrows (C8)
Algal Mat	or Crust (B4)		Presence of	of Reduced In	ron (C4)		Satu	ration Visible on Aerial Imagery (C9)
Iron Depo	osits (B5)		Thin Muck	Surface (C7)		X Geor	morphic Position (D2)
Inundation	n Visible on Aerial Ima	agery (B7)	Other (Exp	lain in Rema	rks)		FAC-	-Neutral Test (D5)
Water-Sta	ained Leaves (B9)						Fros	t-Heave Hummocks (D7) (LRR F)
Field Observa	itions:							
Surface Water	Present? Ye	es No	X Depth (inc	ches):				
Water Table Pi	resent? Ye	es <u>No</u>	X Depth (ind	ches):				
Saturation Pre	sent? Ye	es <u>No</u>	X Depth (inc	ches):		Wetla	nd Hydrology Pre	sent? Yes <u>No X</u>
(includes capit								
Describe Reco	orded Data (stream ga	uge, monitoring	g well, aerial photos	, previous in	spections),	if available	9:	
Remarks [.]								
Hydrology inc	licators are not preser	nt.						

Project/Site:	FM 741 EA		City/County:	ĸ	aufman County		Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department	of Transpo	ortation		State:	Texas	Sampling Point:	WDP44
Investigator(s):	CW and JK	•	Section, Towns	ship, Range:			N/A	
Landform (hillslope, te	rrace, etc): Depression		Local relief (co	ncave, conve	ex, none):	conc	ave	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.69126	817	Long:	-96.459384	49 Datu	m: NAD 83
Soil Map Unit Name:	Ferris clay, 5 to 12 percent slopes, erode	ed			NW	I classificati	on: NA	
Are climatic / hydrolog	ic conditions on the site typical for this time	of year?	Yes X	No	(If no, explai	in in Remark	(S.)	
Are Vegetation	, Soil , or Hydrology	significantly	/ disturbed?	Are "I	Normal Circumsta	ances" prese	ent? Yes	X No
Are Vegetation	, Soil , or Hydrology r	naturally pr	oblematic?	(If ne	eded, explain any	answers in	Remarks.)	
SUMMARY OF FI	NDINGS - Attach site map show	ing sam	pling point	locations,	, transects, ir	nportant	features, etc.	
Hydrophytic Vegetat	tion Present? Yes X N	0				-		
Hydric Soil Present?	? Yes X N	0	– Is ti	he Sampled	Area			
Wetland Hydrology	Present? Yes X N	0	with	nin a Wetlan	d?	Yes X	No	
			_					
Remarks: All of the conditior	three wetland indicators were present. This during the site investigations were normal	is point is l al.	ocated within a	wetland. The	Antecedent Pre	cipitation To	ol scored a 12, ind	licating
VEGETATION - U	se scientific names of plants.							
					Dominance	Test worksl	neet:	
		Ahsoluto	Dominant	Indicator	Number of Dr	ominant Sne	cies	
Tree Stratum (Plo	ut size:)	% Cover	Species?	Status	That Are OBI	_, FACW, or	FAC:	<u>1</u> (A)
1					Total Number	of Dominar	at	
2					Species Acro	ss All Strata		1 (B)
3					opeoles / loro			<u> </u>
т. <u> </u>		0	= Total Cove		Percent of Do	ominant Spe	cies	
Sanling/Shrub Strati	um (Plot size:				That Are OBI	FACW. or	FAC: 10	00.0 (A/B)
1						_, ,		()
2					Prevalence I	ndex works	sheet:	
3.					Total %	Cover of:	Multi	ply by:
4.		-			OBL species	95	5x1=	95
5.					FACW specie	es 5	x 2 =	10
		0	= Total Cove	er	FAC species	0	x 3 =	0
Herb Stratum (Plo	ot size: <u>30' radius</u>)		_		FACU specie	s <u> </u>	x 4 =	0
1. Eleocharis palust	tris	95	Yes	OBL	UPL species	0	x 5 =	0
2. Carex cherokeen	isis	5	No	FACW	Column Iotal	s: <u>10</u>	0 (A)	<u>105</u> (B)
3								05
4.					Prevale	ence index =	B/A = 1	.05
5					Hydrophytic	Vegetation	Indicators:	
6					X 1 - Rapio	d Test for Hy	drophytic Vegetat	ion
7					X 2 - Domi	inance Test	is >50%	
8					X 3 - Preva	alence Inde>	< ≤3.0 ¹	
9					4 - Morp	hological Ac	laptations ¹ (Provid	e supporting
10				<u> </u>	Problem	atic Hydropl	nytic Vegetation ¹ (I	Explain)
		100	= Total Cove	er				
Woody Vine Stratum	<u>1</u> (Plot size:)				¹ Indicators of	hydric soil a	and wetland hydrol	logy must
1					be present, u	nless disturl	ped or problemation	
Z			- Tatal Caus					
% Para Cround in H	lorb Strotum 0	0		÷1	Hydrophytic			
					Vegetation	Ň	X N	
					Present?	Ye	s <u>X</u> NO	
Remarks:								
Hydrophytic vegeta	ition is present.							

SOIL	
------	--

Dopui	Matrix	Redo	x Features				
(inches)	Color (moist) %	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 4/1 80	10YR 6/3	20	D	M	Clay	
	· ·	<u> </u>		- <u> </u>		·	
	·						
				·			
	·	<u> </u>				·	
	·			·		· ·	
		<u> </u>		<u> </u>		·	
Type: C=Con	ncentration, D=Depletion, RM=R	Reduced Matrix, CS=Cov	ered or Coat	ed Sand Gra	ains.	² Location	n: PL=Pore Lining, M=Matrix.
lydric Soil lı	ndicators: (Applicable to all L	RRs, unless otherwise	noted.)			Indicators fo	r Problematic Hydric Soils³:
Histosol	(A1)	Sandy Gle	eyed Marix (S	64)		1 cm	Muck (A9) (LRR I, J)
Histic Ep	vipedon (A2)	Sandy Re	dox (S5)			Coas	t Prairie Redox (A16) (LRR F, G, H)
Black His	stic (A3)	Stripped M	Aatrix (S6)			Dark	Surface (S7) (LRR G)
Hydroge	n Sulfide (A4)	Loamy Mu	icky Mineral	(F1)		High	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)	Loamy Gle	eyed Matrix (F2)		(LRR	H outside of MLRA 72 & 73)
1 cm Mu	CK (A9) (LRR F, G, H)	X Depleted I	Viatrix (F3)			Redu	Iced Vertic (F18)
Depieted	rk Surface (A12)	Redox Da	TK Sufface (F	·0)			Shallow Dark Surface (TE12)
Sandy M	lucky Mineral (S1)	Depieted I Redox De	pressions (F)	8)		Very	r (Explain in Remarks)
2.5 cm N	lucky Peat or Peat (S2) (LRR G	G. H) High Plair	s Depression	o, ns (F16)		³ Indica	tors of hydrophytic vegetation and
5 cm Mu	cky Peat or Peat (S3) (LRR F)	(MLRA 72	& 73 of LRI	R H)		wetlan	d hydrology must be present,
_	, , , , ,	,		,		unless	disturbed or problematic.
Restrictive L	aver (if present):						
Type:	- J o. (p . coo).						
Depth (in	ches):					Hydric Soil Pres	ent? Yes X No
Hydric soil in	dicators are present						
Hydric soil in	dicators are present.						
Hydric soil in	dicators are present.						
Hydric soil in (DROLOG Wetland Hyd	dicators are present.						
Hydric soil in (DROLOG Wetland Hyd Primary Indica	dicators are present. Y rology Indicators: ators (minimum of one required;	check all that apply)				Secondar	y Indicators (minimum of two required)
Hydric soil in (DROLOG Vetland Hyd Primary Indica Surface V	dicators are present. iY rology Indicators: ators (minimum of one required; Water (A1) tors Table (A2)	; check all that apply)	(B11)			<u>Secondar</u> Surfa	y Indicators (minimum of two required) ice Soil Cracks (B6)
Hydric soil in /DROLOG Vetland Hyd Primary Indica Surface V X High War X Soturatio	dicators are present. Y rology Indicators: ators (minimum of one required; Water (A1) ter Table (A2) p (A2)	<u>; check all that apply)</u> Salt Crust Aquatic In	(B11) vertebrates (B13)		Secondary Surfa Spars	y Indicators (minimum of two required) ice Soil Cracks (B6) sely Vegetated Concave Surface (B8)
Hydric soil in /DROLOG Vetland Hyd Primary Indica Surface V X High Wa X Saturatic Water M	dicators are present. FY rology Indicators: ators (minimum of one required; Water (A1) ter Table (A2) on (A3) arks (B1)	check all that apply)Salt CrustAquatic InHydrogen	(B11) vertebrates (Sulfide Odor	B13) - (C1)		Secondary Surfa Spars X Drain	y Indicators (minimum of two required) ice Soil Cracks (B6) sely Vegetated Concave Surface (B8) iage Patterns (B10) zed Phizospheres on Living Poots (C2)
Hydric soil in /DROLOG Vetland Hyd Primary Indica Surface V X High Wa' X Saturatic Water Ma Sedimen	dicators are present. PY rology Indicators: ators (minimum of one required; Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2)	; check all that apply) Salt Crust Aquatic In Hydrogen Dry-Seaso Oxidized F	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres	B13) - (C1) le (C2)	a Roots (C	Secondary Surfa Spars X Drain Oxidi	y Indicators (minimum of two required) ice Soil Cracks (B6) sely Vegetated Concave Surface (B8) iage Patterns (B10) zed Rhizospheres on Living Roots (C3
Hydric soil in /DROLOG Wetland Hyd Primary Indica Surface V X High Wa X Saturatio Water Ma Sedimen Drift Dep	dicators are present. Trology Indicators: ators (minimum of one required; Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3)	check all that apply) Salt Crust Aquatic In Hydrogen Dry-Seaso Oxidized F	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled)	B13) · (C1) le (C2) s along Livin	g Roots (C	Secondar Surfa Spars X Drain Oxidi	y Indicators (minimum of two required) ice Soil Cracks (B6) sely Vegetated Concave Surface (B8) lage Patterns (B10) zed Rhizospheres on Living Roots (C3 iere tilled) ish Burrows (C8)
Hydric soil in /DROLOG Wetland Hyd Primary Indica Surface V X High War X Saturatio Water Mar Sedimen Drift Dep Algal Ma	dicators are present. Trology Indicators: ators (minimum of one required; Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) posits (B3) tt or Crust (B4)	; check all that apply) Salt Crust Aquatic In Hydrogen Dry-Seaso Oxidized F (where r Presence	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled) of Reduced I	B13) · (C1) le (C2) s along Livin	g Roots (C	Secondar Surfa Spars X Drain Oxidi C3) (wh X Crayl X Satur	y Indicators (minimum of two required) ice Soil Cracks (B6) sely Vegetated Concave Surface (B8) lage Patterns (B10) zed Rhizospheres on Living Roots (C3 nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9)
Hydric soil in	dicators are present. rology Indicators: ators (minimum of one required; Water (A1) ter Table (A2) on (A3) arks (B1) arks (B1) to Deposits (B2) posits (B3) t or Crust (B4) osits (B5)	; check all that apply) Salt Crust Aquatic In Hydrogen Dry-Seasc Oxidized F Presence Presence Thin Muck	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled) of Reduced I Surface (C7	B13) • (C1) le (C2) s along Livin lron (C4) ')	g Roots (C	Secondary Surfa Spars X Drain X Drain Oxidi X Crayt X Satur X Geor	y Indicators (minimum of two required) ice Soil Cracks (B6) sely Vegetated Concave Surface (B8) lage Patterns (B10) zed Rhizospheres on Living Roots (C3 here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2)
Hydric soil in /DROLOG Vetland Hyd Primary Indica Surface ' X High Wa' X Saturatic Water Ma Sedimen Drift Dep Algal Ma Iron Dep Inundatic	dicators are present. FY rology Indicators: ators (minimum of one required; Water (A1) ter Table (A2) on (A3) arks (B1) it Deposits (B2) posits (B3) it or Crust (B4) osits (B5) on Visible on Aerial Imagery (B7	; check all that apply) Salt Crust Aquatic In Dry-Seaso Oxidized F (where r Presence Thin Muck)Other (Exp	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled) of Reduced I : Surface (C7 plain in Rema	B13) - (C1) le (C2) s along Livin lron (C4) ') arks)	g Roots (C	Secondary Surfa Spars X Drain Oxidi C3) (wh X Crayf X Satur X Geor X FAC-	y Indicators (minimum of two required) the Soil Cracks (B6) sely Vegetated Concave Surface (B8) lage Patterns (B10) zed Rhizospheres on Living Roots (C3 here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5)
Hydric soil in 'DROLOG Vetland Hyd Primary Indica Surface ' X High Wa X Saturation Water Ma Sedimen Drift Dep Algal Ma Iron Dep Mater-St	dicators are present. Trology Indicators: ators (minimum of one required; Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) it or Crust (B4) osits (B5) on Visible on Aerial Imagery (B7 tained Leaves (B9)	; check all that apply) Salt Crust Aquatic In Hydrogen Dry-Seaso Oxidized F (where I Presence Thin Muck)Other (Exp	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled) of Reduced I c Surface (C7 olain in Rema	B13) · (C1) le (C2) s along Livin lron (C4) ') arks)	g Roots (C	Secondary Surfa Spars X Drain Oxidi X Crayt X Satur X Satur X Geor X FAC- Frost	y Indicators (minimum of two required) ice Soil Cracks (B6) sely Vegetated Concave Surface (B8) lage Patterns (B10) zed Rhizospheres on Living Roots (C eret tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)
Hydric soil in	dicators are present. Trology Indicators: ators (minimum of one required; Water (A1) ter Table (A2) on (A3) arks (B1) It Deposits (B2) bosits (B3) It or Crust (B4) osits (B5) on Visible on Aerial Imagery (B7 tained Leaves (B9) ations:	; check all that apply) Salt Crust Aquatic In Hydrogen Dry-Seaso Oxidized F (where r Presence Thin Muck ')Other (Exp	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled) of Reduced I s Surface (C7 plain in Rema	B13) · (C1) le (C2) s along Livin lron (C4) ') arks)	g Roots (C	Secondary Surfa Spars X Drain Oxidi X Crayf X Satur X Geor X FAC- Frost	y Indicators (minimum of two required) tice Soil Cracks (B6) sely Vegetated Concave Surface (B8) lage Patterns (B10) zed Rhizospheres on Living Roots (C3 tere tilled) Tish Burrows (C8) Tation Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)
Hydric soil in	dicators are present. FY rology Indicators: ators (minimum of one required; Water (A1) ter Table (A2) on (A3) arks (B1) it Deposits (B2) posits (B3) it or Crust (B4) osits (B5) on Visible on Aerial Imagery (B7 tained Leaves (B9) rations: r Present? Yes	; check all that apply) 	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled) of Reduced I : Surface (C7 plain in Rema	B13) - (C1) le (C2) s along Livin lron (C4) ') arks)	g Roots (C	Secondary Surfa Spars X Drain Oxidi X Crayf X Satur X Geor X FAC- Frost	y Indicators (minimum of two required) tice Soil Cracks (B6) sely Vegetated Concave Surface (B8) lage Patterns (B10) zed Rhizospheres on Living Roots (C3 here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)
Hydric soil in	dicators are present.	<pre>; check all that apply) Salt Crust Aquatic In Hydrogen Dry-Seasc Oxidized F Presence Thin Muck ') No Depth (ir No Depth (ir </pre>	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled) of Reduced I Surface (C7 plain in Rema plain in Rema	B13) - (C1) le (C2) s along Livin lron (C4) ') arks) 12	g Roots (C	Secondary Surfa Spars X Drain Oxidi X Crayl X Satur X Geor X FAC- Frost	y Indicators (minimum of two required) ice Soil Cracks (B6) sely Vegetated Concave Surface (B8) iage Patterns (B10) zed Rhizospheres on Living Roots (C3 iere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)
Hydric soil in	dicators are present.	; check all that apply) 	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled) of Reduced I : Surface (C7 olain in Rema nches): nches): nches):	B13) - (C1) le (C2) s along Livin lron (C4) ') arks) <u>12</u> 12	g Roots (C	Secondary Surfa Spars X Drain Oxidi X Crayt X Satur X Satur X Geor X FAC- Frost	y Indicators (minimum of two required) ice Soil Cracks (B6) sely Vegetated Concave Surface (B8) iage Patterns (B10) zed Rhizospheres on Living Roots (C ish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)
Hydric soil in	dicators are present.	; check all that apply) 	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled) of Reduced I s Surface (C7 olain in Rema nches): nches): nches):	B13) • (C1) le (C2) s along Livin lron (C4) ') arks) <u>12</u> 12	g Roots (C	Secondary Surfa Spars X Drain Oxidi X Crayt X Satur X Satur X Geon X FAC- Frost	<u>y Indicators (minimum of two required)</u> ice Soil Cracks (B6) sely Vegetated Concave Surface (B8) lage Patterns (B10) zed Rhizospheres on Living Roots (C ere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)
Hydric soil in	dicators are present.	<u>; check all that apply)</u> Salt Crust Aquatic In Dry-Sease Oxidized F (where i Presence Thin Muck ') Other (Exp No X Depth (ir No depth (ir	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled) of Reduced I s Surface (C7 oblain in Rema aches): nches): nches): s, previous ir	B13) • (C1) le (C2) s along Livin lron (C4) ') arks) <u>12</u> 12 12 nspections),	g Roots (C Wetla	Secondary Surfa Spars X Drain Oxidi X Drain Oxidi X Drain Oxidi X Crayl X Satur X Geor X FAC- Frost	<u>y Indicators (minimum of two required</u> ice Soil Cracks (B6) sely Vegetated Concave Surface (B8) iage Patterns (B10) zed Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)
Hydric soil in	dicators are present.	; check all that apply) 	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled) of Reduced I Surface (C7 plain in Rema aches): nches): s, previous ir	B13) - (C1) le (C2) s along Livin lron (C4) 	g Roots (C Wetla	Secondary Surfa Spars Oxidi Oxidi Oxidi Oxidi Crayi Satur Satur Satur FAC- Frost	<u>y Indicators (minimum of two required</u> ice Soil Cracks (B6) sely Vegetated Concave Surface (B8) iage Patterns (B10) zed Rhizospheres on Living Roots (C iere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F) sent? Yes X No
Hydric soil in 'DROLOG Vetland Hyd Primary Indica Surface ' X High Wa X Saturatic Water Ma Sedimen Drift Dep Algal Ma Iron Dep Inundatic Water Table F Saturation Pre- Saturation Pre- Describe Rec Remarks:	dicators are present.	; check all that apply) Salt Crust Aquatic In Hydrogen Dry-Seasc Oxidized F (where i Presence Thin Muck ') Other (Exp No X Depth (ir No Depth (ir No Depth (ir No Depth (ir	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled) of Reduced I (Surface (C7 plain in Rema nches): nches): s, previous ir	B13) - (C1) le (C2) s along Livin lron (C4) /) arks) <u>12</u> 12 12 nspections),	g Roots (C Wetla	Secondary Surfa Spars X Drain Oxidi X Drain X Crayl X Crayl X Satur X Satur X Geor X FAC- Frost	<u>y Indicators (minimum of two required</u> ice Soil Cracks (B6) sely Vegetated Concave Surface (B8) iage Patterns (B10) zed Rhizospheres on Living Roots (C nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)
Hydric soil in Imary Indica Surface ' X High Wa X Saturatic Water Mi Sedimen Drift Dep Algal Ma Iron Deption Inundation Water-St Geditation Present Naturation Present Naturation Present Nescribe Rec Remarks: Hydrology in	dicators are present.	; check all that apply) Salt Crust Aquatic In Hydrogen Dry-Seasc Oxidized F (where i Presence Thin Muck ') Other (Exp No X Depth (ir No Depth (ir No Depth (ir No Depth (ir No Depth (ir	(B11) vertebrates (Sulfide Odor on Water Tab Rhizospheres not tilled) of Reduced I s Surface (C7 olain in Rema nches): nches): nches): s, previous ir	B13) · (C1) le (C2) s along Livin lron (C4) /) arks) <u>12</u> 12 12 12 12	g Roots (C Wetla	Secondary Surfa Spars X Drain Oxidi X Crayt X Satur X Geor X FAC- Frost	<u>y Indicators (minimum of two required</u> ice Soil Cracks (B6) sely Vegetated Concave Surface (B8) lage Patterns (B10) zed Rhizospheres on Living Roots (C iere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)

Project/Site:	FM 741 EA	(Citv/Countv:	к	aufman Countv	Sampling [Date: 04/29/2022
Applicant/Owner:	Texas Departmen	t of Transpor	tation		State: Texa	as Sampling F	Point: WDP45
Investigator(s):	CW and JK	<u></u>	Section Town	nshin Range		N/A	
Landform (hillslope terrace etc):	Poadside hill slope	<u> </u>	ocal relief (c		v none):		Slope (%): 2.3
Subragion (LPP):		Lot:		6745		5750092	
		Lal	32.0930	0745	LUIIG90.43		Datum. NAD 03
Son Map Unit Name: <u>Ferris clay</u>	y, 5 to 12 percent slopes, erod	ed	/ V	NI-		silication: <u>R4SBC</u>	<u>;</u>
Are climatic / hydrologic conditions	s on the site typical for this tim	e of year?	res <u>x</u>	NO		emarks.)	Y N
Are vegetation, Soil	, or Hydrology	significantly	disturbed?	Are "I	Normal Circumstances	present? Ye	*S X NO
Are Vegetation, Soil	, or Hydrology	_naturally pro	blematic?	(If nee	eded, explain any answ	ers in Remarks.)	
SUMMARY OF FINDINGS	 Attach site map show 	ving samp	oling point	t locations,	, transects, impor	tant features,	etc.
Hydrophytic Vegetation Present	? Yes M	No X					
Hydric Soil Present?	Yes	No X	ls	the Sampled	Area		
Wetland Hydrology Present?	Yes	No X	wi	thin a Wetland	d? Yes	No	Х
Remarks: None of the three we	atland indicators were present	. This point is	not located	within a wetlan	d. The Antecedent Pre	cipitation Tool score	red a 12, indicating
conditions during the	site investigations were norm	nal.					
VEGETATION - Use scient	ific names of plants.				1		
					Dominance Test w	vorksheet:	
		Absolute	Dominant	Indicator	Number of Domina	nt Species	
Tree Stratum (Plot size: 3	30' radius	% Cover	Species?	Status	That Are OBL, FAC	W. or FAC:	3 (A)
1 Celtis laevigata		25	Vec	EAC	,,		(0)
2 Cloditsia triaconthos		5	No	EACU	Total Number of Do	minant	
		5	INU	FACU	Species Across All	Strata:	7 (B)
3		·			Opecies Across Air	<u> </u>	(D)
4					Dereent of Domine	at Encoico	
		30	= Iotal Cov	/er			40.0 (A/D)
Sapling/Shrub Stratum (Plot s	size: <u> </u>				That Are OBL, FAC	, vv, or FAC:	<u>42.9</u> (A/B)
1. Maclura pomifera		15	Yes	FACU	Provalonco Indox	workshoot:	
2. Juniperus virginiana		15	Yes	UPL		worksheet.	Multiply by:
3. <u>Celtis laevigata</u>		10	Yes	FAC		0.	
4					OBL species	<u> </u>	=
5			_		FACVV species	<u>15</u> x 2 =	= <u>30</u>
		40	= Total Cov	/er	FAC species	<u>45</u> x 3 =	= <u>135</u>
Herb Stratum (Plot size:	30' radius)		_		FACU species	<u>60</u> x 4 =	= 240
1. Bromus arvensis		15	Yes	FACU	UPL species	<u>25</u> x 5 =	= 125
2. Valerianella radiata		15	Yes	FACW	Column Totals:	145 (A)	(B)
3. Erodium cicutarium ssp. cicut	tarium	10	No	NI			
4. Plantago maior		10	No	FAC	Prevalence Ir	ndex = B/A =	3.66
5. Oxalis corniculata		10	No	FACU			
6					Hydrophytic Vege	tation Indicators:	
7					1 - Rapid Test	for Hydrophytic Ve	egetation
9					2 - Dominance	• Test is >50%	
0					3 - Prevalence	Index ≤3.0 ¹	
9		·			4 - Morphologi	cal Adaptations ¹ (F	Provide supporting
10					Problematic H	ydrophytic Vegetat	tion ¹ (Explain)
	20' radius	60	= Iotal Cov	/er			
Woody Vine Stratum (Plot siz	e:)				¹ Indicators of hydric	soil and wetland	hydrology must
1. <u>Smilax bona-nox</u>		15	Yes	FACU	be present, unless	disturbed or proble	ematic.
2						·	
		15	= Total Cov	/er	Hydrophytic		
% Bare Ground in Herb Stratum	55				Vegetation		
					Present?	Yes	No X
Remarks:							
Hydrophytic vegetation is not pr	resent.						

S	0	IL	
J	J		-

Profile Desc	ription: (Describe to t	he depth need	ed to document th	e indicator	or confirm	the absen	nce of indicators.)	
(inchoo)	Color (moint)	0/	Color (moint)		Tunol	1.002	Toyturo	Demorko
				70	Туре	LUC		Remarks
0-16	101R 3/1	100			<u> </u>			
						<u> </u>		
						<u> </u>		
						<u> </u>		
							<u> </u>	
							<u> </u>	
							<u> </u>	
¹ Type: C=Cor	ncentration, D=Depletio	on, RM=Reduce	ed Matrix, CS=Cove	red or Coate	d Sand Gra	ains.	² Location:	: PL=Pore Lining, M=Matrix.
Hudria Sail I	ndiastore: (Applicabl		unloss otherwise r	voted)			Indicators for	Problematic Hydric Sails ³ :
		e to all LKKS, t		ioleu.) Iod Marix (S.	4)			
	(AI)		Sandy Giey		+)			
	npedon (A2)		Saliuy Reu	0X (33)			Coasi	
	slic (A3)			allix (50)			Dark s	Deine Denressione (E16)
Hydroge	n Sulfide (A4)			ску ivinerai (i	F1)			Plains Depressions (F16)
)	Loamy Gle	yed Matrix (F	-2)		(LKK	H OUTSIDE OF MILRA /2 & /3)
	ICK (A9) (LRR F, G, H	l)		iatrix (F3)	•			
	a Below Dark Surface (ATT)	Redox Darl	k Surface (F6	0) (FZ)			areni Material (TF2)
	ark Sufface (A12)			ark Surface	(- /)		Very S	(Fundain in Destantia)
Sandy M	lucky Mineral (S1)		Redox Dep	ressions (F8	5)		Other	(Explain in Remarks)
2.5 cm N	lucky Peat or Peat (S2	2) (LRR G, H)			S (F16)		Sindicate	ors of hydrophytic vegetation and
5 cm Mu	icky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LRR	(Н)		wetland	hydrology must be present,
							unless o	disturbed or problematic.
Restrictive L	ayer (if present):							
Туре:								
Depth (in	ches):						Hydric Soil Prese	ent? Yes <u>No X</u>
Remarks: Hydric soil ir	idicators are not prese	nt.						
HYDROLOG	iΥ							
Wetland Hyd	rology Indicators:							
Primary Indic	ators (minimum of one	required; check	k all that apply)				Secondary	Indicators (minimum of two required)
Surface	Water (A1)		Salt Crust ((B11)			Surfac	e Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic Inv	ertebrates (E	313)		Sparse	ely Vegetated Concave Surface (B8)
Saturatio	on (A3)		Hydrogen S	Sulfide Odor	(C1)		X Draina	ge Patterns (B10)
Water M	arks (B1)		Dry-Seasor	n Water Table	e (C2)		Oxidiz	ed Rhizospheres on Living Roots (C3)
Sedimer	nt Deposits (B2)		Oxidized R	hizospheres	along Living	g Roots (C	3) (whe	ere tilled)
Drift Dep	oosits (B3)		(where n	ot tilled)			Crayfis	sh Burrows (C8)
Algal Ma	t or Crust (B4)		Presence of	of Reduced Ir	on (C4)		Satura	tion Visible on Aerial Imagery (C9)
Iron Dep	osits (B5)		Thin Muck	Surface (C7))		Geom	orphic Position (D2)
Inundatio	on Visible on Aerial Ima	agery (B7)	Other (Exp	lain in Rema	rks)		FAC-N	leutral Test (D5)
Water-St	tained Leaves (B9)						Frost-I	Heave Hummocks (D7) (LRR F)
Field Observ	ations:							
Surface Wate	r Present? Y	′es No	X Depth (ind	ches):				
Water Table F	Present? Y	′es No	X Depth (ind	ches):				
Saturation Pre	esent? Y	′es No	X Depth (ind	ches):		Wetla	nd Hydrology Prese	ent? Yes <u>No X</u>
(includes cap	illary fringe)	_						
Describe Rec	orded Data (stream ga	auge, monitoring	g well, aerial photos	, previous in	spections), i	if available	:	
Remarks:								
Hydrology in	dicators are not preser	nt.						

Project/Site:	FM 741 EA	(City/County:	К	aufman County	5	Sampling Date:	04/29)/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Te	exas S	Sampling Point:	WD	P46
Investigator(s):	CW and JK	Ś	Section, Town	ship, Range:			N/A		
Landform (hillslope, terrace, et	tc): Depression	L	_ocal relief (co	oncave, conve	ex, none):	concav	/e	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.7013	724	Long: -96	.44974185	5 Datu	um: N	AD 83
Soil Map Unit Name: Houston	n Black clay, 1 to 3 percent slopes	_			NWI cla	assification	: NA		
Are climatic / hydrologic condit	tions on the site typical for this time	of year?	Yes X	No	(If no, explain in	Remarks.)		
Are Vegetation, Soil	, or Hydrology	significantly	disturbed?	Are "N	Normal Circumstance	es" present	t? Yes	X No	o
Are Vegetation, Soil	, or Hydrologyı	naturally pro	blematic?	(If nee	eded, explain any an	swers in R	emarks.)		
SUMMARY OF FINDING	GS - Attach site map show	ing samp	ling point	locations,	transects, impo	ortant fe	eatures, etc.		
Hydrophytic Vegetation Pres	sent? Yes X N	0							
Hydric Soil Present?	Yes X N	0	ls t	he Sampled /	Area				
Wetland Hydrology Present?	? Yes X N	o	wit	hin a Wetland	d? Ye	s X	No		
Remarks: All of the three w	vetland indicators were present. Th	is point is lo	cated within a	wetland. The	Antecedent Precipita	ation Tool	scored a 12, inc	dicating	
conditions during	g the site investigations were norma	al.							
VEGETATION - Use sci	entific names of plants.								
	•				Dominance Test	t workshe	et:		
		Absolute	Dominant	Indicator	Number of Domin	nant Speci	es		
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL FA	ACW or FA	AC.	5	(A)
1)	70 00001		Olalus		,			
2		-		·	Total Number of I	Dominant			
3					Species Across A	All Strata:		5	(B)
4				·				-	. ()
		0	= Total Cove	er	Percent of Domin	nant Specie	es		
Sapling/Shrub Stratum (P	Plot size: 30' radius)		_		That Are OBL, FA	ACW, or FA	AC: 1	00.0	(A/B)
1. Salix nigra	, ,	30	Yes	FACW					
2. Baccharis neglecta		10	Yes	FAC	Prevalence Inde	ex worksh	eet:		
3.				·	Total % Cov	/er of:	Mult	iply by:	
4.				·	OBL species	65	x 1 =	65	
5.				. <u> </u>	FACW species	65	x 2 =	130	
		40	= Total Cove	er	FAC species	10	x 3 =	30	
Herb Stratum (Plot size:	30' radius)		_		FACU species	0	x 4 =	0	
1. Typha angustifolia		25	Yes	OBL	UPL species	0	x 5 =	0	
2. Scirpus pendulus		20	Yes	OBL	Column Totals:	140	(A)	225	(B)
3. <u>Setaria magna</u>		15	Yes	FACW					
4. Ludwigia hirtella		10	No	OBL	Prevalence	e index = B	5/A =	1.61	—
5. Valerianella radiata		10	No	FACW	Hydrophytic Veg	detation Ir	ndicators:		
6. Andropogon glomeratus		10	No	FACW	1 - Rapid Te	st for Hydr	ophytic Vegetal	tion	
7. Eleocharis palustris		10	No	OBL	X 2 - Dominan	ice Test is	>50%		
8					X 3 - Prevalen	ce Index ≤	3.0 ¹		
9					4 - Morpholo	ogical Adap	otations ¹ (Provid	de support	ting
10				·	Problematic	Hydrophy	tic Vegetation ¹ ((Explain)	
		100	= Total Cove	er					
Woody Vine Stratum (Plo	it size:)				¹ Indicators of hyd	dric soil and	d wetland hydro	ology must	ſ
1				·	be present, unles	ss disturbe	d or problemation	с.	
2			Tatal Oau	·					
0/ Dana Oneverd in Usert Otra	t	0	= 10tal Cove	er	Hydrophytic				
% Bare Ground In Herb Stra	itum <u> </u>				Vegetation				
					Present?	Yes	<u> </u>		
Remarks [.]									
Hydrophytic vegetation is p	present.								

SOIL	
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Depth	Matrix		Redox	Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	2.5Y 5/3	90	10YR 3/6	10	С	M,PL	Silty Clay	
		. <u> </u>						
		·						
	·							
		······································				<u> </u>		
		· ·						
		· ·						
¹ Type: C=Cor	ncentration, D=Depletio	n, RM=Redu	ced Matrix, CS=Cover	ed or Coat	ed Sand Gr	ains.	² Locati	on: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applicable	to all LRRs.	, unless otherwise n	oted.)			Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gley	ed Marix (S	64)		1 cr	m Muck (A9) (LRR I, J)
Histic Ep	oipedon (A2)		Sandy Redo	ox (S5)			Coa	ast Prairie Redox (A16) (LRR F, G, H)
Black Hi	stic (A3)		Stripped Ma	trix (S6)			Dar	k Surface (S7) (LRR G)
Hydroge	n Sulfide (A4)		Loamy Muc	ky Mineral	(F1)		Hig	h Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)		Loamy Gley	ed Matrix (F2)		(LR	R H outside of MLRA 72 & 73)
I CIII IVIU Depleter	ICK (А9) (LKR F, G, П) N Below Dark Surface (/	/ A 11)	A Depieted Ma	Surface (F	6)		Rec	Juced Verlic (F18)
Depieted	ark Surface (A12)	、 (1)	Depleted D:	ark Surface	0) (F7)			v Shallow Dark Surface (TE12)
Sandy M	lucky Mineral (S1)		Redox Depr	essions (F	8)		Oth	er (Explain in Remarks)
2.5 cm N	/lucky Peat or Peat (S2)) (LRR G, H)	High Plains	Depression	ns (F16)		³ Indic	ators of hydrophytic vegetation and
5 cm Mu	icky Peat or Peat (S3)	(LRR F)	(MLRA 72 &	73 of LR	RH)		wetla	nd hydrology must be present,
							unles	s disturbed or problematic.
Restrictive L	aver (if present):							
Tunoi	ayer (il present).							
IVDE.								
Depth (in	ches):		<u> </u>				Hydric Soil Pre	esent? Yes X No
Depth (in	ches):						Hydric Soil Pre	esent? Yes X No
Depth (in Remarks: Hydric soil ir	ches):						Hydric Soil Pre	esent? Yes X No
Remarks: Hydric soil ir	ches):						Hydric Soil Pre	esent? Yes <u>X</u> No
Depth (in Remarks: Hydric soil ir	ches):						Hydric Soil Pre	esent? Yes <u>X</u> No
Pype. Depth (in Remarks: Hydric soil ir	ches): ndicators are present.						Hydric Soil Pre	esent? Yes <u>X</u> No
Pype. Depth (in Remarks: Hydric soil ir YDROLOG	ches): ndicators are present. SY Irology Indicators:						Hydric Soil Pre	esent? Yes <u>X</u> No
Primary Indic	ches): ndicators are present. SY Irology Indicators: ators (minimum of one i	required; che					Hydric Soil Pre	esent? Yes X No
Primary Indic X Surface	ches): ndicators are present. SY Irology Indicators: ators (minimum of one i Water (A1)	required; che	 ck all that apply) Salt Crust (f	311)			Hydric Soil Pre	esent? Yes X No ary Indicators (minimum of two required) face Soil Cracks (B6)
Primary Indic X X Surface X High Wa	ches): Idicators are present. SY Irology Indicators: ators (minimum of one i Water (A1) ter Table (A2)	required; che	 ck all that apply) Salt Crust (f Aquatic Inve	311) ertebrates (B13)		Hydric Soil Pre	ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8)
Primary Indic X X X X X X X X X X X X X X X X X X X	ches): adicators are present. BY Irology Indicators: ators (minimum of one i Water (A1) tter Table (A2) on (A3)	required; che	<u></u> <u></u>	311) ertebrates (ulfide Odor			Hydric Soil Pre	essent? Yes X No arry Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10)
Primary Indic X Surface X High Wa X Saturatio Water M	ches): dicators are present. BY Irology Indicators: ators (minimum of one i Water (A1) tter Table (A2) on (A3) arks (B1)	required; che	ck all that apply) Salt Crust (F Aquatic Inve Hydrogen S Dry-Season	311) ertebrates (ulfide Odor Water Tab	B13) r (C1) le (C2)		Hydric Soil Pre	ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C3)
Type Depth (in Remarks: Hydric soil ir YDROLOG Wetland Hyd Primary Indic X Surface X High Wa X Saturatid Water M Sedimer	ches): ndicators are present. SY Irology Indicators: ators (minimum of one i Water (A1) iter Table (A2) on (A3) arks (B1) nt Deposits (B2)	required; che	ck all that apply) Salt Crust (I Aquatic Inve Hydrogen S Dry-Season Oxidized Rh	311) ertebrates (ulfide Odor Water Tab nizospheres	B13) r (C1) ile (C2) s along Livir	ng Roots (C	Hydric Soil Pre Seconda Sur Spa X Dra X Dra Oxi (W	asent? Yes X No ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C3) where tilled)
	ches): ndicators are present. SY Irology Indicators: ators (minimum of one i Water (A1) tter Table (A2) on (A3) arks (B1) nt Deposits (B2) posits (B3) there Denote (B1)	required; che	<u>ck all that apply)</u> Salt Crust (F Aquatic Inve Hydrogen S Dry-Season Oxidized Rh Where no	311) ertebrates (ulfide Odoi Water Tab izospheres ot tilled)	B13) r (C1) le (C2) s along Livir	ng Roots (C	Hydric Soil Pre Seconda Sur Sur Sur Sur Sur Sur Sur Sur	ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C3) /here tilled) yfish Burrows (C8)
	ches): dicators are present. FY Irology Indicators: ators (minimum of one i Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posita (JE)	required; che	<u>ck all that apply)</u> Salt Crust (I Aquatic Inve Hydrogen S Dry-Season Oxidized Rh Presence of This Muck S	311) ertebrates (ulfide Odoi Water Tab nizospheres t tilled) Reduced	B13) r (C1) le (C2) s along Livir Iron (C4)	ng Roots (C	Hydric Soil Pre	ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C3) /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
	ches): adicators are present. FY Irology Indicators: ators (minimum of one I) Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ima	required; che	<u>ck all that apply)</u> Salt Crust (f Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of Thin Muck S Other (Evol	311) ertebrates (ulfide Odor Water Tab nizospheres t tilled) F Reduced Surface (C7 Surface (C7	B13) r (C1) ile (C2) s along Livir Iron (C4) 7) artes)	ng Roots (C	Hydric Soil Pre Seconda Sur Sur Sur Sur Sur Sur Sur Sur	ary Indicators (minimum of two required) face Soil Cracks (B6) inage Patterns (B10) dized Rhizospheres on Living Roots (C3) /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pomorphic Position (D2)
	ches): dicators are present. BY Irology Indicators: ators (minimum of one I Water (A1) tter Table (A2) on (A3) arks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ima tained Leaves (B9)	required; che	<u>ck all that apply)</u> Salt Crust (f Aquatic Inve Hydrogen S Dry-Season Oxidized Rh (where no Presence of Thin Muck S Other (Expla	311) ertebrates (ulfide Odor Water Tab nizospheres of tilled) F Reduced Surface (C7 ain in Rema	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks)	ng Roots (C	Hydric Soil Pre Seconda Sur Sur Sa X Dra X Dra X Cra X Sat X Geo X FAC From Sur Sur Sur Sur Sur Sur Sur Sur	essent? Yes X No ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C3) /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Primary Indic X Surface X High Wa X Saturatio X Saturatio X Saturatio Algal Ma Iron Dep Inundatio Water-S	ches): dicators are present. BY Irology Indicators: ators (minimum of one i Water (A1) ter Table (A2) on (A3) arks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ima tained Leaves (B9)	required; che gery (B7)	ck all that apply) Salt Crust (F Aquatic Inve Hydrogen S Dry-Season Oxidized Rr (where no Presence of Thin Muck S Other (Expla	311) ertebrates (ulfide Odor Water Tab nizospheres ot tilled) F Reduced Surface (C7 ain in Rema	B13) r (C1) ile (C2) s along Livir Iron (C4) 7) arks)	ng Roots (C	Hydric Soil Pre Seconda Sur Spa X Dra X Dra Oxi 3) (W X Cra X Sat X Geo X FAO Fro	essent? Yes X No ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C3) /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F)
Primary Indic X Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Water-S	ches): adicators are present. SY Irology Indicators: ators (minimum of one i Water (A1) ter Table (A2) on (A3) arks (B1) arks (B1) arks (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ima tained Leaves (B9) rations:	required; che	ck all that apply)	311) ertebrates (ulfide Odoi Water Tab izospheres ot tilled) F Reduced Surface (C7 ain in Rema	B13) r (C1) le (C2) s along Livir Iron (C4) r) arks)	ng Roots (C	Hydric Soil Pre	essent? Yes X No ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C3) <i>v</i> here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7)(LRR F)
Primary Indic X Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Water-S Field Observ Surface Wate	ches): adicators are present. SY Irology Indicators: ators (minimum of one i Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Ima tained Leaves (B9) rations: er Present? Ye	 required; che gery (B7) 	ck all that apply)	311) ertebrates (ulfide Odoi Water Tab nizospheres ot tilled) F Reduced Surface (C7 ain in Rema hes):	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks) 2	ng Roots (C	Hydric Soil Pre	essent? Yes X No ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C3) /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
Type. Depth (in Remarks: Hydric soil ir YDROLOG Wetland Hyd Primary Indic X Surface X High Wa X Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation Water-S Field Observ Surface Water Table F	ches): indicators are present. BY Irology Indicators: ators (minimum of one i Water (A1) ther Table (A2) on (A3) arks (B1) it Deposits (B2) boosits (B3) at or Crust (B4) boosits (B5) on Visible on Aerial Ima tained Leaves (B9) Frations: er Present? Ye	gery (B7)	ck all that apply)	311) ertebrates (ulfide Odor Water Tab nizospheres t tilled) F Reduced Surface (C7 ain in Remain hes): hes):	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks) <u>2</u> 8	ng Roots (C	Hydric Soil Pre	ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C3) where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) omorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F)
	ches): adicators are present. BY Irology Indicators: ators (minimum of one I Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2) bosits (B3) at or Crust (B4) bosits (B5) on Visible on Aerial Ima tained Leaves (B9) Vations: Present? Ye esent? Ye	gery (B7)	ck all that apply)	311) ertebrates (ulfide Odor Water Tab nizospheres t tilled) F Reduced Surface (C7 ain in Remain hes): hes): hes):	B13) r (C1) ile (C2) s along Livir lron (C4) 7) arks) <u>2</u> 8 8 8	ng Roots (C	Hydric Soil Pre Seconda Sur Sur Sour Sur Sur Sur Sur Sur Sur Sur S	esent? Yes X No Ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C3) where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
Primary Indic X Surface X High Wa X Saturatio Vater M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Water-S Field Observ Surface Water Saturation Pr (includes cap	ches):	gery (B7)	ck all that apply)	B11) ertebrates (ulfide Odor Water Tab nizospheres of tilled) Reduced Surface (C7 ain in Remain hes): hes): hes):	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks) <u>2 8</u> 8	ng Roots (C	Hydric Soil Pre Seconda Sur Spa X Dra X Dra X Cra X Sat X Gec X FAC X FAC Fro	esent? Yes X No
Type. Depth (in Remarks: Hydric soil ir YDROLOG Wetland Hyd Primary Indic X Surface X High Wa X Saturation Drift Dep Algal Ma Iron Dep Inundation Water-S Field Observ Surface Water Saturation Pr (includes cap) Describe Record	ches):	gery (B7)	ck all that apply)	311) ertebrates (ulfide Odoi Water Tab izospheres ot tilled) F Reduced Surface (C7 ain in Rema hes): hes): hes): previous ir	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks) 2 8 8 8	ng Roots (C	Hydric Soil Pre	esent? Yes X No ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C3) /here tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pmorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
Type. Depth (in Remarks: Hydric soil ir YDROLOG Wetland Hyd Primary Indic X Surface X High Wa X Saturation Water M Sedimer Drift Dep Inundatii Water-S Field Observ Surface Water Surface Cape Field Observ Saturation Pr (includes cap Describe Record	ches): adicators are present. FY Irology Indicators: ators (minimum of one in Water (A1) tter Table (A2) on (A3) arks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial Ima tained Leaves (B9) Frations: er Present? Ye esent? Ye esent? Ye esent? Ye illary fringe)	gery (B7) 25 X N 25 X N 25 X N 25 X N 25 X N	ck all that apply)	311) ertebrates (ulfide Odol Water Tab nizospheres t tilled) f Reduced Surface (C7 ain in Remain hes): hes): hes): previous in	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks) 2 8 8 8	ng Roots (C	Hydric Soil Pre	esent? Yes X No ary Indicators (minimum of two required) face Soil Cracks (B6) arsely Vegetated Concave Surface (B8) inage Patterns (B10) dized Rhizospheres on Living Roots (C3) where tilled) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) pomorphic Position (D2) C-Neutral Test (D5) st-Heave Hummocks (D7) (LRR F) esent? Yes X No
Primary Indic X Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Water-S Field Observ Surface Water Surface Water Surface Water Construction Pr (includes cap Describe Reconstruction Describe Reconstruction Remarks:	ches):	gery (B7)	ck all that apply)	311) ertebrates (ulfide Odor Water Tab nizospheres of tilled) F Reduced Surface (C7 ain in Remain hes): hes): hes): previous in	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks) 2 8 8 8	ng Roots (C	Hydric Soil Pre	esent? Yes X No
Primary Indic X Surface X High Wa X Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Water-S Field Observ Surface Water Surface Water Surface Water Surface Water Surface Records Construction Pr (includes cap Describe Records)	ches):	gery (B7)	ck all that apply)	311) ertebrates (ulfide Odoi Water Tab izospheres ot tilled) F Reduced Surface (C7 ain in Rema hes): hes): hes): previous in	B13) r (C1) le (C2) s along Livir lron (C4) 7) arks) 2 8 8 8	Mg Roots (C	Hydric Soil Pre	esent? Yes X No

Project/Site: FM	741 EA	City/Co	unty:	Ka	aufman County		Sampling Date	e: 04/29/202	22
Applicant/Owner:	Texas Department of Tran	sportation			State:	Texas	Sampling Poir	nt: WDP47	
Investigator(s): CV	V and JK	Section	i, Towns	hip, Range:			N/A		
Landform (hillslope, terrace, etc):	Vegetated flat	Local re	elief (co	ncave, conve	x, none):	non	e	Slope (%):	0
Subregion (LRR): LRR J MI	_RA 86A Lat:	32	2.70139	625	Long: -9	96.4497819)1 Da	atum: NAD 8	3
Soil Map Unit Name: Houston Black clay	1 to 3 percent slopes				NWI 0	classificatio	n: NA		
Are climatic / hydrologic conditions on the	site typical for this time of year	? Yes	Х	No	(If no. explain	in Remark	s.)		
Are Vegetation . Soil . c	or Hvdrology significa	ntlv disturb	ed?	Are "N	ormal Circumstan	ices" prese	nt? Yes	X No	
Are Vegetation . Soil	or Hydrologynaturally	/ problemat	ic?	(If nee	eded, explain any a	answers in	Remarks.)		
SUMMARY OF FINDINGS - Attac	h site map showing s	amplina i	point	locations.	transects. im	portant	features, et	C.	
Hydrophytic Vegetation Present?	Vec No X	, ,		,			,		
Hydrio Soil Procent?	Vec V No	<u> </u>	le th	o Samplad /	Aroo				
Wetland Hydrology Present?		,	15 (1	in a Watland	-11 ca 10 \	/00	No	~	
		<u> </u>	with	in a wettand	ir i		NO	<u> </u>	
Remarks: One of the three wetland indiconditions during the site inve	cators waspresent. This point estigations were normal.	is not locate	ed withi	n a wetland. 1	The Antecedent Pr	ecipitation	Tool scored a	12, indicating	
VEGETATION - Use scientific na	mes of plants.								
					Dominance Te	st worksh	eet:		
	Absol	ute Domi	inant	Indicator	Number of Dor	ninant Spe	cies		
Tree Stratum (Plot size:) % Co	ver Spec	ies?	Status	That Are OBL,	FACW, or I	FAC:	0 (A)	
1	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	<u></u>						、 ,	
2					Total Number of	of Dominan	t		
3					Species Across	s All Strata:		4 (B)	
<u> </u>								(/	
	() = Tot	al Cove		Percent of Don	ninant Spec	cies		
Sanling/Shrub Stratum (Plot size:	· · · · · · · · · · · · · · · · · · ·			1	That Are OBI	FACW or	FAC	0.0 (A/I	B)
)				mat / tre ODE,	171011, 01		0.0 (77	5)
1					Prevalence In	dex works	heet:		
2					Total % C	over of:	M	ultiply by:	
3					OBL species	0	x 1 =	0	
4					FACW species	0	x 2 =	0	
D					FAC species	15	x 3 =	45	
Line Otentum (Distring on the	<u> </u>	= 100	ai Cove	ſ	FACU species	50	x 4 =	200	
Herb Stratum (Piot size: <u>30' radiu</u>	<u>s</u>)	• · ·	/	FAOL	UPL species	40	x 5 =	200	
	2	<u> </u>	res	FACU	Column Totals:	105		445 (B)
2. Cynodon dactylon	2	<u> </u>	res	FACU				``	,
3. <u>Oenothera speciosa</u>	2	<u> </u>	res	<u></u>	Prevalen	ce Index =	B/A =	4 24	
4. Pyrrhopappus pauciflorus	2	<u> </u>	res						
5. Mimosa strigillosa		<u>5 I</u>	No	FAC	Hydrophytic V	egetation/	Indicators:		
6. <u>Oplismenus hirtellus</u>	1	0 1	No	FACU	1 - Rapid	Test for Hy	drophytic Vege	tation	
7					2 - Domina	ance Test is	s >50%		
8					3 - Prevale	ence Index	≤3.0¹		
9					4 - Morpho	ological Ad	aptations ¹ (Pro	vide supporting	
10					Problemat	ic Hvdroph	vtic Vegetation	¹ (Explain)	
	10	05 = Tot	al Cove	r	_	, , , , , , , , , , , , , , , , , , ,	,	x F - 7	
Woody Vine Stratum (Plot size:)				¹ Indicators of h	vdric soil a	nd wetland hvo	trology must	
1					he present unl	ess disturb	ed or problem:	atic	
2									
	() = Tot	al Cove	r	Hydrophytic				
% Bare Ground in Herb Stratum	0				Vegetation				
					Present?	Yes	s No	o X	
Remarks:									
Hydrophytic vegetation is not present.									

SOIL	
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Indexts Color (model) % Type: Lot Texture Bernarks 0-18 2.9Y 5/3 90 10YR 7/2 10 C M Caay 19 2.9Y 5/3 90 10YR 7/2 10 C M Caay 19 2.9Y 5/3 90 10YR 7/2 10 C M Caay 19 2.9Y 5/3 90 10YR 7/2 10 C M Caay 19 2.9Y 5/3 90 10YR 7/2 C Caay M Caay M M 19 Color Concentration, D=Depletion, RM-Reduced Matrix, (S) 10 M M M Coasy Matrix (S) 10 Coasy Matrix (S) 10 Dark Surface (A1) 10 M M Coasy Matrix (S) 10 Dark Surface (A1) Expleted Matrix (S) 10 M M M M M M M M M M M M M M M M M	Depth	Matrix		R	Redox Features				
G. 18 2.5 V 5/3 90 10 YR 7/2 10 C M Clay Type: Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. ************************************	(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
"Type: C=Concentitation, D=Depietion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. "Location: PL=Pore Lining, M=Matrix." "Type: C=Concentitation, D=Depietion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. "Idocation: PL=Pore Lining, M=Matrix." "Hydric Soil Infocators: (Applicable to all LRBs, unless otherwise noted.) Indicators for Problematic Hydric Soils". Histic Epipedon (A2) Sandy Redux (S5) Coase Prain Redux (A1). (LRR F, G) Bistoilied Layers (A5) Case Prain Redux (A1). (LRR F, G) Case Prain Redux (A1). (LRR F, G) Depieted Matrix (A3) Strapped Matrix (F3) Reduced Verits (F16) Stratified Layers (A5) URR F, G, H) Depieted Matrix (F3) Reduced Verits (F16) Stratified Layers (A5) URR F, G, H) Depieted Matrix (F3) Reduced Verits (F12) Sandy Muday (Merail (S1) Depieted Matrix (S1) Reduced Verits (F12) Vay Shallow Datrix Surface (F12) Sandy Muday (Merail (S1) Depieted Matrix (S1) Notacian (T172) Vay Shallow Datrix Surface (F12) Thinks (Mara (K1) Sandy Class (R1) High Plans Depressions (F16) "Midicators (T172) Sandy Muday More (G1 Present): Yrgs: No Sandy Muday Muday Plant Present): Midicators (Midicators (Midicators (Midicators (Midicators (Midicators (Midicators (Midicators (Midicators (Mi	0-18	2.5Y 5/3	90	10YR 7/2	10	C	М	Clay	
Type: C=Concentration, D=Deptetion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. "Location: PL=Pore Lining, M=Matrix. Type: C=Concentration, D=Deptetion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. Indicators: (Applicable to all LRRe, unless otherwise noted.) Indicators: (Applicable to all LRRe, unless otherwise noted.) Histos (A1) Sandy Redox (S5) Coase Paria Redox (A16) Redox Paria Redox (A16									
Type: C-Concentration. D=Depletion. RM-Reduced Matrix, CS-Covered or Coaled Sand Grains. "Location: PL=Pore Lining, M=Matrix. Type: C-Concentration. D=Depletion. RM-Reduced Matrix, CS-Covered or Coaled Sand Grains. "Location: PL=Pore Lining, M=Matrix. Histic Epipedin (A2) Sandy Reduc (S5) Indicators for Problematic Hydric Solit*. Histic Epipedin (A2) Sandy Reduc (S6) Dark Surface (S7). (LRR G) Block Histic (A3) Stepped Matrix (S8) Dark Surface (S7). (LRR G) Histic Epipedin (A2) Camy Muckly Matrix (F2) ULRR H outside of MLRA 72.8.73 Statified Layers (A5) (LRR F) Loany Gleyed Matrix (F2) Red Parent Material (F1) Depleted Brain Dark Surface (F1) Depleted Matrix (F2) Red Parent Material (F12) Red Parent Material (F12) Sandy Muckly Mineral (S1) Depleted Matrix (F2) With Material (F12) Red areant Material (F12) 2.8 on Muckly Flat or Pat (S2) (LRR 6, H) High Flains Depressions (F16) Mindcators for Minoty Prophysic wegatation an weekan hydrology Indicators Stringer Mitter of Protocols Mindcators for Minoty Parence Parent (S2) (LRR 6, H) High Raine Depressions (F16) Secondary Indicators (minimum of two regulations on two regulations in weekan hydrology Indicators are present. Stringer Mitter (A1) Secondary Indicators (R10) Secondary Indicat									
Type: C=Concentration, D=Deptetion, RM=Reduced Matrix, CB=Covered or Coated Sand Grains. *Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators (Applicable to all LRRe, unless otherwise noted.) Indicators (Applicable to all LRRe, unless otherwise noted.) Indicators (Applicable to all CRR L, 0) Histoc (A1) Sandry Gleyd Matrix (S6) Indicators (Applicable to all LRRe, 0) Coast Prime Redox (A16) (LRR F, 0) Black Heir (A3) Sandry Gleyd Matrix (F2) Learny Mucky Mireral (F1) High Pains Depressions (F16) Straitfiel Layers (A5) LRR F, 1) Learny Source (A12) Depleted Matrix (F2) Depleted Bolow Dark Surface (A11) Reduced Vent (F16) Reduced Vent (F16) Depleted Dark Surface (A12) Depleted Dark Surface (F17) Very Shallow Dark Surface (F12) S.f. om Mucky Mineral (S1) Reduced Vent (F16) Reduced Vent (F16) S.f. om Mucky Peat or Peat (S2) (LRR F, 1) (MLRA 72 & 73 of LR H) Very Shallow Dark Surface (F17) Deptite (Indes)::::::::::::::::::::::::::::::::::::									
"Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS=Covered or Coaled Sand Grains." *Location: PL=Pore Lining, M=Matrix, RMPrice Soil Indicators for Problematic Hydric Soils": "Histics Epidedin (A2) Sandy Reduc (S5)									
Type: C-Concentration, D-Depletion, RM-Reduced Matrix, CS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators (Applicable Coale): Histos (A1) Sandy Gleged Matrix (S5) Coast Problematic Hydric Soils): Histos (A1) Sandy Gleged Matrix (S5) Coast Problematic Hydric Soils): Histos (A1) Coart Matrix (S6) Coast Problematic Hydric Soils): 1 orn Muck (A9) (LRR F, G, H) Loomy Muck Mineral (F1) High Plains Depressions (F16) Depleted Below Dark Surface (A11) Redox Dark Surface (F16) Reduced Vertic (F16) Depleted Dark Nurdee (A12) Depleted Dark Surface (A12) Depleted Dark Surface (A12) Other Ecleptain in Remarks) 2.5 om Mucky Meator Part (S2) (LRR G, H) High Plains Depressions (F16) Wery Shallow Dark Surface (A12) Other Ecleptain in Remarks) Type: Depleted Dark Surface (A12) Muck Y Deator Part (S2) (LRR G, H) High Plains Depresentsions (F16) Surface Nater (A11) Type: Depleted Dark Surface (A12) Muck Y Deator Part (S2) (LRR G, H) High Plains Depresentsions (F16) Surface Nater (A11) Surface Nater (A11) Surface Nater (A11) Surface Nater (A12) Surface Nater (A11) Surface Nater (A11) Surface Nat									
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. *Location: PL=Pore Lining, M=Matrix. Hydrof: Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: 1 cm Muck (A9) (LRR I, J) Sandy Reduc (S5) Sandy Reduc (S5) Const Praine Reduc (A1) Herst (S7) Const Praine Reduc (A1) Const Praine Reduc (A1) Const Markare (S7) Const Markare (S7) Const Variace (S3) Const Variace (S3) Const Variace (S7) Const Variace (S3) Const Variace (S7) Const Variace (S3) Const Variace (S3) Const Variace (S3) Const Variace (S3) Const Variace (S7) Const Variace (S3) Const Variace (S3) Const Variace (S3) Const Variace (S7) Muck (S9) Const Variace (S3) Const Variace (S7) Muck (S9) Const Variace (S7) Very Samady Variace (S3) Muck Samado Variace (S7) Muck Samado Variace (S7) Muck Samado Variace (S7) Mu			. <u> </u>						
With Calibrations: (Applicable to all LRs, unless otherwise noted.) Indicators: (Applicable to all LRs, unless otherwise noted.) Histic Splaton (A2) Sandy Gleyed Marx (S4) 1 cm Muck (A9) (LR F, I, J) Black Histic (A3) Stripped Marx (S5) Dark Surface (S7) (LR 6) Hydrogen Suffice (A4) Learny Gleyed Marx (S2) Dark Surface (S7) (LR 6) Stratified Layers (A5) (LR F, F, C, H) Depleted Marx (F2) Red Parent March (A1) Depleted Borb Dark Surface (A12) Depleted Marx (S12) Red Parent March (T2) Sandy Mucky Meral (S1) Depleted Bark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Mucky Meral (S1) Depleted Dark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Mucky Meral (S1) Depleted Dark Surface (TF12) Very Shallow Dark Surface (TF12) Type: Depleted Dark Surface (TF1) Very Shallow Dark Surface (TF12) Type: Mucky Peat or Peat (S2) (LR R G, H) High Plains Depressions (F16) Hydric Soil Present? Yrpe: Mucky Peat or Peat (S3) (LR F) High Cosil Present? Yes	Type: C=Con		on, RM=Reduce	d Matrix, CS=	Covered or Coate	ed Sand Gra	ains.	²Locatio	n: PL=Pore Lining, M=Matrix.
Histics (A1) Sandy Gleyet Marx (S4) 1 orn Muck (A9) LRR F, J) Histic Explored n (A2) Sandy Redox (S5) Coast Praine Redox (A16) LRR F, G Hydrogen Suffield (A3) Loarny Gleyed Matrix (S3) Dark Surface (S7) LRR G, G Stratified Layer (A5) Loarny Gleyed Matrix (S3) High Plans Depressions (F16) High Plans Depressions (F16) Stratified Layer (A1) Depleted Back Watra (F17) High Plans Depressions (F16) Red Parent Matria (T172) Sandy Mucky Mineral (S1) Redox Dark Surface (F77) Very Shaltow Dark Surface (T12) Red Parent Matria (T172) Sandy Mucky Mineral (S1) Redox Dark Surface (F77) Very Shaltow Dark Surface (T12) Red Parent Matria (T172) Sandy Mucky Mineral (S1) Redox Dark Surface (F17) Very Shaltow Dark Surface (T12) Redox Dark Surface (T12) Sandy Mucky Mineral (S1) Redox Dark Surface (T17) Very Shaltow Dark Surface (T12) Notactars of hydrophylic wegetation an wethan hydrology must be present. Wetland Hydrology Indicators Mucky Peat or Peat (S2) (LR R F) (MLRA 72 & 73 of LR H H) Surface Sulf Cracks (B6) Surface Water (A11) Satt Crust (B11) Surface Sulf Cracks (B6) Sparsely Vegetated Concurve Sulface Satt Crust (B11) Sufface Sulf Cracks (B6) Sp	Hvdric Soil In	dicators: (Applicable	e to all LRRs. u	nless otherw	ise noted.)			Indicators fo	or Problematic Hydric Soils ³ :
Histic Epipeion (A2) Sandy Redox (35) Coast Prairie Redox (A16) (LRR F, G Bitack Histic (A3) Strippel Matrix (S5) Dark Surface (S7) (LRR G) Hydrogen Sulfiel (A4) Loarny Gleyed Matrix (F2) High Planis Depressions (F16) 1 cm Muck (A6) (LRR F, G, H) X Depleted Matrix (F2) Reduced Vertic (F13) 1 cm Muck (A6) (LRR F, G, H) X Depleted Matrix (F2) Reduced Vertic (F12) 2 Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Head Parent Material (T72) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Head Parent Material (T72) S cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) "Indicators of hydrophytic vegetation an wetland hydrology must be present. Remarks: Hydric Soil Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of one required; check all that apply) Sulface Water (A1) Aquatic Invertebrates (B13) Sparsely Vegetated Conceve Surface Soil Cracks (B0) Sulface Water (A1) Aquatic Invertebrates (B13) Sparsely Vegetated Conceve Surface Soil Cracks (B1) Hydrigen Sulface Mark (B1) Dry-Season Vater Table (C2) Oxidized Rhizospheres on Living Rod (Where Tilled) Oxidized Rhizospheres on Living Rod (Where Table (R2) Oxidized Rhizospheress on L	Histosol (A1)		Sandv	Gleved Marix (S	4)		1 cm	Muck (A9) (LRR I. J)
Endex Histic (A3) Sinped Matrix (S3) Dark Surface (S7) (LRR 6) Hydrogen Suffide (A4) Loamy Mucky Mineral (F1) High Plans Depressions (F16) Stratified Layers (A5) (LRR F) Loamy Mucky Mineral (F2) 1 cm Muck (A9) (LRR F, 6, H) X Depleted Matrix (F2) Sender Mucky (A9) (LRR F, 6, H) X Depleted Dark Surface (F7) Sender Mucky Mineral (S1) Redox Depressions (F16) High Plans Depressions (F16) 2.5 cm Mucky Peat or Peat (S2) (LRR F) High Plans Depressions (F16) 5 cm Mucky Peat or Peat (S2) (LRR F) High Plans Depressions (F16) 7/Per	Histic Epi	pedon (A2)		Sandy	Redox (S5)	,		Coas	st Prairie Redox (A16) (LRR F, G, H)
Hydrogen Sulfite (A) Stratified Layers (A) Stratified Layers (A) (LR F) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Sulface (A1) Depleted Below Dark Surface (A1) Depleted Dark Surface (F7) Loamy Mucky Mineral (S1) Sond Mucky Peat or Peat (S2) (LR R, H) High Plains Depressions (F16) High Plains Depressions (F16) Generation (F17) Sond Mucky Mear or Peat (S2) (LR R, H) High Plains Depressions (F16) High Plains Depressions (F16) Sond Mucky Peat or Peat (S2) (LR R, H) High Plains Depressions (F16) Sufface Water (H1) Salt Crust (H1) High Plains Depressions (H10) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Root Oxidized Rhizospheres on Living Root Oxidized Rhizospheres on Living Root (where tilled) Cright Barrows (G8) High Plain	Black His	tic (A3)		Strippe	ed Matrix (S6)			Dark	Surface (S7) (LRR G)
Statified Layers (A5) (LRR F) Leamy Gleyed Matrix (F2) (LR H outside of MLRA 72 & 73) 1 orn Muck (A9) (LRR F, G, H) X Depleted Matrix (F3) Reduced Vertic (F18) Depleted Below Dark Surface (A11) Reduced Vertic (F12) Reduced Vertic (F13) Sandy Mucky Mineral (S1) Reduce Dark Surface (F7) Very Shallow Dark Surface (F12) 2.5 orn Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) "Indicators of hydrophydic vegetation an wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type:	Hydrogen	Sulfide (A4)		Loamy	/ Mucky Mineral (F1)		High	Plains Depressions (F16)
Image: Image	Stratified	Layers (A5) (LRR F))	Loamy	Gleyed Matrix (F	-2)		(LRF	R H outside of MLRA 72 & 73)
	1 cm Muc	k (A9) (LRR F, G, H)	X Deplet	ted Matrix (F3)			Redu	uced Vertic (F18)
Thick Dark Surface (A12) Depleted Dark Surface (F7) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Other (Explain in Remarks) 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) "Indicators of hydrophytic vegetation an wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Deplet (inches): Hydric Soil Present? Yes X No _ Remarks: Hydric Soil Present? Yes _ X No _ Remarks: Hydric Soil Present? Yes _ X No _ Surface Water (A1) Salt Crust (B11) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Invertebrates (B13) Sparsely Vegetated Concave Surface Surface Water (A1) Aquatic Invertebrates (B13) Sparsely Vegetated Concave Surface Saturation (A3) Hydrogen Sufface Otor (C1) Drivage Patterns (B10) Drivage Patterns (B10) Water Marks (B1) Orxidized Rhizospheres along Living Roots (C3) Crayfish Burrows (C6) Crayfish Burrows (C6) Adgalt Mor Crust (B4) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks (D7)(LRR F) Water Marks (B3) Depth (inches): Depth (inches): <td>Depleted</td> <td>Below Dark Surface (</td> <td>A11)</td> <td>Redox</td> <td>Dark Surface (F</td> <td>6)</td> <td></td> <td>Red</td> <td>Parent Material (TF2)</td>	Depleted	Below Dark Surface (A11)	Redox	Dark Surface (F	6)		Red	Parent Material (TF2)
Safe Wucky Version (S1)	Thick Dar	k Surface (A12)		Deplet	ted Dark Surface	(F7)		Very	Shallow Dark Surface (TF12)
2.5 cm Mucky Peat or Peat (S2) (LRR G, H) 5 cm Mucky Peat or Peat (S3) (LRR F) (MLRA 72 & 73 of LRR H) "Indicators of hydrology must be present, unless disturbed or problematic. Restrictive Layer (if present): Type: Depth (inches): Hydric Soil Present? Yes No Remarks: Hydric soil indicators are present. YDROLOGY Wetland Hydrology Indicators: Primary indicators (minimum of one required; check all that apply) Surface Water (A1)	Sandy Mu	ucky Mineral (S1)		Redox	Depressions (F8	3)		Othe	r (Explain in Remarks)
	2.5 cm M	ucky Peat or Peat (S2	2) (LRR G, H)	High F	Plains Depression	s (F16)		³Indica	tors of hydrophytic vegetation and
unless disturbed or problematic. Restrictive Layer (if present): Type:	5 cm Muc	ky Peat or Peat (S3)	(LRR F)	(MLR/	A 72 & 73 of LRF	R H)		wetlan	d hydrology must be present,
Restrictive Layer (if present): Type:								unless	disturbed or problematic.
Type:	Restrictive La	yer (if present):							
Depth (inches): Hydric Soil Present? Yes X No Remarks: Hydric soil indicators are present. Present? Yes X No Primary Indicators are present. Sattactors (minimum of one required; check all that apply) Secondary Indicators (minimum of two required; check all that apply) Secondary Indicators (minimum of two required; check all that apply) Secondary Indicators (minimum of two required; check all that apply)	Туре:			_					
Remarks: Hydric soil indicators are present. YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of two required; check all that apply)	Depth (inc	hes):						Hydric Soil Pres	sent? Yes X No
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of two required; check all that apply) Surface Water (A1) Salt Crust (B11) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Invertebrates (B13) Sparsely Vegetated Concave Surface Saturation (A3) Hydrogen Sulfde Odor (C1) Drainage Patterns (B10) Oxidized Rhizospheres along Living Roots (C3) Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres along Living Roots (C3) (where titled) Drift Deposits (B3) (where not tilled) Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (B7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No Surface vater Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Surface water Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Surface Water Present? Yes No X Depth (inches									
Finary Indicators (minimum of one required; check all that apply) Secondary Indicators (minimum of two required; check all that apply) Surface Water (A1) Salt Crust (B11) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Invertebrates (B13) Sparsely Vegetated Concave Surface Saturation (A3) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Root Sediment Deposits (B2) Oxidized Rhizospheres along Living Roots (C3) (where not tilled) Drift Deposits (B3) (where not tilled) Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (I7) Iron Deposits (B5) Thin Muck Surface (C7) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Water-Stained Leaves (B9) X Depth (inches): Yes Water Table Present? Yes No X Depth (inches): Water Table Present? Yes No X Depth (inches): Cincludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:<	YDROLOG	Y ology Indicators:							
Surface Water (A1) Salt Crust (B11) Surface Soll Cracks (B6) High Water Table (A2) Aquatic Invertebrates (B13) Sprasely Vegetated Concave Surface Saturation (A3) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots Sediment Deposits (B2) Oxidized Rhizospheres along Living Roots (C3) (where tilled) Drift Deposits (B3) (where not tilled) Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C Iron Deposits (B5) Thin Muck Surface (C7) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Water Table Present? Yes No X Depth (inches): Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Cincludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Meana	Primary Indica	tors (minimum of one	required: check	all that apply))			Secondar	v Indicators (minimum of two required)
High Water Table (A2) Aquatic Invertebrates (B13) Sparsely Vegetated Concave Surface Saturation (A3) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roo Sediment Deposits (B2) Oxidized Rhizospheres along Living Roots (C3) (where tilled) Drift Deposits (B3) (where not tilled) Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C Iron Deposits (B5) Thin Muck Surface (C7) Geomorphic Position (D2) Inudation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Frost-Heave Hummocks (D7) (LRR F) Surface Water Present? Yes No X Surface capillary fringe) No X Depth (inches): Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Hydrology indicators are not present.	Surface V	Vater (A1)	required, encou	Salt C	rust (B11)			Surfa	ace Soil Cracks (B6)
Saturation (A3) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roo Sediment Deposits (B2) Oxidized Rhizospheres along Living Roots (C3) (where tilled) Drift Deposits (B3) (where not tilled) Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (B7) Iron Deposits (B5) Thin Muck Surface (C7) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Field Observations: Saturation Present? Yes Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Hydrology indicators are not present.	High Wat	er Table (A2)		Aquati	ic Invertebrates (E	313)		Span	sely Vegetated Concave Surface (B8)
Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roo Sediment Deposits (B2) Oxidized Rhizospheres along Living Roots (C3) (where tilled) Drift Deposits (B3) (where not tilled) Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C Iron Deposits (B5) Thin Muck Surface (C7) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Water Table Present? Yes No X Sufface Water Present? Yes No X Mater Table Present? Yes No X Sufface Corded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Wetland Hydrology Present? Yes No Remarks: Hydrology indicators are not present. Facena to present. Staturation present. Staturation present.	Saturation	ו (A3)		Hydro	gen Sulfide Odor	(C1)		 Drair	nage Patterns (B10)
Sediment Deposits (B2) Oxidized Rhizospheres along Living Roots (C3) (where tilled) Drift Deposits (B3) (where not tilled) Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C7) Iron Deposits (B5) Thin Muck Surface (C7) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Frost-Heave Hummocks (D7)(LRR F) Field Observations: Saturation Present? Yes Saturation Present? Yes No X Water Table Present? Yes No X Includes capillary fringe) Depth (inches): Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Hydrology indicators are not present.	Water Ma	rks (B1)		Dry-Se	eason Water Tabl	e (C2)		Oxidi	ized Rhizospheres on Living Roots (C3)
Drift Deposits (B3) (where not tilled) Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (I Iron Deposits (B5) Thin Muck Surface (C7) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Thin Muck X Depth (inches): Frost-Heave Hummocks (D7)(LRR F) Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Cincludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Hydrology indicators are not present. Hydrology indicators are not present. Hydrology indicators are not present.	Sediment	Deposits (B2)		Oxidiz	ed Rhizospheres	along Livin	g Roots (C	3) (wł	nere tilled)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (1 Iron Deposits (B5) Thin Muck Surface (C7) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Frost-Heave Hummocks (D7) (LRR F) Field Observations: Surface Water Present? Yes No _X Depth (inches): Water Table Present? Yes No _X Depth (inches): Saturation Present? Yes No _X Depth (inches): Saturation Present? Yes No _X Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Hydrology indicators are not present.	Drift Depo	osits (B3)		(whe	ere not tilled)			Cray	fish Burrows (C8)
Iron Deposits (B5)	Algal Mat	or Crust (B4)		Prese	nce of Reduced I	ron (C4)		Satu	ration Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Frost-Heave Hummocks (D7) (LRR F) Field Observations: Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes No X Depth (inches): Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No No Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Yes No Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Yes No Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Saturation Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No Saturation Present? Yes No Yes No Yes Yes<	Iron Depo	osits (B5)		Thin M	luck Surface (C7)		Geor	morphic Position (D2)
	Inundatio	n Visible on Aerial Ima	agery (B7)	Other	(Explain in Rema	rks)		FAC-	Neutral Test (D5)
Field Observations: Surface Water Present? Yes No X Depth (inches):	Water-Sta	ained Leaves (B9)						Frost	t-Heave Hummocks (D7) (LRR F)
Surface Water Present? Yes No X Depth (inches):	Field Observa	itions:							
Water Table Present? Yes No X Depth (inches): Image: Mode of the state of the sta	Surface Water	Present? Y	es No	X Dept	h (inches):				
Saturation Present? YesNo _X _ Depth (inches): Wetland Hydrology Present? YesNo _ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: NoNO	Water Table P	resent? Y	les No	X Dept	h (inches):				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Hydrology indicators are not present.	Saturation Pre	sent? Y	es No	X Dept	h (inches):		Wetla	nd Hydrology Pres	sent? Yes <u>No X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Hydrology indicators are not present.	(includes capil	lary fringe)							
Remarks: Hydrology indicators are not present.	Describe Reco	orded Data (stream ga	uge, monitoring	well, aerial ph	notos, previous in	spections),	if available	:	
Hydrology indicators are not present.	Remarks:								
	Hydrology ind	icators are not preser	nt.						

Project/Site:	FM 741 EA		City/County:	к	Caufman County	Samplir	ng Date:	04/29	/2022
Applicant/Owner:	Texas Department	of Transpo	rtation		State: Texa	as Samplir	ng Point:	WD	P48
Investigator(s):	CW and JK		Section, Town	ship, Range:		N/A	-		
Landform (hillslope, terrace, etc):	Depression		Local relief (co	oncave. conve	ex. none):	concave	S	lope (%): 0-1
Subregion (LRR):	RR J MI RA 86A	Lat [.]	32 70088	3789	long: -96.45	5037975	Datum	r N/	AD 83
Soil Map Unit Name: Houston Bl	lack clay, 1 to 3 percent slopes				NWI class	ification N	A	· <u> </u>	
Are climatic / hydrologic conditions	s on the site typical for this time	of vear?	Yes X	No	(If no, explain in R	emarks)			
Are Vegetation Soil	or Hydrology	significantly	disturbed?	Are "1	Normal Circumstances"	nresent?	Yes X	. No	`
Are Vegetation Soil	or Hydrology	naturally pro	blematic?	/ite i		ers in Remarks	=) =)		
	, of Hydrology	ing com	oling point	locations	trancasta impor	tant foature	s.)		
SOMMART OF FINDINGS	- Attach site map show	niy sani		iocations,	transects, impor	tant leature	5, 810.		
Hydrophytic Vegetation Present	? Yes <u>X</u> N	0	-						
Hydric Soil Present?	Yes <u>X</u> N	0	ls t	he Sampled	Area				
Wetland Hydrology Present?	Yes <u>X</u> N	0	wit	hin a Wetlan	d? Yes	<u> X N</u> c)	-	
Remarks: All of the three wetla conditions during the	Ind indicators were present. The site investigations were norma	is point is lo al.	ocated within a	wetland. The	Antecedent Precipitation	on Tool scored	a 12, indic	ating	
VEGETATION - Use scient	tific names of plants.								
					Dominance Test w	orksheet:			
		Absolute	Dominant	Indicator	Number of Dominar	nt Species			
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	That Are OBL, FAC	W, or FAC:	3		(A)
1.									
2.					Total Number of Do	minant			
3.			_		Species Across All	Strata:	3	i.	(B)
4.									
		0	= Total Cov	er	Percent of Dominar	nt Species			
Sapling/Shrub Stratum (Plot s	size:)				That Are OBL, FAC	W, or FAC:	100	0.0	(A/B)
1 (* 1000	,				,	,			()
2					Prevalence Index	worksheet:			
3				·	Total % Cover	of:	Multipl	y by:	
4				·	OBL species	0 >	<1 =	0	
5					FACW species	30 >	< 2 =	60	
· · · · · · · · · · · · · · · · · · ·		0	= Total Cov		FAC species	60 >	< 3 =	180	
Herb Stratum (Plot size [.]	30' radius)				FACU species	0 >	< 4 =	0	
1 Panicum virgatum	<u>50 Iadius</u>)	25	Ves	FAC	UPL species	0 >	< 5 =	0	
2 Tridens albescens		25	 	EAC	Column Totals:	90 ((A)	240	(B)
3 Juncus marginatus		25	 Ves	EACW/					
S. Juncus marginalus A Phyla fruticosa		10	No		Prevalence In	ndex = B/A =	2.6	57	
4. Filyla Indicosa		5	No						
			INU	FACW	Hydrophytic Veget	tation Indicato	ors:		
0				·	1 - Rapid Test	for Hydrophytic	c Vegetation	n	
· · · · · · · · · · · · · · · · · · ·				·	X 2 - Dominance	Test is >50%			
8					X 3 - Prevalence	Index ≤3.0 ¹			
9					4 - Morphologi	cal Adaptations	s1 (Provide	support	ing
10					Problematic Hy	ydrophytic Veg	etation ¹ (Ex	<plain)< td=""><td></td></plain)<>	
	`	90		er					
Vvoody Vine Stratum (Plot siz	ze:)				¹ Indicators of hydric	soil and wetla	nd hydrolog	gy must	
1				- <u> </u>	be present, unless	disturbed or pro	oblematic.		
2									
% Bare Ground in Herb Stratum	n <u>10</u>	0	_ = Total Cov	er	Hydrophytic Vegetation				
					Present?	Yes X	No		
Remarks: Hydrophytic vegetation is prese	ent.								

SOIL	
------	--

Deptil			11000	t cutures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 4/1	90	10YR 6/3	10	D	Μ	Clay	
					·			
		·			·			
		<u> </u>			·			
					·			
		·			·			
ype: C=Conc	entration, D=Depletion	, RM=Reduc	ced Matrix, CS=Cove	ered or Coate	ed Sand Gra	ains.	² Locatio	on: PL=Pore Lining, M=Matrix.
ydric Soil In	dicators: (Applicable f	to all LRRs,	unless otherwise r	noted.)			Indicators f	or Problematic Hydric Soils ³ :
Histosol (41)		Sandy Gle	yed Marix (S	64)		1 cn	n Muck (A9) (LRR I, J)
Histic Epi	pedon (A2)		Sandy Red	lox (S5)			Coa	st Prairie Redox (A16) (LRR F, G, H)
Black Hist	ic (A3)		Stripped M	atrix (S6)			Darl	Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Mu	cky Mineral	(F1) 50)		High	Plains Depressions (F16)
Stratified			Loamy Gle	yed Matrix (F2)		(LK	R H OUTSIDE OF MLRA 72 & 73)
I CIT Muc	к (А9) (LKK F, G, П) Below Dark Surface (A	11)		k Surface (F	6)		Red	Darent Material (TE2)
Thick Dar	k Surface (A12)	11)	Depleted C	ark Surface (i	(F7)		Ven	Shallow Dark Surface (TE12)
Sandy Mu	icky Mineral (S1)		Redox Der	pressions (F	8)		Othe	er (Explain in Remarks)
2.5 cm Mi	ucky Peat or Peat (S2)	(LRR G. H)	High Plains	S Depression	-, ns (F16)		³ Indic	ators of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3) (I	LRR F)	(MLRA 72	& 73 of LRI	RH)		wetlar	nd hydrology must be present,
_		·	·				unless	s disturbed or problematic.
estrictive La	ver (if present):							
	Joi (ii procond).							
Type:								
Type: Depth (incl emarks: lydric soil ind	nes): icators are present.						Hydric Soil Pre	sent? Yes X No
Type: Depth (incl emarks: Hydric soil ind	nes):						Hydric Soil Pre	sent? Yes <u>X</u> No
Type: Depth (incl emarks: Hydric soil ind	hes): licators are present.						Hydric Soil Pre	sent? Yes <u>X</u> No
Type: Depth (incl emarks: Hydric soil ind DROLOG	hes): licators are present. / plogy Indicators:						Hydric Soil Pre	sent? Yes <u>X</u> No
Type: Depth (incl emarks: lydric soil ind DROLOG fetland Hydr rimary Indicat	hes): licators are present. / ology Indicators: .ors (minimum of one re	>quired; che		/044)			Hydric Soil Pre	sent? Yes <u>X</u> No y Indicators (minimum of two required
Type: Depth (incl emarks: lydric soil ind DROLOG Vetland Hydr rimary Indicat (hes): licators are present. / ology Indicators: :ors (minimum of one re /ater (A1)	>quired; che	<u></u>	(B11)			Hydric Soil Pre	sent? Yes X No
Type: Depth (incl emarks: dydric soil ind DROLOG fetland Hydr rimary Indicat Surface W High Wate Saturation	hes): licators are present. / ology Indicators: :ors (minimum of one re /ater (A1) :r Table (A2)	2quired; che	<u>ck all that apply)</u> Salt Crust (Aquatic Inv	(B11) rertebrates (B13)		Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8) page Patterns (B10)
Type: Depth (incl emarks: lydric soil ind DROLOG /etland Hydr imary Indicat (hes): licators are present. / ology Indicators: ors (minimum of one re /ater (A1) rr Table (A2) + (A3) rks (B1)	⊇quired; che	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S	(B11) vertebrates (Sulfide Odor	B13) • (C1) le (C2)		Hydric Soil Pre	sent? Yes X No
Type: Depth (incl emarks: dydric soil ind DROLOGY /etland Hydr rimary Indicat (Surface W (Saturatior Water Ma Sediment	hes): licators are present. f ology Indicators: ors (minimum of one re /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2)	⊇quired; che	<u>ck all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Seaso Oxidized R	(B11) rertebrates (Sulfide Odor n Water Tab	B13) • (C1) le (C2) \$ along Livin	a Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled)
Type: Depth (incl emarks: dydric soil ind DROLOG /etland Hydr /etland Hydr /imary Indicat C Surface W C High Wate Saturatior Water Ma Sediment Drift Depo	hes): licators are present. f ology Indicators: cors (minimum of one re /ater (A1) er Table (A2) 1 (A3) rks (B1) Deposits (B2) sits (B3)	2quired; che	<u>ck all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Seaso Oxidized R (where n	(B11) vertebrates (Sulfide Odor n Water Tab thizospheres ot tilled)	B13) • (C1) le (C2) s along Livin	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8)
Type: Depth (incl emarks: lydric soil ind DROLOG Tetland Hydr rimary Indicat C Surface W C High Wate Saturatior Water Ma Sediment Drift Depc Algal Mat	hes): licators are present. f ology Indicators: cors (minimum of one re /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4)	<u>equired; che</u>	<u>ck all that apply)</u> <u>Salt Crust (</u> Aquatic Inv <u>Hydrogen S</u> <u>Dry-Season</u> <u>Oxidized R</u> (where n Presence of	(B11) vertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I	B13) • (C1) le (C2) s along Livin iron (C4)	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8) iration Visible on Aerial Imagery (C9)
Type: Depth (incl emarks: lydric soil ind DROLOG DROLOG Cetland Hydr Cetland Hydr imary Indical Caturation Gaturation Water Ma Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo	hes): licators are present. f ology Indicators: :ors (minimum of one re /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) sits (B5)	2quired; che	<u>ck all that apply)</u> <u>Salt Crust (</u> Aquatic Inv Hydrogen S Dry-Seaso Oxidized R (where n Presence of Thin Muck	(B11) vertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7	B13) · (C1) le (C2) s along Livin iron (C4) ')	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8) iration Visible on Aerial Imagery (C9) morphic Position (D2)
Type: Depth (incl emarks: lydric soil ind DROLOG DROLOG Called Hydr <u>rimary Indicat</u> <u>Called Hydr</u> <u>rimary Indicat</u> <u>Called Hydr</u> <u>Called Hydr</u> <u>Called</u>	hes): licators are present. f ology Indicators: cors (minimum of one re /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) sits (B5) i Visible on Aerial Imag	≥quired; che	ck all that apply) Salt Crust of Aquatic Inv Hydrogen S Dry-Seaso Oxidized R (where n Presence of Thin Muck Other (Exp	(B11) rertebrates (Sulfide Odor n Water Tab rhizospheres ot tilled) of Reduced I Surface (C7 lain in Rema	B13) • (C1) le (C2) s along Livin ron (C4) ') arks)	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8) irration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5)
Type: Depth (incl emarks: lydric soil ind DROLOG etland Hydr imary Indicat C Surface W High Wate Saturatior Water Ma Sediment Drift Depc Algal Mat Iron Depo Inundatior Water-Sta	hes): licators are present. fology Indicators: tors (minimum of one re /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) sits (B5) i Visible on Aerial Imag ined Leaves (B9)	equired; che	<u>ck all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Seaso Oxidized R (where n Presence o Thin Muck Other (Exp	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema	B13) • (C1) le (C2) s along Livin ron (C4) *) arks)	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) iration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hurmocks (D7) (LRR F)
Type: Depth (incl emarks: lydric soil ind DROLOG DROLOG Calland Hydr rimary Indical Calland Hydr rimary Indical Calland Hydr rimary Indical Calland Hydr Saturation Calland Hydr Satur Sat	hes): licators are present. f ology Indicators: tors (minimum of one re vater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) sits (B5) i Visible on Aerial Imag ined Leaves (B9) 	equired; che	<u>ck all that apply)</u> Salt Crust of Aquatic Inv Aquatic Inv Hydrogen S Dry-Seaso Oxidized R (where n Presence of Thin Muck Other (Exp	(B11) vertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema	B13) • (C1) le (C2) s along Livin ron (C4) ') arks)	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8) uration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7) (LRR F)
Type: Depth (incl emarks: Hydric soil ind DROLOG /etland Hydr rimary Indical C Surface V C High Wate Saturation Water Ma Sediment Drift Depc Algal Mat Iron Depo Inundation C Water-Sta ield Observa	hes): licators are present. f ology Indicators: tors (minimum of one re /ater (A1) Pr Table (A2) 1 (A3) rks (B1) Deposits (B2) 1 visits (B3) or Crust (B4) sits (B5) 1 Visible on Aerial Imag ined Leaves (B9) tions: Present? Yes	equired; che	ck all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches):	B13) • (C1) le (C2) s along Livin ron (C4) ') arks) 0.5	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) frish Burrows (C8) irration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7) (LRR F)
Type: Depth (incl emarks: dydric soil ind DROLOG Vetland Hydr rimary Indical C Surface V C High Water Saturation Water Ma Sediment Drift Depc Algal Mat Iron Depo Inundation C Water-Sta ield Observa urface Water /ater Table Pr	hes): licators are present. f ology Indicators: tors (minimum of one re /ater (A1) Pr Table (A2) 1 (A3) rks (B1) Deposits (B2) 1 visits (B3) or Crust (B4) 1 sits (B5) 1 Visible on Aerial Imag ined Leaves (B9) tions: Present? Yes esent? Yes	3 X Nr 3 X Nr	ck all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab chizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches):	B13) · (C1) le (C2) s along Livin ron (C4) /) arks) 0.5 12	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) iration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7) (LRR F)
Type: Depth (incl emarks: dydric soil ind DROLOG Vetland Hydr rimary Indicat C Surface W C High Water Saturation Water Ma Sediment Drift Depc Algal Mat Iron Depo Inundation C Water-Sta ield Observa urface Water raturation Pres	hes): licators are present. f ology Indicators: tors (minimum of one re Vater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) sits (B3) or Crust (B4) sits (B5) i Visible on Aerial Imag ined Leaves (B9) tions: Present? Yes esent? Yes	2quired; che 2quired; che 3 X No 3 X No 3 No 3 No 3 No	ck all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab chizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches):	B13) • (C1) le (C2) s along Livin ron (C4) *) arks) 0.5 12	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) iration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7) (LRR F) sent? Yes X No
Type: Depth (incl emarks: lydric soil ind DROLOG Vetland Hydr rimary Indicar (hes): licators are present. f ology Indicators: tors (minimum of one re vater (A1) er Table (A2) 1 (A3) rks (B1) Deposits (B2) 1 (A3) rks (B1) Deposits (B2) 1 (A3) or Crust (B4) sits (B3) or Crust (B4) sits (B5) 1 Visible on Aerial Imag ined Leaves (B9) tions: Present? Yes esent? Yes ary fringe)	equired; che	ck all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab thizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches):	B13) • (C1) le (C2) s along Livin (ron (C4) *) arks) 0.5 12	g Roots (C	Hydric Soil Pre	sent? Yes X No y Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8) iration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7) (LRR F) sent? Yes X No
Type: Depth (incl emarks: lydric soil ind DROLOG etland Hydr imary Indica Surface W High Wate Saturatior Water Ma Sediment Drift Depc Algal Mat Iron Depo Inundatior Water-Sta eld Observa urface Water aturation Pre- aturation Pre- aturation Pre- aturation Pre-	hes): licators are present. f ology Indicators: tors (minimum of one re vater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) h (A3) rks (B1) Deposits (B2) h (A3) or Crust (B4) sits (B3) or Crust (B4) sits (B5) h Visible on Aerial Imag ined Leaves (B9) tions: Present? Yes sent? Yes ary fringe) rded Data (stream gauge	2equired; che 2equired; che 3 X No 3 X No 3 X No 3 X No 3 X No 3 X No 3 X No 4 X No 5 X No 5 X No 6 X No 7 No 7 No 7 No 7 No 7 No 7 No 7 No 7 No 7	ck all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab vhizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches): s, previous ir	B13) • (C1) le (C2) s along Livin (ron (C4) r) arks) 0.5 12 12 1spections),	g Roots (C	Hydric Soil Pre	sent? Yes X No Ty Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8) nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8) iration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7) (LRR F) sent? Yes X No
Type: Depth (incl emarks: lydric soil ind DROLOGN etland Hydr imary Indical Surface V High Water Saturatior Water Ma Sediment Drift Depc Algal Mat Iron Depo Inundatior Water-Sta eld Observa aurface Water ater Table Pr aturation Pres accudes capill esscribe Reco	hes): licators are present. f ology Indicators: tors (minimum of one re Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B3) or Crust (B4) sits (B5) n Visible on Aerial Imag ined Leaves (B9) tions: Present? Yes esent? Yes esent? Yes esent? Yes esent? Yes	<u>equired; che</u> <u>equired; che</u> <u>s X N</u> <u>s X N</u> <u>s X N</u> <u>s X N</u> <u>s 2 N</u>	ck all that apply)	(B11) vertebrates (Sulfide Odor n Water Tab chizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches): ches): ches):	B13) · (C1) le (C2) s along Livin ron (C4) ·) arks) 0.5 12 	g Roots (C	Hydric Soil Pre	sent? Yes X No
Type: Depth (incl emarks: ydric soil ind DROLOG etland Hydr imary Indica Surface W High Wate Saturatior Water Ma Sediment Drift Depc Algal Mat Iron Depo Inundation Water-Sta eld Observa Irface Water ater Table Pr turation Pre: cludes capill escribe Reco	hes): licators are present. f ology Indicators: tors (minimum of one re vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) vists (B3) or Crust (B4) sits (B5) n Visible on Aerial Imag ined Leaves (B9) tions: Present? Yes sent? Yes sent? Yes sent? Yes sent? Yes sent? Yes sent? Yes	equired; che s X Nr s X Nr s X Nr ge, monitorin	ck all that apply)	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches): s, previous ir	B13) (C1) le (C2) along Livin (C4) () arks) 0.5 12 () aspections),	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two required ace Soil Cracks (B6) rsely Vegetated Concave Surface (B8 nage Patterns (B10) lized Rhizospheres on Living Roots (C here tilled) rfish Burrows (C8) iration Visible on Aerial Imagery (C9) morphic Position (D2) -Neutral Test (D5) t-Heave Hummocks (D7) (LRR F) sent? Yes X No

Project/Site:	FM 741 EA	(City/County:	Ka	aufman County	S	Sampling Date:	04/29/202	22
Applicant/Owner:	Texas Department	of Transpor	tation		State: Te	exas S	Sampling Point:	WDP49	I
Investigator(s):	CW and JK		Section, Towr	nship, Range:			N/A		
Landform (hillslope, terrace, etc)	: Roadside vegetated fl	at I	_ocal relief (c	oncave, conve	x, none):	none		Slope (%):	0
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.7009	6653	Long: -96	.45033787	Datur	m: NAD 8	33
Soil Map Unit Name: Houston	Black clay, 1 to 3 percent slopes				NWI cla	assification	: NA		
Are climatic / hydrologic condition	ns on the site typical for this time	of year?	Yes X	No	(If no, explain in	Remarks.)		
Are Vegetation, Soil	, or Hydrologys	significantly	disturbed?	Are "N	Iormal Circumstance	es" present	? Yes	X No	
Are Vegetation, Soil	, or Hydrologyr	naturally pro	blematic?	(If nee	ded, explain any an	swers in R	emarks.)		
SUMMARY OF FINDINGS	6 - Attach site map show	ing samp	ling point	locations,	transects, imp	ortant fe	atures, etc.		
Hydrophytic Vegetation Preser	nt? Yes No	o X							
Hydric Soil Present?	Yes No	0 X	ls	the Sampled A	Area				
Wetland Hydrology Present?	Yes No	0 X	wit	thin a Wetland	I? Ye	s	No X		
Remarks: None of the three v	wetland indicators were present.	This point is	s not located	within a wetlan	d. The Antecedent F	Precipitation	n Tool scored a	12, indicating	J I
conditions during ti	ne site investigations were norma	al.							
VEGETATION - Use scier	ntific names of plants.								
					Dominanaa Taa	worksho			
			D · · ·		Number of Domin	ant Speek	el.		
Trace Otractions (Distribution	、 、	Absolute	Dominant	Indicator				2 (^)	`
Iree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, F		····	<u> </u>	1
1					Total Number of I	Dominant			
2					Species Across A	All Strata		7 (B)	1
3						an Otrata.		<u>/</u> (B)	
4		0	- Total Cov		Percent of Domir	ant Snecie	29		
Sapling/Shrub Stratum (Play	t sizo:	0	_ = 10(a) COV	ei	That Are OBL F	ACW or FA	AC: 4'	29 (A/	B)
	(SIZE)							<u></u> (77	5)
2					Prevalence Inde	x workshe	eet:		
3					Total % Cov	ver of:	Multip	oly by:	
4					OBL species	0	x 1 =	0	
5					FACW species	15	x 2 =	30	
· · · · · · · · · · · · · · · · · · ·		0	= Total Cov	er	FAC species	30	x 3 =	90	
Herb Stratum (Plot size:	30' radius)			0.	FACU species	30	x 4 =	120	
1. Erodium cicutarium ssp. cic	cutarium	15	Yes	NI	UPL species	30	x 5 =	150	
2. Bromus arvensis		15	Yes	FACU	Column Totals:	105	(A)	390 ((B)
3. Sherardia arvensis		15	Yes	NI					
4. Vicia sativa		15	Yes	FACU	Prevalence	e Index = B	/A =3	.71	
5. Panicum virgatum		15	Yes	FAC		notation In	diastara		
6. Tridens albescens		15	Yes	FAC	1 Danid To	et for Uvdr	idicators:	on	
7. Valerianella radiata		15	Yes	FACW	2 Dominon			JII	
8.					2 - Dominan 3 Prevalen		2 0 ¹		
9.					4 - Morphole	ce nuex ⊐ naical Adar	otations ¹ (Provide	e supporting	
10					Problematic	Hvdronhvt	tic Vegetation ¹ (F	- supporting - volain)	
		105	= Total Cov	rer		riyaropiiyi			
Woody Vine Stratum (Plot s	size:)				¹ Indicators of hyd	tric soil and	d wetland hydrol	oav must	
1		<u> </u>			be present unles	ss disturbe	d or problematic	sgy maar	
2									
		0	= Total Cov	rer	Hydrophytic				
% Bare Ground in Herb Stratu	m <u> 0 </u>				Vegetation				
					Present?	Yes	No	Х	
Remarks:	present								
	present.								

S	0	IL	
J	J		-

Profile Desc	ription: (Describe to f	he depth neede	ed to document t	he indicator	or confirm	the absen	ice of indicators.)	
(inches)		0/_	Color (moist)		Tupe ¹		Texture	Remarks
		100		70	Type.	LUC		remarks
0-18	101R 4/1	100					Cidy	
		·						
¹ Type: C=Cor	ncentration, D=Depletion	on, RM=Reduce	d Matrix, CS=Cov	ered or Coate	d Sand Gra	ains.	² Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applicabl	e to all LRRs, u	nless otherwise	noted.)			Indicators fo	r Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gle	eyed Marix (S4	4)		1 cm	Muck (A9) (LRR I, J)
Histic Ep	oipedon (A2)		Sandy Re	dox (S5)			Coas	t Prairie Redox (A16) (LRR F, G, H)
Black Hi	stic (A3)		Stripped N	Aatrix (S6)			Dark	Surface (S7) (LRR G)
Hydroge	n Sulfide (A4)		Loamy Mu	icky Mineral (I	F1)		High	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)	Loamy Gle	eyed Matrix (F	-2)		(LRR	H outside of MLRA 72 & 73)
1 cm Mu	ck (A9) (LRR F, G, F	I)	Depleted I	Matrix (F3)			Redu	ced Vertic (F18)
Depleted	Below Dark Surface	(A11)	Redox Da	rk Surface (F6	6)		Red F	Parent Material (TF2)
Thick Da	ark Surface (A12)		Depleted I	Dark Surface	(F7)		Very S	Shallow Dark Surface (TF12)
Sandy M	lucky Mineral (S1)		Redox De	pressions (F8	5)		Other	r (Explain in Remarks)
2.5 cm N	lucky Peat or Peat (S2	2) (LRR G, H)	High Plain	s Depression	s (F16)		³ Indicat	tors of hydrophytic vegetation and
5 cm Mu	cky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LRR	R H)		wetland	d hydrology must be present,
							unless	disturbed or problematic.
Restrictive L	ayer (if present):							
Type:	, , , , , , , , , , , , , , , , , , ,							
Depth (in	ches):						Hydric Soil Pres	ent? Yes No X
Remarks:								
Hydric soil in	dicators are not prese	nt.						
HYDROLOG	iΥ							
Wetland Hyd	rology Indicators:							
Primary Indic	ators (minimum of one	required; check	all that apply)				Secondary	/ Indicators (minimum of two required)
Surface	Water (A1)		Salt Crust	(B11)			Surfa	ce Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic In	vertebrates (E	313)		Spars	sely Vegetated Concave Surface (B8)
Saturatio	on (A3)		Hydrogen	Sulfide Odor	(C1)		X Drain	age Patterns (B10)
Water M	arks (B1)		Dry-Seaso	on Water Table	e (C2)		Oxidi:	zed Rhizospheres on Living Roots (C3)
Sedimer	nt Deposits (B2)		Oxidized F	Rhizospheres	along Living	g Roots (C	3) (wh	ere tilled)
Drift Dep	oosits (B3)		(where i	not tilled)			Crayf	ish Burrows (C8)
Algal Ma	it or Crust (B4)		Presence	of Reduced Ir	on (C4)		Satur	ation Visible on Aerial Imagery (C9)
Iron Dep	osits (B5)		Thin Muck	Surface (C7))		Geom	norphic Position (D2)
Inundation	on Visible on Aerial Im	agery (B7)	Other (Exp	plain in Rema	rks)		FAC-I	Neutral Test (D5)
Water-S	tained Leaves (B9)						Frost-	-Heave Hummocks (D7) (LRR F)
Field Observ	ations:							
Surface Wate	r Present?	íes No	X Depth (ir	nches):				
Water Table F	Present?	/es No	X Depth (ir	nches):				
Saturation Pr	esent?	/es No	X Depth (ir	nches):		Wetlar	nd Hydrology Pres	sent? Yes No X
(includes cap	illary fringe)			·				
Describe Rec	orded Data (stream ga	auge, monitoring	well, aerial photo	s, previous in	spections),	if available	:	
Remarks:								
Hydrology in	dicators are not prese	nt.						

Project/Site:	FM 741 EA		City/County:	ĸ	aufman County		Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department	of Transpo	tation		State:	Texas	Sampling Point:	WDP50
Investigator(s):	CW and JK		Section, Town	ship, Range:			N/A	
Landform (hillslope, terrad	ce, etc): Roadside ditch		Local relief (co	ncave, conve	ex, none):	conca	ave	Slope (%): 1-2
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.70185	009	Long: -	96.4495563	31 Dati	um: NAD 83
Soil Map Unit Name: H	louston Black clay, 1 to 3 percent slopes	 3			NWI	classificatic	on: NA	
Are climatic / hydrologic c	onditions on the site typical for this time	of year?	Yes X	No	(If no, explain	in Remark	s.)	
Are Vegetation	, Soil , or Hydrology s	significantly	disturbed?	Are "I	Normal Circumstar	ices" prese	nt? Yes	X No
Are Vegetation	, Soil , or Hydrology r	naturally pro	blematic?	(If ne	eded, explain any	answers in	Remarks.)	
SUMMARY OF FINE	DINGS - Attach site map show	ing sam	olina point	locations.	transects. im	portant	features, etc.	
					,	<u>p 01 00.10 1</u>		
Hydrophylic Vegetation	Present? fes <u>A</u> N	0		he Compled	A.r.o.o.			
Wetland Hydrology Dro	res <u> </u>	0	15 1	ne Sampleu	Area	Vaa V	No	
		u	with		ur			
Remarks: All of the thr conditions d	ee wetland indicators were present. Thi uring the site investigations were norma	s point is lo al.	cated within a	wetland. The	Antecedent Precip	vitation Too	I scored a 12, ind	Jicating
VEGETATION - USE	scientific names of plants.							
					Dominance Te	est worksh	eet:	
		Absolute	Dominant	Indicator	Number of Dor	minant Sper	cies	
Tree Stratum (Plot siz	ze:)	% Cover	Species?	Status	That Are OBL,	FACW, or I	FAC:	(A)
1								
2		_			Total Number of	of Dominant	t	
3					Species Acros	s All Strata:	: <u> </u>	<u>1</u> (B)
4								
		0	= Total Cove	er	Percent of Dor	ninant Spec	cies	
Sapling/Shrub Stratum	(Plot size:)				That Are OBL,	FACW, or I	FAC: <u>1</u>	<u>00.0</u> (A/B)
1					Brovalonco In	dox worke	hoot:	
2					Total % C	'over of:	Mult	tiply by:
3						,0VEI 0I. 80		.ipiy by. 80
4					EACW species	10	x1=	20
5					FAC species	0	x 3 =	
		0	= Total Cove	er	FACI I species	0	x 4 =	
Herb Stratum (Plot siz	ze: <u>30' radius</u>)					10	x5=	
1. Eleocharis palustris		80	Yes	OBL	Column Totals	· 100		 150 (B)
2. Valerianella radiata		10	No	FACW			<u> </u>	
3. Veronica peregrina s	ssp. xalapensis	10	No	NI	Prevalen	ice Index =	B/A =	15
4								1.0
5					Hydrophytic \	/egetation	Indicators:	
6					X 1 - Rapid	Test for Hyd	drophytic Vegeta	tion
7				<u> </u>	X 2 - Domin	ance Test is	s >50%	
8					X 3 - Preval	ence Index	≤3.0¹	
9					4 - Morph	ological Ada	aptations ¹ (Provi	de supporting
10					Problema	tic Hydroph	ytic Vegetation ¹	(Explain)
		100	= Iotal Cove	er				
Woody Vine Stratum	(Plot size:)				¹ Indicators of h	ydric soil a	nd wetland hydro	ology must
1					be present, un	less disturb	ed or problemati	С.
Z			Tatal Oau					
0/ Dana Onaviradia Ulark	Otastura	0		er.	Hydrophytic			
% Bare Ground In Herb	Stratum 0				Vegetation			
					Present?	Yes	s <u>X</u> No	
Pemarks:					-			
Hydrophytic vegetation	n is present.							
	-							

SOIL	
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Depth	Matrix		Redox	Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 5/1	90	10YR 6/3	10	D	Μ	Clay	
		·						
		· <u> </u>						
Type: C=Conc	centration, D=Depletic	on, RM=Reduce	ed Matrix, CS=Cove	red or Coat	ed Sand Gra	ains.	² Locatio	n: PL=Pore Lining, M=Matrix.
lydric Soil In	dicators: (Applicable	e to all LRRs, ι	Inless otherwise n	oted.)			Indicators for	or Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gley	ed Marix (S	54)		1 cm	Muck (A9) (LRR I, J)
Histic Epi	pedon (A2)		Sandy Red	ox (S5)			Coas	t Prairie Redox (A16) (LRR F, G, H)
Black Hist	tic (A3)		Stripped Ma	atrix (S6)			Dark	Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Muc	cky Mineral	(F1)		High	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)		Loamy Gle	yed Matrix ((F2)		(LRF	R H outside of MLRA 72 & 73)
1 cm Muc	k (A9) (LRR F, G, H)	X Depleted M	latrix (F3)			Redu	uced Vertic (F18)
Depleted	Below Dark Surface (A11)	Redox Darl	k Surface (F	-6)		Red	Parent Material (TF2)
Thick Dar	k Surface (A12)		Depleted D	ark Surface	e (F7)		Very	Shallow Dark Surface (TF12)
Sandy Mu	ucky Mineral (S1)		Redox Dep	ressions (F	8)		Othe	r (Explain in Remarks)
2.5 cm Mi	ucky Peat or Peat (S2) (LRR G, H)	High Plains	Depressio	ns (F16)		³Indica	tors of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LR	R H)		wetlan	d hydrology must be present,
							unless	disturbed or problematic.
estrictive La	yer (if present):							
Type:								
Depth (inc	hes):						Hydric Soil Pres	sent? Yes X No
	v							
rimony Indiao	tors (minimum of one	roquirod: chool	(all that apply)				Secondar	v Indicators (minimum of two required
		required, crieci	Call that apply)	D11)			Secondar	y Indicators (Infinitian of two required
	valer (AT)		Sait Crust (BII) ortobrotoo ((D12)		Surra	ace Soli Cracks (B6)
C High Wate			Aquatic Inv	ertebrates (БТЗ) r (C1)		Span	sely vegetated Concave Surface (B8)
Saturation	r (AS)			Notor Tab				age Patterns (BTU)
Sodimont	Doposite (P2)			hizocoboro	ne (CZ) s along Livin	a Pooto (C	Oxiu	zed Rillospheres on Living Roots (C
Drift Done	Deposits (D2)			ot tilled)		y Roois (C		
Maal Mat	or Cruct $(P4)$		Proconce		Iron (C4)			ration Visible on Aprial Imagony (CQ)
Iron Dono	of Clust (D4)		Thin Muck	Surface (C	7)			norphic Position (D2)
Inundation	n Visible on Aerial Ima	ageny (B7)	Other (Evol) arke)			Neutral Test (D5)
Water Sta		agery (B7)			ains)		FAC-	Heave Hummocks (DZ)/I PP E)
	amed Leaves (D9)							
ield Observa	ations:							
urface Water	Present? Y	es <u>X</u> No	Depth (ind	ches):	1			
/ater Table Pr	resent? Y	es <u>X</u> No	Depth (ind	ches):	8			
aturation Pre	sent? Y	es No	X Depth (ind	ches):		Wetla	nd Hydrology Pres	sent? Yes X No
ncludes capill	lary fringe)							
escribe Reco	orded Data (stream ga	uge, monitoring	g well, aerial photos	, previous i	nspections),	if available	9:	
emarks:								
iydrology ind	licators are present.							

Project/Site: FM	741 EA	(City/County:	К	aufman County	Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Texas	Sampling Point:	WDP51
Investigator(s):	W and JK	9	Section, Towr	nship, Range:		N/A	
Landform (hillslope, terrace, etc):	Ditch	ι	ocal relief (c	oncave, conve	x, none): cor	ncave S	Slope (%): 1-2
Subregion (LRR): LRR J M	ILRA 86A	Lat:	32.7017	3547	Long: -96.44971	448 Datur	n: NAD 83
Soil Map Unit Name: Houston Black cla	ay, 1 to 3 percent slopes				NWI classifica	tion: NA	
Are climatic / hydrologic conditions on the	site typical for this time	of year?	/es X	No	(If no, explain in Rema	rks.)	
Are Vegetation, Soil,	or Hydrologys	ignificantly	disturbed?	Are "N	Normal Circumstances" pre	sent? Yes 📝	KNo
Are Vegetation, Soil,	or Hydrologyn	aturally pro	blematic?	(If nee	eded, explain any answers	in Remarks.)	
SUMMARY OF FINDINGS - Atta	ch site map showi	ng samp	ling point	locations,	transects, importan	t features, etc.	
Hydrophytic Vegetation Present?	Yes No) X			· · · · · ·		
Hydric Soil Present?	Yes No	x	ls	the Sampled /	Area		
Wetland Hydrology Present?	Yes X No)	wit	thin a Wetland	1? Yes	No X	
Remarks: One of the three wetland inc conditions during the site inv	licators was present. Thi /estigations were norma	is point is n I.	ot located wit	hin a wetland.	The Antecedent Precipitati	on Tool scored a 12,	indicating
VEGETATION - Use scientific na	ames of plants.				1		
					Dominance Test work	sheet:	
		Absolute	Dominant	Indicator	Number of Dominant Sp	pecies	
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW, o	or FAC: () (A)
1.							
2.					Total Number of Domina	ant	
3.					Species Across All Stra	ta:2	<u>2</u> (B)
4.							
		0	= Total Cov	rer	Percent of Dominant Sp	ecies	
Sapling/Shrub Stratum (Plot size:)		-		That Are OBL, FACW, o	or FAC: 0	.0 (A/B)
<u> </u>	ŕ						
2.					Prevalence Index wor	ksheet:	
3.					Total % Cover of:	Multip	ly by:
4.					OBL species	0 x 1 =	0
5.					FACW species	5 x 2 =	10
		0	= Total Cov	ver	FAC species	0 x 3 =	0
Herb Stratum (Plot size: 30' radi	us)		_		FACU species	95 x 4 =	380
1. Lolium perenne		60	Yes	FACU	UPL species	<u>15 x 5 =</u>	75
2. Plantago rhodosperma		25	Yes	FACU	Column Totals: 1	15 (A)	465 (B)
3. <u>Vicia sativa</u>		10	No	FACU		5/4	.
4. Pyrrhopappus pauciflorus		10	No	NI	Prevalence Index	= B/A =4.	04
5. <u>Tetraneuris linearifolia</u>		5	No	NI	Hydrophytic Vegetatic	n Indicators:	
6. Packera tampicana		5	No	FACW	1 - Rapid Test for H	lydrophytic Vegetatic	n
7			<u> </u>		2 - Dominance Tes	t is >50%	
8			<u> </u>		3 - Prevalence Inde	ex ≤3 0 ¹	
9					4 - Morphological A	Adaptations ¹ (Provide	e supporting
10					Problematic Hvdro	ohvtic Vegetation1 (E	xplain)
		115	= Total Cov	rer	,		r - ,
Woody Vine Stratum (Plot size:)				¹ Indicators of hvdric soi	and wetland hydrold	oav must
1					be present, unless distu	rbed or problematic.	0,
2							
		0	= Total Cov	rer	Hydrophytic		
% Bare Ground in Herb Stratum	0				Vegetation		
					Present?	/es No	Х
Remarks: Hydrophytic vegetation is not present.							

S	0	IL	
J	J		-

Profile Desci	ription: (Describe t	o the depth nee	ded to c	locument th	e indicator o	or confirm	the absen	nce of indicators.)
(inchos)		0/	Color	(moint)		Tupol	1.002	Toxturo	Pomarka
			COIOI	(moist)	70	Type	LUC		Remarks
0-18	101R 5/1	100			·		<u> </u>	Clay	
					·				
					·				
					·				
¹ Type: C=Cor	centration, D=Depl	etion, RM=Reduc	ed Matr	ix, CS=Cover	red or Coate	d Sand Gr	ains.	² Locatio	on: PL=Pore Lining, M=Matrix.
Hydric Soil II	ndicators: (Applica	able to all LRRs,	unless	otherwise n	oted.)			Indicators f	for Problematic Hydric Soils ³ :
Histosol	(A1)			Sandy Gley	ed Marix (S4	4)		1 cr	m Muck (A9) (LRR I, J)
Histic Ep	ipedon (A2)			Sandy Red	ox (S5)			Coa	ast Prairie Redox (A16) (LRR F, G, H)
Black His	stic (A3)			Stripped Ma	atrix (S6)			Dar	k Surface (S7) (LRR G)
Hydroge	n Sulfide (A4)			Loamy Muc	ky Mineral (F	F1)		Higl	h Plains Depressions (F16)
Stratified	Layers (A5) (LRR	t F)		Loamy Gley	/ed Matrix (F	2)		(LR	R H outside of MLRA 72 & 73)
1 cm Mu	ck (A9) (LRR F. G	. Н)		Depleted M	atrix (F3)	,		Red	Juced Vertic (F18)
Depleter	Below Dark Surfac	; ;e (A11)		Redox Dark	Surface (F6	3)		Red	Parent Material (TE2)
Thick Da	irk Surface (A12)	· · /		Depleted D	ark Surface	, (F7)		Ven	v Shallow Dark Surface (TF12)
Sandy M	lucky Mineral (S1)			Redox Dep	ressions (FR)		0th	er (Explain in Remarks)
2.5 cm M	lucky Peat or Peat (High Plains	Denressions	/ s (E16)		3Indic	et (Explain in Remarks)
2.0 CM N	cky Peat or Peat (S	(02) (ERR 0, II)	—	/MI DA 72 8	8.73 of I DD	ы) ы		wetla	nd hydrology must be present
	cky real of real (S					,		weila	a disturbed or problematic
								unes	
Restrictive L	ayer (if present):								
Туре:									
Depth (in	ches):							Hydric Soil Pre	esent? Yes NoX
Hydric soil in	dicators are not pre	sent.							
HYDROLOG	iΥ								
Wetland Hyd	rology Indicators:								
Primary Indica	ators (minimum of o	ne required; che	ck all tha	t apply)				Seconda	ary Indicators (minimum of two required)
Surface	Water (A1)			Salt Crust (B11)			Sur	face Soil Cracks (B6)
High Wa	ter Table (A2)			Aquatic Inve	ertebrates (B	313)		 Spa	arsely Vegetated Concave Surface (B8)
Saturatio	on (A3)			Hydrogen S	Sulfide Odor	(C1)		X Dra	inage Patterns (B10)
Water M	arks (B1)		—	Drv-Season	Water Table	(C2)		Oxic	dized Rhizospheres on Living Roots (C3)
Sedimen	at Denosits (B2)		—	Oxidized Rh	nizosnheres	along Livir	na Roots (C	() ()	where tilled)
Drift Den	(B3)			(where no	nzeepheree	along Lini	ig 1 (0010 (0		vfish Burrows (C8)
Dint Dep	t or Crust (B4)				f Peduced In	on $(C4)$			uration Visible on Aerial Imagery (CQ)
				Thin Muck (011 (C4)			marchia Desition (D2)
IION Dep	USIIS (D3)		—			dia)			Shouted Test (D5)
		inagery (B7)	—			KS)		FAC	-Neutral Test (D3)
water-St	ained Leaves (B9)							Fros	st-Heave Hummocks (D7)(LRR F)
Field Observ	ations:								
Surface Wate	r Present?	Yes No	<u>х</u>	Depth (inc	hes):				
Water Table F	Present?	Yes No	x x	Depth (inc	hes):		.		
Saturation Pre	esent?	Yes No	x	Depth (inc	hes):		Wetla	nd Hydrology Pre	esent? Yes X No
(includes capi	illary fringe)								
Describe Rec	orded Data (stream	gauge, monitorir	ng well, a	aerial photos,	previous ins	spections),	if available	:	
Domestics									
Hydrology in	idicators are presen	ıt.							
	·								

Project/Site:	FM 741 EA		City/County:	٢	Kaufman County	Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department	of Transpo	rtation		State: Texas	Sampling Point:	WDP52
Investigator(s):	CW and JK		Section, Town	ship, Range:		N/A	
Landform (hillslope, terrace, etc	c): Ditch		Local relief (co	oncave, conve	ex, none): co	oncave	Slope (%): 1-2
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.70240)221	Long: -96.4488	8316 Datur	m: NAD 83
Soil Map Unit Name: Houston	Black clay 1 to 3 percent slopes				NWI classific	ation: NA	
Are climatic / hvdrologic conditi	ions on the site typical for this time	of vear?	Yes X	No	(If no. explain in Rem	arks.)	
Are Vegetation . Soil	. or Hydrology	significantly	disturbed?	Are "	Normal Circumstances" pr	esent? Yes	X No
Are Vegetation , Soil	, or Hydrology	naturally pro	oblematic?	(If ne	eded, explain any answers	in Remarks.)	
SUMMARY OF FINDING	S - Attach site map show	ving sami	olina point	locations	. transects. importa	nt features, etc.	
	opt2 Yoo Y N				,,	,	
Hydrophylic Vegetation Pres		0	-	he Sampled	Area		
Wotland Hydrology Procent?		0		hin a Watlan	Alea Voc	X No	
		0	-			<u> </u>	_
Remarks: All of the three w conditions during	etland indicators were present. Th the site investigations were norm	is point is lo al.	ocated within a	wetland. The	e Antecedent Precipitation	Tool scored a 12, ind	icating
VEGETATION - Use scie	entific names of plants.						
					Dominance Test wor	ksheet:	
		Absolute	Dominant	Indicator	Number of Dominant S	Species	
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW,	or FAC:	<u>1</u> (A)
1							
2					Total Number of Domin	hant	
3					Species Across All Str	ata:	<u>1</u> (B)
4							
		0	= Total Cove	ər	Percent of Dominant S	species	
Sapling/Shrub Stratum (Pl	lot size:)				That Are OBL, FACW,	or FAC: 10	<u>0.0</u> (A/B)
1					Provalence Index wo	rkshoot.	
2					Total % Cover of	· Multir	oly by:
3						80 x 1 =	80
4					FACW species	<u>10</u> x 2 =	20
5					FAC species	0 x3=	0
		0	_ = Total Cove	er	FACU species	$10 \times 4 =$	40
Herb Stratum (Plot size:	30' radius)				UPL species	$\frac{10}{0}$ x 5 =	0
1. Eleocharis palustris		80	Yes	OBL	Column Totals:	100 (A)	140 (B)
2. Packera tampicana		10	<u>No</u>	FACW			(2)
3. Taraxacum officinale		10	No	FACU	Prevalence Inde	x = B/A = 1	.4
4.							
5					Hydrophytic Vegetat	on Indicators:	
6					X 1 - Rapid Test for	Hydrophytic Vegetation	on
7			<u> </u>		X 2 - Dominance Te	st is >50%∶	
8			<u> </u>		X 3 - Prevalence Inc	Jex ≤3.0¹	
9					4 - Morphological	Adaptations ¹ (Provide	e supporting
10		100			Problematic Hydr	ophytic Vegetation ¹ (E	Explain)
Weedy Vine Stratum (Dist		100		51			
	(SIZE)				¹ Indicators of hydric so	il and wetland hydrol	ogy must
2					be present, unless dis	turbed or problematic.	
Z		0	- Total Cov	or			
% Para Cround in Harb Strat	turn 0	0		51	Hydropnytic		
% Bare Ground in Herb Strai					vegetation	Vac V Na	
					Present?	res <u>x</u> no	
Remarks: Hydrophytic vegetation is pr	resent.						

SOIL	
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Depth	Matrix	ie ueptn need	Redo>	Features	or contirm	ule absel	nce of malcators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 5/1	95	10YR 7/2	5	D	М	Clay	
							·	
					·			
·					·			
·							<u> </u>	
¹ Type: C=Cond	centration, D=Depletio	n, RM=Reduce	d Matrix, CS=Cove	red or Coate	ed Sand Gra	ains.	² Locatio	n: PL=Pore Lining, M=Matrix.
Hydric Soil In	dicators: (Applicable	to all LRRs, u	Inless otherwise n	oted.)			Indicators for	or Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gley	/ed Marix (S	4)		1 cm	Muck (A9) (LRR I, J)
Histic Epi	pedon (A2)		Sandy Red	ox (S5)			Coas	at Prairie Redox (A16) (LRR F, G, H)
Black His	tic (A3)		Stripped M	atrix (S6)			Dark	Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Muc	cky Mineral (F1)		High	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)		Loamy Gle	yed Matrix (F	-2)		(LRF	R H outside of MLRA 72 & 73)
1 cm Muc	k (A9) (LRR F, G, H)		X Depleted N	latrix (F3)			Redu	uced Vertic (F18)
Depleted	Below Dark Surface (/	A11)	Redox Dar	K Surface (Fi	6) (FZ)		Rea	Parent Material (TF2)
I NICK Dar	K Sufface (A12)		Depleted D	ark Surface	(F7)		very	Shallow Dark Surface (TF12)
Sanuy Mi	ucky Milleral (ST)		High Plains	Depression	9) is (F16)			tors of hydrophytic vegetation and
2.5 cm Muc	ky Peat or Peat (S3)		(MI RA 72	& 73 of I RR	8 (1 10) 8 H)		wetlan	d hydrology must be present
0 01111100					(1)		unless	disturbed or problematic.
Restrictive La	yer (if present):							
Туре:								
Depth (inc	hes):						Hydric Soil Pres	sent? Yes X No
IYDROLOG	Y							
Wetland Hydr	ology Indicators:	a autradu ab a al					Casandar	(Indiantors (minimum of two required)
Primary Indica	tors (minimum of one	requirea; cneck	call that apply)	D11)			<u>Secondar</u>	y Indicators (minimum of two required)
High Wat	$\frac{Valer(A1)}{Pr}$			ertebrates (F	313)		Suna	selv Vegetated Concave Surface (B8)
Saturation	n (A3)		Hydrogen S	Sulfide Odor	(C1)		X Drair	age Patterns (B10)
Water Ma	rks (B1)		Drv-Seaso	n Water Tabl	(C2)		Oxid	ized Rhizospheres on Living Roots (C3)
Sediment	Deposits (B2)		Oxidized R	hizospheres	along Livin	g Roots (C	(wi	nere tilled)
Drift Depo	osits (B3)		(where n	ot tilled)	-		Cray	fish Burrows (C8)
Algal Mat	or Crust (B4)		Presence of	of Reduced In	ron (C4)		X Satu	ration Visible on Aerial Imagery (C9)
Iron Depo	osits (B5)		Thin Muck	Surface (C7))		X Geor	morphic Position (D2)
Inundation	n Visible on Aerial Ima	gery (B7)	Other (Exp	lain in Rema	ırks)		X FAC	Neutral Test (D5)
Water-Sta	ained Leaves (B9)						Fros	t-Heave Hummocks (D7) (LRR F)
Field Observa	tions:							
Surface Water	Present? Ye	es <u>No</u>	X Depth (ind	ches):				
Water Table Pi	resent? Ye	es No	X Depth (ind	ches):		14/-41-	a d Harder Ia and Burg	
(includes capil	sent? Ye larv fringe)	:5 <u> </u>		ines):		vvetla	nu nyarology Pre	sent res <u>X</u> NO
Describe Reco	orded Data (stream ga	uge, monitoring	well, aerial photos	, previous in	spections),	if available	e:	
	. 0		•					
Remarks:								
Hydrology ind	icators are present.							

Project/Site:	FM 741 EA		City/County:	k	Kaufman County	Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Texas	Sampling Point:	WDP53
Investigator(s):	CW and JK		Section, Town	ship, Range:			
Landform (hillslope, terrace	e, etc): Terrace		Local relief (co	oncave, conve	ex, none): n	ione S	Slope (%): 0
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.7024	162	Long: -96.44889	9523 Datun	n: NAD 83
Soil Map Unit Name: Ho	ouston Black clay, 1 to 3 percent slopes				NWI classifica	ation: NA	
Are climatic / hydrologic co	onditions on the site typical for this time	of year?	Yes X	No	(If no, explain in Rema	arks.)	
Are Vegetation ,	Soil , or Hydrology s	ignificantly	disturbed?	Are "I	Normal Circumstances" pre	sent? Yes >	K No
Are Vegetation,	Soil, or Hydrologyr	naturally pro	blematic?	(If ne	eded, explain any answers	in Remarks.)	
SUMMARY OF FIND	INGS - Attach site map show	ing samp	oling point	locations	, transects, importan	t features, etc.	
Hydrophytic Vegetation I	Present? Yes No	<u>с х</u>					
Hydric Soil Present?	Yes No		ls t	he Sampled	Area		
Wetland Hydrology Pres	sent? Yes No		wit	hin a Wetlan	d? Yes	No X	
Remarks: None of the t	hree wetland indicators were present. uring the site investigations were norma	This point is al.	s not located v	vithin a wetlar	nd. The Antecedent Precipit	tation Tool scored a 1	2, indicating
VEGETATION - USE	scientific names of plants.						
					Dominance Test work	sheet:	
		Absolute	Dominant	Indicator	Number of Dominant S	pecies	
Tree Stratum (Plot size	e:)	% Cover	Species?	Status	That Are OBL, FACW, o	or FAC: () (A)
1					T		
2.		·				ant	(D)
3.					Species Across All Stra	lla.	(B)
4					Dereent of Dominant St		
		0	= lotal Cov	er	That Are ORL EACW		
Sapling/Shrub Stratum	(Plot size:)				That Are OBL, FACW, 0	JI FAC. <u>0</u> .	<u>.</u> (А/В)
1		·			Prevalence Index wor	ksheet:	
2					Total % Cover of:	Multip	ly by:
3					OBL species	0 x 1 =	0
5					FACW species	0 x 2 =	0
···		0	= Total Cov	er	FAC species	0 x 3 =	0
Herb Stratum (Plot size	e: 30' radius)				FACU species	90 x 4 =	360
1. Cvnodon dactvlon	,	80	Yes	FACU	UPL species	10 x 5 =	50
2. Sherardia arvensis		10	No	NI	Column Totals:	100 (A)	410 (B)
3. Taraxacum officinale		10	No	FACU			
4.					Prevalence Index	x = B/A = 4	.1
5.					Hudronbutio Vogototic	n Indiactore	
6.					1 Papid Tast for k	Judrophytic Vogotatic	n
7.					2 Dominance Tes	t is 50%	/1
8.					3 - Prevalence Ind	$ax < 3.0^{1}$	
9.					4 - Morphological	ox ⊒0.0 Adaptations¹ (Provide	supporting
10					Problematic Hydro	nhvtic Vegetation ¹ (F	xplain)
		100	= Total Cov	er			Apidin' y
Woody Vine Stratum	(Plot size:)				¹ Indicators of hydric soi	I and wetland hydrold	oav must
1					be present, unless dist	urbed or problematic.	3, 11
2							
		0	= Total Cov	er	Hydrophytic		
% Bare Ground in Herb	Stratum 0				Vegetation		
					Present?	Yes <u>No</u>	Х
Damarka							
Remarks: Hydrophytic vegetation	is present						
i iyaropriyuo vegetatiOff							

S	0	IL	
J	J		-

Profile Descrip	otion: (Describe to the	he depth neede	ed to document the	e indicator o	or confirm	the absen	ce of indicators.)	
		0/	Color (maint)	reatures	Tunci	1002	Toxture	Domorko
		<u> </u>	Color (moist)	%	туре'	LOC		Reinarks
0-18	IUTK 4/1	100					Clay	
· ·		· ·					· ·	
· ·		· ·			<u> </u>		·	
· ·		· ·			·		·	
<u> </u>		·						
·		·			<u> </u>		·	
· ·		· ·			·			
¹ Type: C=Conc	entration, D=Depletio	n, RM=Reduced	d Matrix, CS=Cover	ed or Coated	d Sand Gra	ains.	² Location	: PL=Pore Lining, M=Matrix.
Hvdric Soil Ind	dicators: (Applicable	e to all LRRs. u	nless otherwise n	oted.)			Indicators for	Problematic Hvdric Soils ³ :
Histosol (A	A1)		Sandy Gley	ed Marix (S4)		1 cm I	Muck (A9) (LRR I, J)
Histic Epip	bedon (A2)		Sandy Redo	ox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Black Hist	ic (A3)		Stripped Ma	trix (S6)			Dark S	Surface (S7) (LRR G)
Hydrogen	Sulfide (A4)		Loamy Muc	ky Mineral (F	1)		High F	Plains Depressions (F16)
Stratified I	ayers (A5) (LRR F)		Loamy Gley	ed Matrix (F2	2)		(LRR	H outside of MLRA 72 & 73)
1 cm Mucl	k (A9) (LRR F, G, H)	Depleted M	atrix (F3)			Reduc	ced Vertic (F18)
Depleted I	Below Dark Surface (A	A11)	Redox Dark	Surface (F6))		Red P	arent Material (TF2)
Thick Dark	k Surface (A12)		Depleted Da	ark Surface (I	F7)		Very S	Shallow Dark Surface (TF12)
Sandy Mu	cky Mineral (S1)		Redox Depr	essions (F8)			Other	(Explain in Remarks)
2.5 cm Mu	icky Peat or Peat (S2) (LRR G, H)	High Plains	Depressions	(F16)		³ Indicate	ors of hydrophytic vegetation and
5 cm Muc	ky Peat or Peat (S3)	(LRR F)	(MLRA 72 8	& 73 of LRR	H)		wetland	hydrology must be present,
							unless o	disturbed or problematic.
Restrictive La	yer (if present):							
Туре:	· · ·							
Depth (incl	nes):						Hydric Soil Prese	ent? Yes No X
Hydric soil indi	icators are present.							
HYDROLOGY	/							
Wetland Hydro	ology Indicators:							
Primary Indicat	ors (minimum of one	required; check	all that apply)				Secondary	Indicators (minimum of two required)
Surface W	/ater (A1)		Salt Crust (I	311)			Surfac	ce Soil Cracks (B6)
High Wate	er Table (A2)		Aquatic Inve	ertebrates (B	13)		Spars	ely Vegetated Concave Surface (B8)
Saturation	(A3)		Hydrogen S	ulfide Odor (C1)		Draina	age Patterns (B10)
Water Mar	rks (B1)		Dry-Season	Water Table	(C2)		Oxidiz	ed Rhizospheres on Living Roots (C3)
Sediment	Deposits (B2)		Oxidized Rh	nizospheres a	along Living	g Roots (C	3) (wh e	ere tilled)
Drift Depo	sits (B3)		(where no	ot tilled)			Crayfi	sh Burrows (C8)
Algal Mat	or Crust (B4)		Presence of	Reduced Irc	on (C4)		Satura	ation Visible on Aerial Imagery (C9)
Iron Depo	sits (B5)		Thin Muck S	Surface (C7)			Geom	orphic Position (D2)
Inundation	Visible on Aerial Ima	agery (B7)	Other (Expl	ain in Remarl	ks)		FAC-N	Neutral Test (D5)
Water-Sta	ined Leaves (B9)						Frost-	Heave Hummocks (D7) (LRR F)
Field Observa	tions:							
Surface Water	Present? Ye	es No	X Depth (inc	hes):				
Water Table Pr	esent? Ye	es No	X Depth (inc	hes):				
Saturation Pres	sent? Ye	es No	X Depth (inc	hes):		Wetlar	nd Hydrology Pres	ent? Yes <u>No X</u>
(includes capill	ary fringe)							
Describe Reco	rded Data (stream ga	uge, monitoring	well, aerial photos,	previous ins	pections),	if available	c	
Remarks:	cators are present							
nyarology indi	cators are present.							

Project/Site:	FM 741 EA		City/County:	K	Kaufman County		Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State:	Texas	Sampling Point:	WDP54
Investigator(s):	CW and JK	:	Section, Town	ship, Range:			N/A	
Landform (hillslope, terrace, etc	c): Ditch		Local relief (co	oncave, conve	ex, none):	conca	ave	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.70157	/231	Long:	-96.449597	7 Dati	um: NAD 83
Soil Map Unit Name: Housto	on Black clay, 1 to 3 percent slope	S			NWI	classificatio	n: NA	
Are climatic / hydrologic condition	ons on the site typical for this time	of year?	Yes X	No	(If no, explain	in Remarks	s.)	
Are Vegetation, Soil	, or Hydrology	significantly	disturbed?	Are "I	Normal Circumstar	nces" prese	nt? Yes	X No
Are Vegetation, Soil	, or Hydrology	naturally pro	blematic?	(If ne	eded, explain any	answers in	Remarks.)	
SUMMARY OF FINDING	S - Attach site map show	ing samp	oling point	locations,	, transects, im	portant f	features, etc.	
Hydrophytic Vegetation Prese	ent? Yes X N	0						
Hydric Soil Present?	Yes X N	0	ls t	he Sampled	Area			
Wetland Hydrology Present?	Yes X N	0	wit	hin a Wetlan	d? ``	Yes X	No	
			·					
Remarks: All of the three we	etland indicators were present. Thi	s point is loo	cated within a	wetland. The	Antecedent Precip	pitation Tool	l scored a 12, ind	dicating
conditions during	the site investigations were norma	al.						
VEGETATION - Use scie	entific names of plants.							
					Dominance Te	est worksh	eet:	
		Absolute	Dominant	Indicator	Number of Dor	minant Spec	cies	
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL,	FACW, or I	FAC:	1 (A)
<u> </u>				·				
2.			_		Total Number of	of Dominant	t	
3.			_		Species Acros	s All Strata:	<u> </u>	1 (B)
4.								
		0	= Total Cove	er	Percent of Dor	minant Spec	cies	
Sapling/Shrub Stratum (Pl	ot size:)				That Are OBL,	FACW, or I	FAC: 1	00.0 (A/B)
1								
2					Prevalence In	dex works	heet:	4
3				<u> </u>		over of:	Mul	
4				. <u> </u>	OBL species	0	x 1 =	0
5					FAC w species	s <u> </u>	x 2 =	
		0	= Total Cove	er	FAC Species	0	× 3 =	0
Herb Stratum (Plot size:	30' radius)					20	× 5 =	100
1. <u>Eleocharis palustris</u>		80	Yes	OBL	Column Totals	· <u>100</u>	(A)	(B)
2. Pyrrhopappus pauciflorus		10	No	<u>NI</u>				(D)
3. <u>Erodium cicutarium ssp. c</u>	sicutarium	10	No	<u>NI</u>	Prevalen	nce Index =	B/A =	18
4				·				
5					Hydrophytic \	legetation	Indicators:	
6				·	X 1 - Rapid	Test for Hyd	drophytic Vegeta	tion
/				·	X 2 - Domin	ance Test is	s >50%	
0				·	X 3 - Preval	ence Index	≤3.0¹	
9 10				·	4 - Morph	ological Ada	aptations ¹ (Provi	de supporting
10		100	= Total Cove		Problema	tic Hydroph	ytic Vegetation ¹	(Explain)
Woody Vine Stratum (Plot	size)	100						
)				¹ Indicators of h	nydric soil a	nd wetland hydro	ology must
2.				·	be present, un	less disturb	ed or problemati	С.
		0	= Total Cove	er	Hydrophytic			
% Bare Ground in Herb Strat	um 0		_		Vegetation			
					Present?	Yes	s X No	
							<u> </u>	
Remarks:								
Hydrophytic vegetation is pr	esent.							

SOIL	
------	--

(inches) 0-18	Color (maint) 0/						
0-18		Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
	10YR 5/1 90	10YR 6/3	10	C	PL	Clay	
						<u> </u>	
ype: C=Concen	ntration, D=Depletion, RM=Redu	ced Matrix, CS=Cove	ered or Coate	ed Sand Gra	ains.	² Location	: PL=Pore Lining, M=Matrix.
dric Soil Indic	ators: (Applicable to all LRRs	, unless otherwise r	noted.)			Indicators for	r Problematic Hydric Soils ³ :
Histosol (A1))	Sandy Gley	yed Marix (S	4)		1 cm	Muck (A9) (LRR I, J)
Histic Epiped	don (A2)	Sandy Red	lox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Black Histic	(A3)	Stripped M	atrix (S6)			Dark Dark	Surface (S7) (LRR G)
Hydrogen Su	ulfide (A4)	Loamy Muc	cky Mineral ((F1)		High I	Plains Depressions (F16)
Stratified Lay	yers (A5) (LRR F)	Loamy Gle	yed Matrix (I	F2)		(LRR	H outside of MLRA 72 & 73)
1 cm Muck (A9) (LRR F, G, H)	X Depleted M	Aatrix (F3)			Redu	ced Vertic (F18)
Depleted Be	low Dark Surface (A11)	Redox Dar	k Surface (F	6)		Red F	Parent Material (TF2)
Thick Dark S	Surface (A12)	Depleted D	ark Surface	(F7)		Very S	Shallow Dark Surface (TF12)
Sandy Muck	y Mineral (S1)	Redox Dep	pressions (F8	3)		Other	(Explain in Remarks)
2.5 cm Muck	(y Peat or Peat (S2) (LRR G, H)	High Plains	s Depression	ıs (F16)		³ Indicat	ors of hydrophytic vegetation and
5 cm Mucky	Peat or Peat (S3) (LRR F)	(MLRA 72	& 73 of LRF	R H)		wetland	I hydrology must be present,
						unless	disturbed or problematic.
strictive Laye	er (if present):						
Туре:	,						
Depth (inches	s):					Hydric Soil Pres	ent? Yes X No
/ / /							
etland Hydrolo	av Indicators:						
etland Hydrolo	ogy Indicators: s (minimum of one required: che	ck all that apply)				Secondary	Indicators (minimum of two required
etland Hydrolc imary Indicators Surface Wate	ogy Indicators: s (minimum of one required; che er (A1)	ck all that apply)	(B11)			Secondary Surfa	r Indicators (minimum of two required
etland Hydrolc imary Indicators Surface Wate High Water 1	ogy Indicators: (minimum of one required; che rer (A1) Table (A2)	<u>ck all that apply)</u> Salt Crust (Aouatic Inv	(B11) vertebrates (I	313)		Secondary Surfa Spars	Indicators (minimum of two required ce Soil Cracks (B6) elv Vegetated Concave Surface (B8
etland Hydrolc imary Indicator Surface Wate High Water T Saturation (A	bigy Indicators: <u>s</u> (minimum of one required; che er (A1) Table (A2) A3)	<u>ck all that apply)</u> Salt Crust (Aquatic Inv Hvdrogen S	(B11) vertebrates (I Sulfide Odor	B13) (C1)		Secondary Surfa Spars Spars Drain.	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8 age Patterns (B10)
etland Hydrolc imary Indicators Surface Wate High Water T Saturation (# Water Marks	bigg Indicators: <u>s</u> (minimum of one required; che ter (A1) Table (A2) A3) 3 (B1)	<u>ck all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Drv-Seaso	(B11) /ertebrates (I Sulfide Odor n Water Tabl	B13) (C1) e (C2)		Secondary Surfa Spars Spars Drain Oxidia	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8 age Patterns (B10) zed Rhizospheres on Living Roots (0
etland Hydrolc imary Indicator: Surface Wat High Water T Saturation (A Water Marks Sediment De	bigg Indicators: <u>s (minimum of one required; che</u> ter (A1) Table (A2) A3) s (B1) eposits (B2)	<u>ck all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Seasol Oxidized R	(B11) vertebrates (I Sulfide Odor n Water Tabl hizospheres	B13) (C1) e (C2) along Livin	a Roots (C	Secondary Surfa Spars X Drain Oxidiz	r Indicators (minimum of two required ce Soil Cracks (B6) sely Vegetated Concave Surface (B8 age Patterns (B10) zed Rhizospheres on Living Roots (C ere tilled)
etland Hydrolc imary Indicators Surface Wat High Water 7 Saturation (A Water Marks Sediment De Drift Deposit	ogy Indicators: <u>s (minimum of one required; che</u> ter (A1) Table (A2) A3) § (B1) posits (B2) (B3)	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Season Oxidized R (where n	(B11) rertebrates (I Sulfide Odor n Water Tabl rhizospheres ot tilled)	B13) (C1) e (C2) along Livin	ng Roots (C	Secondary Surfa Spars X Drain Oxidiz C3) (wh X Crayf	Indicators (minimum of two required ce Soil Cracks (B6) sely Vegetated Concave Surface (B8 age Patterns (B10) zed Rhizospheres on Living Roots (C ere tilled) ish Burrows (C8)
etland Hydrolc imary Indicators Surface Wat High Water Saturation (A Water Marks Sediment De Drift Deposit Algal Mat or	ogy Indicators: s (minimum of one required; che ter (A1) Table (A2) A3) s (B1) eposits (B2) s (B3) Crust (B4)	 ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Season Oxidized R (where n Presence c 	(B11) vertebrates (I Sulfide Odor n Water Tabl hizospheres ot tilled) of Reduced I	B13) (C1) e (C2) along Livin ron (C4)	ng Roots (C	Secondary Surfa Spars X Drain Oxidiz C3) (wh X Crayf X Satur	r Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8 age Patterns (B10) zed Rhizospheres on Living Roots (C ere tilled) ish Burrows (C8) ation Visible on Aerial Imagery (C9)
etland Hydrolc imary Indicators Surface Wat High Water 1 Saturation (<i>F</i> Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits	ogy Indicators: s (minimum of one required; che ter (A1) Table (A2) A3) s (B1) eposits (B2) is (B3) Crust (B4) s (B5)	:ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Season Oxidized R (where n Presence o Thin Muck	(B11) vertebrates (I Sulfide Odor n Water Tabl hizospheres ot tilled) of Reduced II Surface (C7	B13) (C1) le (C2) along Livin ron (C4))	ng Roots (C	Secondary Surfa Spars X Drain Oxidiz C3) (wh X Crayf X Satur X Georr	Indicators (minimum of two required ce Soil Cracks (B6) ely Vegetated Concave Surface (B8 age Patterns (B10) zed Rhizospheres on Living Roots (C ere tilled) ish Burrows (C8) ation Visible on Aerial Imagery (C9) norphic Position (D2)
etland Hydrolc imary Indicators Surface Wat High Water T Saturation (<i>F</i> Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Inundation V	ogy Indicators: (minimum of one required; che ter (A1) Table (A2) A3) (B1) eposits (B2) is (B3) Crust (B4) s (B5) (isible on Aerial Imagery (B7)	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seaso Oxidized R (where n Presence c Thin Muck Other (Exp	(B11) vertebrates (I Sulfide Odor n Water Tabl hizospheres ot tilled) of Reduced II Surface (C7 lain in Rema	B13) (C1) le (C2) along Livin ron (C4)) urks)	ig Roots (C	C3) Secondary Surfa Spars X Drain Oxidiz C3 X Crayf X Crayf X Satur X Geom X FAC-I	Indicators (minimum of two required ce Soil Cracks (B6) sely Vegetated Concave Surface (B8 age Patterns (B10) zed Rhizospheres on Living Roots (C ere tilled) ish Burrows (C8) ation Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5)
etland Hydrold imary Indicators Surface Wat High Water 1 Saturation (<i>f</i> Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Inundation V Water-Staine	ogy Indicators: <u>s</u> (minimum of one required; che ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) s (B5) 'isible on Aerial Imagery (B7) ed Leaves (B9)	 <u>ck all that apply</u> Salt Crust (Aquatic Inv Hydrogen (Dry-Season Oxidized R (where n Presence of Thin Muck Other (Exp 	(B11) rertebrates (I Sulfide Odor n Water Tabl hizospheres ot tilled) of Reduced II Surface (C7 lain in Rema	B13) (C1) e (C2) along Livin ron (C4)) ırks)	ng Roots (C	C3) Secondary Surfa Spars X Drain Oxidiz X Crayf X Crayf X Geom X FAC-I Frost	<u>r Indicators (minimum of two required</u> ce Soil Cracks (B6) sely Vegetated Concave Surface (B8 age Patterns (B10) zed Rhizospheres on Living Roots (C ere tilled) ish Burrows (C8) ation Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) .Heave Hummocks (D7) (LRR F)
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Project/Site:	FM 741 EA		City/County:	k	Kaufman County	Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department	t of Transpo	rtation		State: Texa	as Sampling Point	WDP55
Investigator(s):	CW and JK		Section, Town	ship, Range:		N/A	
Landform (hillslope, terrace, etc	:): Ditch		Local relief (co	oncave, conve	ex, none):	concave	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.7016	6421	Long: -96.44	1948276 Dat	um: NAD 83
Soil Map Unit Name: Houston	Black clay, 1 to 3 percent slopes	;			NWI class	ification: NA	
Are climatic / hydrologic condition	ons on the site typical for this time	e of year?	Yes X	No	(If no, explain in R	emarks.)	
Are Vegetation, Soil	, or Hydrology	significantly	disturbed?	Are "I	Normal Circumstances"	present? Yes	X No
Are Vegetation, Soil	, or Hydrology	naturally pro	oblematic?	(If ne	eded, explain any answ	ers in Remarks.)	
SUMMARY OF FINDING	S - Attach site map show	ing sam	pling point	locations,	, transects, impor	tant features, etc	•
Hydrophytic Vegetation Prese	ent? Yes N	lo X					
Hydric Soil Present?	Yes X N	lo	Is t	the Sampled	Area		
Wetland Hydrology Present?	Yes N	lo X	wit	hin a Wetlan	d? Yes	No X	
		-	-		-		
Remarks: One of the three v	vetland indicators was present. Th	his point is r	not located wit	hin a wetland.	. The Antecedent Precip	pitation Tool scored a 1	2, indicating
conditions during	the site investigations were norma	al.					
VEGETATION - Use scie	entific names of plants.						
					Dominanco Tost w	orkehoot:	
		Abaaluta	Deminent	Indicator	Number of Domina	of Species	
Tree Streture (Dist size)	,		Dominant	Indicator		W or EAC:	1 (A)
)	% Cover	Species?	Status	That AIC ODE, I AO		(7)
2					Total Number of Do	minant	
2					Species Across All	Strata:	4 (B)
3							<u> </u>
···			- Total Cov	or	Percent of Dominar	nt Species	
Sanling/Shrub Stratum (Pl	ot size:	0	_ 10tal 000	CI	That Are OBL FAC	W or FAC	25.0 (A/B)
1)						()
2					Prevalence Index	worksheet:	
3		_			Total % Cover	of: Mul	tiply by:
4					OBL species	25 x 1 =	25
5.					FACW species	5 x 2 =	10
		0	= Total Cov	er	FAC species	0 x 3 =	0
Herb Stratum (Plot size:	30' radius)				FACU species	45 x 4 =	180
1. Lolium perenne		25	Yes	FACU	UPL species	25 x 5 =	125
2. Eleocharis palustris		25	Yes	OBL	Column Totals:	100 (A)	340 (B)
3. Pyrrhopappus pauciflorus		20	Yes	NI			
4. Medicago lupulina		20	Yes	FACU	Prevalence Ir	ndex = B/A =	3.4
5. Erodium cicutarium ssp. ci	icutarium	5	No	NI	Hydrophytic Vogo	tation Indicators:	
6. Valerianella radiata		5	No	FACW	1 - Ranid Test	for Hydronhytic Vegeta	ition
7.					2 - Dominance	Test is >50%	
8					3 - Prevalence	Index $\leq 3.0^{1}$	
9					4 - Morphologi	cal Adaptations ¹ (Provi	de supporting
10					Problematic H	vdrophytic Vegetation ¹	(Explain)
		100	= Total Cov	er		,,,,	(F - 7
Woody Vine Stratum (Plot	size:)				¹ Indicators of hydric	soil and wetland hydro	ology must
1					be present, unless	disturbed or problemati	ic.
2						•	
		0	= Total Cov	er	Hydrophytic		
% Bare Ground in Herb Strate	um <u>0</u>				Vegetation		
					Present?	Yes No	X
Remarks: Hydrophytic vegetation is no	ot present.						

SOIL	
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			Reuux						
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-6	10YR 5/1	90	10YR 3/6	10	C	M	Clay		
ype: C=Cond	entration, D=Depletio	n, RM=Reduc	ed Matrix, CS=Cove	red or Coat	ed Sand Gra	ains.	² Locatio	on: PL=Pore Lining, M=Matrix.	
dric Soil In	dicators: (Applicable	to all LRRs,	unless otherwise n	oted.)			Indicators f	or Problematic Hydric Soils ³ :	
Histosol (A1)		Sandy Gley	yed Marix (S	64)		1 cr	n Muck (A9) (LRR I, J)	
Histic Epi	pedon (A2)		Sandy Red	ox (S5)			Coa	st Prairie Redox (A16) (LRR F,	G, H)
Black Hist	ic (A3)		Stripped M	atrix (S6)			Dar	(Surface (S7) (LRR G)	
_ Hydrogen	Sulfide (A4)		Loamy Muc	sky Mineral	(F1)		High	Plains Depressions (F16)	
_ Stratified	Layers (A5) (LRR F)		Loamy Gle	yed Matrix ((F2)		(LR	R H outside of MLRA 72 & 73)	
_ 1 CM Muc	K (A9) (LRR F, G, H)	1	X Depleted IV	latrix (F3)	-0)			Uced Vertic (F18)	
_ Depleted	Below Dark Surface (A	1 11)		K Surface (F	-0) (E7)			Parent Material (TF2)	
Sandy Mi	icky Mineral (S1)		Depleted D	ressions (F	s (i 7) 8)			(Fynlain in Remarks)	
2.5 cm Mi	icky Peat or Peat (S2)		High Plains	Depression	o) ns (F16)		3Indic	ators of hydronhytic vegetation a	and
5 cm Muc	ky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LR	R H)		wetla	nd hydrology must be present.	and
	.,	(,	(,		unles	s disturbed or problematic.	
ostriotivo La	vor (if procept):								
	yer (il present).								
IVIE	Gravel nar	٠k							
Depth (incl emarks: lydric soil inc	Gravel parters):	6					Hydric Soil Pre	sent? Yes <u>X</u> No	
Depth (inclemarks: lydric soil inc	Gravel par hes): licators are present.	ck 6					Hydric Soil Pre	sent? Yes <u>X</u> No	
Depth (incl emarks: lydric soil inc DROLOG	Gravel par hes):	6 					Hydric Soil Pre	sent? Yes <u>X</u> No	
Depth (incl emarks: lydric soil inc DROLOG ¹ etland Hydr	Gravel par hes): licators are present. / plogy Indicators: ors (minimum of one	6					Hydric Soil Pre	sent? Yes <u>X</u> No	
Depth (incl emarks: lydric soil incl DROLOG ¹ etland Hydr imary Indica Surface V	Gravel part hes):	ck 6 	<u>k all that apply)</u>	 			Hydric Soil Pre	sent? Yes X No	equire
Depth (incl emarks: lydric soil incl DROLOG ^N etland Hydr imary Indica Surface V High Wate	Gravel par hes): licators are present. f ology Indicators: tors (minimum of one in /ater (A1) rr Table (A2)	ck 6 	<u>k all that apply)</u> <u>Salt Crust (</u>	B11) ertebrates (B13)		Hydric Soil Pre	sent? Yes X No	equire
Depth (incl emarks: lydric soil inc DROLOG` etland Hydr imary Indica Surface V High Wate Saturatior	Gravel par hes): licators are present. f ology Indicators: iors (minimum of one i /ater (A1) rr Table (A2) i (A3)	ck 6 	<u></u>	B11) ertebrates (Sulfide Odor	(B13) r (C1)		Hydric Soil Pre	sent? Yes X No	equired
Depth (incl emarks: lydric soil inc DROLOG detland Hydr rimary Indica Surface V High Wate Saturatior Water Ma	Gravel par hes): licators are present. f ology Indicators: cors (minimum of one i /ater (A1) r Table (A2) i (A3) rks (B1)	ck 6 	<u>k all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S	B11) ertebrates (Sulfide Odor 1 Water Tab	(B13) r (C1) ole (C2)		Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two re ace Soil Cracks (B6) rsely Vegetated Concave Surfac nage Patterns (B10) tized Rhizospheres on Living Ro	equired ce (B8
Depth (incl emarks: lydric soil inc DROLOG Metland Hydr rimary Indica Surface V High Wate Saturatior Water Ma Sediment	Gravel par hes): licators are present. f ology Indicators: cors (minimum of one i /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2)	ck 6 	<u>k all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R	(B11) ertebrates (3ulfide Odor n Water Tab hizospheres	(B13) r (C1) ele (C2) s along Livin	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two re ace Soil Cracks (B6) rsely Vegetated Concave Surfac nage Patterns (B10) tized Rhizospheres on Living Ro here tilled)	equiree ce (B8 pots (0
Depth (incl emarks: lydric soil inc DROLOG /etland Hydr rimary Indica Surface V High Wate Saturatior Water Ma Sediment Drift Depc	Gravel par hes): licators are present. f ology Indicators: cors (minimum of one i /ater (A1) ar Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3)	ck 6 required; chec		(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled)	(B13) r (C1) ele (C2) s along Livin	g Roots (C	Hydric Soil Pre	sent? Yes X No	ce (B8
Depth (incl emarks: Hydric soil incl DROLOG DROLOG /etland Hydr rimary Indica Surface V High Wate Saturatior Water Ma Sediment Drift Depo Algal Mat	Gravel par hes): licators are present. f ology Indicators: ors (minimum of one i /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)	ck 6 required; chec	:k all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R Oxidized R (where n	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced	(B13) r (C1) le (C2) s along Livin Iron (C4)	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two re ace Soil Cracks (B6) rsely Vegetated Concave Surfac nage Patterns (B10) lized Rhizospheres on Living Ro here tilled) rfish Burrows (C8) uration Visible on Aerial Imagery	equired ce (B8 pots ((r (C9))
Depth (incl emarks: Hydric soil incl DROLOG DROLOG Vetland Hydr rimary Indica Surface V High Wate Saturatior Water Ma Sediment Drift Depo Algal Mat Iron Depo	Gravel par hes): licators are present. f ology Indicators: ors (minimum of one i /ater (A1) Pr Table (A2) i (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	ck 6 required; chec	<u>*k all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R (where n Presence o Thin Muck	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7	(B13) r (C1) ole (C2) s along Livin Iron (C4) 7)	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two re ace Soil Cracks (B6) rsely Vegetated Concave Surfac nage Patterns (B10) dized Rhizospheres on Living Ro here tilled) /fish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2)	equired ce (B8 pots ((r (C9)
Depth (incl emarks: lydric soil inc DROLOG DROLOG /etland Hydr rimary Indica Surface V High Wate Saturatior Water Ma Sediment Drift Depc Algal Mat Iron Depc Inundation	Gravel par hes): licators are present. f ology Indicators: tors (minimum of one i /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima	ck 6 required; chec gery (B7)	<u>:k all that apply)</u> <u>Salt Crust (</u> Aquatic Inv Hydrogen S Dry-Seasor Oxidized R (where n Presence c Thin Muck Other (Exp	[B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) if Reduced I Surface (C7 lain in Rema	B13) r (C1) ole (C2) s along Livin Iron (C4) 7) arks)	g Roots (C	Hydric Soil Pre Seconda Suri Suri Drai Oxio :3) (w Satu Satu Satu	sent? Yes X No ry Indicators (minimum of two re ace Soil Cracks (B6) rsely Vegetated Concave Surfac nage Patterns (B10) dized Rhizospheres on Living Ro here tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) -Neutral Test (D5)	equired ce (B8 poots (((C9)
Depth (incl emarks: lydric soil inc dydric soil inc DROLOG Petland Hydr fimary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depc Algal Mat Iron Depc Inundation Water-Sta	Gravel par hes): licators are present. / ology Indicators: tors (minimum of one /ater (A1) er Table (A2) + (A3) rks (B1) Deposits (B2) + sits (B3) or Crust (B4) sits (B5) + Visible on Aerial Ima ined Leaves (B9)	ck 6 required; chec gery (B7)	Salt Crust ((B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema	(B13) r (C1) ele (C2) s along Livin lron (C4) 7) arks)	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two re ace Soil Cracks (B6) rsely Vegetated Concave Surfac nage Patterns (B10) dized Rhizospheres on Living Ro here tilled) (fish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) -Neutral Test (D5) at-Heave Hummocks (D7) (LRR	equire ce (B8 oots (((C9) F)
Depth (incl emarks: lydric soil inc dydric soil inc DROLOG DROLOG /etland Hydr rimary Indica Surface V High Wate Saturatior Water Ma Sediment Drift Depc Algal Mat Iron Depc Inundation Water-Sta	Gravel par hes): licators are present. f ology Indicators: tors (minimum of one) /ater (A1) er Table (A2) 1 (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) sits (B5) 1 Visible on Aerial Ima ined Leaves (B9) tions:	ck 6 required; chec gery (B7)	<u>:k all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R Presence of Thin Muck Other (Expl	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema	(B13) r (C1) ole (C2) s along Livin Iron (C4) 7) arks)	g Roots (C	Hydric Soil Pre	sent? Yes X No ry Indicators (minimum of two re ace Soil Cracks (B6) rsely Vegetated Concave Surfac nage Patterns (B10) tized Rhizospheres on Living Ro here tilled) /fish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) -Neutral Test (D5) at-Heave Hummocks (D7) (LRR	equired ce (B8 poots ((r (C9) F)
Depth (incl emarks: lydric soil incl dydric soil incl DROLOG /etland Hydr rimary Indica Surface V High Water Saturatior Water Ma Sediment Drift Depc Algal Mat Iron Depc Inundation Water-Sta ield Observa	Gravel par hes): licators are present. f ology Indicators: tors (minimum of one Vater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima ined Leaves (B9) Tions: Present? Ye	ck6 <u>6</u> <u>6</u> <u>required; chec</u> <u>gery (B7)</u> <u>s</u> Nc	<u>xk all that apply)</u> Salt Crust (Aquatic Inv Hydrogen S Dry-Season Oxidized R (where n Presence c Thin Muck Other (Expl X Depth (inc	(B11) ertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema 	(B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks)	g Roots (C	Hydric Soil Pre	sent? Yes X No	equirec ce (B8 poots (C r (C9) F)
Propertype. Depth (incl emarks: Hydric soil inco provide the soil	Gravel par hes): licators are present. f ology Indicators: tors (minimum of one Vater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima ined Leaves (B9) 	ck 6 required; chec gery (B7) ss No ss No	:x all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema 	(B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks)	g Roots (C	Hydric Soil Pre	sent? Yes X No	equired ce (B8 pots (C (C9) F)
	Gravel par hes): licators are present. f ology Indicators: tors (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4) sits (B5) i Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye esent? Ye	ck	x all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Remainst ches): 	(B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks)	ig Roots (C	Hydric Soil Pre	sent? Yes X No	equired ce (B8 pots (((C9) F)
Depth (incl emarks: 	Gravel par hes): licators are present. f ology Indicators: tors (minimum of one /ater (A1) er Table (A2) h (A3) rks (B1) Deposits (B2) h (A3) rks (B1) Deposits (B2) h (A3) or Crust (B4) sits (B5) h Visible on Aerial Ima ined Leaves (B9) tions: Present? Ye sent? Ye ary fringe)	ck 6 	X all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Season Oxidized R (where n) Presence c Thin Muck Other (Expl X Depth (inc X Depth (inc	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches):	(B13) r (C1) ile (C2) s along Livin lron (C4) 7) arks)	g Roots (C	Hydric Soil Pre	sent? Yes X No	equired ce (B8 oots ((r (C9) F)
Depth (incl emarks: lydric soil inc emarks: lydric soil inc emarks: lydric soil inc emarks: lydric soil inc enternation fetland Hydr Saturation Water Ma Sediment Drift Depc Algal Mat Iron Depc Inundation Water-Sta eld Observa urface Water later Table Pr aturation Pre includes capill escribe Reco	Gravel par hes):	ck <u>6</u> <u>required; chec</u> gery (B7) <u>2s</u> No <u>2s</u> No <u>2s</u> No <u>2s</u> No <u>2s</u> No <u>2s</u> No	x all that apply)	(B11) rertebrates (Sulfide Odor n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): ches): ches): , previous ir	(B13) r (C1) ele (C2) s along Livin lron (C4) 7) arks)	ig Roots (C	Hydric Soil Pre	sent? Yes X No	equire ce (B8 pots ((r (C9) F)
Depth (incl Depth (incl emarks: lydric soil inc DROLOG` etland Hydr imary Indica Surface V High Wate Saturatior Water Ma Saturatior Urift Depc Algal Mat Iron Depc Inundation Water-Sta eld Observa urface Water aturation Pre aturation Pre accribe Recc	Gravel par hes):	ck	:x all that apply)	(B11) rertebrates (Sulfide Odoi n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): 	(B13) r (C1) ole (C2) s along Livin lron (C4) 7) arks) mspections),	g Roots (C Wetlan	Hydric Soil Pre	sent? Yes X No	equiree ce (B8 pots (((C9) F)
Depth (incl Depth (incl emarks: lydric soil inc DROLOG ¹ etland Hydr imary Indica Surface V High Wate Saturatior Water Ma Sediment Drift Depc Algal Mat Iron Depc Algal Mat Iron Depc Inundation Water-Sta eld Observa aurface Water ater Table Pr aturation Pre- includes capill escribe Reco	Gravel par hes):	ck 6 6 required; chec gery (B7) 25 Nc 25 Nc 25 Nc 29 Nc	2k all that apply)	(B11) rertebrates (Sulfide Odoi n Water Tab hizospheres ot tilled) of Reduced I Surface (C7 lain in Rema ches): 	(B13) r (C1) le (C2) s along Livin lron (C4) 7) arks)	g Roots (C	Hydric Soil Pre	sent? Yes X No	equire ce (B8 pots ((r (C9)) F)

Project/Site:	FM 74	1 EA		City/County:	ĸ	Kaufman County	S	Sampling Date:	04/29/2022
Applicant/Owner:		Texas Departmer	nt of Transpo	rtation		State: T	Texas S	ampling Point:	WDP56
Investigator(s):	CW a	and JK	•	Section, Town	ship, Range:			N/A	
Landform (hillslope, terra		Depression		Local relief (co	oncave, conve	ex, none):	concav	e	Slope (%): 0-1
Subregion (LRR):	LRR J MLR	A 86A	Lat:	32.70511	1669	Long: -96	6.44647177	Datu	m: NAD 83
Soil Map Unit Name: H	ouston Black clav. 1	to 3 percent slope	s			NWI cl	lassification	: NA	
Are climatic / hydrologic o	conditions on the site	e typical for this tim	e of year?	Yes X	No	(If no, explain i	n Remarks.)	
Are Vegetation	, Soil , or I	Hydrology	significantly	disturbed?	Are "I	Normal Circumstanc	ces" present	? Yes	X No
Are Vegetation	, Soil , or I	Hydrology	naturally pro	oblematic?	(If ne	eded, explain any a	nswers in R	emarks.)	
SUMMARY OF FIN	DINGS - Attach	site map show	ving sam	plina point	locations.	. transects. imp	ortant fe	atures, etc.	
	Procent?	Voc V I		<u> </u>		,,,			
Hydrio Soil Prosont?	TPTesent?		NO	-	he Sampled	Aroa			
Motional Hydrology Dro	acout?		NO		hin e Wetlen			No	
	Sent?		NU	-		u: 16	<u> </u>		
Remarks: All of the the conditions of	ee wetland indicator luring the site investi	rs were present. Tr igations were norm	nis point is lo ial.	cated within a	wetland. The	Antecedent Precipit	tation Tool s	cored a 12, indi	cating
VEGETATION - Use	scientific nam	es of plants.							
						Dominance Tes	st workshee	et:	
			Absolute	Dominant	Indicator	Number of Dom	inant Specie	es	
Tree Stratum (Plot s	ize:)	% Cover	Species?	Status	That Are OBL, F	ACW, or FA	AC:	2 (A)
1.		/							
2.						Total Number of	Dominant		
3.						Species Across	All Strata:		2 (B)
4.									
			0	= Total Cove	er	Percent of Domi	inant Specie	es	
Sapling/Shrub Stratum	(Plot size:)				That Are OBL, F	ACW, or FA	AC: 10)0.0 (A/B)
1.									
2.						Prevalence Ind	ex workshe	eet:	
3.						Total % Co	over of:	Multi	ply by:
4.						OBL species	70	x 1 =	70
5.						FACW species	10	x 2 =	20
			0	= Total Cove	er	FAC species	10	x 3 =	30
Herb Stratum (Plot s	ize: 30' radius)				FACU species	0	x 4 =	0
1. Eleocharis palustris			50	Yes	OBL	OPL species	0	x 5 =	<u> </u>
2. Scirpus pendulus			20	Yes	OBL	Column Totals:	90	(A)	<u>120</u> (B)
3. Phyla fruticosa			10	No	FAC	Drevelane	a laday – D	/A	22
4. Packera tampicana			10	No	FACW	Prevalenc		/A = I	.33
5						Hydrophytic Ve	egetation In	dicators:	
6						X 1 - Rapid T	est for Hydro	ophytic Vegetati	on
7						X 2 - Domina	nce Test is :	>50%	
8						X 3 - Prevale	nce Index ≤	3.0 ¹	
9				·		4 - Morphol	logical Adap	otations1 (Provid	e supporting
10					·	Problematio	c Hydrophyt	ic Vegetation ¹ (E	Explain)
			90	= Total Cove	er				
Woody Vine Stratum	(Plot size:)				¹ Indicators of hy	dric soil and	d wetland hydrol	ogy must
1					·	be present, unle	ess disturbed	d or problematic	
Z					·				
0/ Dama One word in Lind	h Otratura 0		0		er	Hydrophytic			
% Bare Ground in Heri	o Stratum 0					Vegetation			
						Present?	Yes	<u>X</u> No	
Remarks: Hydrophytic vegetatio	n is present.								

SOIL	_
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Depth	Matrix		Redox	Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 4/1	80	10YR 7/2	10	D	М	Clay	
			10YR 3/6	10	С	PL	Clay	
				·	·			
					·		. <u> </u>	
				·	·		·	
					·			
				·	·		·	
¹ Type: C=Con	centration, D=Depletion	n, RM=Reduc	ed Matrix, CS=Cove	red or Coate	ed Sand Gr	ains.	²Loca	tion: PL=Pore Lining, M=Matrix.
Hydric Soil Ir	dicators: (Applicable	to all LRRs,	unless otherwise n	oted.)			Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gley	ed Marix (S	54)		10	cm Muck (A9) (LRR I, J)
Histic Ep	ipedon (A2)		Sandy Red	ox (S5)			Co	oast Prairie Redox (A16) (LRR F, G, H)
Black His	stic (A3)		Stripped Ma	atrix (S6)			Da	ark Surface (S7) (LRR G)
Hydroge	n Sulfide (A4)		Loamy Muc	ky Mineral ((F1)		Hig	gh Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)		Loamy Gle	ed Matrix (F2)		(L	RR H outside of MLRA 72 & 73)
1 cm Mu	ck (A9) (LRR F, G, H)		X Depleted M	atrix (F3)			Re	educed Vertic (F18)
Depleted	Below Dark Surface (A	411)	Redox Darl	(Surface (F	6)		Re	ed Parent Material (TF2)
I NICK Da	rk Surface (A12)		Depleted D	ark Surface	(F7)		Ve	ry Shallow Dark Surface (TF12)
	ucky Mineral (ST) lucky Post or Post (S2)		Redox Dep	Doprossion	5) no (E16)		UL	her (Explain in Remarks)
2.5 CIT IV	nucky Feat of Feat (32)			8 73 of I RE	із (F IO) Э H I		wet	and hydrology must be present
					(1)		unle	ss disturbed or problematic.
Restrictive L	ayer (if present):							
Type:	, , , , , , , , , , , , , , , , , , ,							
Type.								
Depth (ind Remarks:	ches):						Hydric Soil P	resent? Yes X No
Remarks: Hydric soil in	ches):						Hydric Soil P	resent? Yes X No
Depth (ind Remarks: Hydric soil in	ches): dicators are present. Y						Hydric Soil P	resent? Yes <u>X</u> No
Depth (ind Remarks: Hydric soil in YDROLOG Wetland Hyd	ches): dicators are present. Y rology Indicators:						Hydric Soil Pr	resent? Yes <u>X</u> No
Pepth (ind Remarks: Hydric soil in YDROLOG Wetland Hyd Primary Indica	ches): dicators are present. Y rology Indicators: ators (minimum of one r	required; che	ck all that apply)				Hydric Soil Pr	resent? Yes X No
Primary Indica Surface V X High Wa	ches): dicators are present. Y rology Indicators: ators (minimum of one r Nater (A1) rer Table (A2)	required; che	ck all that apply) Salt Crust (B11)	B13)		Hydric Soil Pr	resent? Yes X No
Primary Indica Surface V X Saturation	ches): dicators are present. Y rology Indicators: ators (minimum of one r Nater (A1) ter Table (A2) n (A3)	required; che	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S	B11) ertebrates (i	B13)		Hydric Soil Pr	resent? Yes X No
Primary Indica Metland Hyd Primary Indica X High Wa X Saturatic Water Mi	ches): dicators are present. Y rology Indicators: ators (minimum of one r Water (A1) ter Table (A2) n (A3) arks (B1)	required; che	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Drv-Seasor	B11) ertebrates (l Sulfide Odor n Water Tab	B13) (C1) le (C2)		Hydric Soil Pr	resent? Yes X No lary Indicators (minimum of two required) urface Soil Cracks (B6) parsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C3)
Primary Indice X High War X High War X Saturatio Water Ma Sedimen	ches): dicators are present. Y rology Indicators: ators (minimum of one r Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2)	required; che	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R	B11) ertebrates (I Sulfide Odor n Water Tab	B13) (C1) le (C2) s along Livir	a Roots (C	Hydric Soil Pr	resent? Yes X No lary Indicators (minimum of two required) inface Soil Cracks (B6) parsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C3) where tilled)
Primary Indica X High Water Ma X Saturatio Water Ma Sedimen Drift Dep	ches): dicators are present. Y rology Indicators: ators (minimum of one r Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3)	required; che	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R (where net	B11) ertebrates (I Sulfide Odor n Water Tabi hizospheres ot tilled)	B13) (C1) le (C2) s along Livir	ng Roots (C	Hydric Soil Pr Second Su Su Sp Dr Ox 3) (X Cr	resent? Yes X No lary Indicators (minimum of two required) inface Soil Cracks (B6) parsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C3) where tilled) ayfish Burrows (C8)
YDROLOG Wetland Hyd Primary Indica X High Watar Mage X Saturation X Sediment Drift Dep X Algal Ma	ches): dicators are present. Y rology Indicators: ators (minimum of one r Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	required; che	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R (where no Presence o	B11) ertebrates (I Sulfide Odor n Water Tab hizospheres ot tilled) f Reduced I	B13) • (C1) le (C2) ; along Livir ron (C4)	ng Roots (C	Hydric Soil Pr Second Su Su Su Su Su Su Su Su Su Su Su Su Su	resent? Yes X No lary Indicators (minimum of two required) Inface Soil Cracks (B6) barsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C3) where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9)
YDROLOG Wetland Hyd Primary Indica Surface V X High War X Saturation Water Main Sedimen Drift Dep X X Algal Main Iron Dep Iron Dep	ches): dicators are present. Y rology Indicators: ators (minimum of one r Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	required; che	<u>ck all that apply)</u> <u>Salt Crust (</u> Aquatic Inv <u>Hydrogen S</u> Dry-Seasor <u>Oxidized R</u> (where no <u></u> Presence o <u></u> Thin Muck	B11) ertebrates (I Sulfide Odor n Water Tab hizospheres ot tilled) f Reduced I Surface (C7	B13) • (C1) le (C2) s along Livir ron (C4)	ng Roots (C	Hydric Soil Pr 	resent? Yes X No lary Indicators (minimum of two required) Inface Soil Cracks (B6) varsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C3) where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) comorphic Position (D2)
	ches): dicators are present. Y rology Indicators: ators (minimum of one r Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima	required; che	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R Presence o Thin Muck 1 Other (Expl	B11) ertebrates (I Sulfide Odor h Water Tab hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema	B13) (C1) le (C2) s along Livir ron (C4)) arks)	ng Roots (C	Hydric Soil Pr Second Su Sp Su Sp So So So So So Su Sp Su Sp Su Sp Su Sp Su Sp Su Sp Su Su Sp Su Su Sp Su Su Su Su Su Su Su Su Su Su Su Su Su	resent? Yes X No lary Indicators (minimum of two required) inface Soil Cracks (B6) barsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C3) where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) comorphic Position (D2) kC-Neutral Test (D5)
YDROLOG Wetland Hyd Primary Indica Surface V X High Wat X Saturation Water Ma Drift Dep X Algal Ma Iron Dep Inundation Water-St	ches): dicators are present. Y rology Indicators: ators (minimum of one r Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima ained Leaves (B9)	required; cher	<u>ck all that apply)</u> <u>Salt Crust (</u> Aquatic Inv <u>Hydrogen S</u> Dry-Seasor Oxidized R (where m Presence o Thin Muck Other (Expl	B11) ertebrates (I Sulfide Odor n Water Tabi hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema	B13) • (C1) le (C2) s along Livir ron (C4) •) arks)	ng Roots (C	Hydric Soil Pr 	resent? Yes X No lary Indicators (minimum of two required) Inface Soil Cracks (B6) varsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C3) where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) eomorphic Position (D2) AC-Neutral Test (D5) post-Heave Hummocks (D7) (LRR F)
Primary Indica Wetland Hyd Primary Indica Surface V X High Wa' X Saturatic Water Ma Sedimen Drift Dep X Algal Ma Iron Dep Inundatic Water-St Field Observ	ches): dicators are present. Y rology Indicators: ators (minimum of one r Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima ained Leaves (B9) ations:	required; cher	ck all that apply) Salt Crust (Aquatic Inv Hydrogen S Dry-Seasor Oxidized R (where no Presence o Thin Muck Other (Expl	B11) ertebrates (I Sulfide Odor n Water Tab nizospheres ot tilled) f Reduced I Surface (C7 ain in Rema	B13) (C1) le (C2) s along Livir ron (C4)) arks)	ng Roots (C	Hydric Soil Pr Second Su Su Sp Dr Ox 3) (X Cr X Sa X Cr X Sa X FA Fr Fr	resent? Yes X No lary Indicators (minimum of two required) urface Soil Cracks (B6) barsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C3) where tilled) ayfish Burrows (C8) tturation Visible on Aerial Imagery (C9) ecomorphic Position (D2) kC-Neutral Test (D5) bost-Heave Hummocks (D7) (LRR F)
YDROLOG Wetland Hyd Primary Indica Surface V X High Wa X Saturation Water Main Sedimen Drift Dep Inon Dep Inron Dep Inundation Water-St Field Observ	ches): dicators are present. Y rology Indicators: ators (minimum of one r Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima ained Leaves (B9) ations: r Present? Ye	gery (B7)	ck all that apply)	B11) ertebrates (I Sulfide Odor n Water Tab hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema	B13) (C1) le (C2) along Livir ron (C4)) arks)	ng Roots (C	Hydric Soil Pr	resent? Yes X No lary Indicators (minimum of two required) Inface Soil Cracks (B6) barsely Vegetated Concave Surface (B8) ainage Patterns (B10) tidized Rhizospheres on Living Roots (C3) where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) ecomorphic Position (D2) .C-Neutral Test (D5) bost-Heave Hummocks (D7) (LRR F)
Primary Indica Wetland Hyd Primary Indica Surface V X High Wai X Saturatio Water Ma Sedimen Drift Dep X Algal Ma Iron Dep Inundatio Water-St Field Observ Surface Wate Water Table F	ches): dicators are present. Y rology Indicators: ators (minimum of one r Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima ained Leaves (B9) ations: r Present? Ye	gery (B7)	ck all that apply)	B11) ertebrates (I Sulfide Odor n Water Tab hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema	B13) (C1) le (C2) along Livir ron (C4)) arks) 8	ng Roots (C	Hydric Soil Pr	resent? Yes X No lary Indicators (minimum of two required) Inface Soil Cracks (B6) barsely Vegetated Concave Surface (B8) ainage Patterns (B10) tidized Rhizospheres on Living Roots (C3) where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) ecomorphic Position (D2) .C-Neutral Test (D5) bost-Heave Hummocks (D7) (LRR F)
Primary Indica Methand Hyd Primary Indica Surface V X High War X Saturation Drift Dep X Algal Ma Iron Dep Inundation Water-St Field Observ Surface Water Water Table F Saturation Pre-	ches): dicators are present. Y rology Indicators: ators (minimum of one r Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima ained Leaves (B9) ations: r Present? Ye esent? Ye	gery (B7)	ck all that apply)	B11) ertebrates (i Sulfide Odor n Water Tabi hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema ches): ches):	B13) (C1) le (C2) s along Livir ron (C4)) arks) 8 8	ng Roots (C	Hydric Soil Pr Second Su Su Su Su Su Su Su Su Su Su	resent? Yes X No lary Indicators (minimum of two required) Inface Soil Cracks (B6) Parsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C3) where tilled) ayfish Burrows (C8) kturation Visible on Aerial Imagery (C9) comorphic Position (D2) AC-Neutral Test (D5) post-Heave Hummocks (D7) (LRR F) resent? Yes X No
Primary Indica Primary Indica Wetland Hyd Primary Indica Surface V X High Wa X Saturatio Water Ma Sedimen Drift Dep X Algal Ma Iron Dep Inundatio Water-St Field Observ Surface Wate Water Table F Saturation Pre (includes capi	ches): dicators are present. Y rology Indicators: ators (minimum of one r Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima ained Leaves (B9) ations: r Present? Ye resent? Ye sesent? Ye	gery (B7)	ck all that apply)	B11) ertebrates (Sulfide Odor hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema ches): ches):	B13) (C1) le (C2) s along Livir ron (C4)) arks) 8 8 8	ng Roots (C	Hydric Soil Pr Second Su Su Su Su Su Su Su Su Su Su	resent? Yes X No lary Indicators (minimum of two required) Inface Soil Cracks (B6) parsely Vegetated Concave Surface (B8) ainage Patterns (B10) kidized Rhizospheres on Living Roots (C3) where tilled) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) comorphic Position (D2) AC-Neutral Test (D5) pst-Heave Hummocks (D7) (LRR F) resent? Yes X No
Primary Indica Primary Indica Surface V X High Wa X Saturatice Water Ma Sedimen Drift Dep X Algal Ma Iron Dep Inundatice Water St Field Observ Surface Water Saturation Pre- (includes capi Describe Rec	ches): dicators are present. Y rology Indicators: ators (minimum of one r Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima ained Leaves (B9) ations: r Present? Ye resent? Ye esent? Ye llary fringe)	gery (B7)	ck all that apply)	B11) ertebrates (i Sulfide Odor hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema ches): ches): ches):	B13) (C1) le (C2) s along Livir ron (C4)) arks) 8 8 8	ng Roots (C	Hydric Soil Pr Second Su Su Su Su Su Su Su Su Su Su	resent? Yes X No lary Indicators (minimum of two required) Inface Soil Cracks (B6) Darsely Vegetated Concave Surface (B8) ainage Patterns (B10) idized Rhizospheres on Living Roots (C3) where tilled) ayfish Burrows (C8) Itturation Visible on Aerial Imagery (C9) comorphic Position (D2) .C-Neutral Test (D5) ost-Heave Hummocks (D7) (LRR F) resent? Yes X No
YDROLOG Wetland Hyd Primary Indica Surface V X High Wat X Saturatica Water Ma Sedimen Drift Dep Algal Ma Iron Dep Inundatica Water Table F Saturation Pre Gincludes capi Describe Rec Describe Rec Describe Rec	ches): dicators are present. Y rology Indicators: ators (minimum of one r Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima ained Leaves (B9) ations: r Present? Ye esent? Ye esent? Ye llary fringe) orded Data (stream gau	gery (B7)	ck all that apply)	B11) ertebrates (I Sulfide Odor n Water Tab hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema sches): ches): ; previous in	B13) (C1) le (C2) s along Livir ron (C4)) arks) 8 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1	ug Roots (C	Hydric Soil Pr	resent? Yes X No
Primary Indica Primary Indica Surface V X High Wat X Saturatice Water Mai Sedimen Drift Dep X Algal Ma Iron Dep Inundatice Water Table F Saturation Pre- (includes capi Describe Recc Remarks: Hydrology indi-	ches): dicators are present. Y rology Indicators: ators (minimum of one r Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima ained Leaves (B9) ations: r Present? Ye resent? Ye esent? Ye llary fringe) orded Data (stream gau dicators are present.	gery (B7)	ck all that apply)	B11) ertebrates (I Sulfide Odor hizospheres ot tilled) f Reduced I Surface (C7 ain in Rema ches): ches): ches): , previous in	B13) (C1) le (C2) s along Livir ron (C4)) arks) 8 8 8	ng Roots (C	Hydric Soil Pr Second Su Su Su Su Su Su Su Su Su Su	resent? Yes X No lary Indicators (minimum of two required) inface Soil Cracks (B6) barsely Vegetated Concave Surface (B8) ainage Patterns (B10) idized Rhizospheres on Living Roots (C3) where tilled) ayfish Burrows (C8) itturation Visible on Aerial Imagery (C9) ecomorphic Position (D2) .C-Neutral Test (D5) ost-Heave Hummocks (D7) (LRR F) resent? Yes X No
Project/Site:	FM 741 EA		City/County:	: К	aufman County	Sampling Date:	04/29/2022	
--	---------------------------------------	---------------	------------------	------------------	--	----------------------------------	----------------	--
Applicant/Owner:	Texas Departmen	t of Transpo	f Transportation		State: Texas	Sampling Point:	WDP57	
Investigator(s):	CW and JK		Section, Tov	vnship, Range:		N/A		
Landform (hillslope, terrace, etc): Ditch		Local relief ((concave, conve	ex, none): cond	ave	Slope (%): 0-1	
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.705	38432	Long: -96.446420	06 Datur	m: NAD 83	
Soil Map Unit Name: Houston	Black clay, 1 to 3 percent slope	s			NWI classificati	on: NA		
Are climatic / hydrologic condition	ons on the site typical for this time	e of year?	Yes X	No	(If no, explain in Remark	(s.)		
Are Vegetation , Soil	, or Hydrology	significantly	disturbed?	Are "N	Normal Circumstances" prese	ent? Yes	X No	
Are Vegetation , Soil	, or Hydrology	naturally pro	oblematic?	(If nee	eded, explain any answers in	Remarks.)		
SUMMARY OF FINDING	S - Attach site map show	ving sam	oling poir	nt locations,	transects, important	features, etc.		
Hydrophytic Vegetation Prese	ent? Yes N	lo X						
Hydric Soil Present?	Yes N		-	s the Sampled	Δrea			
Wetland Hydrology Present?	Yes N			vithin a Wetland	d? Yes	No X		
							_	
Remarks: None of the three wetland indicators were present. This point is not located within a wetland. The Antecedent Precipitation Tool scored a 12, indicating conditions during the site investigations were normal.								
VEGETATION - USe SCIE	ntific names of plants.							
					Dominance Test works	neet:		
		Absolute	Dominant	Indicator	Number of Dominant Spe	ecies		
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW, or	FAC:	3 (A)	
1								
2					Total Number of Dominar	nt		
3					Species Across All Strata		7 (B)	
4								
		0	= Total Co	over	Percent of Dominant Spe	cies		
Sapling/Shrub Stratum (Plo	ot size:)				That Are OBL, FACW, or	FAC: 42	2.9 (A/B)	
1					Brovalanca Indax work	hoot:		
2					Total % Cover of:	Multic	alv by:	
3							<u>0</u>	
4					EACW species 3	x1=	60	
5					FAC species 1	5 ×3=	45	
		0	_ = Total Co	over	FACU species	$x_{4} = $	240	
Herb Stratum (Plot size:	<u>30' radius</u>)				LIPL species	×5=	0	
1. Packera tampicana		15	Yes	FACW	Column Totals: 10	(A)	(B)	
2. <u>Cynodon dactylon</u>		15	Yes	FACU		<u> </u>		
3. Allium canadense		15	Yes	FACU	Prevalence Index =	: B/A = 3	29	
4. Lolium perenne		15	Yes	FACU				
5. Valerianella radiata		15	Yes	FACW	Hydrophytic Vegetation	Indicators:		
6. <u>Chaerophyllum tainturieri</u>		15	Yes	FAC	1 - Rapid Test for Hy	drophytic Vegetatio	on	
7. Ambrosia artemisiifolia		15	Yes	FACU	2 - Dominance Test	is >50%		
8					3 - Prevalence Index	< ≤3.0 ¹		
9					4 - Morphological Ad	laptations ¹ (Provide	e supporting	
10					Problematic Hydrop	nytic Vegetation ¹ (E	Explain)	
Maadu Vina Ctratum (Dist.		105		over				
	size)				¹ Indicators of hydric soil a	and wetland hydrolo	ogy must	
1					be present, unless distur	ped or problematic.		
Z			- Total Ca					
% Para Cround in Harb Strati		0	_ = 10(a) CC	Jvei	Hydrophytic			
% Bare Ground in Herb Stratt					Vegetation	- N-	V	
					Present? Ye	NO	Χ	
Remarks: Hydrophytic vegetation is not	t present.							

S	0	IL	
J	J		-

Profile Description: (Describe to the depth needed to document the indicator or confirm the absorbed by Matrix Bedox Features							e absence of indicators.)				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹		Texture	Remarks			
0-18	10YR 3/1	100			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
		· ·									
¹ Type: C=Cor	ncentration, D=Depletio	on, RM=Reduc	ed Matrix, CS=Cove	ered or Coate	ed Sand Gra	ins.	² Locatio	n: PL=Pore Lining, M=Matrix.			
Hydric Soil I	ndicators: (Applicable	e to all LRRs,	unless otherwise r	noted.)			Indicators for	or Problematic Hydric Soils ³ :			
Histosol	(A1)		Sandy Gle	yed Marix (S	4)		1 cm	Muck (A9) (LRR I, J)			
Histic Ep	oipedon (A2)		Sandy Rec	lox (S5)			Coas	st Prairie Redox (A16) (LRR F, G, H)			
Black Hi	stic (A3)		Stripped M	atrix (S6)			Dark	Surface (S7) (LRR G)			
Hydroge	n Sulfide (A4)		Loamy Mu	cky Mineral ((F1)		High	Plains Depressions (F16)			
Stratified	Layers (A5) (LRR F)		Loamy Gle	yed Matrix (I	-2)		(LRF	R H outside of MLRA 72 & 73)			
1 cm Mu	ICK (A9) (LRR F, G, H		Depleted N	/latrix (F3)	0)		Redu	uced Vertic (F18)			
	Below Dark Surface (A11)	Redox Dar	к Surface (F	6) (F7)		Red	Parent Material (TF2)			
I hick Da	ark Surface (A12)		Depleted D	vark Surface	(F7)		Very	Snallow Dark Surface (1+12)			
	iucky Mineral (S1)				5) NG (E16)		Othe	r (Explain in Remarks)			
2.5 cm №	NUCKY Peat of Peat (S2				із (ГТО) Э ЦІ		Sindica	action of the second			
	iuny real of real (53)		(WILKA /2	ox / 3 OT LRF	(п)		wetian	disturbed or problematic			
							uniess				
Restrictive L	ayer (if present):										
Туре:											
Depth (in	ches):						Hydric Soil Pres	sent? Yes <u>No X</u>			
Remarke											
Hydric soil in	idicators are not prese	nt.									
	v										
Wotlond Live											
Primony India	ators (minimum of one	required abo	k all that apply)				Socond	v Indicators (minimum of two required)			
Fillinary Indic	ators (minimum of one Water (A1)	required; cheo	Solt Crust	(B11)							
	ter Table (Δ 2)			(DII) (ertebrates (I	313)		Outla Sport	sely Venetated Concave Surface (B8)			
Saturatio	(A3)		Hydronen	Sulfide Odor	(C1)		Opan Drair	hage Patterns (B10)			
Water M	arks (B1)		Drv-Seaso	n Water Tahl	(C2)			ized Rhizospheres on Living Roots (C3)			
Sedimer	nt Deposits (B2)		Oxidized R	hizosnheres	along Living	Roots (C	(wł	nere tilled)			
Drift Der	osits (B3)		(where n	ot tilled)	2.2.19 -14116	,	Crav	fish Burrows (C8)			
Algal Ma	t or Crust (B4)		Presence	of Reduced I	ron (C4)		Satu	ration Visible on Aerial Imagery (C9)			
Iron Dep	osits (B5)		Thin Muck	Surface (C7)		X Geor	morphic Position (D2)			
Inundatio	on Visible on Aerial Ima	agery (B7)	Other (Exp	lain in Rema	, irks)		FAC-	Neutral Test (D5)			
Water-St	tained Leaves (B9)	,			,		Frost	t-Heave Hummocks (D7) (LRR F)			
	-										
Field Observ	ations:		· -								
Surface Wate	r Present? Y	es <u>No</u> No	X Depth (in	ches):							
Water Table F	Present? Y	es <u>No</u> No	X Depth (in	ches):							
Saturation Pr	esent? Y	es No	X Depth (in	ches):		Wetla	nd Hydrology Pres	sent? Yes No X			
(includes cap	iliary tringe)										
Describe Rec	orded Data (stream da	uge, monitorir	ng well, aerial photos	, previous in	spections). i	f available); ;				
		J ,	. ,								
Remarks: Hydrology in	dicators are not preser	nt.									
i i yalology ili											

Project/Site:	FM 741 EA	(City/County:	k	Kaufman County	Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department	of Transpor	ortation		State: Texas	Sampling Point:	WDP58
Investigator(s):	CW and JK		Section, Township, Range:			N/A	
Landform (hillslope, terrace, etc)	: Vegetated flat		Local relief (co	oncave, conve	ex, none): r	none S	Slope (%): 0
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.71017	7097	Long:96.45073	3079 Datur	n: NAD 83
Soil Map Unit Name: Houston	Black clay, 0 to 1 percent slopes				NWI classifica	ation: <u>NA</u>	
Are climatic / hydrologic conditio	ns on the site typical for this time	of year?	Yes X	No	(If no, explain in Rema	arks.)	
Are Vegetation, Soil	, or Hydrologys	significantly	disturbed?	Are "	Normal Circumstances" pre	esent? Yes 2	KNo
Are Vegetation, Soil	, or Hydrologyr	naturally pro	blematic?	(If ne	eded, explain any answers	in Remarks.)	
SUMMARY OF FINDINGS	S - Attach site map show	ing samp	oling point	locations	, transects, importar	it features, etc.	
Hydrophytic Vegetation Prese	nt? Yes N	o X					
Hydric Soil Present?	Yes N	0 X	ls t	he Sampled	Area		
Wetland Hydrology Present?	Yes N	0 X	wit	hin a Wetlan	d? Yes	No X	
Remarks: None of the three w conditions during th	vetland indicators were present. The site investigations were normations were normations were normations were normations were normatic structure to the structure stru	This point is I.	not located w	ithin a wetlan	d. The Antecedent Precipit	ation Tool scored a 1	2, indicating
VEGETATION - Use scient	ntific names of plants.						
					Dominance Test work	sheet:	
		Absolute	Dominant	Indicator	Number of Dominant S	pecies	
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW,	or FAC: () (A)
1					Total Number of Domin	ant	
2					Species Across All Stra	ant ata:	4 (B)
3							<u>r</u> (B)
4			- Total Cov	or	Percent of Dominant S	necies	
Sapling/Shrub Stratum (Plo	tsize:	0	_ = 10tal 000		That Are OBL FACW	or FAC: 0	0 (A/B)
)						
2					Prevalence Index wor	ksheet:	
3			_		Total % Cover of:	Multip	ly by:
4				·	OBL species	0 x 1 =	0
5					FACW species	0 x 2 =	0
		0	= Total Cov	er	FAC species	0 x 3 =	0
Herb Stratum (Plot size:	30' radius)		-		FACU species	60 x 4 =	240
1. Bromus arvensis		25	Yes	FACU	UPL species	50 x 5 =	250
2. Erodium cicutarium ssp. cic	cutarium	25	Yes	NI	Column Totals:	110 (A)	490 (B)
3. Setaria viridis		25	Yes	NI			
4. Lolium perenne		25	Yes	FACU	Prevalence Index	x = B/A = 4.	45
5. Sorghum halepense		10	No	FACU	Hydrophytic Vogotati	on Indicators:	
6.			_		1 Papid Test for	Hydrophytic Vegetatic	n
7.			_		2 Dominance Tes	tie >50%	лт
8.					3 - Prevalence Ind	$A \times < 3 \ 0^{1}$	
9			_		4 - Morphological	Adaptations ¹ (Provide	supporting
10					Problematic Hydro	onhytic Vegetation ¹ (F	xolain)
		110	= Total Cove	er			
Woody Vine Stratum (Plot s	size:)				¹ Indicators of hydric so	il and wetland hydrolo	av must
1			_		he present unless dist	urbed or problematic	ygy must
2.			_				
		0	= Total Cove	er	Hydrophytic		
% Bare Ground in Herb Stratu	ım <u>0</u>				Vegetation		
					Present?	Yes No	Х
Remarks:	procent						
	P. 000111.						

S	0	IL	
J	J		-

Profile Descr	iption: (Describe to th	ne depth need	ed to document the	e indicator	or confirm	the absen	nce of indicators.)	
(inches)		0/.	Color (moint)	reatures	Turo1	1 002	Toyture	Pomarka
		<u> </u>		70	Type'	LUC		Remarks
0-18	TUTR 3/2	100					Clay	
		<u> </u>			<u> </u>			
		<u> </u>		·	<u> </u>		<u> </u>	
		<u> </u>						
						<u> </u>		
¹ Type: C=Con	centration. D=Depletio	n. RM=Reduce	d Matrix. CS=Cover	ed or Coate	d Sand Gra	ains.	² Location	: PL=Pore Lining, M=Matrix,
Hudria Cail Ir	diastara, (Applicable		unless otherwise n	otod)			Indiantara far	Problematic Hydric Spile ³
Historol		to all LRRS, t	Sandy Cloy	od Marix (S	4)			
	(AT) inadan (A2)		Sandy Dod		+)			Drairie Doday (A16) (LBB E C H)
	npedon (A2)		Sanuy Reut	JX (33)			Coasi	
	suc (A3)			unx (50) lu Minerel (Dark 3	Surface (S7) (LRR G)
Hydroge				ky Mineral (I	F I)			Plains Depressions (FT6)
	Layers (A5) (LRR F)		Loamy Gley	ed Matrix (F	-2)			H OUTSIDE OF MLRA 72 & 73)
	ск (А9) (LRR F, G, H)		Depleted M	atrix (F3)	2)		Reduc	
	Below Dark Surface (/	A 11)	Redox Dark	Surface (F6) (F 7)			rarent Material (TF2)
Thick Da	rk Surface (A12)		Depleted Da	ark Surface	(- /)		Very S	Snallow Dark Surface (1F12)
Sandy M	ucky Mineral (S1)		Redox Depi	ressions (F8	() (= ()		Other	(Explain in Remarks)
2.5 cm N	lucky Peat or Peat (S2) (LRR G, H)	High Plains	Depression	s (F16)		³ Indicate	ors of hydrophytic vegetation and
5 cm Mu	cky Peat or Peat (S3)	(LRR F)	(MLRA 72 8	\$ 73 of LRR	(H)		wetland	hydrology must be present,
							unless o	disturbed or problematic.
Restrictive L	ayer (if present):							
Туре:								
Depth (ind	ches):						Hydric Soil Prese	ent? Yes No X
Bomorko:								
Hydric soil in	dicators are not presen	t						
	v							
Wetland Hvd	rology Indicators:							
Primary Indica	ators (minimum of one	required: check	all that apply)				Secondary	Indicators (minimum of two required)
<u>r mildry males</u> Surface V	Mater (A1)		Salt Crust (I	R11)			<u>Surface</u>	ce Soil Cracks (B6)
High Wa	ter Table (Λ^2)			ortobratos (E	213)		Spars	ely Vegetated Concave Surface (B8)
	(A2)			ulfido Odor	(C1)		Opars	ago Bottorno (P10)
	nii (AS) arka (B1)			Motor Toble				age Fallerins (BTU)
	arks (BT)		Dry-Season		e (C2)	- D (0		ed Rhizospheres on Living Roots (C3)
Sedimen				lizospheres	along Living	g Roots (C	.3) (wne	ere tillea)
Drift Dep	OSITS (B3)		(wnere no	ot tilled)	(a 1)		Crayfi	sh Burrows (C8)
Algal Ma	t or Crust (B4)		Presence of	Reduced Ir	ron (C4)		Satura	ation Visible on Aerial Imagery (C9)
Iron Dep	osits (B5)		Thin Muck S	Surface (C7))		Geom	orphic Position (D2)
Inundatio	on Visible on Aerial Ima	gery (B7)	Other (Expl	ain in Rema	rks)		FAC-N	Neutral Test (D5)
Water-St	ained Leaves (B9)						Frost-	Heave Hummocks (D7) (LRR F)
Field Observ	ations:							
Surface Wate	r Present? Ye	es No	X Depth (inc	hes):				
Water Table F	Present? Ye	es No	X Depth (inc	hes):				
Saturation Pre	esent? Ye	es No	X Depth (inc	hes):		Wetla	nd Hydrology Pres	ent? Yes No X
(includes capi	llary fringe)							
Describe Dec	orded Data (stream as	ige monitoriaa	well aprial photos	previous in	enections)	if available		
Describe Rec	orueu Data (Stream ga	uge, monitoring	i weii, aenai priotos,		specuons),	n avallable		
Remarks:								
Hydrology ind	dicators are not presen	t.						

Project/Site:	FM 741 EA	(City/County:	k	Kaufman County	Sampling Date	: 04/29/2022
Applicant/Owner:	Texas Department	of Transpor	tation		State: Texas	Sampling Poin	t: WDP59
Investigator(s):	CW and JK	:	Section, Town	ship, Range:		N/A	
Landform (hillslope, terrace, etc)	: Depression		Local relief (co	oncave, conve	ex, none):	concave	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.7165	5249	Long: -96.447	'59176 Da	tum: NAD 83
Soil Map Unit Name: Houston E	Black clay, 0 to 1 percent slopes				NWI classif	ication: NA	
Are climatic / hydrologic condition	ns on the site typical for this time	of year?	Yes X	No	(If no, explain in Rer	marks.)	
Are Vegetation , Soil	, or Hydrology	significantly	disturbed?	Are "I	Normal Circumstances" p	present? Yes	X No
Are Vegetation , Soil	, or Hydrology	naturally pro	blematic?	(If ne	eded, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS	6 - Attach site map show	ing samp	oling point	locations.	transects, importa	ant features, etc	C.
Hydrophytic Vegetation Prese	nt? Ves X N	<u> </u>			, · · · · · · · · · · · · · · · · · · ·		
Hydric Soil Present?		o	lei	ho Sampled	Aroa		
Wotland Hydrology Procent?		°	15 1	hin a Wotlan	Alea Voc	X No	
weiland Hydrology Hesent?		·	WI		u: 165 _		
Remarks: All of the three wet conditions during the conditions dur	land indicators were present. Th he site investigations were norm	is point is lo al.	cated within a	wetland. The	Antecedent Precipitation	ו Tool scored a 12, i	ndicating
	ittile names of plants.						
					Dominance Test wo	rksheet:	
		Absolute	Dominant	Indicator	Number of Dominant	Species	a (b)
Tree Stratum (Plot size:	30' radius)	% Cover	Species?	Status	That Are OBL, FACW	<i>I</i> , or FAC:	<u>3</u> (A)
1. <u>Celtis laevigata</u>		15	Yes	FAC	Total Number of Dem		
2					Iotal Number of Dom	linant	
3					Species Across All S	trata:	<u> </u>
4					Demonst of Demission	Onesian	
		15	= Total Cov	er	Percent of Dominant	Species	400.0 (A/D)
Sapling/Shrub Stratum (Plo	t size:)				That Are OBL, FACW	<i>I</i> , or FAC:	100.0 (A/B)
1					Prevalence Index w	orksheet:	
2					Total % Cover of	of: Mu	ultiply by:
3					OBL species	50 x 1 =	50
4					FACW species	$\frac{0}{0}$ x 2 =	0
5					FAC species	35 x 3 =	105
Llark Strature (Distaire)		0	= 10tal Cov	er	FACU species	0 x 4 =	0
Herb Stratum (Piot size:	30 [°] radius (10	Vee		UPL species		25
1. Eleocharis palustris		40	Yes		Column Totals:	90 (A)	180 (B)
			res				() /
3. Sciepus peridulus					Prevalence Ind	iex = B/A =	2.0
		5	INU	INI			
5					Hydrophytic Vegeta	tion Indicators:	
7					1 - Rapid Test fo	or Hydrophytic Veget	ation
8					X 2 - Dominance T	īest is >50%	
9					X 3 - Prevalence li	ndex ≤3.0¹	
10					4 - Morphologica	al Adaptations ¹ (Prov	/ide supporting
10		75	= Total Cov	er	Problematic Hyc	Irophytic Vegetation ¹	(Explain)
Woody Vine Stratum (Plot s		10					
1 (11000) 1110 01000)				¹ Indicators of hydric s	soil and wetland hyd	rology must
2					be present, unless di	sturbed or problema	tic.
		0	= Total Cov	er	Hydrophytic		
% Bare Ground in Herb Stratu	m 25				Vocatation		
					Procent2	Vec X No	
					Tresenti		
Remarks: Hydrophytic vegetation is pre	sent.						

SOIL	
------	--

Depth	Matrix		Redox	Features	0.0011111			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR 5/1	90	10YR 6/3	10	D	М	Clay	
				·				
		<u> </u>		·				
¹ Type: C=Con	centration, D=Depletio	n, RM=Reduce	ed Matrix, CS=Cove	red or Coate	ed Sand Gra	ains.	² Locatio	n: PL=Pore Lining, M=Matrix.
Hydric Soil In	dicators: (Applicable	to all LRRs,	unless otherwise n	oted.)			Indicators fo	or Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gley	ed Marix (S	4)		1 cm	Muck (A9) (LRR I, J)
Histic Ep	ipedon (A2)		Sandy Red	ox (S5)			Coas	st Prairie Redox (A16) (LRR F, G, H)
Black His	stic (A3)		Stripped Ma	atrix (S6)			Dark	Surface (S7) (LRR G)
Hydroger	n Sulfide (A4)		Loamy Muc	ky Mineral (F1)		High	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)		Loamy Gley	/ed Matrix (I	-2)		(LRF	R H outside of MLRA 72 & 73)
1 cm Muo	ck (A9) (LRR F, G, H		X Depleted M	atrix (F3)	0)		Redu	
Depleted	Below Dark Surface (411)	Redox Dark	(Surface (F	6) (FZ)		Red	Parent Material (TF2)
Thick Da	rk Surface (ATZ)		Depieted D		(F7)		Very	Shallow Dark Surface (TFTZ)
3anuy M	ucky Milleral (31) lucky Peat or Peat (S2		High Plains	Denression	9) Is (F16)		3Indica	ators of hydrophytic vegetation and
5 cm Mu	cky Peat or Peat (S3)	(I RR F)	(MI RA 72)	8 73 of I RE	2 H)		wetlan	id hydrology must be present
		()	(,		unless	disturbed or problematic.
Restrictive La	aver (if present):							
Type:	. .							
Depth (inc	ches):						Hydric Soil Pres	sent? Yes X No
Remarks:	dicators are present							
	v							
Wetland Hyde	I							
Primary Indica	ators (minimum of one	required: chec	k all that apply)				Secondar	v Indicators (minimum of two required)
Surface \	Water (A1)		Salt Crust (B11)			Surfa	ace Soil Cracks (B6)
High Wat	ter Table (A2)		Aquatic Inv	ertebrates (I	313)		X Spar	sely Vegetated Concave Surface (B8)
Saturatio	n (A3)		Hydrogen S	Sulfide Odor	(C1)		 Drair	nage Patterns (B10)
Water Ma	arks (B1)		Dry-Seasor	Water Tabl	e (C2)		Oxid	ized Rhizospheres on Living Roots (C3)
Sedimen	t Deposits (B2)		Oxidized R	nizospheres	along Livin	g Roots (C	C3) (wł	here tilled)
Drift Dep	osits (B3)		(where no	ot tilled)			X Cray	fish Burrows (C8)
X Algal Mat	t or Crust (B4)		Presence o	f Reduced I	ron (C4)		X Satu	ration Visible on Aerial Imagery (C9)
Iron Depo	osits (B5)		Thin Muck	Surface (C7)		X Geor	morphic Position (D2)
Inundatio	n Visible on Aerial Ima	igery (B7)	Other (Expl	ain in Rema	ırks)		X FAC-	-Neutral Test (D5)
Water-Sta	ained Leaves (B9)						Frost	t-Heave Hummocks (D7) (LRR F)
Field Observa	ations:							
Surface Water	r Present? Ye	es <u>No</u>	X Depth (inc	hes):				
Water Table P	resent? Ye	es <u>No</u>	X Depth (inc	hes):				
Saturation Pre	esent? Ye	es No	X Depth (inc	hes):		Wetla	nd Hydrology Pres	sent? Yes X No
(includes capi	llary fringe)							
Describe Reco	orded Data (stream ga	uge, monitorin	g well, aerial photos	previous in	spections),	if available	e:	
Remarks:	dicators are present							
riyarology inc	משמנטוש מוב אופשבווג							

Project/Site: FM	/ 741 EA	(City/County:	ł	Kaufman County	Sam	pling Date:	04/29/2022	2
Applicant/Owner:	Texas Department of Transpo		ortation		State: T	<u>ēxas</u> Sam	pling Point:	WDP60	
Investigator(s):	CW and JK		Section, Township, Range:			N/A	4		
Landform (hillslope, terrace, etc):	Vegetated flat	L	ocal relief (co	ncave, conve	ex, none):	none	S	slope (%): 0	D
Subregion (LRR): LRR J N	VLRA 86A L	_at:	32.71666	158	Long: -96	6.44748259	Datum	1: NAD 83	3
Soil Map Unit Name: Houston Black cla	ay, 0 to 1 percent slopes				NWI cl	lassification: N	IA		
Are climatic / hvdrologic conditions on the	e site typical for this time of	vear? Y	′es X	No	(If no. explain i	n Remarks.)			
Are Vegetation Soil	or Hydrology sign	, ificantly (disturbed?	Are "	Normal Circumstanc	es" present?	Yes X	(No	
Are Vegetation Soil	or Hydrology nati	irally prol	blematic?	(If ne	eded explain any ar	nswers in Rema	arks)	<u> </u>	
	hata man chowing		ling noint	locations	trancosto imn	ortant foat	uros oto		
SOMMART OF FINDINGS - Alla	ich site map showing	y samp		IUCALIONS	, transects, imp		ires, etc.		
Hydrophytic Vegetation Present?	Yes No	Х							
Hydric Soil Present?	Yes No	Х	ls t	he Sampled	Area				
Wetland Hydrology Present?	Yes No	Х	wit	hin a Wetlan	d? Ye	es	No X	_	
- None of the three wetland in	diastora wara procent. This	nointio	not loootod w	ithin a watlan	d The Antecedent	Draginitation To	al agarad a 1'		
Remarks: None of the three wetland in	Idicators were present. This	s point is	not located w	ithin a wetiar	ia. The Antecedent F	Precipitation 10	ol scored a 1	2, indicating	
	vesugations were normal.								
VEGETATION - Use scientific n	ames of plants.								
					Dominance Tes	st worksheet:			
	Δι	bsolute	Dominant	Indicator	Number of Dom	inant Species			
Tree Stratum (Plot size: 30' radi	ius) %	Cover	Species?	Status	That Are OBL F	ACW or FAC	1	(A)	
1 Coltin laguigata	<u>/////////////////////////////////////</u>	15	Voc	EAC	matrio obe, i			(0)	
		15	165	FAC	Total Number of	Dominant			
2				·		All Strata:	2	(P)	
3					Species Acioss	All Strata.	2	(B)	
4					Demonst of Demo				
	_	15	= Total Cove	er	Percent of Domi	inant Species			
Sapling/Shrub Stratum (Plot size:)				That Are OBL, F	-ACW, or FAC:	50	<u>.0</u> (A/B	3)
1					Brovelence Ind	ov workshoot			
2						ex worksneet.	N 4. 14im	h . h	
3						over of:	Multip	y by:	
4					OBL species	0	_ x1=	0	
5.					FACW species	0	x 2 =	0	
		0	= Total Cove	er	FAC species	15	x 3 =	45	
Herb Stratum (Plot size: 30' rad	lius)		_		FACU species	90	x 4 =	360	
1. Lolium perenne		75	Yes	FACU	UPL species	15	x 5 =	75	
2. Bromus arvensis		15	No	FACU	Column Totals:	120	(A)	480 (B	3)
3 Frodium cicutarium ssp. cicutarium		15	No	NI					
	·				Prevalenc	e Index = B/A =	=4.	0	
5				·					
				·	Hydrophytic Ve	egetation Indic	ators:		
8:				·	1 - Rapid Te	est for Hydroph	ytic Vegetatio	n	
7			<u></u>	·	2 - Domina	nce Test is >50	%		
8				·	3 - Prevaler	nce Index ≤3.0¹			
9					4 - Morphol	logical Adaptati	ons¹ (Provide	supporting	
10					Problematio	c Hydrophytic V	egetation ¹ (E	xplain)	
	_	105	= Total Cove	er					
Woody Vine Stratum (Plot size:)				¹ Indicators of hy	dric soil and we	etland hydrolo	av must	
1					be present, unle	ess disturbed or	problematic.	0,	
2							P		
	_	0	= Total Cove	er	Hydrophytic				
% Bare Ground in Herb Stratum	0		_		Vegetation				
					Present?	Yes	No	х	
Remarks:									
Hydrophytic vegetation is not present.									

S	0	IL	
J	J		-

Profile Desci	ription: (Describe to	the depth need	led to docum	ent the indicator	or confirm	the absen	ce of indicators.)	
Ueptn (inchoo)		0/.	Color (maint			1.002	Texture	Pemorka
			COIOF (MOIST) %	туре'	LOC		remarks
U-10	10115 3/1	100		·	· ·		Ciay	
					· ·			
					· ·	<u> </u>	·	
					· ·			
					· ·			
					· ·			
					· ·			
¹ Type: C=Cor	ncentration, D=Depleti	on, RM=Reduce	ed Matrix, CS=	Covered or Coate	ed Sand Gra	ains.	² Location	: PL=Pore Lining, M=Matrix.
Hydric Soil li	ndicators: (Applicabl	e to all LRRs, i	unless otherv	/ise noted.)			Indicators for	Problematic Hydric Soils ³ :
Histosol	(A1)		Sand	y Gleyed Marix (S	4)		1 cm M	Muck (A9) (LRR I, J)
Histic Ep	pipedon (A2)		Sand	/ Redox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Black Hi	stic (A3)		Stripp	ed Matrix (S6)			Dark S	Surface (S7) (LRR G)
Hydroge	n Sulfide (A4)		Loam	y Mucky Mineral ((F1)		High F	Plains Depressions (F16)
Stratified	Layers (A5) (LRR F)	Loam	y Gleyed Matrix (F2)		(LRR	H outside of MLRA 72 & 73)
1 cm Mu	ck (A9) (LRR F, G, H	1)	Deple	ted Matrix (F3)			Reduc	ced Vertic (F18)
Depleted	Below Dark Surface	(A11)	Redo	x Dark Surface (F	6)		Red P	arent Material (TF2)
Thick Da	irk Surface (A12)		Deple	ted Dark Surface	(F7)		Very S	snallow Dark Surface (TF12)
Sandy M	lucky Mineral (S1)		Redo		3)		Other	(Explain in Remarks)
2.5 cm N	lucky Peat or Peat (S2		High I	Plains Depression	IS (F16)		Sindicate	ors of hydrophytic vegetation and
	cky Pear of Pear (53)			A / 2 & / 3 OT LR	КП)		welland	hydrology must be present,
							uniess c	isturbed of problematic.
Restrictive L	ayer (if present):							
Туре:								
Depth (in	ches):						Hydric Soil Prese	ent? Yes <u>No X</u>
Bomorkoj								
Hydric soil ir	ndicators are not prese	ent.						
2								
	v							
	rology Indicators:							
	ators (minimum of one	required: check	k all that apply)			Secondary	Indicators (minimum of two required)
<u>Fillinary Indica</u>	Mater (A1)	required, crieci	Salt (/ `ruet (B11)			Surfac	ndicators (minimum of two required)
High Wa	ter Table ($\Delta 2$)			ic Invertebrates (I	R13)		Surrac	ely Vegetated Concave Surface (B8)
Saturatio	(A3)		Hvdro	aen Sulfide Odor	(C1)		Opaina	age Patterns (B10)
Water M	arks (B1)		Drv-S	eason Water Tab	(C2)		Oxidiz	ed Rhizospheres on Living Roots (C3)
Sedimer	it Deposits (B2)		Oxidiz	zed Rhizospheres	along Livin	a Roots (C3	3) (whe	ere tilled)
Drift Dep	osits (B3)		(wh	ere not tilled)		J	Cravfi	sh Burrows (C8)
Algal Ma	t or Crust (B4)		Prese	nce of Reduced I	ron (C4)		Satura	ation Visible on Aerial Imagery (C9)
Iron Dep	osits (B5)		 Thin I	Muck Surface (C7)		Geom	orphic Position (D2)
Inundatio	on Visible on Aerial Im	agery (B7)	Other	(Explain in Rema	arks)		FAC-N	leutral Test (D5)
Water-St	ained Leaves (B9)						Frost-	Heave Hummocks (D7)(LRR F)
	ational							
Field Ubserv	r Proport?	/oo N-	V Dr-	th (inchas);				
Water Table F	Precent?			th (inches):				
Saturation Dr	reserrer 1	(00 N/0		th (inches):		Wotler		ant? Ves No V
(includes can	illary fringe)	NU				weudi	ia riyurology Frest	
(includes cap								
Describe Rec	orded Data (stream ga	auge, monitoring	g well, aerial p	hotos, previous in	spections),	if available:		
Domestica								
Hydrology in	dicators are not prese	nt.						

Project/Site:	FM 741 EA		City/County:	ĸ	Kaufman County	Sampling Date:	04/29/2022
Applicant/Owner:	Texas Department of Transpo		ortation		State: Texas	Sampling Point: WDP61	
Investigator(s):	CW and JK			ship, Range:		N/A	
Landform (hillslope, terrace,	etc): Stream terrace		Local relief (co	ncave, conve	ex, none): cor	ncave S	Slope (%): 0-1
Subregion (LRR):	LRR J MLRA 86A	Lat:	32.72779	938	Long: -96.45715	265 Datun	n: NAD 83
Soil Map Unit Name: Heid	den clay, 3 to 5 percent slopes				NWI classifica	tion: <u>R4SBC</u>	
Are climatic / hydrologic cond	ditions on the site typical for this time	of year?	Yes X	No	(If no, explain in Rema	rks.)	
Are Vegetation, So	oil, or Hydrologys	significantly	disturbed?	Are "I	Normal Circumstances" pres	sent? Yes 🔿	KNo
Are Vegetation, Se	oil, or Hydrologyı	naturally pro	blematic?	(If ne	eded, explain any answers i	in Remarks.)	
SUMMARY OF FINDIN	IGS - Attach site map show	ing samp	oling point	locations,	, transects, importan	t features, etc.	
Hydrophytic Vegetation Pr	esent? Yes X N	o					
Hydric Soil Present?	Yes X N	0	ls th	ne Sampled	Area		
Wetland Hydrology Preser	nt? Yes X N	0	with	nin a Wetlan	d? Yes >	K No	
			·				_
Remarks: All of the three	wetland indicators were present. Th	is point is lo	cated within a	wetland. The	Antecedent Precipitation T	ool scored a 12, indi	cating
conditions duri	ng the site investigations were norma	al.					
VEGETATION - Use so	cientific names of plants.						
					Dominance Test works	sheet:	
		Absolute	Dominant	Indicator	Number of Dominant Sp	pecies	
Tree Stratum (Plot size:)	% Cover	Species?	Status	That Are OBL, FACW, c	or FAC:	5 (A)
$\frac{1}{1}$	/	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>					()
2.					Total Number of Domina	ant	
3.		_			Species Across All Stra	ta:	5 (B)
4.							
		0	= Total Cove	r	Percent of Dominant Sp	becies	
Sapling/Shrub Stratum	(Plot size: 30' radius)		_		That Are OBL, FACW, c	or FAC: 10	0.0 (A/B)
1. Salix nigra	`,	10	Yes	FACW			
2.					Prevalence Index work	ksheet:	
3.					Total % Cover of:	Multip	ly by:
4.					OBL species	40 x 1 =	40
5.					FACW species	10 x 2 =	20
		10	= Total Cove	r	FAC species	50 x 3 =	150
Herb Stratum (Plot size:	<u> </u>				FACU species	0 x4=	0
1. Typha angustifolia		40	Yes	OBL	OPL species	<u>0 </u>	<u> </u>
2. Ranunculus sardous		15	Yes	FAC		00 (A)	210 (B)
3. Rumex crispus		15	Yes	FAC	Drevelence Index	- D/A - 2	4
4					Prevalence index	- D/A	.1
5					Hydrophytic Vegetatio	on Indicators:	
6				. <u> </u>	1 - Rapid Test for H	lydrophytic Vegetatic	on
7					X 2 - Dominance Tes	t is >50%	
8					X 3 - Prevalence Inde	ex ≤3.0¹	
9				. <u> </u>	4 - Morphological A	Adaptations1 (Provide	supporting
10				<u> </u>	Problematic Hydro	phytic Vegetation ¹ (E	xplain)
	20' radius	70	= Total Cove	r			
Woody Vine Stratum (P	lot size: <u> </u>				¹ Indicators of hydric soil	and wetland hydrold	ogy must
1. <u>Ipomoea cordatotriloba</u>		20	Yes	FAC	be present, unless distu	irbed or problematic.	
2							
% Dana One und in Utarts Ot		20	= Total Cove	r	Hydrophytic		
% Bare Ground in Herb St	ratum <u>30</u>				Vegetation	<i>,</i> , , , , , , , , , , , , , , , , , ,	
					Present?	res <u>X</u> No	
Remarks:							
Hydrophytic vegetation is	present.						

SOIL	
------	--

(inches)									
(incries)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-18	10YR 4/1	90	10YR 3/6	10	C	PL	Clay		
	·			·			·		
	·			·			·		
		·							
	·	·		·			·		
				· <u> </u>			<u> </u>		
	·	·					<u> </u>		
ype: C=Conc	centration, D=Depletion, RI	M=Reduced	Matrix, CS=Cove	red or Coate	ed Sand Gra	ains.	² Locatio	n: PL=Pore Lining, M=Matrix.	
ydric Soil In	dicators: (Applicable to a	all LRRs, un	less otherwise n	oted.)			Indicators fo	or Problematic Hydric Soils ³ :	
Histosol (A1)		Sandy Gley	ed Marix (S	4)		1 cm	Muck (A9) (LRR I, J)	
Histic Epi	pedon (A2)		Sandy Red	ox (S5)			Coas	t Prairie Redox (A16) (LRR F, G, H)	
Black Hist	tic (A3)		Stripped Ma	atrix (S6)			Dark	Surface (S7) (LRR G)	
Hydrogen	Sulfide (A4)		Loamy Muc	ky Mineral (F1)		High	Plains Depressions (F16)	
Stratified	Layers (A5) (LRR F)		Loamy Gley	/ed Matrix (F	-2)		(LRF	R H outside of MLRA 72 & 73)	
1 cm Muc	k (A9) (LRR F, G, H)		X Depleted M	atrix (F3)	-		Redu	iced Vertic (F18)	
Depleted	Below Dark Surface (A11)		Redox Dark	Surface (Fi	6)		Red	Parent Material (TF2)	
_ Thick Dar	k Surface (A12)		Depleted D	ark Surface	(F7)		Very	Shallow Dark Surface (TF12)	
_ Sandy Mu	icky Mineral (S1)		Redox Dep	ressions (F&	3)		Othe	r (Explain in Remarks)	
2.5 CM IVIL	ucky Peat of Peat (S2) (LF	κκ G, H) Γ Γ			IS (F16)		³ Indicators of hydrophytic vegetation and		
5 cm Muc	ky Peal of Peal (53) (LRF	КГ)	(IVILKA 72)	& / 3 OT LRP	сп)		wellan	d hydrology must be present,	
	iyer (if present):								
Depth (incl	hes):		-				Hydric Soil Pros	cont? Yes X No	
Deptil (inci							Tryunc con Trea		
Hydric soli ind	licators are present.								
	licators are present.								
DROLOG	licators are present. Y ology Indicators:								
DROLOG	licators are present. Y ology Indicators: tors (minimum of one requi	ired; check a	Ill that apply)				Secondar	y Indicators (minimum of two required	
	licators are present. Y ology Indicators: tors (minimum of one requi Vater (A1)	ired; check a	Ill that apply) Salt Crust (B11)			Secondar Surfa	y Indicators (minimum of two required	
DROLOG Vetland Hydr Primary Indicat Surface W High Wate	Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2)	ired; check a	III that apply) Salt Crust (Aquatic Invi	B11) ertebrates (f	313)		Secondar Surfa Spar	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8	
Type Soli ind Surface W High Wate Saturation	ficators are present. Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2) n (A3)	ired; check a	III that apply) Salt Crust (Aquatic Invo Hydrogen S	B11) ertebrates (E	313) (C1)		Secondar Surfa Spar Spar Spar	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 nage Patterns (B10)	
DROLOG Vetland Hydr Yrimary Indicat Surface V High Wate Saturatior Water Ma	ficators are present. Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2) n (A3) rks (B1)	ired; check a	Ill that apply) Salt Crust (Aquatic Invo Hydrogen S Dry-Seasor	B11) ertebrates (f Sulfide Odor 1 Water Tabl	313) (C1) e (C2)		Secondar Surfa Spar X Drair Oxidi	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 nage Patterns (B10) ized Rhizospheres on Living Roots (0	
Vetland Hydri Vetland Hydri Primary Indicat Surface W High Wate Saturation Water Ma Sediment	Y ology Indicators: tors (minimum of one requivater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2)	ired; check a	Il that apply) Salt Crust (Aquatic Invi Hydrogen S Dry-Seasor Oxidized RI	B11) ertebrates (E Sulfide Odor 1 Water Tabl nizospheres	313) (C1) e (C2) along Livin	g Roots (C	Secondar Surfa Spar X Drair Oxidi C3) (wt	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 hage Patterns (B10) ized Rhizospheres on Living Roots (C here tilled)	
Vetland Hydri Primary Indicat Primary Indicat Surface W High Wate Saturation Water Ma Sediment X Drift Depo	Y ology Indicators: tors (minimum of one requiver) Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3)	ired; check a	Il that apply) Salt Crust (Aquatic Invo Hydrogen S Dry-Seasor Oxidized Ri (where no	B11) ertebrates (f Sulfide Odor h Water Tabl hizospheres ot tilled)	313) (C1) e (C2) along Livin	g Roots (C	Secondar Surfa Spar X Drair Oxidi C3) (wf X Cray	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 nage Patterns (B10) ized Rhizospheres on Living Roots (C nere tilled) fish Burrows (C8)	
	Y ology Indicators: tors (minimum of one requivater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4)	ired; check a	Il that apply) Salt Crust (Aquatic Invo Hydrogen S Dry-Seasor Oxidized Ri (where no Presence o	B11) ertebrates (F Sulfide Odor h Water Tabl hizospheres ot tilled) f Reduced II	313) (C1) e (C2) along Livin ron (C4)	g Roots (C	Secondar Spar Spar Spar Oxidi Oxidi Cray Satur	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 hage Patterns (B10) ized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9)	
	Y ology Indicators: tors (minimum of one requiver Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5)	ired; check a	Il that apply) Salt Crust (Aquatic Inve Hydrogen S Dry-Seasor Oxidized RI (where no Presence o Thin Muck S	B11) ertebrates (F Sulfide Odor h Water Tabl hizospheres ot tilled) f Reduced In Surface (C7	313) (C1) e (C2) along Livin ron (C4))	g Roots (C	Secondar Surfa Spar X Drair X Drair Oxidi C3) (wł X Cray Satur X Geor	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 hage Patterns (B10) ized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2)	
	Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery	ired; check a	Il that apply) Salt Crust (Aquatic Inve Hydrogen S Dry-Seasor Oxidized RI (where no Presence o Thin Muck s Other (Expl	B11) ertebrates (B Sulfide Odor n Water Tabl nizospheres ot tilled) f Reduced In Surface (C7 ain in Rema	313) (C1) e (C2) along Livin ron (C4)) ırks)	g Roots (C	Secondar Spar X Drair X Drair Oxidi X Cray Satur X Geor X FAC-	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 nage Patterns (B10) ized Rhizospheres on Living Roots (C nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5)	
	Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery ained Leaves (B9)	ired; check a	Il that apply) Salt Crust (Aquatic Invi Hydrogen S Dry-Seasor Oxidized RI (where no Presence o Thin Muck S Other (Expl	B11) ertebrates (E Sulfide Odor n Water Tabl nizospheres ot tilled) f Reduced In Surface (C7 ain in Rema	313) (C1) e (C2) along Livin ron (C4)) rks)	g Roots (C	Secondar Surfa Spar X Drair Oxidi C3) (wf X Cray Satu X Geor X FAC- Frost	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 hage Patterns (B10) ized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) t-Heave Hummocks (D7) (LRR F)	
DROLOG Vetland Hydre Trimary Indical Surface V High Wate Saturatior Water Ma Sediment X Drift Depc Algal Mat Iron Depo Inundatior Water-Sta	Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery ained Leaves (B9)	ired; check a	Il that apply) Salt Crust (Aquatic Inve Hydrogen S Dry-Seasor Oxidized RI (where no Presence o Thin Muck S Other (Expl	B11) ertebrates (B Sulfide Odor h Water Tabl hizospheres ot tilled) f Reduced In Surface (C7 ain in Rema	313) (C1) e (C2) along Livin ron (C4)) rks)	g Roots (C	Secondar Surfa Spar X Drair Oxidi X Cray X Cray Satuu X Geor X FAC- Frost	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 hage Patterns (B10) ized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) morphic Position (D2) Neutral Test (D5) i-Heave Hummocks (D7) (LRR F)	
DROLOG Vetland Hydr Primary Indical Surface V High Wate Saturatior Water Ma Sediment X Drift Depc Algal Mat Iron Depo Inundatior Water-Sta Gurface Water	Y ology Indicators: tors (minimum of one requiver Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery ained Leaves (B9) ttions: Present? Yes	ired; check a	Ill that apply) Salt Crust (Aquatic Invo Hydrogen S Dry-Seasor Oxidized RI (where no Presence o Thin Muck S Other (Expl X Depth (inc	B11) ertebrates (f Sulfide Odor n Water Tabl nizospheres ot tilled) f Reduced In Surface (C7 ain in Rema	313) (C1) e (C2) along Livin ron (C4)) ırks)	g Roots (C	Secondar Surfa Spar X Drair Oxidi X Cray X Cray Satur X Geor X FAC- Frost	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 hage Patterns (B10) ized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) t-Heave Hummocks (D7) (LRR F)	
	Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery ained Leaves (B9) ttions: Present? Yes resent? Yes	/ (B7)	Il that apply) Salt Crust (Aquatic Invo Hydrogen S Dry-Seasor Oxidized RI (where no Presence o Thin Muck S Other (Expl X Depth (inc X Depth (inc	B11) ertebrates (f Sulfide Odor n Water Tabl nizospheres ot tilled) f Reduced In Surface (C7 ain in Rema ches):	313) (C1) e (C2) along Livin ron (C4)) rks)	g Roots (C	Secondar Surfa Spar X Drair Oxidi X Cray X Cray Satur X Geor X FAC- Frost	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 hage Patterns (B10) ized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) t-Heave Hummocks (D7) (LRR F)	
DROLOG Vetland Hydre rimary Indicat Surface W High Wate Saturatior Water Ma Sediment Sediment Algal Mat Iron Depo Inundatior Water-Sta Gurface Water Vater Table Pr faturation Pres	Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) n Visible on Aerial Imagery ained Leaves (B9) ttions: Present? Yes sent? Yes	/ (B7)	Il that apply) Salt Crust (Aquatic Invi Hydrogen S Dry-Seasor Oxidized RI (where no Presence o Thin Muck S Other (Expl X Depth (inc X Depth (inc X Depth (inc	B11) ertebrates (E Sulfide Odor n Water Tabl nizospheres ot tilled) f Reduced In Surface (C7 ain in Rema whes):	313) (C1) e (C2) along Livin ron (C4)) rks)	g Roots (C	Secondar Surfa Spar X Drair Oxidi X Cray X Cray Satur X Geor X FAC- Frost	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 hage Patterns (B10) ized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) t-Heave Hummocks (D7) (LRR F)	
	Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery ained Leaves (B9) tions: Present? Yes	/ (B7)	Il that apply) Salt Crust (Aquatic Invo Hydrogen S Dry-Seasor Oxidized RI (where no Presence o Thin Muck S Other (Expl X Depth (inc X Depth (inc	B11) ertebrates (I Sulfide Odor n Water Tabl nizospheres ot tilled) f Reduced II Surface (C7 ain in Rema shes): thes): thes):	313) (C1) e (C2) along Livin ron (C4)) rrks)	g Roots (C	Secondar Surfa Spar X Drair Oxidi X Cray X Cray Satur X Geor X FAC- Frost	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 hage Patterns (B10) ized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) E-Heave Hummocks (D7) (LRR F)	
DROLOG Vetland Hydr Primary Indicat Surface W High Wate Saturatior Water Ma Sediment X Drift Depo Inundatior Water-Sta Gurface Water Vater Table Pr Saturation Pres ncludes capill Describe Reco	Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery ained Leaves (B9) tions: Present? Yes	ired; check a	Il that apply) Salt Crust (Aquatic Invo Hydrogen S Dry-Seasor Oxidized Rl (where no Presence o Thin Muck S Other (Expl X Depth (inc X Depth (inc	B11) ertebrates (f Sulfide Odor n Water Tabl nizospheres ot tilled) f Reduced II Surface (C7 ain in Rema shes): shes): thes): previous in	313) (C1) e (C2) along Livin ron (C4)) rrks) spections),	g Roots (C Wetla	Secondar Surfa Spar X Drair Oxidi X Drair Oxidi X Cray Satu X Geor X FAC- Frost	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 nage Patterns (B10) ized Rhizospheres on Living Roots (C nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) E-Heave Hummocks (D7) (LRR F)	
	Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery ained Leaves (B9) ttions: Present? Yes sent? Yes lary fringe) rded Data (stream gauge,	ired; check a	Il that apply) Salt Crust (Aquatic Inve Hydrogen S Dry-Seasor Oxidized RI (where no Presence o Thin Muck S Other (Expl X Depth (inc X Depth (inc X Depth (inc x Depth (inc	B11) ertebrates (F Sulfide Odor n Water Tabl nizospheres ot tilled) f Reduced In Surface (C7 ain in Rema sches): ches): ;hes): , previous in	B13) (C1) e (C2) along Livin ron (C4)) rks) spections),	g Roots (C	Secondar Surfa Spar X Drair X Drair Oxidi X Cray Satu X Geor X FAC- Frost	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 hage Patterns (B10) ized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F) sent? Yes X No	
DROLOG Development Development Development Development Saturation Saturation Water Ma Sediment Drift Depc Algal Mat Iron Depo Inundation Water-Sta ield Observa urface Water /ater Table Pr aturation Pres ncludes capill vescribe Reco cemarks:	Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) or Crust (B4) usits (B5) n Visible on Aerial Imagery ained Leaves (B9) ttions: Present? Yes sent? Yes lary fringe) orded Data (stream gauge, the set of	ired; check a	Il that apply) Salt Crust (Aquatic Inve Hydrogen S Dry-Seasor Oxidized RI (where no Presence o Thin Muck S Other (Expl X Depth (inc X Depth (inc X Depth (inc X	B11) ertebrates (f Sulfide Odor n Water Tabl nizospheres ot tilled) f Reduced In Surface (C7 ain in Rema ches): ches): thes): previous in	313) (C1) e (C2) along Livin ron (C4)) rrks) spections),	g Roots (C	Secondar	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 hage Patterns (B10) ized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) t-Heave Hummocks (D7) (LRR F) sent? Yes X No	
DROLOG Vetland Hydre rimary Indical Surface V High Water Saturatior Water Ma Sediment C Drift Depo Algal Mat Iron Depo Inundatior Water-Sta ield Observa urface Water /ater Table Pr aturation Presence marks: Hydrology ind	Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery ained Leaves (B9) tions: Present? Yes sent? Yes lary fringe) prded Data (stream gauge, ticators are present.	ired; check a	Il that apply) Salt Crust (Aquatic Invo Hydrogen S Dry-Seasor Oxidized RI (where no Presence o Thin Muck S Other (Expl X Depth (inc X Depth (inc X Depth (inc Vell, aerial photos,	B11) ertebrates (E Sulfide Odor n Water Tabl nizospheres ot tilled) f Reduced In Surface (C7 ain in Rema ches): ches): previous in	313) (C1) e (C2) along Livin ron (C4)) rks) spections),	g Roots (C Wetla	Secondar Surfa Spar X Drair Oxidi X Drair Oxidi X Cray Satur X Geor X FAC- Frost	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 hage Patterns (B10) ized Rhizospheres on Living Roots (C here tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) E-Heave Hummocks (D7) (LRR F)	
DROLOG etland Hydr imary Indical Surface W High Wate Saturatior Water Ma Sediment Drift Depo Algal Mat Iron Depo Inundatior Water-Sta etd Observa urface Water aturation Pre- aturation Pre-	Y ology Indicators: tors (minimum of one requi Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) n Visible on Aerial Imagery ained Leaves (B9) ttions: Present? Yes lary fringe) orded Data (stream gauge, licators are present.	ired; check a	Il that apply) Salt Crust (Aquatic Invo Hydrogen S Dry-Seasor Oxidized Rl (where no Presence o Thin Muck S Other (Expl X Depth (inc X Depth (inc X Depth (inc X	B11) ertebrates (f Sulfide Odor n Water Tabl nizospheres ot tilled) f Reduced II Surface (C7 ain in Rema shes): thes): previous in	313) (C1) e (C2) along Livin ron (C4)) rrks) spections),	g Roots (C Wetla	Secondar Surfa Spar X Drair Oxidi X Drair Oxidi X Cray Satur X Geor X FAC- Frost	y Indicators (minimum of two required ace Soil Cracks (B6) sely Vegetated Concave Surface (B8 nage Patterns (B10) ized Rhizospheres on Living Roots (C nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) E-Heave Hummocks (D7) (LRR F)	

Project/Site: FM 741 EA	FM 741 EA			aufman County	Sampling Date:	04/29/2022
Applicant/Owner: Texas Departmen	Texas Department of Transportation			State: Texas	Sampling Point:	WDP62
Investigator(s): CW and JK	CW and JK S				N/A	
Landform (hillslope, terrace, etc): Hillslope	I	_ocal relief (co	oncave, conve	x, none): co	nvex	Slope (%): 3-5
Subregion (LRR): LRR J MLRA 86A	Lat:	32.7276	8968	Long: -96.45700	053 Datur	n: NAD 83
Soil Map Unit Name: Heiden clay, 3 to 5 percent slopes				NWI classifica	tion: NA	
Are climatic / hydrologic conditions on the site typical for this time	e of year?	íes X	No	(If no, explain in Rema	rks.)	
Are Vegetation , Soil X , or Hydrology	significantly	disturbed?	Are "N	Iormal Circumstances" pres	sent? Yes	X No
Are Vegetation , Soil , or Hydrology	naturally pro	blematic?	(If nee	ded, explain any answers i	n Remarks.)	
SUMMARY OF FINDINGS - Attach site map show	ving samp	ling point	locations,	transects, importan	t features, etc.	
Hydrophytic Vegetation Present? Yes	lo X			· •	-	
Hydric Soil Present? Yes		ls f	the Sampled A	Area		
Wetland Hydrology Present? Yes		wit	hin a Wetland	i? Yes	No X	
						_
Remarks: None of the three wetland indicators were present	. This point is	s not located	within a wetlan	d. The Antecedent Precipit	ation Tool scored a	12, indicating
conditions during the site investigations were norn	nal.					
VEGETATION - Use scientific names of plants						
				Dominance Test work	abaati	
	A In a shuff	Deminent	la dia atau	Number of Dominant Sr		
	Absolute	Dominant	Indicator	That Are ORL EACING		2 (A)
<u>Iree Stratum</u> (Plot size: <u>30 radius</u>)	% Cover	Species?	Status	That Ale Obl, FACW, C	I FAC.	<u>2</u> (A)
1. Salix higra	15	Yes	FACW	Total Number of Doming	ant	
2				Species Acress All Street	anii.	6 (D)
3				Species Across Air Stra	ld.	<u>5</u> (B)
4				Demonstraf Demoissant Or	!	
	15	= lotal Cov	er	That Are ODL FAOM		
Sapling/Shrub Stratum (Plot size: 30 radius)				That Are OBL, FACW, c	or FAC: <u>3</u>	3.3 (A/B)
1. <u>Rubus trivialis</u>	25	Yes	FACU	Prevalence Index worl	(shoot:	
2				Total % Cover of:	Multir	alv by:
3						<u>ny Dy.</u>
4					<u> </u>	
5				FACW species	<u>10</u> x2=	
	25	= Total Cov	er	FAC species	$\frac{50}{10}$ x 3 =	90
Herb Stratum (Plot size: <u>30' radius</u>)				LIDI aposion	<u>10</u> x 4 =	125
1. Sorghum halepense	40	Yes	FACU	Column Totolo:	<u>20 </u>	120 695 (D)
2. Rumex crispus	30	Yes	FAC		00 (A)	<u> </u>
3. <u>Torilis nodosa</u>	25	Yes	NI	Provalance Index	- D/A - 2	01
4. Erigeron canadensis	10	No	FACU	Flevalence index	- B/A - <u> </u>	01
5. Bromus arvensis	10	No	FACU	Hydrophytic Vegetatio	n Indicators:	
6				1 - Rapid Test for H	lvdrophytic Vegetati	on
7				2 - Dominance Tes	t is >50%	
8				3 - Prevalence Inde	ex ≤3.0 ¹	
9				4 - Morphological A	daptations ¹ (Provide	e supportina
10				Problematic Hvdro	ohvtic Vegetation ¹ (F	Explain)
	115	= Total Cov	er		, ,	· ···· /
Woody Vine Stratum (Plot size: 30' radius)				¹ Indicators of hydric soil	and wetland hydrole	oav must
1. Toxicodendron radicans	25	Yes	FACU	he present unless distu	rhed or problematic	Jgy maor
2						
	25	= Total Cov	er	Hydrophytic		
% Bare Ground in Herb Stratum		_		Vegetation		
				Present? Y	íes No	х
Remarks:						
Hydrophytic vegetation is not present.						

S	0	I	L
Э	υ		L

Profile Desc	ription: (Describe to	the depth need	ded to document t	he indicator	or confirm	the abser	nce of indicato	rs.)
(inches)		0/	Color (maint)			1.002	Toyturo	Pomorko
				70	Type'	LOC		
0-10	101R 3/4	100						Graver present on sunace
					·			
					·			
· <u> </u>								
¹ Type: C=Cor	ncentration, D=Depleti	on, RM=Reduc	ed Matrix, CS=Cov	ered or Coate	ed Sand Gra	ains.	² Loca	ation: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applicab	le to all LRRs,	unless otherwise	noted.)			Indicator	s for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gle	eyed Marix (S	4)		1	cm Muck (A9) (LRR I, J)
Histic Ep	oipedon (A2)		Sandy Re	dox (S5)			C	coast Prairie Redox (A16) (LRR F, G, H)
Black Hi	stic (A3)		Stripped N	/latrix (S6)			D	ark Surface (S7) (LRR G)
Hydroge	n Sulfide (A4)		Loamy Mu	icky Mineral ((F1)		н	ligh Plains Depressions (F16)
Stratified	Layers (A5) (LRR F	;)	Loamy Gle	eyed Matrix (I	F2)		(1	LRR H outside of MLRA 72 & 73)
1 cm Mu	ck (A9) (LRR F, G, I	H)	Depleted I	Matrix (F3)			R	educed Vertic (F18)
Depleted	Below Dark Surface	(A11)	Redox Da	rk Surface (F	6)		R	ed Parent Material (TF2)
Thick Da	ark Surface (A12)		Depleted I	Dark Surface	(F7)		V	ery Shallow Dark Surface (TF12)
Sandy N	lucky Mineral (S1)		Redox De	pressions (F8	3)		c	ther (Explain in Remarks)
2.5 cm N	lucky Peat or Peat (S	2) (LRR G, H)	High Plain	s Depression	ıs (F16)		3Inc	dicators of hydrophytic vegetation and
5 cm Mu	cky Peat or Peat (S3)	(LRR F)	(MLRA 72	& 73 of LRF	RH)		we	tland hydrology must be present,
							unl	ess disturbed or problematic.
Restrictive L	ayer (if present):							
Type:	Cemer	nt						
Depth (in	ches):	10					Hydric Soil F	Present? Yes No X
							-	
Remarks:	diantana ana matemaaa							
Hydric soll in	idicators are not prese	ent.						
HYDROLOG	iΥ							
Wetland Hyd	rology Indicators:							
Primary Indic	ators (minimum of one	e required; chec	k all that apply)				Secon	dary Indicators (minimum of two required)
Surface	Water (A1)		Salt Crust	(B11)			S	urface Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic In	vertebrates (I	B13)		S	parsely Vegetated Concave Surface (B8)
Saturatio	on (A3)		Hydrogen	Sulfide Odor	(C1)		D	rainage Patterns (B10)
Water M	arks (B1)		Dry-Seaso	on Water Tabl	e (C2)		C	oxidized Rhizospheres on Living Roots (C3)
Sedimer	nt Deposits (B2)		Oxidized F	Rhizospheres	along Livin	g Roots (C	:3)	(where tilled)
Drift Dep	oosits (B3)		(where i	not tilled)			C	crayfish Burrows (C8)
Algal Ma	t or Crust (B4)		Presence	of Reduced I	ron (C4)		S	aturation Visible on Aerial Imagery (C9)
Iron Dep	osits (B5)		Thin Muck	Surface (C7)		G	eomorphic Position (D2)
Inundatio	on Visible on Aerial Im	agery (B7)	Other (Exp	olain in Rema	ırks)		E	AC-Neutral Test (D5)
Water-St	tained Leaves (B9)						F	rost-Heave Hummocks (D7) (LRR F)
Field Observ	ations:							
Surface Wate	r Present?	Yes No	X Depth (ir	nches):				
Water Table F	Present?	Yes No	X Depth (ir	nches):				
Saturation Pr	esent?	Yes No	X Depth (ir	nches):		Wetla	nd Hydroloav I	Present? Yes No X
(includes cap	illary fringe)			,			, .	
Describe Rec	orded Data (stream g	auge, monitorin	g well, aerial photo	s, previous in	spections),	if available	:	
Remarks:								
Hydrology in	dicators are not prese	ent.						

Attachment 3 – Historical Aerial Photographs













Attachment 4 - Site Photographs



Photo 001: Wetland determination data point (WDP) 01 (Wetland)



Photo 002: WDP02 (Upland)



Photo 003: WDP03 (Wetland)



Photo 004: WDP04 (Upland)



Photo 005: WDP05 (Upland)



Photo 006: WDP06 (Upland)



Photo 007: WDP07 (Upland)



Photo 008: WDP08 (Upland)



Photo 009: WDP09 (Wetland)



Photo 010: WDP10 (Upland)



Photo 011: WDP11 (Upland)



Photo 012: WDP12 (Upland)



Photo 013: WDP13 (Wetland)



Photo 014: WDP14 (Upland)



Photo 015: WDP15 (Wetland)



Photo 016: WDP16 (Upland)


Photo 017: WDP17 (Upland)



Photo 018: WDP18 (Upland)



Photo 019: WDP19 (Wetland)



Photo 020: WDP20 (Upland)



Photo 021: WDP21 (Upland)



Photo 022: WDP22 (Upland)



Photo 023: WDP23 (Wetland)



Photo 024: WDP24 (Upland)



Photo 025: WDP25 (Wetland)



Photo 026: WDP26 (Upland)



Photo 027: WDP27 (Upland)



Photo 028: WDP28 (Wetland)



Photo 029: WDP29 (Upland)



Photo 030: WDP30 (Wetland)



Photo 031: WDP31 (Upland)



Photo 032: WDP32 (Wetland)



Photo 033: WDP33 (Upland)



Photo 034: WDP34 (Upland)



Photo 035: WDP35 (Wetland)



Photo 036: WDP36 (Wetland)



Photo 037: WDP37 (Upland)



Photo 038: WDP38 (Wetland)



Photo 039: WDP39 (Upland)



Photo 040: WDP40 (Wetland)



Photo 041: WDP41 (Upland)



Photo 042: WDP42 (Wetland)



Photo 043: WDP43 (Upland)



Photo 044: WDP44 (Wetland)



Photo 045: WDP45 (Upland)



Photo 046: WDP46 (Wetland)



Photo 047: WDP47 (Upland)



Photo 048: WDP48 (Wetland)



Photo 049: WDP49 (Upland)



Photo 050: WDP50 (Wetland)



Photo 051: WDP51 (Upland)



Photo 052: WDP52 (Wetland)



Photo 053: WDP53 (Upland)



Photo 054: WDP54 (Wetland)



Photo 055: WDP55 (Upland)



Photo 056: WDP56 (Wetland)



Photo 057: WDP57 (Upland)



Photo 058: WDP58 (Upland)



Photo 059: WDP59 (Wetland)



Photo 060: WDP60 (Upland)



Photo 061: WDP61 (Wetland)



Photo 062: WDP62 (Upland)



Photo 063: Wetland 1 – Palustrine emergent wetland.



Photo 064: Wetland 2 – Palustrine emergent wetland.



Photo 065: Wetland 3 – Palustrine emergent wetland.



Photo 066: Upstream view of Water 1 – Ephemeral stream.



Photo 067: Downstream view of Water 1 – Ephemeral stream.



Photo 068: Upstream view of Water 2 – Intermittent stream.



Photo 069: Downstream view of Water 2 – Intermittent stream.



Photo 070: Wetland 4 – Palustrine scrub/shrub wetland.



Photo 071: Wetland 5 – Palustrine emergent wetland.



Photo 072: Upstream view of Water 3 (Unnamed tributary to Buffalo Creek) – Perennial stream.



Photo 073: Water 3 (Unnamed tributary to Buffalo Creek) at the FM 741 bridge – Perennial stream.



Photo 074: Downstream view of Water 3 (Unnamed tributary to Buffalo Creek) – Perennial stream.


Photo 075: Upstream view of Water 4 – Ephemeral stream.



Photo 076: Downstream view of Water 4 – Ephemeral stream.



Photo 077: Upstream view of Water 5 – Ephemeral stream.



Photo 078: Downstream view of Water 5 – Ephemeral stream.



Photo 079: Wetland 6 – Palustrine forested wetland.



Photo 080: Wetland 7 – Assumed palustrine emergent wetland. No right-of-entry was granted to delineate this feature.



Photo 081: Upstream view of Water 3 (Unnamed tributary to Buffalo Creek) at a second location along the FM 741 roadway – Perennial stream.



Photo 082: Downstream view of Water 3 (Unnamed tributary to Buffalo Creek) at a second location along the FM 741 roadway – Perennial stream.



Photo 083: Upstream view of Water 6 - Ephemeral stream.



Photo 084: Downstream view of Water 6 - Ephemeral stream.



Photo 085: Wetland 8 – Palustrine emergent wetland.



Photo 086: Wetland 9 – Palustrine emergent wetland.



Photo 087: Upstream view of Water 7 – Intermittent stream.



Photo 088: Downstream view of Water 7 – Intermittent stream.



Photo 089: Upstream view of Water 7 – Intermittent stream.



Photo 090: Downstream view of Water 7 - Intermittent stream.



Photo 091: Offsite source of hydrology to Water 7.



Photo 092: Pond outlet - offsite source of hydrology to Water 7.



Photo 093: Upstream view of Water 8 – Ephemeral stream.



Photo 094: Downstream view of Water 8 – Ephemeral stream.



Photo 095: Wetland 10 – Palustrine scrub-shrub wetland.



Photo 096: Wetland 11 – Palustrine scrub-shrub wetland.



Photo 097: Wetland 12 – Palustrine emergent wetland.



Photo 098: Another view of Wetland 12 – Palustrine emergent wetland.



Photo 099: Wetland 13 – Palustrine scrub-shrub wetland.



Photo 100: Upstream view of Water 9 – Ephemeral stream.



Photo 101: Downstream view of Water 9 – Ephemeral stream.



Photo 102: Wetland 14 – Palustrine emergent wetland.



Photo 103: Wetland 15 – Palustrine emergent wetland.



Photo 104: Wetland 16 – Palustrine emergent wetland.



Photo 105: Wetland 17 – Palustrine emergent wetland.



Photo 106: Wetland 18 – Assumed palustrine emergent wetland. No right-of-entry was granted to delineate this feature.



Photo 107: Downstream view of Water 10 – Ephemeral stream.



Photo 108: Upstream view of Water 10 (offsite channelized stream) – Ephemeral stream.



Photo 109: Wetland 19 – Assumed palustrine emergent wetland. No right-of-entry was granted to delineate this feature.



Photo 110: Wetland 20 – Palustrine emergent wetland.



Photo 111: Wetland 21 – Palustrine emergent wetland.



Photo 112: Wetland 22 – Palustrine emergent wetland.



Photo 113: Wetland 23 – Palustrine emergent wetland.



Photo 114: Wetland 24 – Palustrine emergent wetland.



Photo 115: Wetland 25 – Assumed palustrine emergent wetland. Feature could not be delineated due to aggressive dog.



Photo 116: Wetland 26 – Palustrine emergent wetland.



Photo 117: Wetland 27 – Palustrine emergent wetland.



Photo 118: Upstream view of Water 11 – Intermittent stream.



Photo 119: Downstream view of Water 11 – Intermittent stream.



Photo 120: Wetland 28 – Palustrine emergent wetland.

Attachment 5 – USACE Antecedent Precipitation Tool Results



Coordinates	32.67818036, -96.44311328
Observation Date	2022-04-14
Elevation (ft)	420.4
Drought Index (PDSI)	Severe drought
WebWIMP H ₂ O Balance	Wet Season

CORPS OF ENGL	Figure and tables made by the Antecedent Precipitation Tool
	/ incoducine i recipitation i ooi
	Version 1.0
	Written by Jason Deters
GU SS	
STORY PRO	U.S. Army Corps of Engineers

32.67818036, -96.44311328	30 Days Ending	30 th %ile (in)	70 th %ile (in)
2022-04-14	2022-04-14	2.073228	3.646851
420.4	2022-03-15	2.399606	4.144095
Severe drought	2022-02-13	1.690945	3.322835
Wet Season	Result		
Figure and tables made by the			-

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
TERRELL MUNI AP	32.71, -96.2672	475.066	10.462	54.666	5.28	8553	90
TERRELL 1.3 NNE	32.7494, -96.2833	538.058	2.879	62.992	1.477	5	0
TERRELL	32.7336, -96.3225	495.079	3.604	20.013	1.694	2786	0
TERRELL 1.8 NW	32.7524, -96.3348	512.139	4.901	37.073	2.387	1	0
TERRELL 8.2 SSW	32.6276, -96.3586	429.134	7.789	45.932	3.863	3	0
KAUFMAN 3 SE	32.5589, -96.2725	419.948	10.445	55.118	5.276	5	0

Wetness Condition

Normal

Dry

Dry

Observed (in)

3.169291

0.61811

1.46063

Jun	Jul	Aug
2022	2022	2022

Condition Value	Month Weight	Product
2	3	6
1	2	2
1	1	1
		Drier than Normal - 9

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	32.67818036, -96.44311328
Observation Date	2022-04-28
Elevation (ft)	420.4
Drought Index (PDSI)	Severe drought
WebWIMP H ₂ O Balance	Wet Season

Version 1.0

Written by Jason Deters



70th %ile (in) Observed (in) Wetness Condition Co 30 Days Ending 30th %ile (in) Weather Station Name Coordinates Elevation (ft) Distance (mi) Elevation 643.045 532.152 PLANO 1.8 SE 33.0306, -96.7211 29.21 LUCAS 3.7 E 33.108, -96.515 29.989 33.0171, -96.5463 WYLIE 2.6 SW 550.853 24.171 32.9887, -96.553 499.016 WYLIE 2.9 SW 22.383 **RICHARDSON 2.2 NW** 27.693 32.9921, -96.7397 666.995 PLANO 2.3 SSE 33.0148, -96.7352 666.995 28.782 MURPHY 0.9 SSW 33.0005, -96.6116 563.976 24.323 WYLIE 0.9 S 33.0297, -96.5163 530.84 24.656 546.916 LAVON 0.7 NNW 33.0359, -96.441 24.716 PLANO 4.5 ESE DALLAS 3.7 E 33.025, -96.6724 32.7998, -96.7012 610.892 27.411 532.152 17.193 32.9573, -96.7469 **RICHARDSON 2.4 WSW** 623.032 26.136 ROWLETT 2.3 NW 32.9321, -96.5769 541.011 19.188 UNIVERSITY PARK 3.1 WNW 32.863, -96.845 521.982 26.612 MESQUITE 2.4 W 32.7709, -96.6409 518.045 13.161 WAXAHACHIE 2.6 ENE 32.4225, -96.8108 568.898 27.76 CRANDALL 32.6297, -96.4581 430.118 3.461 CANTON 5 W 484.908 29.27 32.5669, -95.9578

' lul	Aug	' Sen
2022	2022	2022

					-		
				eight	Month V	alue	ondition Va
a			lormal	Days	ghted Δ	Wei	evation Δ
		2	712		19.648		222.645
		4	164		16.846		111.752
	Γ	4	394		14.03		130.453
		2	1262		11.832		78.616
		7	2457		19.291		246.595
		1	51		20.049		246.595
	Γ	5	246		14.438		143.576
		2	2		13.818		110.44
		1	21		14.249		126.516
		1	1		17.557		190.492
		ר כ	380		9.658		111.752
		7	7		17.057		202.632
		2	12		10.949		120.611
		3	368		14.679		101.582
	Γ	3	3		7.208		97.645
		2	2		16.614		148.498
		7	857		1.591		9.718
	Γ	ΣT	3040		15.06		64.508

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	32.67818036, -96.44311328
Observation Date	2022-04-29
Elevation (ft)	420.4
Drought Index (PDSI)	Severe drought
WebWIMP H ₂ O Balance	Wet Season

Written by Jason Deters



30 Days Ending	30 th %ile (in)	70 th %ile(in)	Obse	erved (in) W	etness Condition	Condition Va	alue Month V	Veight	Product
Weath	er Station Name	Coord	linates	Elevation (ft) Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
	PLANO 1.8 SE	33.0306, -9	6.7211	643.04	5 29.21	222.645	19.648	712	0
	LUCAS 3.7 E	33.108, -	96.515	532.152	2 29.989	111.752	16.846	164	0
	WYLIE 2.6 SW	33.0171, -9	6.5463	550.853	3 24.171	130.453	14.03	394	0
	WYLIE 2.9 SW	32.9887, -	96.553	499.01	5 22.383	78.616	11.832	1262	0
RICH	ARDSON 2.2 NW	32.9921, -9	6.7397	666.99	5 27.693	246.595	19.291	2457	88
	PLANO 2.3 SSE	33.0148, -9	6.7352	666.99	5 28.782	246.595	20.049	51	1
Ν	/URPHY 0.9 SSW	33.0005, -9	6.6116	563.97	5 24.323	143.576	14.438	246	0
	WYLIE 0.9 S	33.0297, -9	6.5163	530.84	4 24.656	110.44	13.818	2	0
	LAVON 0.7 NNW	33.0359, -	96.441	546.91	5 24.716	126.516	14.249	21	1
	PLANO 4.5 ESE	33.025, -9	6.6724	610.892	2 27.411	190.492	17.557	1	0
	DALLAS 3.7 E	32.7998, -9	6.7012	532.152	2 17.193	111.752	9.658	380	0
RICHA	RDSON 2.4 WSW	32.9573, -9	6.7469	623.032	2 26.136	202.632	17.057	7	0
R	OWLETT 2.3 NW	32.9321, -9	6.5769	541.01	1 19.188	120.611	10.949	12	0
UNIVERSITY	Y PARK 3.1 WNW	32.863, -	96.845	521.982	2 26.612	101.582	14.679	368	0
	MESQUITE 2.4 W	32.7709, -9	6.6409	518.04	5 13.161	97.645	7.208	3	0
WAXA	AHACHIE 2.6 ENE	32.4225, -9	6.8108	568.898	3 27.76	148.498	16.614	2	0
	CRANDALL	32.6297, -9	6.4581	430.118	3 3.461	9.718	1.591	857	0
	CANTON 5 W	32.5669, -9	5.9578	484.908	3 29.27	64.508	15.06	3040	0

' lul	Aug	' Sen
2022	2022	2022