

Consulting Engineers

November 13, 2020

Regulatory Division U.S. Army Corps of Engineers 819 Taylor Street, Room 3A37 P.O. Box 17300 Fort Worth, TX 76102-0300

Re: Vulcan Materials Company, Weatherford Quarry Palo Pinto and Parker Counties, Texas Approved Jurisdictional Determination Request HHNT Project Number: 8021-011

To Whom It May Concern:

On behalf of Vulcan Materials Company (Vulcan), Hodges, Harbin, Newberry & Tribble, Inc., (HHNT) is requesting an Approved Jurisdictional Determination (AJD) of jurisdictional wetlands and streams as well as wetlands and streams that we are proposing are non-jurisdictional. The overall Project Review Area (Review Area) consists of approximately 1,534.81 acres and is located south of Interstate 20 at 1111 Gilbert Pit Rd in Millsap, Texas. The Review Area is located in both Palo Pinto and Parker Counties. (Appendix A, Figure 1). Topography within the Review Area ranges from 840 to 950 feet above mean sea level in elevation (Appendix A, Figure 2). The site consists mostly of undisturbed land, a portion of the rock quarry, and a rock processing area along the eastern and southern portion of the Review Area. An AJD form for the Navigable Waters Protection Rule (NWPR) has been completed and is located in Appendix B of this application. Additionally, an Operations and Maintenance Business Information Link Regulatory Module (ORM2) Aquatic Resources Upload Table has also been completed and is located in Appendix G of this application. The aquatic features in this ORM2 table are listed per Cowardin classification code. Conditions were normal during the delineation and the output from the U.S. Army Corps of Engineers (ACOE) Antecedent Precipitation Calculator has been included in Appendix I. Despite normal conditions, this region of Texas did receive 8.05 inches of rain over the 14 days prior to the delineation. Therefore, there was a sizeable amount of standing water that we would consider atypical. Jurisdiction of wetlands and streams within the Review Area were determined based upon the Clean Water Act regulation 33 CFR 328.3(a) NWPR definition of Jurisdictional Waters of the U.S.

Wetlands and stream boundaries identified within the Review Area were recorded with a Juniper Archer 2 and a Trimble Geo7. All data was post processed to achieve sub-meter accuracy. Upland and wetland data forms for jurisdictional features and non-jurisdictional features are provided in Appendix C. In order to determine stream type, streams and ephemeral channels were scored according to the North Carolina Division of Water Quality Methodology for Identification of Intermittent and Perennial Streams and Their Origins (V. 4.11, 2010). These data forms for jurisdictional and non-jurisdictional streams and ephemeral channels are provided in Appendix E.

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The limits of the wetland and streams were identified and flagged within the Review Area consistent with current jurisdictional guidelines as described in the 1987 Corps of Engineers Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0) by scientists from HHNT and Halff Associates Inc. on September 14-17, 2020. HHNT conducted a preliminary online delineation to identify potential aquatic resources prior to going on-site. Sources used in the preliminary review include a review of the U.S. Fish and Wildlife National Wetland Inventory, United States Geological Survey (USGS) National Hydrography Dataset, USGS Topography, United States Department of Agriculture Web Soil Survey, and also a review of current and historic aerials.

In addition, Halff conducted transects within the Review Area, according to the 1987 ACOE Wetland Delineation Manual, to verify all wetland and stream features were delineated on the property, and no unique habitats were found. Photos depicting community types found along these transects are provided in Appendix D.

The following is a summary of Aquatic Features located within the Review Area and their jurisdictional status.

Jurisdictional

Wetlands

A total of \pm 1.31 acres of wetlands were delineated on-site. Of these features, approximately 0.52 acre was determined to be jurisdictional and met the criteria of (a)(4) waters (adjacent wetlands) according to the NWPR. These features were adjacent or abutted an (a)(2) water (intermittent stream ERA(i)) that flowed off-site.

Surface Waters

A total of +/- 8.42 acres of surface water features were delineated on-site. Of these features, +/- 6.81 acres were determined to be jurisdictional and met the criteria of (a)(3) waters (lakes, ponds, and impoundments) according to the NWPR. These features flowed into an (a)(2) water off-site.

Tributaries

A feature with a total length of +/-1,396 linear feet was determined to be a jurisdictional tributary and met the definition of an (a)(2) water (intermittent tributary) according to NWPR. This feature (intermittent stream ERA(i)) flows off-site to the north and through a culvert under I-20 into an unnamed tributary of the Brazos River.

Non-Jurisdictional

Wetlands

The remaining \pm 0.79 acre of wetlands was determined to be non-jurisdictional and met the criteria of (b)(1) waters (non-adjacent wetlands) according to the NWPR, as they are not adjacent to any (a)(1)-(a)(4) waters nor or they susceptible to flooding from any (a)(1)-(a)(4) waters.

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Lakes, Ponds, and Impoundments

The remaining \pm /-1.61 acres of surface water features were determined to be non-jurisdictional and met the definition of (b)(8) (artificial ponds or open water) waters according to the NWPR and were determined to be non-jurisdictional. These features did not connect nor were susceptible to flooding from and (a)(1)-(a)(4) waters.

Tributaries- Ephemeral Channels

A total of +/-29,415 linear feet of ephemeral channels were also delineated on-site. These features were determined to be non-jurisdictional and met the definition of (b)(3) waters according to the NWPR. In addition, a total of +/-3,014 linear feet of overland surface flow features connecting ephemeral channels were delineated on-site and were determined to be non-jurisdictional. These were features that conveyed water or were areas of standing water which consistently lacked bed and bank features and did not have any wetland indicators and therefore could not be qualified as ephemeral channels or wetlands. These areas were delineated to show connections between ephemeral channels where bed and bank features were lacking. These features met the definition of (b)(4) waters according to the NWPR (Appendix A, Figures 6 and 7).

In addition to the 8 inches of rain the Review Area received prior to the delineation, the Review Area is also receiving stormwater discharge from their overall mine site. A map depicting the location of the stormwater discharge and the associated culverts can be found in Appendix A (Figure 8). To assist in stormwater control, Vulcan has incorporated mobile pumps which discharge through ephemeral channels ERH and EMA from the pit during heavy rain events. Due to the discharge, the channels displayed a large amount of flowing water but did not have wetland vegetation and/or hydric soils consistent of a permanent or intermittent flow. HHNT conducted data points in these locations in order to determine actual conditions and to determine if areas met all three criteria to for wetlands according to the ACOE Great Plains Regional Supplement. Many of these areas did not meet one or more of the criteria for wetlands or streams and therefore no wetlands or intermittent/perennial streams were delineated in these areas

In summary, approximately +/- 1,396 linear feet of intermittent stream, +/- 0.52 acre of wetlands and +/- 6.81 acres of surface waters were determined to be jurisdictional. Approximately +/- 0.79 acre of wetland, +/- 1.61 acres of non-jurisdictional waters, and +/- 29,415 linear feet of ephemeral channels were determined to be non-jurisdictional according to the NWPR definition of Jurisdictional Waters of the U.S.

At your earliest convenience, we respectfully request that the Approved Jurisdictional Determination be processed for the project and Review Area. Please contact me to schedule a site review, if required.

Should you have any questions regarding the above referenced request please do not hesitate to contact me at rsulkers@hhnt.com and/or (615) 500-1264.

Sincerely,

HODGES, HARBIN, NEWBERRY & TRIBBLE, INC.

Rachael B. Sulkers

Senior Environmental Consultant

RBS/mp

Enclosure

Appendices

Appendix A: Figures

- 1. Location Map
- 2. Topographic Map
- 3. Soils Map
- 4. National Wetland Inventory Map
- 5. Floodplain Map
- 6. Delineation Map Key
- 6a 6d. Delineation Map Series
- 7. Resource ID Map Key
- 7a 7d. Resource ID Map Series
- 8. Stormwater Discharge Map
- 9. Adjacent Property Owners Map

Appendix B: Applications

1. Navigable Waters Protection Rule AJD Form

Appendix C: Wetland / Upland Data Forms

Appendix D: Transect Data Forms (Halff)

Appendix E: Stream Data Forms

Appendix F: Site Photographs

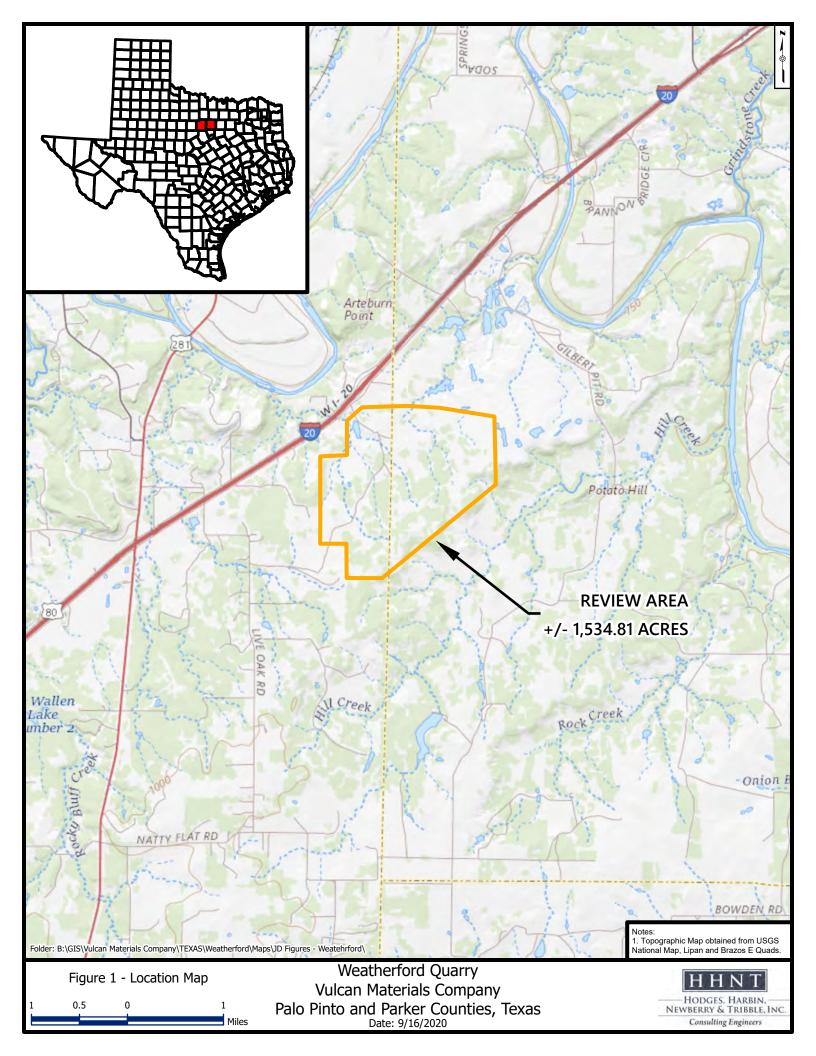
Appendix G: ORM Aquatic Resources Upload Table

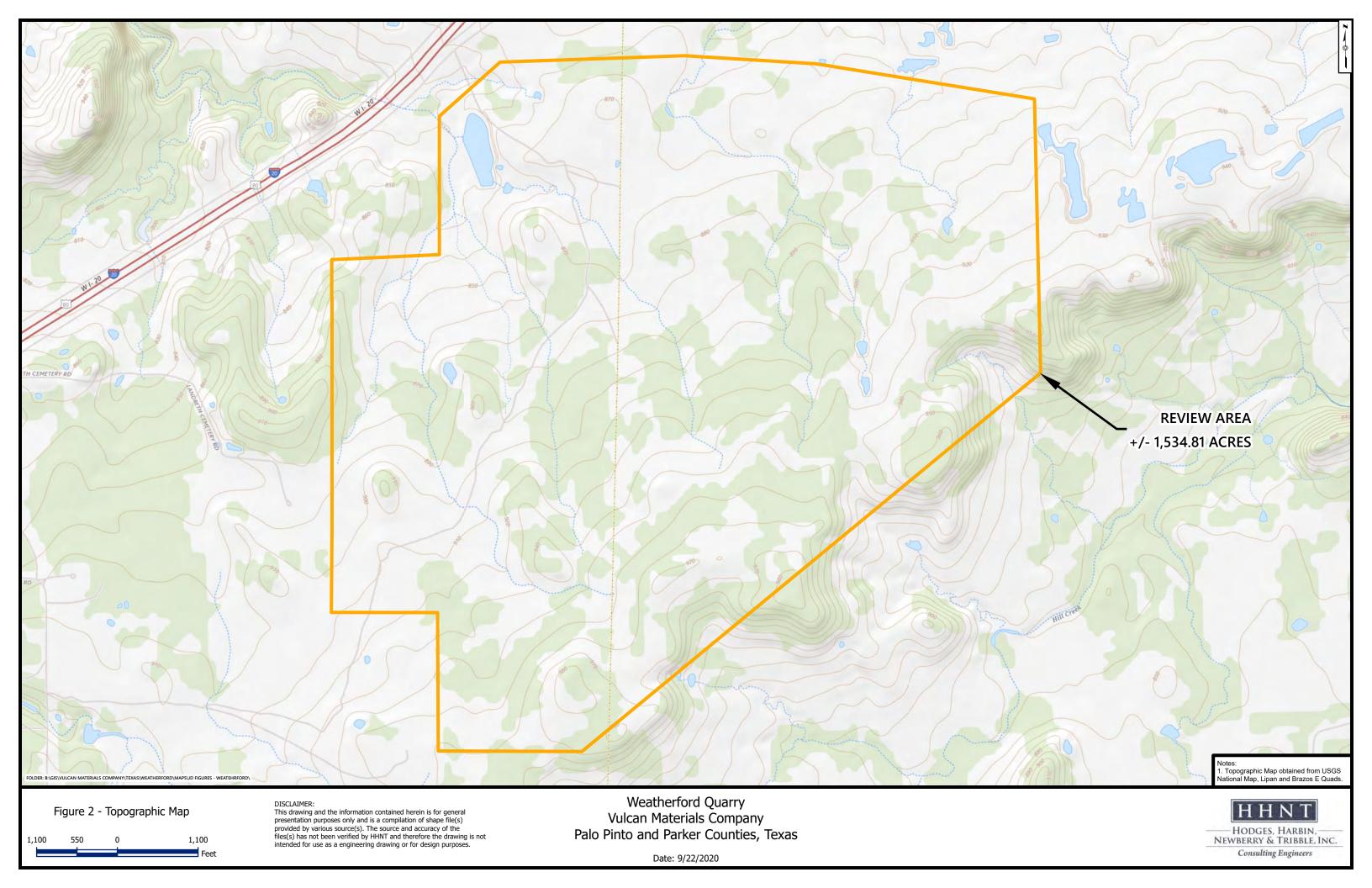
Appendix H: Ownership Information

Appendix I: Antecedent Precipitation

APPENDIX A-FIGURES

- 1. Location Map
- 2. Topographic Map
- 3. Soils Map
- 4. National Wetland Inventory Map
- 5. Floodplain Map
- 6. Delineation Map Key
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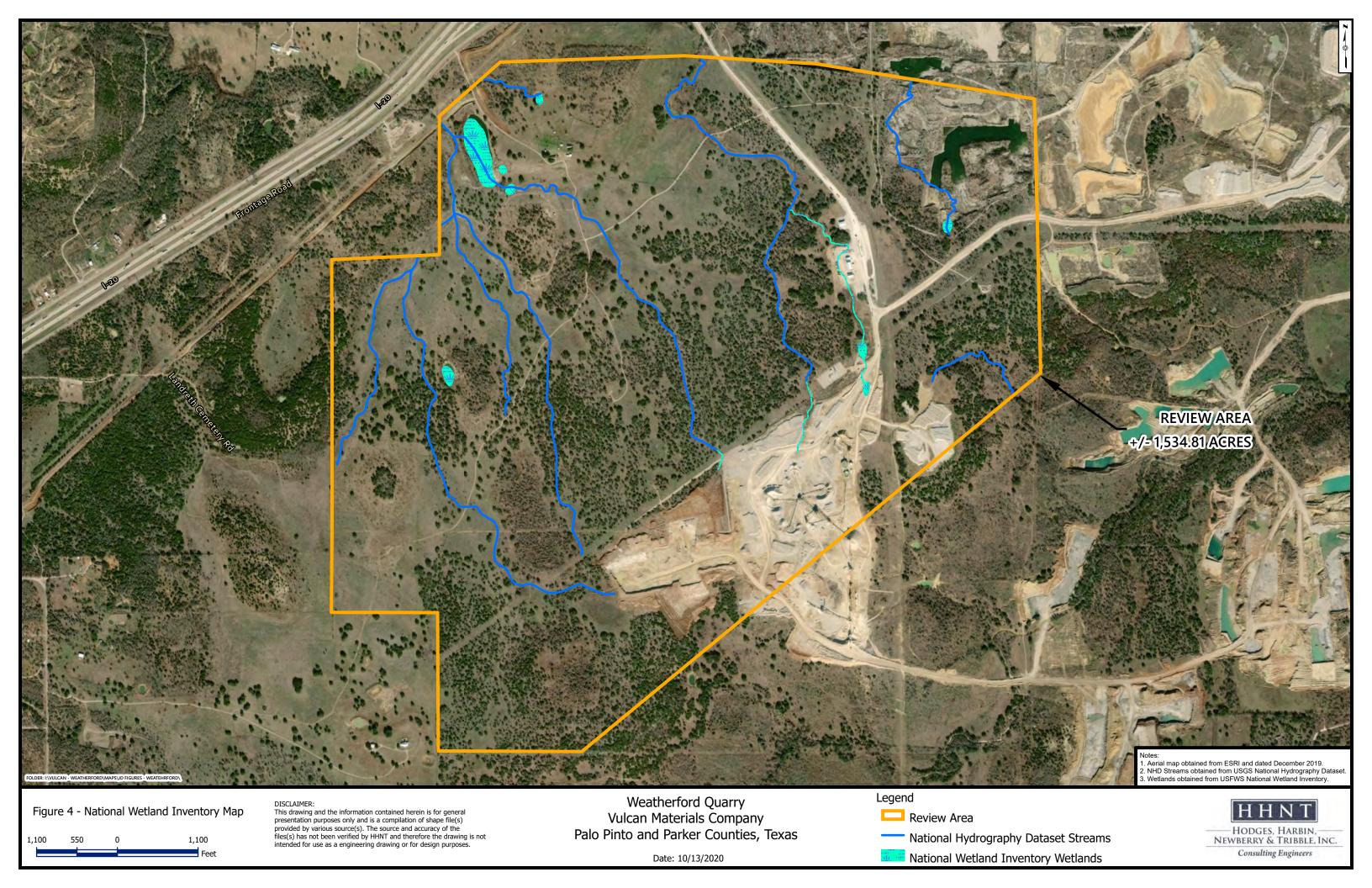


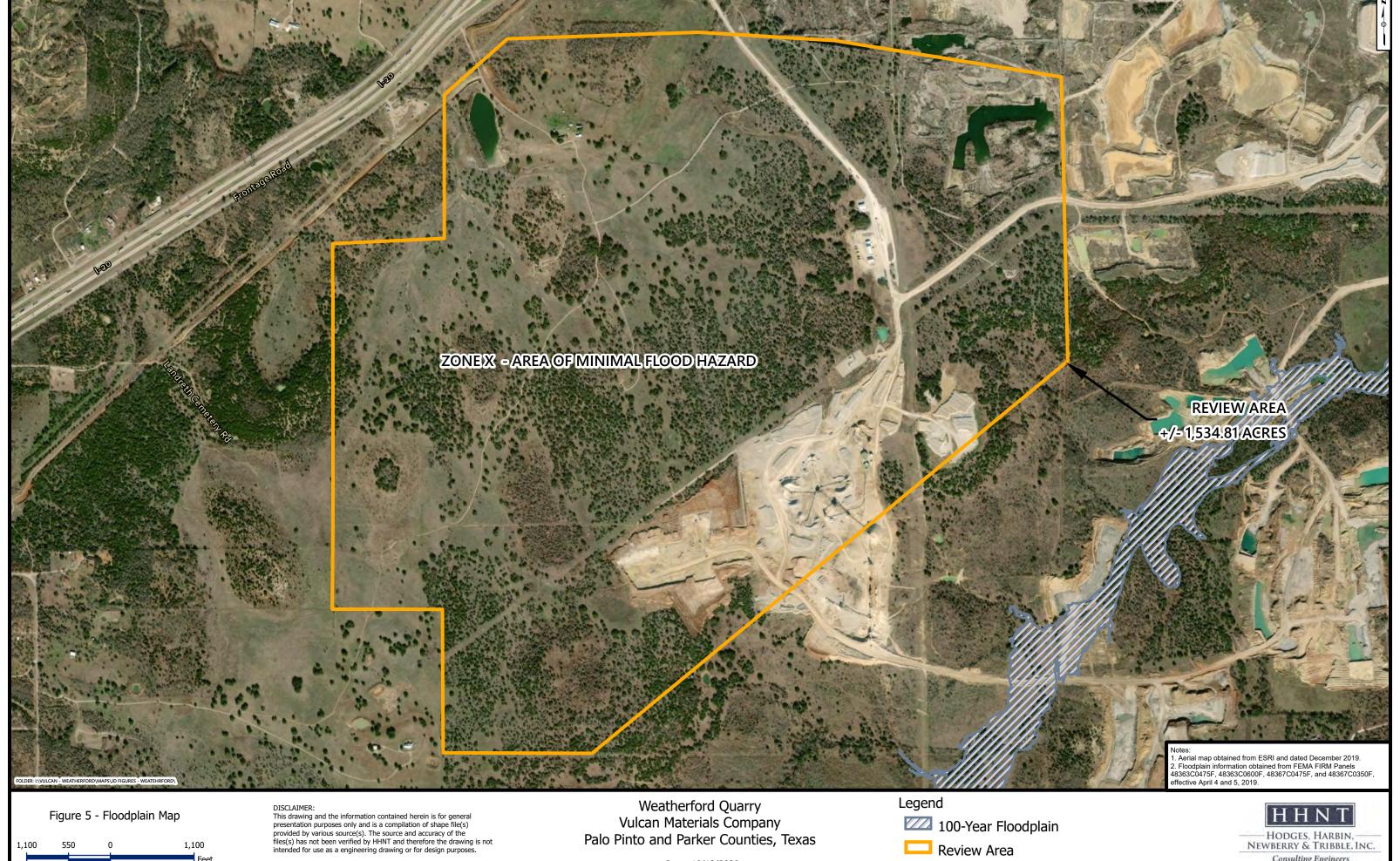


Legend **Parker County** ■ BnD - Bonti and Truce soils, 1 to 8 percent slopes ■ BsG - Brackett and Maloterre soils, 12 to 30 percent slopes — HnB - Hensley complex, 0 to 3 percent slopes LnB - Lindy loam, 1 to 3 percent slopes QU Pits, quarries, 0 to 45 percent slopes TrC2 - Truce fine sandy loam, 1 to 5 percent slopes, eroded **Palo Pinto County** LnB ■ 11 - Bonti-Exray complex, 1 to 8 percent slopes, extremely stony 20 - Hensley very stony clay loam, 0 to 5 percent slopes 24 - Lindy clay loam, 1 to 3 percent slopes = 32 - Owens-Harpersville complex, 8 to 45 percent slopes, extrmely bouldery ■ 45 - Truce fine sandy loam, 1 to 5 percent slopes, eroded ■ 46 - Shatruce-Bonti complex, 8 to 40 percent slopes, rubbly - WHERE WAS TO 8 - Blanket clay loam, 0 to 1 percent slopes ■W - Water HnB 20 BsG REVIEW AREA +/-1,534.81/ACRES 24 11 Notes. 1. Aerial map obtained from ESRI and dated December 2019. 2. Soils information obtained from USDA Web Soil Survey. Note that the survey is divided along the county line. DISCLAIMER: This drawing and the information contained herein is for general presentation purposes only and is a compilation of shape file(s) provided by various source(s). The source and accuracy of the files(s) has not been verified by HHNT and therefore the drawing is not intended for use as a engineering drawing or for design purposes. Weatherford Quarry Figure 3 - Soils Map **Vulcan Materials Company** HODGES, HARBIN, NEWBERRY & TRIBBLE, INC. Palo Pinto and Parker Counties, Texas 1,100

Date: 10/13/2020

Consulting Engineers

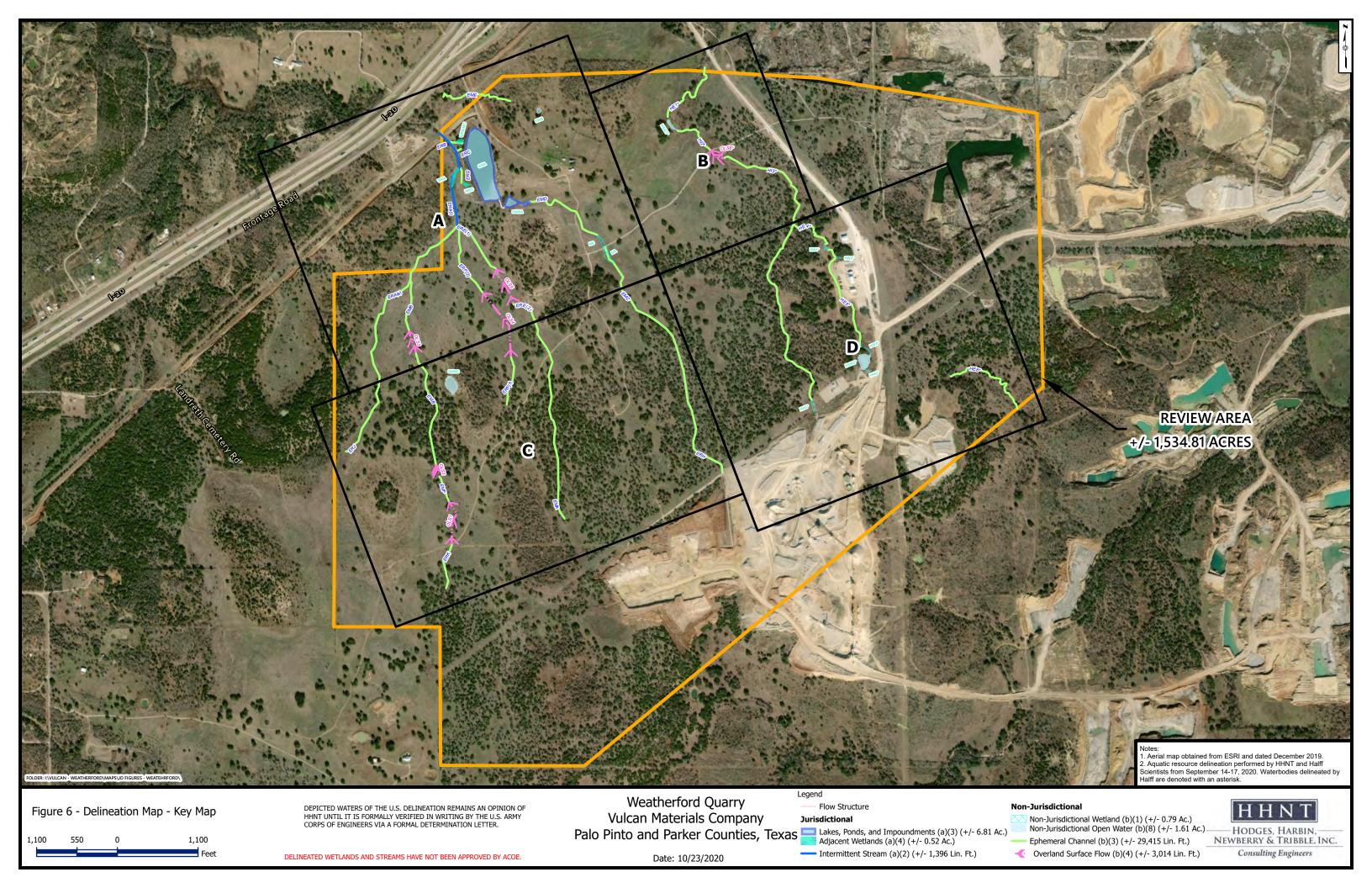


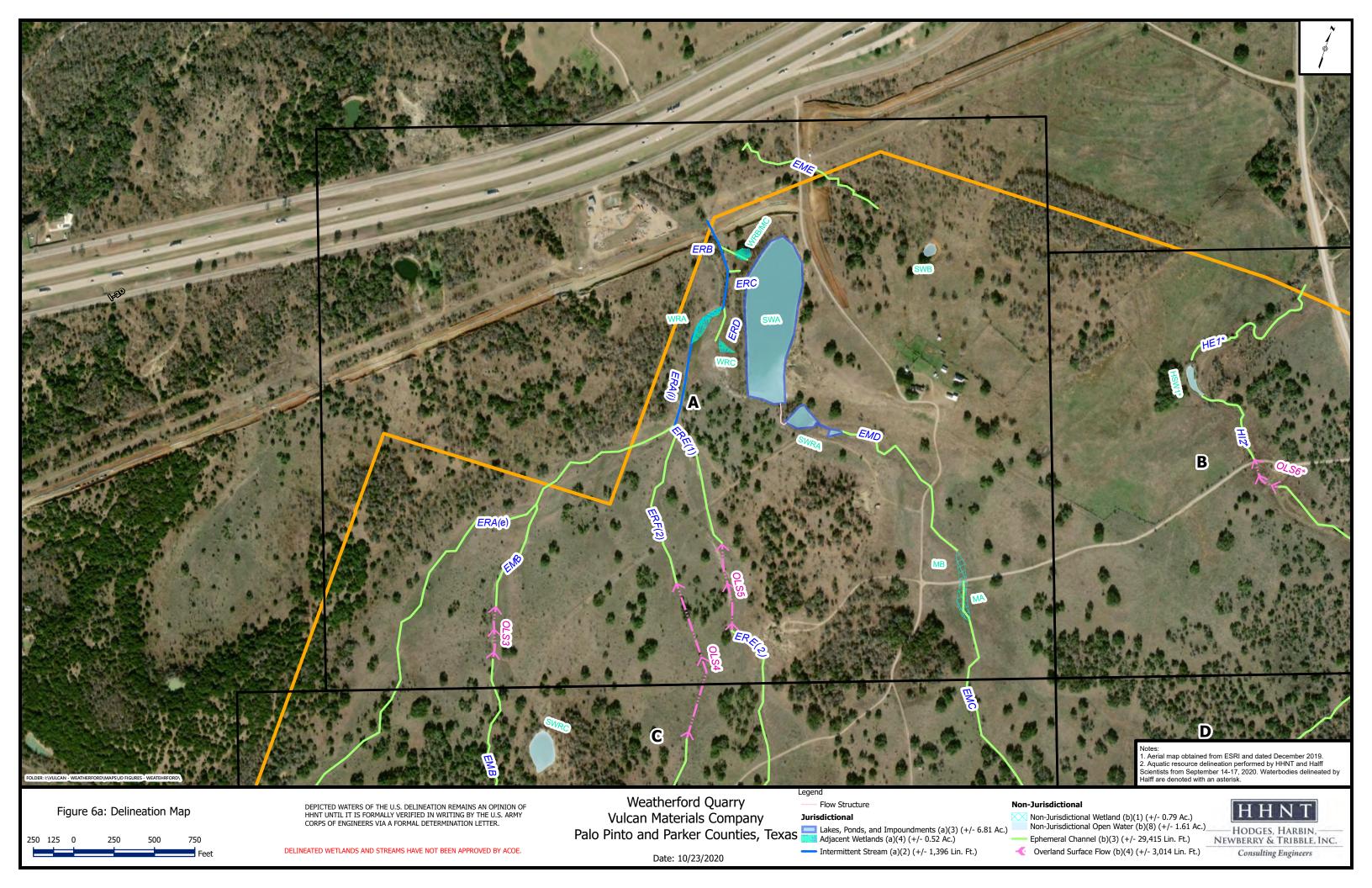


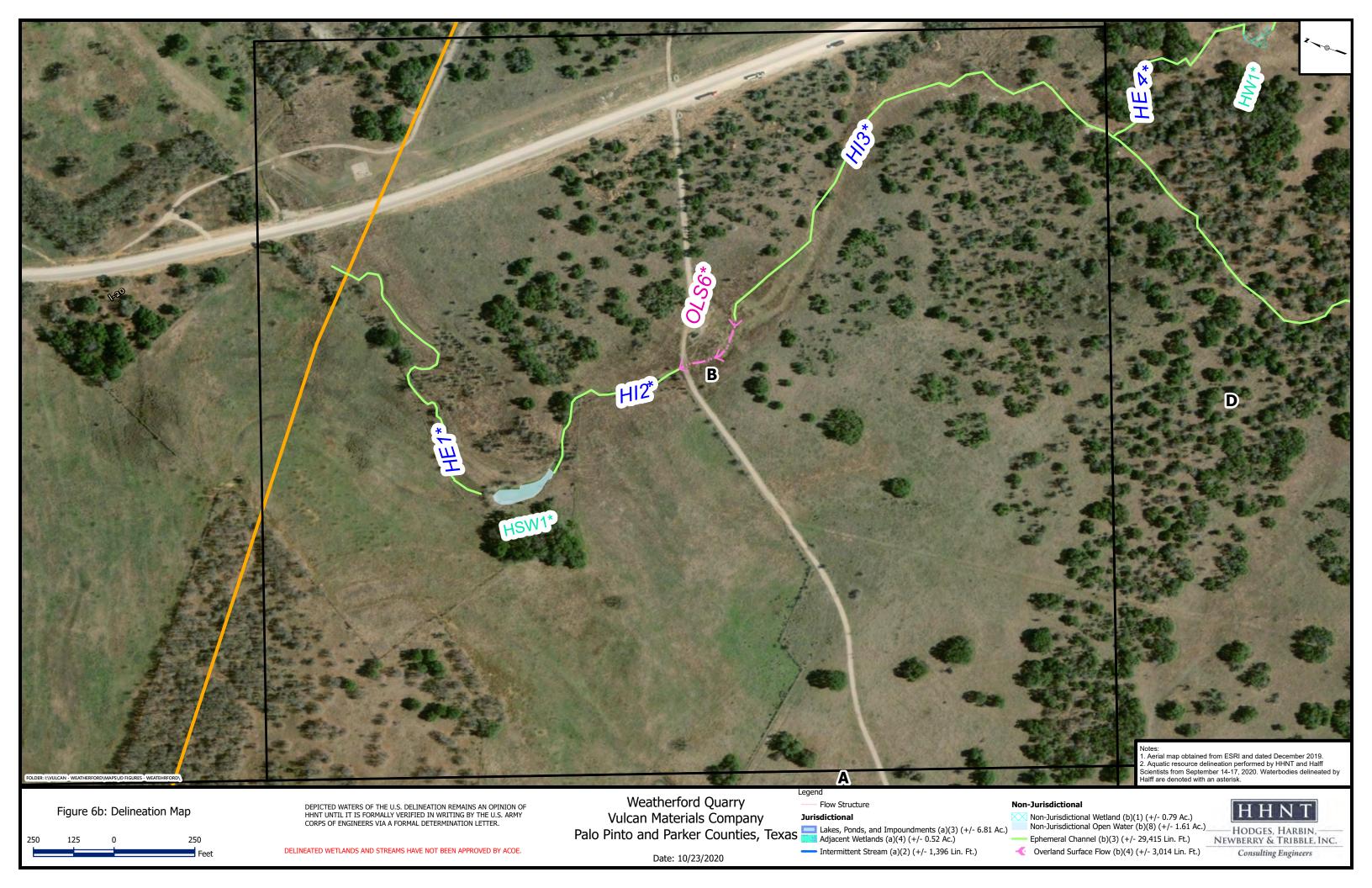
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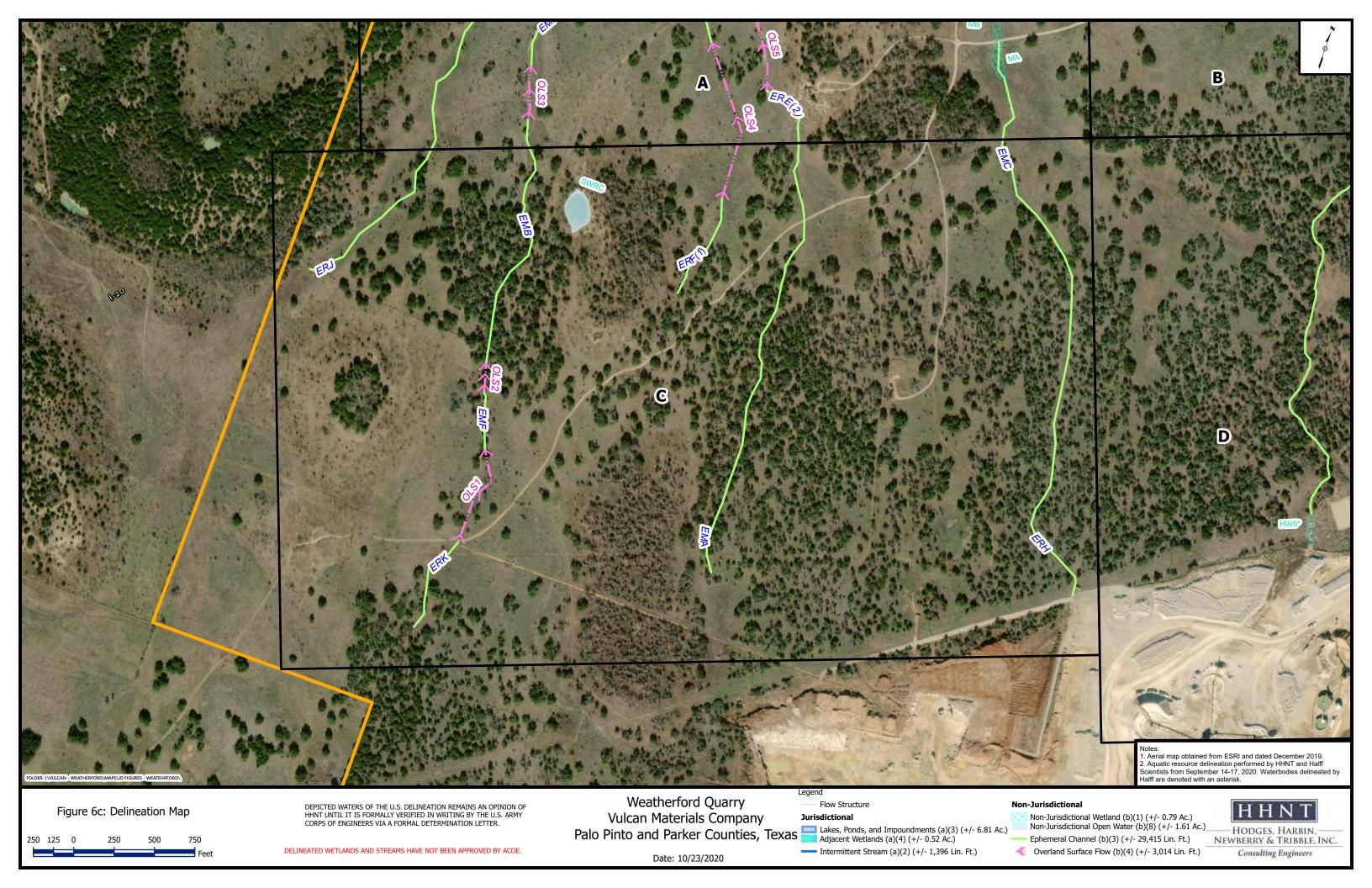


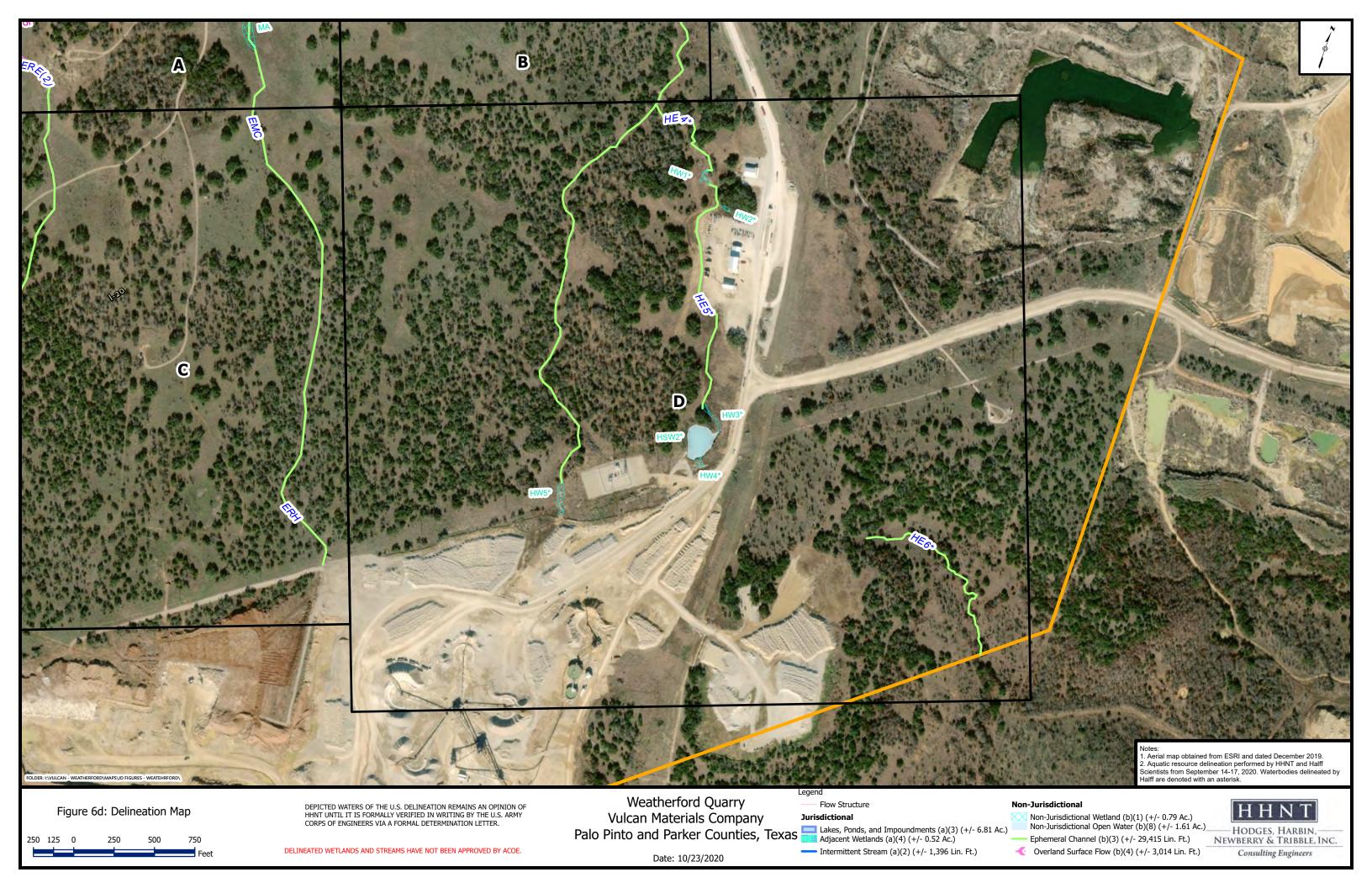


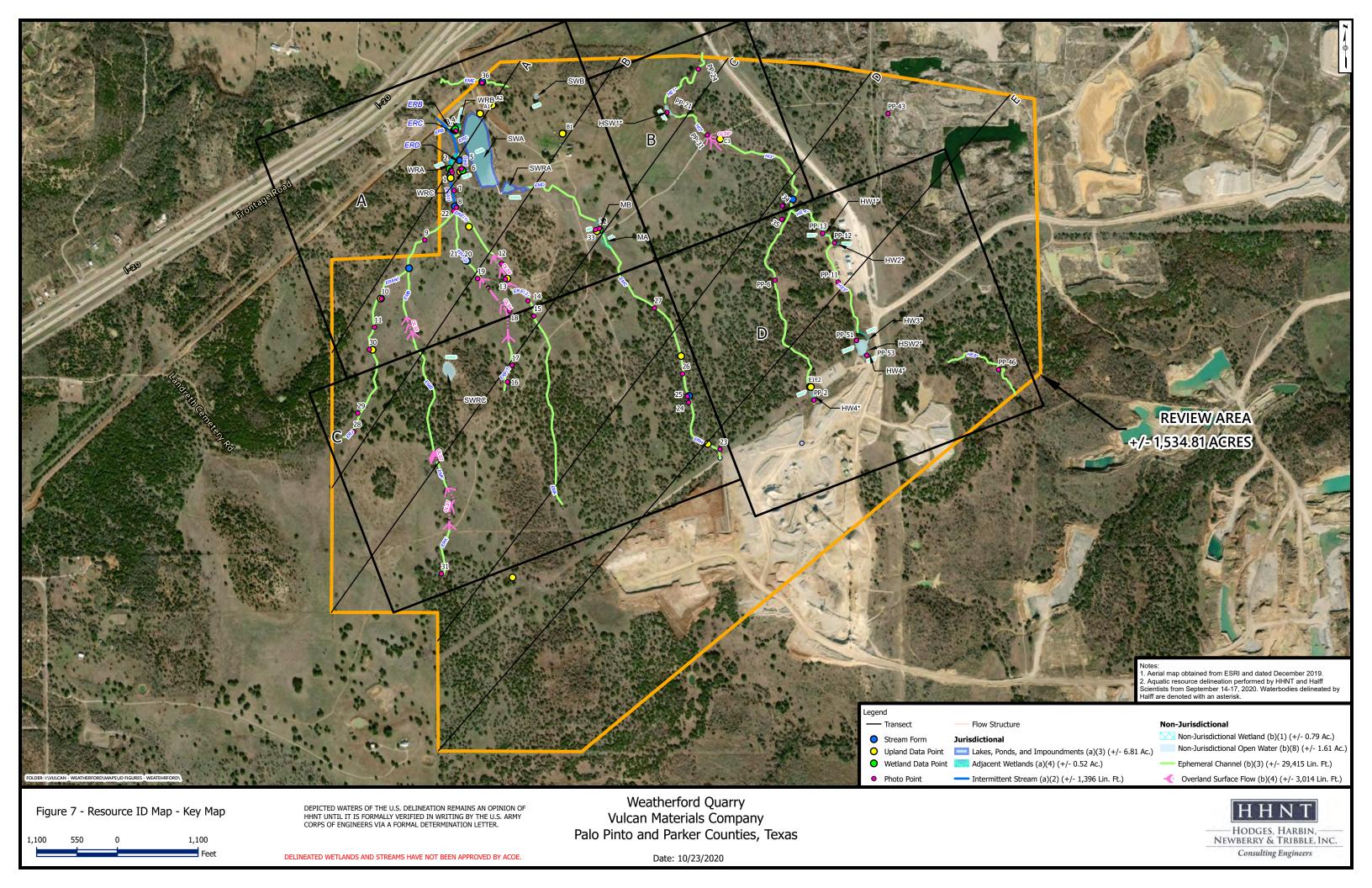


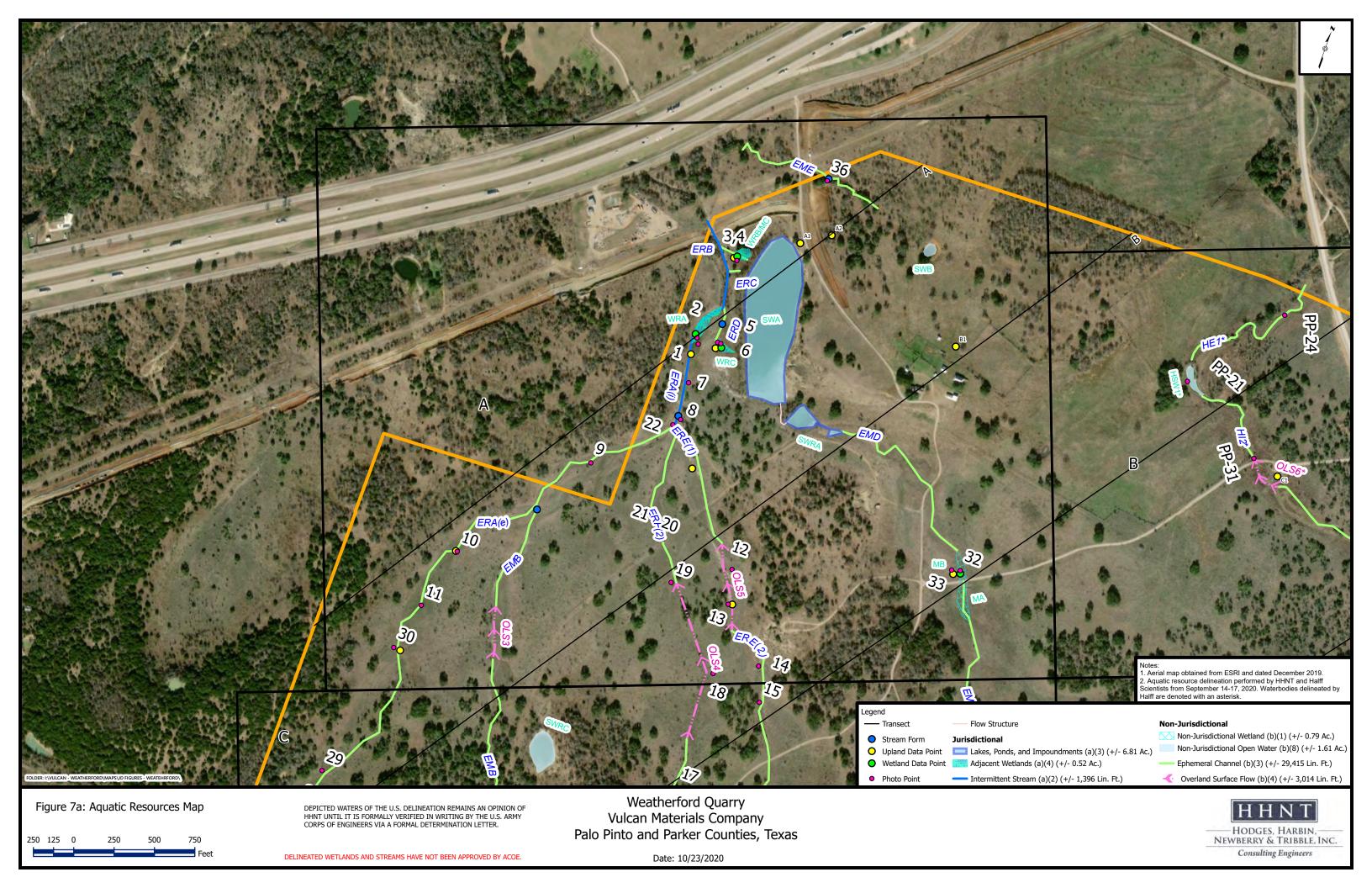


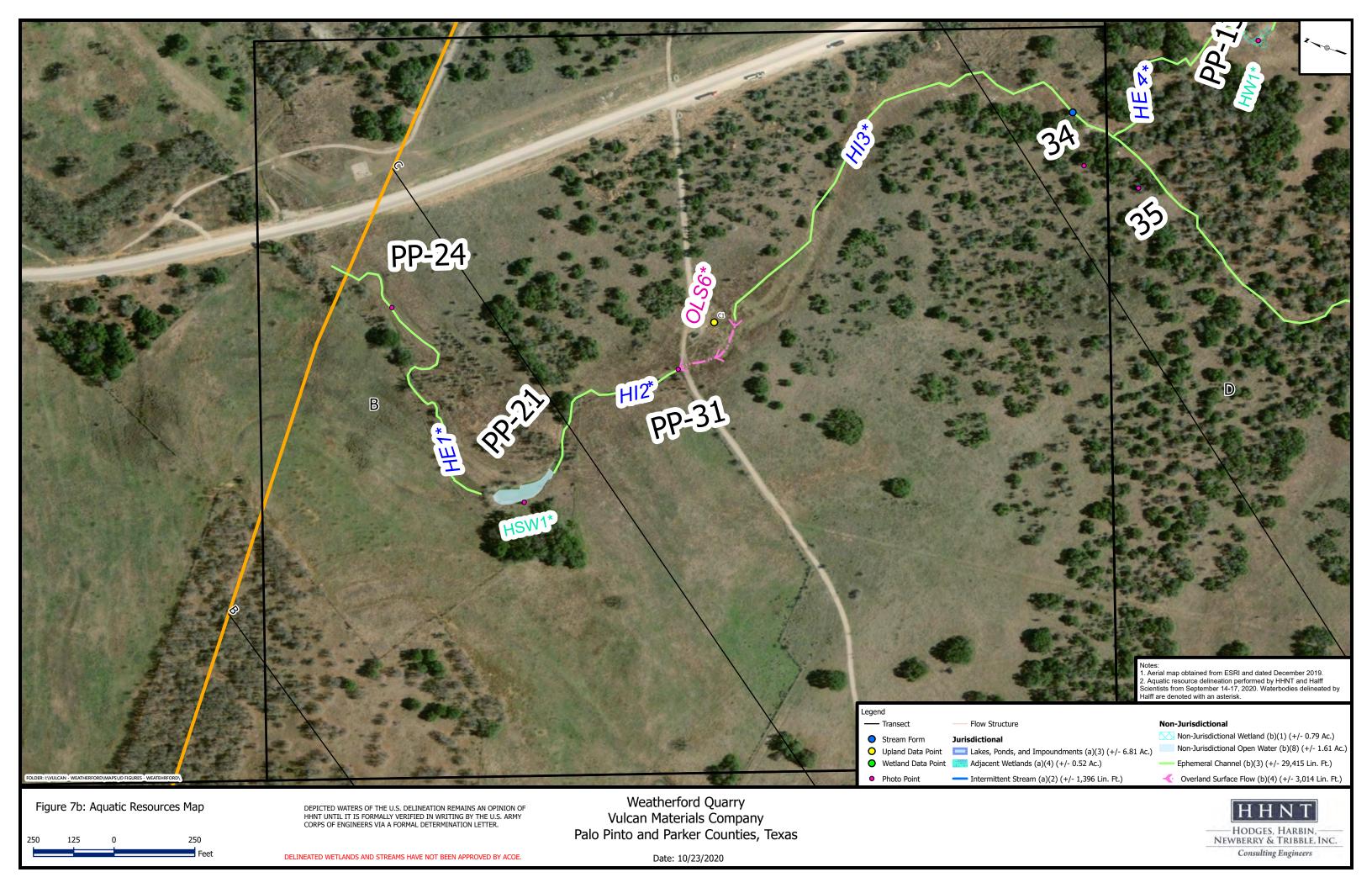


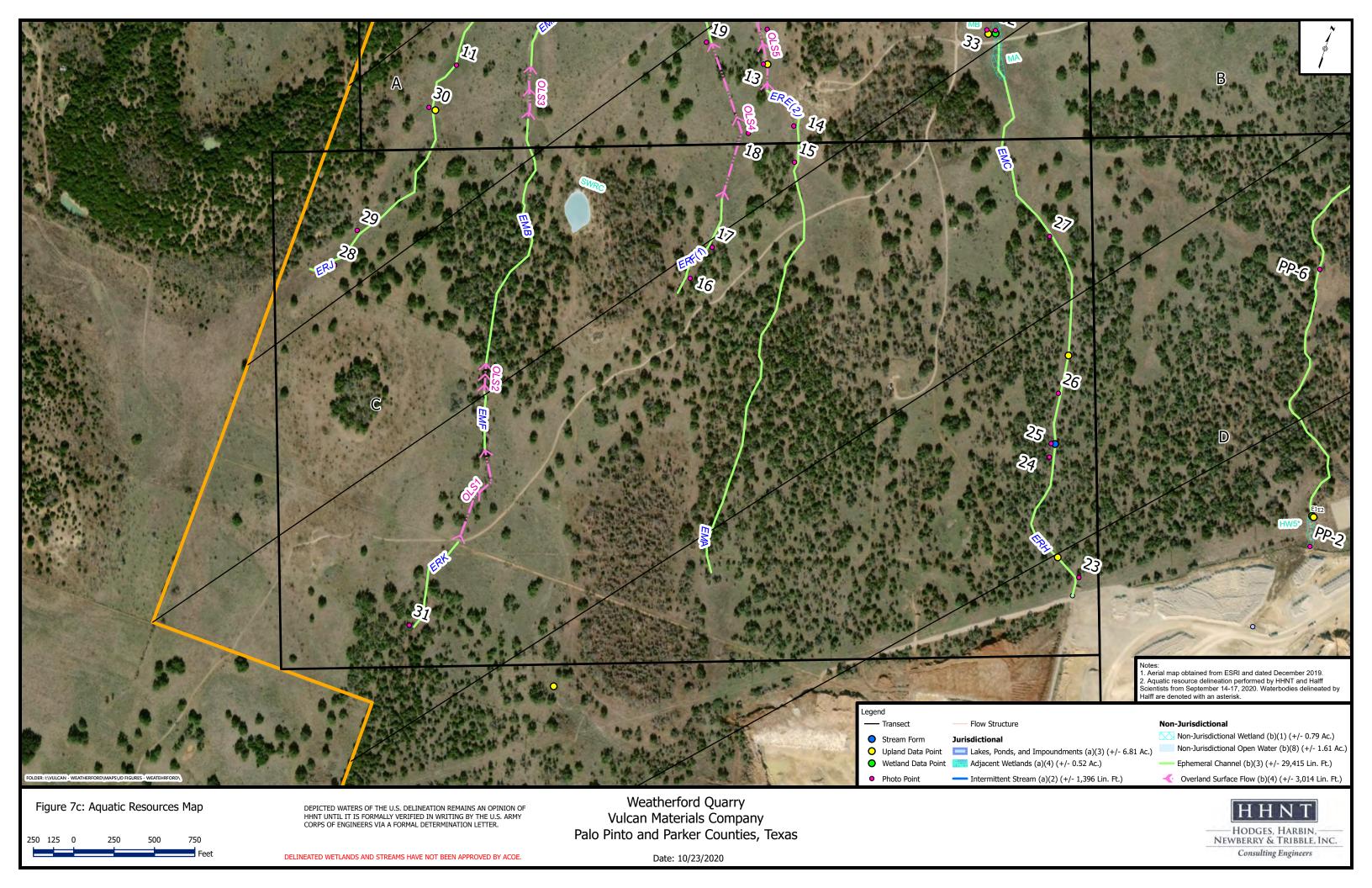


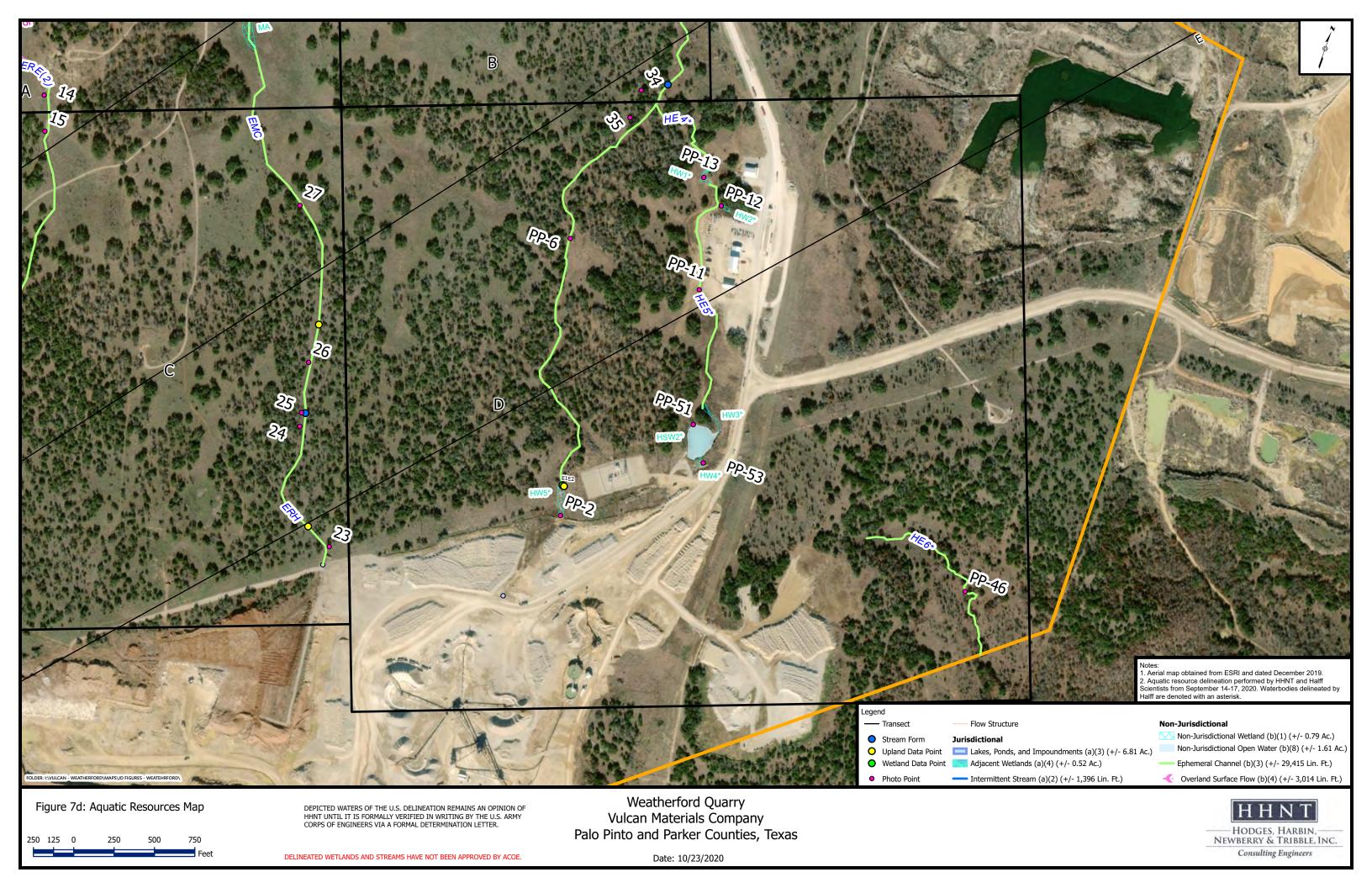


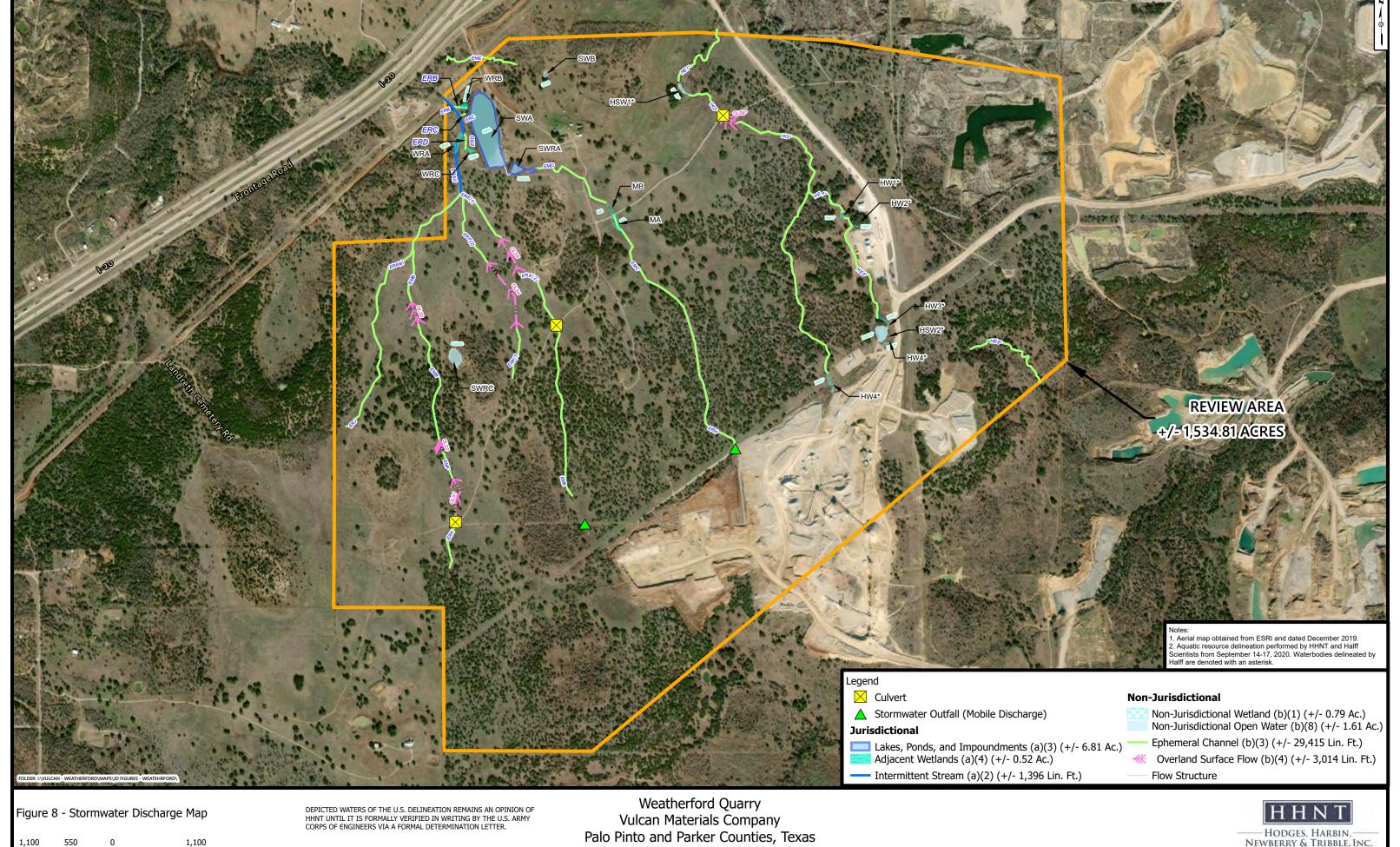










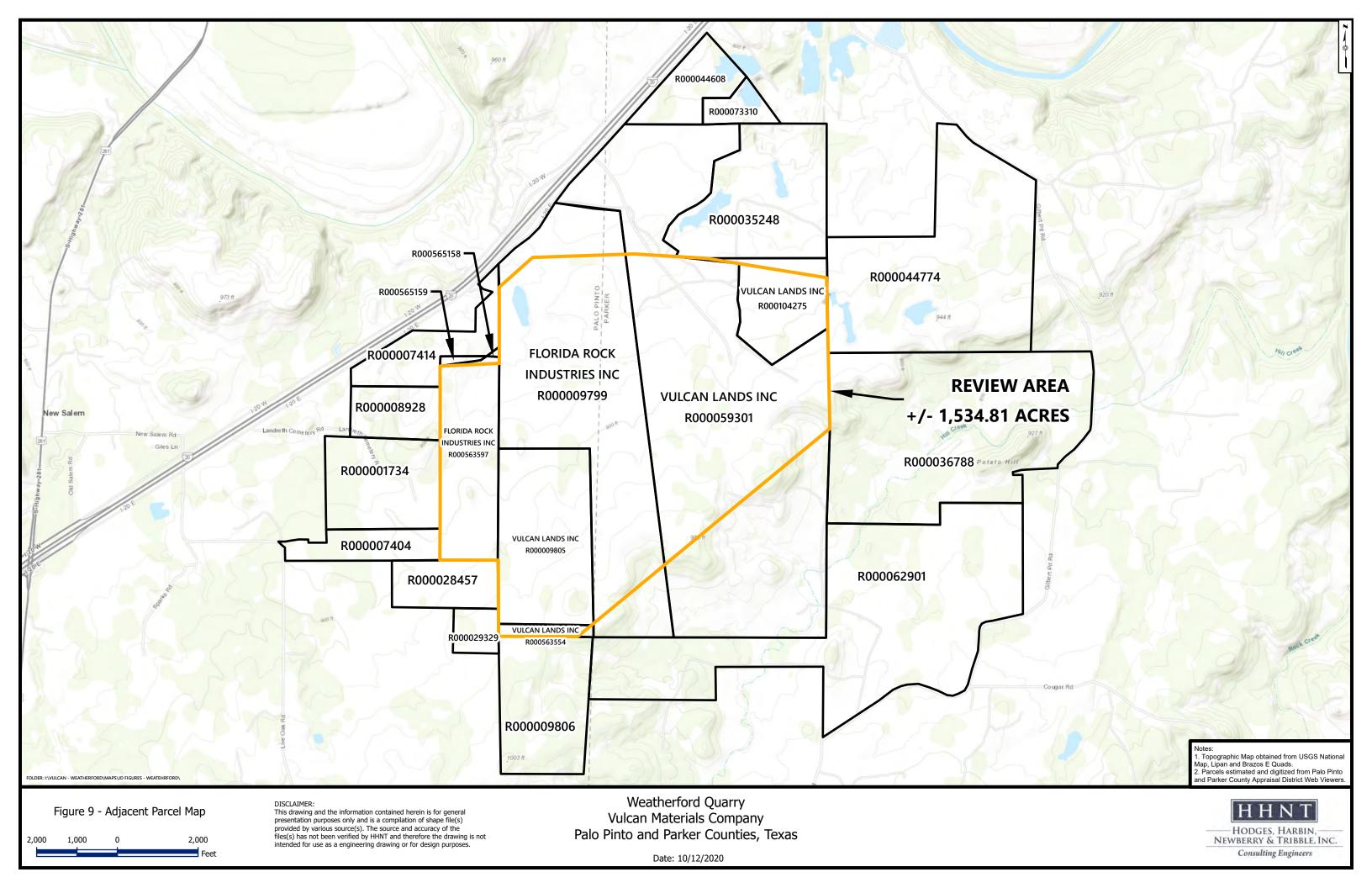


DELINEATED WETLANDS AND STREAMS HAVE NOT BEEN APPROVED BY ACOE.

Palo Pinto and Parker Counties, Texas

Date: 11/12/2020

HODGES, HARBIN, NEWBERRY & TRIBBLE, INC. Consulting Engineers



APPENDIX B - APPLICATIONS

1. Navigable Waters Protection Rule AJD Form



I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 2/9/2020

ORM Number: SWF-2020-00498.

Associated JDs: N/A.

Review Area Location¹: State/Territory: Texas City: Millsap County/Parish/Borough: Palo Pinto/ Parker

Center Coordinates of Review Area: Latitude 32.61782 N Longitude -98.06463 W

II. FINDINGS

- **A. Summary:** Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.
 - The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
 - ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
 - There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
 - □ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size)	§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters):3				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):					
(a)(2) Name	(a)(2) Siz	:e	(a)(2) Criteria	Rationale for (a)(2) Determination	
ERA(i)	1,396	linear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Intermittent stream flowing off-site to the north.	

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



Lakes and por	nds, and im	poundmei	nts of jurisdictional w	vaters ((a)(3) waters):
(a)(3) Name	(a)(3) Size		(a)(3) Criteria	Rationale for (a)(3) Determination
SWA	6.33	acre(s)	(a)(3) Lake/pond or impoundment of a jurisdictional water inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	Pond inundated by flooding from (a)(2) intermittent stream ERA(i) in a typical year.
SWRA	0.48	acre(s)	(a)(3) Lake/pond or impoundment of a jurisdictional water inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	Pond connected to an (a)(3) pond SWA inundated by flooding from SWA

Adjacent wetla	ands ((a)(4)) waters):		
(a)(4) Name	(a)(4) Siz	ze	(a)(4) Criteria	Rationale for (a)(4) Determination
WRA	0.28	acre(s)	(a)(4) Wetland abuts an (a)(1)- (a)(3) water.	Wetland abuts to an (a)(2) water, intermittent stream ERA(i).
WRB	0.14	acre(s)	(a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	Inundated by flooding from (a)(2) intermittent stream ERA(i).
WRC	0.10	acre(s)	(a)(4) Wetland inundated by flooding from an (a)(1)-(a)(3) water in a typical year.	Inundated by flooding from (a)(2) intermittent stream ERA(i).

D. Excluded Waters or Features

Excluded waters $((b)(1) - (b)(12))$:4					
Exclusion Name	Exclusion	n Size	Exclusion ⁵	Rationale for Exclusion Determination	
ERA(e)	2,277	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Ephemeral Channel	

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district

to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



Excluded waters (Excluded waters ((b)(1) – (b)(12)): ⁴					
Exclusion Name	Exclusion		Exclusion ⁵	Rationale for Exclusion Determination		
ERB	186	linear feet	(b)(3) Ephemeral feature, including	Ephemeral Channel		
			an ephemeral stream, swale,			
EDC.	70	line e e e	gully, rill, or pool.	Enhanced Channel		
ERC	73	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale,	Ephemeral Channel		
ERD	225	linear	gully, rill, or pool. (b)(3) Ephemeral	Ephemeral Channel		
		feet	feature, including an ephemeral stream, swale, gully, rill, or pool.			
ERE1	805	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Ephemeral Channel		
ERE2	929	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Ephemeral Channel		
ERF1	728	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Ephemeral Channel		
ERF2	1,040	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Ephemeral Channel		
ERH	2743	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Ephemeral Channel		
ERJ	1,564	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	Ephemeral Channel		
ERK	640	linear feet	(b)(3) Ephemeral feature, including	Ephemeral Channel		



Excluded waters (((b)(1) - (b))(12)):4		
Exclusion Name	Éxclusion	n Size	Exclusion ⁵	Rationale for Exclusion Determination
			an ephemeral	
			stream, swale,	
			gully, rill, or pool.	
EMA	2337	linear	(b)(3) Ephemeral	Ephemeral Channel
		feet	feature, including	
			an ephemeral	
			stream, swale,	
END	740		gully, rill, or pool.	5.1
EMB	710	linear	(b)(3) Ephemeral	Ephemeral Channel
		feet	feature, including	
			an ephemeral	
			stream, swale,	
EMPO	4 600	lineer	gully, rill, or pool.	Enhanced shapped
EMB2	1,628	linear	(b)(3) Ephemeral	Ephemeral channel
		feet	feature, including	
			an ephemeral stream, swale,	
			gully, rill, or pool.	
EMC	1016	linear	(b)(3) Ephemeral	Ephemeral channel
EIVIC	1010	feet	feature, including	Epitemeral Chamilei
		1661	an ephemeral	
			stream, swale,	
			gully, rill, or pool.	
EMD	1,236	linear	(b)(3) Ephemeral	Ephemeral Channel
	.,200	feet	feature, including	Zpriomoral orialmor
			an ephemeral	
			stream, swale,	
			gully, rill, or pool.	
EME	1,046	linear	(b)(3) Ephemeral	Ephemeral Channel
		feet	feature, including	
			an ephemeral	
			stream, swale,	
			gully, rill, or pool.	
EMF	352	linear	(b)(3) Ephemeral	Ephemeral Channel
		feet	feature, including	
			an ephemeral	
			stream, swale,	
	4 4 4 5		gully, rill, or pool.	
HE1	1,113	linear	(b)(3) Ephemeral	Ephemeral Channel
		feet	feature, including	
			an ephemeral	
			stream, swale,	
1110	500	line a	gully, rill, or pool.	Enhanced Channel
HI2	598	linear	(b)(3) Ephemeral	Ephemeral Channel.
		feet	feature, including	
			an ephemeral	



Excluded waters ((b)(1) - (b)	Excluded waters $((b)(1) - (b)(12))$:4						
Exclusion Name	Exclusion		Exclusion ⁵	Rationale for Exclusion Determination				
			stream, swale,					
			gully, rill, or pool.					
HI3	4,501	linear	(b)(3) Ephemeral	Ephemeral Channel.				
		feet	feature, including					
			an ephemeral					
			stream, swale,					
			gully, rill, or pool.					
HE4	700	linear	(b)(3) Ephemeral	Ephemeral Channel				
		feet	feature, including					
			an ephemeral					
			stream, swale,					
	4.550		gully, rill, or pool.					
HE5	1,576	linear	(b)(3) Ephemeral	Ephemeral Channel				
		feet	feature, including					
			an ephemeral					
			stream, swale,					
HE6	1,380	linear	gully, rill, or pool.	Enhanced Channel				
ПЕО	1,300	feet	(b)(3) Ephemeral	Ephemeral Channel				
		ieet	feature, including an ephemeral					
			stream, swale,					
			gully, rill, or pool.					
SWB	0.12	acre(s)	(b)(3) Ephemeral	Isolated, non-permanent water feature that is not				
OVVD	0.12	acrc(3)	feature, including	connected to or inundated by any (a)(1)-(a)(3)				
			an ephemeral	water in a typical year.				
			stream, swale,	Water in a typical year.				
			gully, rill, or pool.					
SWRC	0.68	acre(s)	(b)(3) Ephemeral	Isolated, non-permanent water feature that is not				
		()	feature, including	connected to or inundated by any (a)(1)-(a)(3)				
			an ephemeral	water in a typical year.				
			stream, swale,	31				
			gully, rill, or pool.					
MB	0.14	acre(s)	(b)(1) Non-	Isolated wetland not connected to or inundated				
			adjacent wetland.	by flooding from any (a)(1)- (a)(3) water in a				
				typical year.				
MA	0.29	acre(s)	(b)(1) Non-	Isolated wetland not connected to or inundated				
			adjacent wetland.	by flooding from any (a)(1)- (a)(3) water in a				
				typical year.				
HSW1	0.17	acre(s)	(b)(8) Artificial	Open Water drains into an ephemeral channel				
			lake/pond	off-site. An isolated intermittent stream flows				
			constructed or	into the open water from the southern side.				
			excavated in	Intermittent stream not connected to a (a)(1) –				
			upland or a non-	(a)(3) water.				
			jurisdictional					
			water, so long as					
			the artificial lake					
			or pond is not an					



Excluded waters ((b)(1) - (b))(12)):4		
Exclusion Name	Exclusion		Exclusion ⁵	Rationale for Exclusion Determination
			impoundment of a jurisdictional water that meets (c)(6).	
HSW2	0.64	acre(s)	(b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6).	Surface water feature excavated adjacent to mining area and not connected to or inundated by any jurisdictional waters in a typical year.
HW1	0.05	acre(s)	(b)(1) Non- adjacent wetland.	Emergent wetland not connected to or inundated by flooding from any jurisdictional (a)(1)-(a)(3) waters in a typical year. Adjacent to a (b)(3) ephemeral channel.
HW2	0.02	acre(s)	(b)(1) Non-adjacent wetland.	Ephemeral slough not connected to or inundated by flooding from any jurisdictional (a)(1)-(a)(3) waters in a typical year. Adjacent to a (b)(3) ephemeral channel.
HW3	0.07	acre(s)	(b)(1) Non-adjacent wetland.	Emergent wetland not connected to or inundated by flooding from any jurisdictional (a)(1)-(a)(3) waters in a typical year. Adjacent to a (b)(3) ephemeral channel.
HW4	0.05	acre(s)	(b)(1) Non- adjacent wetland.	Emergent wetland not connected to or inundated by flooding from any jurisdictional (a)(1)-(a)(3) waters in a typical year. Adjacent to a (b)(9) surface water feature.
HW5	0.16	acre(s)	(b)(1) Non-adjacent wetland.	Emergent wetland not connected to or inundated by flooding from any jurisdictional (a)(1)-(a)(3) waters in a typical year.
OLS1	652	linear feet	(b)(4) Diffuse stormwater run- off over upland or directional sheet flow over upland.	Overland surface flow connected (b)(3) ephemeral channel ERK to (b)(3) ephemeral channel EMF.
OLS2	187	linear feet	(b)(4) Diffuse stormwater run- off over upland or directional sheet flow over upland.	Overland surface flow connecting (b)(3) ephemeral channel EMF to (b)(3) ephemeral channel EMB.



Excluded waters ((b)(1) - (b))(12)):4		
Exclusion Name	Exclusion	Size	Exclusion ⁵	Rationale for Exclusion Determination
OLS3	338	linear feet	(b)(4) Diffuse stormwater run- off over upland or directional sheet flow over upland.	Overland surface flow connecting (b)(3) ephemeral channel EMB to itself.
OLS4	1020	linear feet	(b)(4) Diffuse stormwater run- off over upland or directional sheet flow over upland.	Overland surface flow connecting (b)(3) ephemeral channel ERF1 to (b)(3) ephemeral channel ERF2.
OLS5	553	linear feet	(b)(4) Diffuse stormwater run- off over upland or directional sheet flow over upland.	Overland surface flow connecting (b)(3) ephemeral channel ERE/EMA to itself.
OLS6	265	linear feet	(b)(4) Diffuse stormwater run- off over upland or directional sheet flow over upland.	Overland surface flow connecting (b)(3) ephemeral channel ERE/EMA to itself.

III. SUPPORTING INFORMATION

- **A. Select/enter all resources** that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.
 - Information submitted by, or on behalf of, the applicant/consultant: Vulcan Materials Company This information is sufficient for purposes of this AJD.

Rationale: N/A or describe rationale for insufficiency (including partial insufficiency).

- ☐ Data sheets prepared by the Corps: Title(s) and/or date(s).
- ☐ Photographs: Select. Title(s) and/or date(s).
- ☐ Corps site visit(s) conducted on: Date(s).
- ☐ Previous Jurisdictional Determinations (AJDs or PJDs): ORM Number(s) and date(s).
- Antecedent Precipitation Tool: provide detailed discussion in Section III.B.
- □ USDA NRCS Soil Survey: Appendix A, Figure 3
- □ USFWS NWI maps: Appendix A, Figure 4

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
USDA Sources	Web Soil Survey
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Other Sources	N/A.



- **B. Typical year assessment(s):** Antecedant Precipitation information provided in Appendix H shows normal conditions on site during time of the delineation.
- C. Additional comments to support AJD: N/A or provide additional discussion as appropriate.

WETLAND DETERMINATION DATA FORM – Great Plains Region

oject/Site: Weatherford Quarry	(City/County	_{r:} Palo Pin	to & Parker Counties	Sampling Date:	September 16, 2
oplicant/Owner: Vulcan Materials Company				State: TX		
		Section, To	wnship, Ra	inge:		
andform (hillslope, terrace, etc.): Plains						ope (%): 0-5
ubregion (LRR): LRRJ			•	,		
bil Map Unit Name: Hensley Very Stony Clay Loan						
e climatic / hydrologic conditions on the site typical for				(If no, explain in F		
e Vegetation, Soil, or Hydrology				"Normal Circumstances"		No
e Vegetation, Soil, or Hydrology				eeded, explain any answe		
UMMARY OF FINDINGS – Attach site ma			•		•	eatures, etc.
Hydrophytic Vegetation Present? Yes	No X	le th	ne Sampleo	l Area		
Hydric Soil Present? Yes	No X		in a Wetla		No X	
Wetland Hydrology Present? Yes X	No	With	iiii a vvetiai	nd: 163	No	_
EGETATION – Use scientific names of pl	ants.					
ree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator	Dominance Test worl		
·	·			Number of Dominant S That Are OBL, FACW,	•	
				(excluding FAC-):	0	(A)
				Total Number of Domii	nant	
				Species Across All Stra	ata: <u>2</u>	(B)
apling/Shrub Stratum (Plot size:)		= Total Co	ver	Percent of Dominant S That Are OBL, FACW,		(A/B)
•				Prevalence Index wo	rksheet:	
				Total % Cover of:	Multip	oly by:
				OBL species 0	x 1 = 0	
				FACW species 0		
		= Total Co	ver	FAC species 0	x 3 = 0	
lerb Stratum (Plot size:)				FACU species 40		
Muhlenbergia capillaris	20	Yes	FACU		x 5 = 0	
Ambrosia artemisiifolia	20	Yes	FACU	Column Totals: 40	(A) <u>16</u>	<u>0</u> (B)
				Prevalence Index	x = B/A = 4	
				Hydrophytic Vegetati		
				1 - Rapid Test for	Hydrophytic Vege	etation
				2 - Dominance Te	st is >50%	
				3 - Prevalence Ind	lex is ≤3.0 ¹	
				4 - Morphological	Adaptations ¹ (Pro	
0				Problematic Hydro	•	,
	40	- Total Co	ver			
Voody Vine Stratum (Plot size:)	50% = 20	20% =	8	¹ Indicators of hydric so be present, unless dist		
l				Hydrophytic		
		- Total Co	ver	Vegetation	,	,
% Bare Ground in Herb Stratum		- Total Co	VOI	Present? Ye	esNo 🗦	\

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SOIL Sampling Point: ERA27

Profile Desc	ription: (Describe	e to the depth	needed to docur	nent the i	indicator	or confirr	n the absence	of indicators.)
Depth	Matrix			x Feature	S1		_	
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-2	10YR 3/2	100					sandy loam	no mottles or very small %
								bedrock
-				-			-	
	-			-	· ——		·	
					·			
17 0-0.			advisad Matrix CC	S-0			21 -	
	oncentration, D=De Indicators: (Appli					ed Sand G		cation: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
-		Cable to all Er						•
Histosol	oipedon (A2)		Sandy (Redox (S5				Muck (A9) (LRR I, J) Prairie Redox (A16) (LRR F, G, H)
Black Hi				d Matrix (S	,			Surface (S7) (LRR G)
	en Sulfide (A4)			Mucky Mir				Plains Depressions (F16)
	d Layers (A5) (LRR	F)		Gleyed Ma	, ,			RR H outside of MLRA 72 & 73)
1 cm Mu	ıck (A9) (LRR F, G	, H)		d Matrix (Reduc	ed Vertic (F18)
Depleted	d Below Dark Surfa	ce (A11)	Redox I	Dark Surfa	ace (F6)			arent Material (TF2)
	ark Surface (A12)				ırface (F7))		Shallow Dark Surface (TF12)
-	fucky Mineral (S1)	(00) (1		Depressio		4.0\		(Explain in Remarks)
	Mucky Peat or Peat				essions (F			of hydrophytic vegetation and
5 cm ivit	icky Peat or Peat (53) (LRR F)	(IVIL	KA 12 &	73 of LRR	(II)		d hydrology must be present, disturbed or problematic.
Restrictive I	Layer (if present):						dilicas	distance of problematic.
Type: be	drock							
Denth (in	ches): Starting at	2 inches on					Hydric Soil	Present? Yes No X
Remarks:	ones)		<u> </u>				Tiyano con	1105cm: 105 NO
ixemaiks.								
HYDROLO	GY							
Wetland Hy	drology Indicators	S:						
Primary Indic	cators (minimum of	one required;	check all that appl	y)			Seconda	ary Indicators (minimum of two required)
Surface	Water (A1)		Salt Crust	(B11)			Surf	face Soil Cracks (B6)
	ater Table (A2)		Aquatic In	-	es (B13)			rsely Vegetated Concave Surface (B8)
Saturation	` ,		Hydrogen					inage Patterns (B10)
Water M	larks (B1)		Dry-Seaso	n Water 1	Γable (C2)		Oxid	dized Rhizospheres on Living Roots (C3)
Sedimer	nt Deposits (B2)		Oxidized F	Rhizosphe	res on Liv	ing Roots	(C3) (w	/here tilled)
Drift Dep	posits (B3)		(where	not tilled)			Cra	yfish Burrows (C8)
X Algal Ma	at or Crust (B4)		Presence	of Reduce	ed Iron (C4	1)	Satu	uration Visible on Aerial Imagery (C9)
Iron Dep	oosits (B5)		Thin Muck	Surface ((C7)		Geo	omorphic Position (D2)
Inundation	on Visible on Aeria	I Imagery (B7)	Other (Exp	olain in Re	emarks)		FAC	C-Neutral Test (D5)
Water-S	tained Leaves (B9)	ı					Fros	st-Heave Hummocks (D7) (LRR F)
Field Obser	vations:							
Surface Wate	er Present?	Yes No	X Depth (in	ches):				
Water Table			X Depth (in					
Saturation P			X Depth (in				land Hydrolog	y Present? Yes X No
(includes cap	oillary fringe)							,
Describe Re	corded Data (strea	m gauge, moni	toring well, aerial	photos, pr	evious ins	pections),	, if available:	
Remarks:								
Algae, cr	acked surfac	e						
İ								

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: Weatherford Quarry		City/County	_{r:} Palo Pir	to & Parker Counties	Sampling Date:	September 16, 2
Applicant/Owner: Vulcan Materials Company				State: TX		
nvestigator(s): R. Sulkers, M. McKnight		Section, To	wnship, Ra	nge:		
_andform (hillslope, terrace, etc.): Plains						pe (%):
Subregion (LRR): LRRJ			•	,		
Soil Map Unit Name: Hensley Very Stony Clay Loam				NWI classific		
Are climatic / hydrologic conditions on the site typical for thi	is time of ye	ar? Yes X				_
Are Vegetation, Soil, or Hydrologys	-			"Normal Circumstances" p		No
Are Vegetation, Soil, or Hydrology	-			eeded, explain any answe	· ·	
SUMMARY OF FINDINGS – Attach site map			-		•	eatures, etc.
Hydrophytic Vegetation Present? Yes N	10 X	la 4h	- Camania	1 4		
Hydric Soil Present? Yes N	10 X		ie Sampleo in a Wetla		No X	
Wetland Hydrology Present? Yes X	lo	WILI	iii a vvetia	nu! Tes	NO <u>//</u>	-
Remarks:						
/EGETATION – Use scientific names of plar	nts.					
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?		Dominance Test work		
1				Number of Dominant S That Are OBL, FACW,		
2.				(excluding FAC-):	0	(A)
3.				Total Number of Domin	nant	
4				Species Across All Stra	nta: <u>2</u>	(B)
Sapling/Shrub Stratum (Plot size:)		= Total Co	ver	Percent of Dominant Sp That Are OBL, FACW,		(A/B)
1				Prevalence Index wor	kehoot:	
2				Total % Cover of:		v bv
3					x 1 = 10	
4				FACW species 0		
5				FAC species 0	x 3 = 0	
Herb Stratum (Plot size:)		= Total Co	vei	FACU species 80	x 4 = <u>320</u>)
1. Muhlenbergia capillaris	60	Yes	FACU	UPL species 0	x 5 = 0	
2. Allium canadense	20	Yes	FACU	Column Totals: 90	(A) <u>330</u>) (B)
3. Eleocharis acicularis	10	No	OBL	Prevalence Index	= B/A = 3.67	
4				Hydrophytic Vegetation		
5				1 - Rapid Test for H		ation
6				2 - Dominance Tes	st is >50%	
7 8				3 - Prevalence Inde	ex is ≤3.0 ¹	
8				4 - Morphological A	Adaptations ¹ (Prov	ride supporting
10					s or on a separate	,
	90	- Total Co	ver	Problematic Hydro	pnytic vegetation	(Explain)
Woody Vine Stratum (Plot size:) 50%	₆ = 45	20% =		¹ Indicators of hydric soi be present, unless distu		
2.				Hydrophytic		
				Vegetation	V	
% Bare Ground in Herb Stratum		- Total Co	VCI	Present? Ye	s No_X	,

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SOIL Sampling Point: ERE2 Wetland

Depth	Matrix		th needed to docu	ox Feature				,
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10YR 3/3	95	10YR 4/6	5	C	M	loamy	redox at 5%
4+				_	-			Bedrock
				-	-			Boarook
	-							
					-			
-								-
	_,						<u> </u>	
	Concentration, D=De					ed Sand G		cation: PL=Pore Lining, M=Matrix.
Hydric Soil	I Indicators: (Appl	icable to all	LRRs, unless other	rwise no	ted.)		Indicators	s for Problematic Hydric Soils ³ :
Histoso	ol (A1)			Gleyed M				Muck (A9) (LRR I, J)
	Epipedon (A2)		-	Redox (S	-			Prairie Redox (A16) (LRR F, G, H)
·	Histic (A3)			d Matrix (-			Surface (S7) (LRR G)
	gen Sulfide (A4)	,		-	neral (F1)		_	Plains Depressions (F16)
	ed Layers (A5) (LRR luck (A9) (LRR F, G			Gleyed M	. ,		`	RR H outside of MLRA 72 & 73) ced Vertic (F18)
	luck (A9) (LRR F, G ed Below Dark Surfa			ed Matrix (Dark Surf				ced Vertic (F18) Parent Material (TF2)
	Dark Surface (A12)	(7 (7 (7)			urface (F7)		Shallow Dark Surface (TF12)
	Mucky Mineral (S1)			Depression		,		(Explain in Remarks)
-	Mucky Peat or Peat	(S2) (LRR (essions (F	16)		of hydrophytic vegetation and
5 cm M	lucky Peat or Peat (S3) (LRR F)	(MI	_RA 72 &	73 of LRF	R H)	wetlan	nd hydrology must be present,
							unless	s disturbed or problematic.
	Layer (if present):							
_{Туре: В}	Bedrock		 .					V
Depth (ii	nches): Starting at	4 inches o	<u>nwa</u> rd				Hydric Soi	I Present? Yes No X
Remarks:								
Sto	ony							
	,							
	2CV							
HYDROLO								
	ydrology Indicators							
	licators (minimum of	one require	d; check all that app	ly)			Second	ary Indicators (minimum of two required)
X Surface	e Water (A1)		Salt Crus	t (B11)				face Soil Cracks (B6)
_	/ater Table (A2)		Aquatic Ir					arsely Vegetated Concave Surface (B8)
	tion (A3)		Hydrogen	Sulfide C	dor (C1)		Dra	inage Patterns (B10)
	Marks (B1)		-		Table (C2			dized Rhizospheres on Living Roots (C3
	ent Deposits (B2)				eres on Liv	ing Roots		where tilled)
	eposits (B3)		•	not tilled				yfish Burrows (C8)
	lat or Crust (B4)				ed Iron (C	4)		uration Visible on Aerial Imagery (C9)
	eposits (B5)		Thin Muc					omorphic Position (D2)
	tion Visible on Aeria		7) Other (Ex	plain in R	emarks)			C-Neutral Test (D5)
	Stained Leaves (B9))					Fro	st-Heave Hummocks (D7) (LRR F)
Field Obse		V		21				
Surface Wa			No Depth (ir			<u> </u>		
Water Table	e Present?	Yes	No Depth (ir	nches):				V
Saturation I		Yes	No Depth (ir	nches):		Wet	land Hydrolog	yy Present? Yes X No
	apillary fringe)	m goligo ma	nitoring well periol	nhotoo n	rovious in	nootiona	if available:	
Describe K	ecorded Data (strea	ııı yauye, mo	nitioning well, aerial	рпоюѕ, р	evious ins	spections)	, ii avaliable.	
Remarks:								
Remarks:								

WETLAND DETERMINATION DATA FORM – Great Plains Region

Palo Pinto & Parker Counties Sampling Date: September 16, 2 State: TX Sampling Point: ERE9 Upland Ship, Range: Oncave, convex, none): None Slope (%): 0-5 Long: -98.069668 NWI classification: None No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No (If needed, explain any answers in Remarks.) point locations, transects, important features, etc.
oncave, convex, none): none Slope (%): 0-5 Long: -98.069668 Datum: NAD83 NWI classification: None No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No (If needed, explain any answers in Remarks.) point locations, transects, important features, etc.
Long:98.069668 Datum: NAD83 NWI classification: None No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No (If needed, explain any answers in Remarks.) point locations, transects, important features, etc.
NWI classification: None No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No (If needed, explain any answers in Remarks.) point locations, transects, important features, etc.
No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No (If needed, explain any answers in Remarks.) point locations, transects, important features, etc.
Are "Normal Circumstances" present? Yes X No (If needed, explain any answers in Remarks.) point locations, transects, important features, etc.
(If needed, explain any answers in Remarks.) point locations, transects, important features, etc.
point locations, transects, important features, etc.
Sampled Area
a Wetland? Yes No X
4 Wolland. 165 No
ndicator Dominance Test worksheet: Status Number of Dominant Species
That Are OBL FACW or FAC
(excluding FAC-): 0 (A)
Total Number of Dominant
Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)
Prevalence Index worksheet:
Total % Cover of: Multiply by:
OBL species 10 x 1 = 10
FACW species $\frac{0}{2}$ $x = \frac{0}{2}$
FAC species $\frac{0}{200}$ x 3 = $\frac{0}{260}$
FACU species $\frac{90}{0}$ $x = \frac{360}{0}$ FACU UPL species $\frac{90}{0}$ $x = \frac{360}{0}$
IDI I Column Lotolo, IVV (A) (D) (D)
Prevalence Index = B/A = 3.6
ACU
Prevalence Index = B/A = 3.6 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
Prevalence Index = B/A = 3.6 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
Prevalence Index = B/A = 3.6 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
Prevalence Index = B/A = 3.6 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is <3.01
Prevalence Index = B/A = 3.6 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
Prevalence Index = B/A = 3.6 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
Prevalence Index = B/A = 3.6 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
Prevalence Index = B/A = 3.6 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 1Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic
Prevalence Index = B/A = 3.6 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 1Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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SOIL Sampling Point: ERE9 Upland

Profile Desc Depth	cription: (Describ Matrix	e to the depth	needed to document the ind Redox Features	icator or confirm	n the absence	e of indicators.)
(inches)	Color (moist)	%		Γype ¹ Loc ²	Texture	Remarks
0-4	10YR 3/3	100			clay loam	
4+					2.2) 134111	bedrock
	-					
	-					
		<u> </u>				
¹ Type: C=C	oncentration. D=De	epletion. RM=R	educed Matrix, CS=Covered or	r Coated Sand G	rains. ² Lo	cation: PL=Pore Lining, M=Matrix.
		•	RRs, unless otherwise noted.			s for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gleyed Matrix	(S4)	1 cm N	Muck (A9) (LRR I, J)
	pipedon (A2)		Sandy Redox (S5)		Coast	Prairie Redox (A16) (LRR F, G, H)
	istic (A3)		Stripped Matrix (S6)			Surface (S7) (LRR G)
	en Sulfide (A4)	. =\	Loamy Mucky Minera	. ,	_	Plains Depressions (F16)
	d Layers (A5) (LRF uck (A9) (LRR F, G		Loamy Gleyed Matrix Depleted Matrix (F3)		`	RR H outside of MLRA 72 & 73) ced Vertic (F18)
	d Below Dark Surfa		Redox Dark Surface			Parent Material (TF2)
-	ark Surface (A12)	,	Depleted Dark Surfa			Shallow Dark Surface (TF12)
	Mucky Mineral (S1)		Redox Depressions			(Explain in Remarks)
· ——	Mucky Peat or Pea		, •			of hydrophytic vegetation and
5 cm Mu	ucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 c	of LRR H)		d hydrology must be present, s disturbed or problematic.
Restrictive	Layer (if present):				uniess	s disturbed of problematic.
Type: be						
	ches): Starting at	4 inches onw	 vard		Hydric Soil	I Present? Yes No X
Remarks:	,		_		, , , , , , , , , , , , , , , , , , , ,	
	Stony					
	Stony					
HADBOLO	acv					
HYDROLO						
	drology Indicators		check all that apply)		Cocond	ary Indicators (minimum of two required)
-	Water (A1)	one required, o	Salt Crust (B11)		·	ary Indicators (minimum of two required) face Soil Cracks (B6)
	ater Table (A2)		Aquatic Invertebrates (I	R13)		arsely Vegetated Concave Surface (B8)
Saturati	` '		Hydrogen Sulfide Odor	•		ninage Patterns (B10)
	farks (B1)		Dry-Season Water Tab			dized Rhizospheres on Living Roots (C3)
	nt Deposits (B2)		Oxidized Rhizospheres			where tilled)
Drift De	posits (B3)		(where not tilled)	-		yfish Burrows (C8)
Algal Ma	at or Crust (B4)		Presence of Reduced I	ron (C4)	Sat	uration Visible on Aerial Imagery (C9)
Iron De	posits (B5)		Thin Muck Surface (C7)	Geo	omorphic Position (D2)
	on Visible on Aeria		Other (Explain in Rema	arks)	·	C-Neutral Test (D5)
	Stained Leaves (B9)			Fro:	st-Heave Hummocks (D7) (LRR F)
Field Obser						
Surface Wat			Depth (inches):			
Water Table	Present?		Depth (inches):			V
Saturation P		Yes No	Depth (inches):	Wetl	land Hydrolog	y Present? Yes No X
	pillary fringe) corded Data (strea	m gauge, monit	toring well, aerial photos, previ	ous inspections),	if available:	
	`			. ,,		
Remarks:						

Project/Site: Weatherford Quarry		City/County	,: Palo Pin	to & Parker Counties	Sampling Date: September 16,
pplicant/Owner: Vulcan Materials Company					Sampling Point: ERE14
nvestigator(s): R. Sulkers, M. McKnight		Section, To	wnship, Ra	nge:	
andform (hillslope, terrace, etc.): Plains		Local relief	f (concave,	convex, none): none	Slope (%): <u>0-5</u>
ubregion (LRR): LRRJ	Lat: 32.	621379		_ Long: <u>-98.06867</u>	Datum: NAD83
oil Map Unit Name: Hensley Very Stony Clay Loam	1			NWI classific	cation: None
re climatic / hydrologic conditions on the site typical for	this time of ye	ar? Yes X	No _	(If no, explain in R	Remarks.)
re Vegetation, Soil, or Hydrology	_significantly	disturbed?	Are	"Normal Circumstances" ן	present? Yes X No
re Vegetation, Soil, or Hydrology	_naturally pro	blematic?	(If ne	eeded, explain any answe	ers in Remarks.)
UMMARY OF FINDINGS – Attach site ma	p showing	samplin	g point l	ocations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes	No X	lo th	ne Sampleo	l Aron	
Hydric Soil Present? Yes	No <u>X</u>		ie Sampied in a Wetla		No X
Wetland Hydrology Present? Yes X Remarks:	No				
Recent rainfall events resulted in satured i		iis was	ine only	Tiyarologic indica	ator noted.
	Absolute		Indicator	Dominance Test work	sheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant S	
1 2				That Are OBL, FACW, (excluding FAC-):	0 (A)
3				Total Number of Domir	nant
I				Species Across All Stra	•
Sapling/Shrub Stratum (Plot size:)		= Total Co	ver	Percent of Dominant S That Are OBL, FACW,	
1 2			-	Prevalence Index wor	ksheet:
3.					Multiply by:
4					$x = \frac{0}{0}$
5					$x = \frac{0}{0}$ $x = \frac{0}{0}$
Herb Stratum (Plot size:)		= Total Co	ver	FACU species 90	$\frac{1}{x} = \frac{1}{360}$
1. Ambrosia artemisiifolia	60	Yes	FACU		x 5 = 0
Muhlenbergia capillaris	20	Yes	FACU	Column Totals: 90	
3. Allium canadense	5	No	FACU	Prevalence Index	, - P/A - 4
4. Euphorbia marginata	5	No	FACU	Hydrophytic Vegetation	
5				1	Hydrophytic Vegetation
5				2 - Dominance Tes	st is >50%
7				3 - Prevalence Ind	ex is ≤3.0 ¹
s 9				4 - Morphological /	Adaptations ¹ (Provide supporting s or on a separate sheet)
10.					phytic Vegetation ¹ (Explain)
		= Total Co			
Noody Vine Stratum (Plot size:) 1	50% = 45	_ 20% =_	18	'Indicators of hydric so be present, unless dist	il and wetland hydrology must urbed or problematic.
				Hydrophytic	
2 % Bare Ground in Herb Stratum		= Total Co	ver	Vegetation Present? Ye	es No X

SOIL Sampling Point: ERE14

Profile Desc	cription: (Describ	e to the depth	needed to docu	ment the i	indicator	or confirr	n the absenc	e of indicators.)
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)		Color (moist)	%	Type'	Loc ²	Texture	Remarks
0-4	10YR 4/2	100					clay loam	no redox
4+	-							bedrock
'-								
	-				· ——			-
		_						-
		_						
	-							
	oncentration, D=De					d Sand G		ocation: PL=Pore Lining, M=Matrix.
-	Indicators: (Appl	icable to all LR						s for Problematic Hydric Soils ³ :
Histosol	,			Gleyed Ma				Muck (A9) (LRR I, J)
	pipedon (A2) istic (A3)		-	Redox (S5 d Matrix (S	-			t Prairie Redox (A16) (LRR F, G, H) Surface (S7) (LRR G)
	en Sulfide (A4)			Mucky Mir	,			Plains Depressions (F16)
	d Layers (A5) (LRF	R F)	-	Gleyed Ma			_	RR H outside of MLRA 72 & 73)
	uck (A9) (LRR F, G		-	ed Matrix (Redu	iced Vertic (F18)
	d Below Dark Surfa	ace (A11)		Dark Surfa	` '			Parent Material (TF2)
	ark Surface (A12)				urface (F7)			Shallow Dark Surface (TF12)
-	Mucky Mineral (S1) Mucky Peat or Pea			Depressio	ns (F8) essions (F	16)		r (Explain in Remarks) s of hydrophytic vegetation and
	ucky Peat or Peat (, , ,	, <u> </u>		73 of LRR	-		nd hydrology must be present,
· <u></u>	, ,	, ,	,			,		ss disturbed or problematic.
	Layer (if present):							
, , <u> </u>	<u>edrock</u>		_					V
Depth (in	ches): Starting	at 4 inche	<u>s</u> onward				Hydric So	il Present? Yes No X
Remarks:								
١ ,	Very stony							
· ·	very storry							
HYDROLO	GY .							
	drology Indicator	e•						
_	cators (minimum of		hock all that ann	lv)			Socono	dary Indicators (minimum of two required)
X Surface	•	one required, c	Salt Crust					rface Soil Cracks (B6)
	ater Table (A2)		Aquatic Ir		s (B13)			earsely Vegetated Concave Surface (B8)
X Saturati			Hydrogen					ainage Patterns (B10)
Water M			Dry-Seas				· · · · · · · · · · · · · · · · · · ·	idized Rhizospheres on Living Roots (C3)
	nt Deposits (B2)		Oxidized			ing Roots		where tilled)
Drift De	posits (B3)		(where	not tilled)			Cra	ayfish Burrows (C8)
Algal Ma	at or Crust (B4)		Presence	of Reduce	ed Iron (C4	-)	Sa	turation Visible on Aerial Imagery (C9)
Iron Dep	posits (B5)		Thin Mucl	k Surface ((C7)		Ge	eomorphic Position (D2)
	ion Visible on Aeria		Other (Ex	plain in Re	emarks)			C-Neutral Test (D5)
	Stained Leaves (B9)					Fro	ost-Heave Hummocks (D7) (LRR F)
Field Obser		Y		2"				
Surface Wat		Yes No	Depth (ir	iches): Z		_		
Water Table	Present?	Yes No	X Depth (ir	iches):		_		v
Saturation P	resent? pillary fringe)	Yes X No	Depth (ir	iches): 1"		_ Wet	land Hydrolo	gy Present? Yes X No
	corded Data (strea	m gauge, monit	oring well, aerial	photos, pr	evious ins	pections),	if available:	
	•					. //		
Remarks:								
	surface water	sheet flow						

Project/Site: Weatherford Quarry		Citv/County	_{∕∶} Palo Pir	to & Parker Counties	Sampling Date	_{e:} September 16, 2
Applicant/Owner: Vulcan Materials Company				State: TX		
D. Oullians M. Malkainkt		Section, To	ownship, Ra	ange:		
andform (hillslope, terrace, etc.): Plains		Local relie	f (concave,	convex, none): none		Slope (%): 0-3
subregion (LRR): LRRJ						
oil Map Unit Name: Hensley Complex				NWI classific		
re climatic / hydrologic conditions on the site typical for						_
Are Vegetation, Soil, or Hydrology				"Normal Circumstances"	· ·	X _{No}
are Vegetation, Soil, or Hydrology				eeded, explain any answe		
SUMMARY OF FINDINGS – Attach site ma						
Hydrophytic Vegetation Present? Yes X	No	le th	ne Sampleo	d Aron		
Hydric Soil Present? Yes	No X		nin a Wetla		No_X	
Wetland Hydrology Present? Yes X	No	With	iii a wetia		No	
Remarks:						
/EGETATION – Use scientific names of pl	Absolute	Dominant	t Indicator	Dominance Test work	ksheet:	
Tree Stratum (Plot size:)	<u></u>	Species?		Number of Dominant S	•	
1				That Are OBL, FACW, (excluding FAC-):	or FAC 1	(A)
2				,		
3 4				Total Number of Domir Species Across All Stra	^	(B)
		= Total Co	ver	Percent of Dominant S	necies	
Sapling/Shrub Stratum (Plot size:)				That Are OBL, FACW,		(A/B)
1				Prevalence Index wor	rksheet:	
2				Total % Cover of:	Mul	tiply by:
3			. ———	OBL species 25	x 1 = <u>2</u>	25
4 5		-		FACW species 0		
o		= Total Co	ver		x 3 = <u>C</u>	
Herb Stratum (Plot size:)				FACU species 35		
1. Eleocharis acicularis	25	Yes	OBL		x 5 = <u>C</u>	
2. Ambrosia artemisiifolia	15	Yes	FACU	Column Totals: 60	(A) <u>1</u>	65 (B)
Muhlenbergia capillaris	15	Yes	FACU	Prevalence Index	c = B/A = 2.75	;
Allium canadense	5	No	FACU	Hydrophytic Vegetati		
5				1 - Rapid Test for		getation
5				2 - Dominance Tes		
7				X 3 - Prevalence Ind	ex is ≤3.0 ¹	
3a				4 - Morphological	Adaptations ¹ (P	rovide supporting
9				data in Remark	•	*
10	60	- Total Co		Problematic Hydro	phytic Vegetation	on' (Explain)
Woody Vine Stratum (Plot size:) 1)	50% = 30	20% = 1	12	¹ Indicators of hydric so be present, unless dist		
2.				Hydrophytic		
		= Total Co		Vegetation	es X No	
% Bare Ground in Herb Stratum		i otai oo		Present? Ye		

SOIL Sampling Point: ERH3

Profile Desc	ription: (Describe	to the depth ne	eded to docui	ment the i	ndicator o	or confirm	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature:	S			
(inches)	Color (moist)		olor (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3"	10YR 3/2	100					clayey loam	no mottles
3+								bedrock
		- 					•	<u> </u>
				- '				-
	-						-	
1Tuno. C=C		alation DM=Dadu	and Matrix Co		d or Coots			nation: DI -Doro Lining M-Matrix
	oncentration, D=Dep Indicators: (Applic					a Sana Gr		cation: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol		able to all Entre		Gleyed Ma				fluck (A9) (LRR I, J)
	oipedon (A2)			Redox (S5	. ,			Prairie Redox (A16) (LRR F, G, H)
Black His			-	d Matrix (S				surface (S7) (LRR G)
	n Sulfide (A4)			Nucky Mir	•			lains Depressions (F16)
	Layers (A5) (LRR	F)	-	Gleyed Ma				R H outside of MLRA 72 & 73)
1 cm Mu	ck (A9) (LRR F, G ,	H)		d Matrix (I	,		Reduc	ed Vertic (F18)
	d Below Dark Surfac	ce (A11)		Dark Surfa				arent Material (TF2)
_	ark Surface (A12)				rface (F7)			hallow Dark Surface (TF12)
	lucky Mineral (S1) /lucky Peat or Peat ((CO) (LDD C H)		Depressio	` ,	16)		(Explain in Remarks) of hydrophytic vegetation and
	icky Peat or Peat (S			•	essions (F ⁻ 73 of LRR	,		d hydrology must be present,
5 6111 1010	icky i cat of i cat (o	o) (ERRY)	(11112		J OI LIKIK	•••,		disturbed or problematic.
Restrictive L	_ayer (if present):							· · · · · · · · · · · · · · · · · · ·
Type: be	drock							
Depth (inc	ches): Starting at	3 inches onward	t				Hydric Soil	Present? Yes No X
Remarks:	,							
HYDROLO	CV							
_	drology Indicators:						0 1	
-	cators (minimum of o	one required; che					'	ary Indicators (minimum of two required)
X Surface			Salt Crust		(5.40)			ace Soil Cracks (B6)
_	ter Table (A2)		Aquatic In					rsely Vegetated Concave Surface (B8)
Saturatio			Hydrogen					nage Patterns (B10)
	arks (B1)	-	Dry-Seaso			5 .		dized Rhizospheres on Living Roots (C3)
	nt Deposits (B2)	•	Oxidized F	•		ng Roots	. ,	there tilled)
	oosits (B3)		· ·	not tilled)		`		/fish Burrows (C8)
_	at or Crust (B4)	•	Presence		-)	· <u></u>	uration Visible on Aerial Imagery (C9)
	osits (B5)		Thin Muck					morphic Position (D2)
	on Visible on Aerial	imagery (B7)	Other (Ex	piain in Re	emarks)			c-Neutral Test (D5)
Field Observ	tained Leaves (B9)					1	FIOS	st-Heave Hummocks (D7) (LRR F)
Surface Water		_{/es} <u>X</u> No	Donth (in	shoo). 2"				
		es No _X						
Water Table								5 .0 v X v
Saturation Pr (includes cap	resent? \ hillary fringe\	′es No X	Depth (in	ches):		_ Wetia	and Hydrolog	y Present? Yes X No
	corded Data (stream	n gauge, monitorii	ng well, aerial	photos, pr	evious ins	pections),	if available:	
Remarks:								

Project/Site: Weatherford Quarry	(City/County	r: Palo Pin	to & Parker Counties	Sampling Date: Se	eptember 16, 20
Applicant/Owner: Vulcan Materials Company				State: TX		
Investigator(s): R. Sulkers, M. McKnight		Section, To	wnship, Ra	nge:		
Landform (hillslope, terrace, etc.): Plains		Local relie	f (concave, o	convex, none): none	Slope	(%): <u>0-3</u>
Subregion (LRR): LRRJ	_ Lat: 32.6	619269		Long: <u>-98.061987</u>	Datum:	NAD83
Soil Map Unit Name: Hensley Complex				NWI classific	cation: None	
Are climatic / hydrologic conditions on the site typical for this	time of yea	ar? Yes X				
Are Vegetation, Soil, or Hydrologysi	ignificantly	disturbed?	Are "	'Normal Circumstances" p	oresent? Yes X	No
Are Vegetation, Soil, or Hydrologyn	aturally pro	blematic?	(If ne	eeded, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map						tures, etc.
Hydrophytic Vegetation Present? Yes No	, X	lo 4h	a Campled	Avec		
Hydric Soil Present? Yes No	<u> Х</u>		ne Sampled nin a Wetlan	nd? Yes	No X	
Wetland Hydrology Present? Yes X No		With	III a Wellai	10: 103		
Remarks: Hydrology present due to presence of c	verland	l surfac	e flow a	s a result of rece	nt rainfall eve	nts.
VEGETATION – Use scientific names of plant	ts.					
Tree Stratum (Plot size:)	Absolute % Cover		Indicator Status	Dominance Test work		
1				Number of Dominant S That Are OBL, FACW,	or FAC	
2				(excluding FAC-):	0	(A)
3.				Total Number of Domin		
4				Species Across All Stra	ata: <u>1</u>	(B)
Sapling/Shrub Stratum (Plot size:)		= Total Co	ver	Percent of Dominant Sp That Are OBL, FACW,		(A/B)
1				Prevalence Index wor	ksheet:	
2.					Multiply k	oy:
3				OBL species 15	x 1 = 15	
5				FACW species 0		
		= Total Co	ver	FAC species 0	x 3 = 0	
Herb Stratum (Plot size:)	00	V	FACIL	FACU species 95		
1. Muhlenbergia capillaris 2. Ambrosia artemisiifolia	80 15	Yes No	FACU FACU	UPL species 0 Column Totals: 110	x = 0 (A) 395	
3. Eleocharis acicularis	15	No	OBL	Column Totals: 110	(A) <u>555</u>	(B)
4 Croton capitatus	5	No	NI	Prevalence Index	= B/A = 3.59	
5	<u> </u>			Hydrophytic Vegetation	on Indicators:	
6				1 - Rapid Test for I	-lydrophytic Vegetati	on
7				2 - Dominance Tes		
8				3 - Prevalence Inde		
9.				4 - Morphological A	Adaptations¹ (Provide s or on a separate sl	e supporting neet)
10			·	Problematic Hydro	•	,
	115	- Total Co	vor			
Woody Vine Stratum (Plot size:) 50%	57.5	20% =	23	¹ Indicators of hydric soi be present, unless dist		
2				Hydrophytic		
0/ Para Craund in Heath Chartering		= Total Co	ver	Vegetation Ye	s No X	
% Bare Ground in Herb Stratum						

US Army Corps of Engineers

SOIL						Sampling Point	ERH15
Profile Description: (Des	scribe to the depth	needed to docum	nent the indic	ator or confir	m the absence		
	atrix		x Features	1 . 2	<u> </u>		
(inches) Color (mo	oist) %	Color (moist)	<u>%</u> <u>Ty</u>	/pe ¹ Loc ²	Texture	Remarks	
<u> 0+</u>						bedrock	
			·				
			· — —		. ———	_	
							
¹Type: C=Concentration, I	D=Depletion RM=F	Reduced Matrix CS	S=Covered or 0	Coated Sand G	Grains ² Lo	cation: PL=Pore Lining, N	Л=Matrix
Hydric Soil Indicators: (A				<u> </u>		for Problematic Hydric	
Histosol (A1)	••		Gleyed Matrix ((S4)		Muck (A9) (LRR I, J)	
Histic Epipedon (A2)			Redox (S5)	,		Prairie Redox (A16) (LRI	R F, G, H)
Black Histic (A3)		Stripped	Matrix (S6)		Dark S	Surface (S7) (LRR G)	
Hydrogen Sulfide (A4))	Loamy I	Mucky Mineral	(F1)	_	Plains Depressions (F16)	
Stratified Layers (A5)			Gleyed Matrix	(F2)	`	RR H outside of MLRA 7	2 & 73)
1 cm Muck (A9) (LRR	·		d Matrix (F3)	F6)		ced Vertic (F18)	
Depleted Below DarkThick Dark Surface (A			Dark Surface (I d Dark Surface	-		Parent Material (TF2) Shallow Dark Surface (TF	12)
Sandy Mucky Mineral	•		o Dark Suriace Depressions (F	. ,		(Explain in Remarks)	12)
2.5 cm Mucky Peat or			ains Depressio			of hydrophytic vegetation	n and
5 cm Mucky Peat or P			RA 72 & 73 of			d hydrology must be pres	
					unless	s disturbed or problemation	
Restrictive Layer (if pres	ent):						
Type: bedrock							V
Depth (inches): Surfac	ce				Hydric Soi	I Present? Yes	No_X
Remarks:							
Could not take	e soil samples	due to bedroo	ck at surfac	ce.			
HYDROLOGY							
Wetland Hydrology Indic	ators:						
Primary Indicators (minimu	ım of one required;	check all that apply	y)		Second	ary Indicators (minimum o	of two required)
Surface Water (A1)	•	Salt Crust	(B11)		Sur	face Soil Cracks (B6)	
High Water Table (A2))	Aquatic Inv		13)		arsely Vegetated Concave	Surface (B8)
Saturation (A3)		Hydrogen				inage Patterns (B10)	, ,
Water Marks (B1)		Dry-Seaso	n Water Table	e (C2)	Oxi	dized Rhizospheres on Li	ving Roots (C3
Sediment Deposits (B	2)	Oxidized F	Rhizospheres o	on Living Roots	s (C3) (v	vhere tilled)	
Drift Deposits (B3)		(where r	not tilled)		Cra	yfish Burrows (C8)	
X Algal Mat or Crust (B4	.)	Presence	of Reduced Iro	on (C4)	Sat	uration Visible on Aerial I	magery (C9)
Iron Deposits (B5)		Thin Muck	Surface (C7)		Geo	omorphic Position (D2)	
Inundation Visible on A	Aerial Imagery (B7)	Other (Exp	olain in Remarl	ks)	FA	C-Neutral Test (D5)	
Water-Stained Leaves	s (B9)				Fro	st-Heave Hummocks (D7) (LRR F)
Field Observations:							
Surface Water Present?		o Depth (ind					
Water Table Present?	Yes No	o Depth (inc	ches):				
Saturation Present? (includes capillary fringe)	Yes No	o Depth (inc	ches):	Wet	tland Hydrolog	y Present? Yes X	No
Describe Recorded Data (stream gauge, mon	itoring well, aerial բ	ohotos, previou	us inspections)	, if available:		
Remarks:							
Overland surface	water flow						

Project/Site: Weatherford Quarry		Citv/County	_{v:} Palo Pir	nto & Parker Counties	Sampling Date: S	September 16, 2
Applicant/Owner: Vulcan Materials Company				State: TX		
		Section, To	ownship, Ra	ange:		
andform (hillslope, terrace, etc.): Plains						e (%):
ubregion (LRR): LRRJ				•		
oil Map Unit Name: Hensley Very Stony Clay Loam,						
re climatic / hydrologic conditions on the site typical for th						_
are Vegetation, Soil, or Hydrology	•	· · · · · · · · · · · · · · · · · · ·		"Normal Circumstances" ¡	•	No
re Vegetation, Soil, or Hydrology				eeded, explain any answe	·	
SUMMARY OF FINDINGS – Attach site map						atures, etc.
Hydrophytic Vegetation Present? Yes N	No X	lo 4k	ne Sampleo	4 Area		
Hydric Soil Present? Yes N	Vo <u>X</u>		nie Sampied nin a Wetla		No X	
Wetland Hydrology Present? Yes N	√o <u>X</u>	With	iiii a vvetia	iiu: 165		
Remarks:						
(FOFTATION II : (1)						
EGETATION – Use scientific names of plan	Absolute	Dominant	t Indicator	Dominance Test work	sheet:	
Tree Stratum (Plot size:)		Species?		Number of Dominant S	•	
1				That Are OBL, FACW, (excluding FAC-):	or FAC 1	(A)
2.						(^)
3				Total Number of Domir Species Across All Stra	^	(B)
4		= Total Co				
Sapling/Shrub Stratum (Plot size:)		- Total Co	vei	Percent of Dominant S That Are OBL, FACW,		(A/B)
1				Prevalence Index wor	·kshoot·	
2					Multiply	bv-
3.					x 1 = 20	
4			·	FACW species 0		
5					x 3 = 0	
Herb Stratum (Plot size:)		= Total Co	ver	FACU species 70	x 4 = 280	
1. Muhlenbergia capillaris	60	Yes	FACU		x 5 = 0	
Eleocharis acicularis	20	Yes	OBL	Column Totals: 90	(A) <u>300</u>	(B)
Ambrosia artemisiifolia	10	No	FACU	Prevalence Index	, _{– D/A} – 3.33	
Croton capitatus	10	No	NI	Hydrophytic Vegetation		
5		-		1 - Rapid Test for I		tion
S				2 - Dominance Tes		
7				3 - Prevalence Ind		
3				4 - Morphological	Adaptations ¹ (Provi	de supporting
9			-	data in Remark	s or on a separate	sheet)
10		= Total Co	Wer	Problematic Hydro	phytic Vegetation ¹	(Explain)
Woody Vine Stratum (Plot size:) 500	% = <u>50</u>	20% =	20	¹ Indicators of hydric so be present, unless dist		
				Hydrophytic		
2.				Vegetation		
2 % Bare Ground in Herb Stratum		= Total Co	ver	Present? Ye	sNo_X	

SOIL Sampling Point: ERH Upland

Depth	cription: (Descr Matr	-		ment the ox Feature		or contin	n uie abseiice	or mulcalors.)
_(inches)	Color (moist		Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0+	•		•					bedrock
					· ——			
	· ·			_				
-								
				_				
¹Type: C=C	Concentration, D=	Depletion RM=R	educed Matrix C	S=Covere	d or Coate	d Sand G	rains ² l o	cation: PL=Pore Lining, M=Matrix.
	Indicators: (Ap	_				d Garia Gi		s for Problematic Hydric Soils ³ :
Histoso				Gleyed Ma				Muck (A9) (LRR I, J)
	pipedon (A2)			Redox (S5				Prairie Redox (A16) (LRR F, G, H)
	listic (A3)		-	d Matrix (S	•			Surface (S7) (LRR G)
_	en Sulfide (A4)			Mucky Mi	,			Plains Depressions (F16)
	ed Layers (A5) (LF	RR F)	-	Gleyed M			_	RR H outside of MLRA 72 & 73)
	uck (A9) (LRR F,			ed Matrix (`	ced Vertic (F18)
	ed Below Dark Su	•		Dark Surfa	-		Red F	Parent Material (TF2)
Thick D	ark Surface (A12)	Deplete	ed Dark Su	ırface (F7)			Shallow Dark Surface (TF12)
	Mucky Mineral (S	,		Depressio				(Explain in Remarks)
	Mucky Peat or Pe			lains Depr				of hydrophytic vegetation and
5 cm M	ucky Peat or Pea	t (S3) (LRR F)	(MI	_RA 72 & `	73 of LRR	H)		nd hydrology must be present,
							unless	s disturbed or problematic.
	Layer (if presen	t):						
Туре: <u>b</u> е								V
Depth (in	nches): surface						Hydric Soi	l Present? Yes No X
Remarks:								
	Coul	d not take so	oil samples d	ue to be	edrock a	at surfa	CE	
HYDROLO	OGY							
	drology Indicate	ors:						
_	icators (minimum		check all that ann	lv)			Second	ary Indicators (minimum of two require
	· Water (A1)	or one required,					· ·	face Soil Cracks (B6)
			Salt Crus Aquatic Ir		o (D12)			
_	ater Table (A2)				, ,			arsely Vegetated Concave Surface (Bi
Saturat			Hydrogen					ninage Patterns (B10)
	Marks (B1)		Dry-Seas					dized Rhizospheres on Living Roots (
	ent Deposits (B2)		Oxidized			ing Roots	. ,	where tilled)
	eposits (B3)		•	not tilled)			·	ayfish Burrows (C8)
_	at or Crust (B4)		Presence			1)	·	turation Visible on Aerial Imagery (C9)
· · · · · · · · · · · · · · · · · · ·	posits (B5)		Thin Muc					omorphic Position (D2)
·	ion Visible on Ae	,	Other (Ex	plain in Re	emarks)			C-Neutral Test (D5)
	Stained Leaves (E	39)					Fro	st-Heave Hummocks (D7) (LRR F)
Field Obse	rvations:							
	ter Present?		Depth (ir					
Water Table	Present?	Yes No	Depth (ir	nches):		_		
Saturation F	Present?	Yes No	Depth (ir	nches):		Wetl	and Hydrolog	yy Present? Yes No _X
	pillary fringe)						if = , = i1 - 1-1 -	
Describe Re	ecorded Data (stre	earn gauge, moni	toring well, aerial	pnotos, pr	evious ins	pections),	ıı avallable:	
Remarks:								

Project/Site: Weatherford Quarry	,	Jity/County	· Faio Fiii	to a rainer counties	Sampling Date:	September 16, 2
Applicant/Owner: Vulcan Materials Company				State: TX		
Investigator(s): R. Sulkers, M. McKnight	:	Section, To	wnship, Ra	nge:	- , ,	
Landform (hillslope, terrace, etc.): Plains						ope (%): 0-5
Subregion (LRR): LRRJ	Lat: 32.6	619553	•	Long: -98.075646	Dat	um: NAD83
Soil Map Unit Name: Hensley Very Stony Clay Loam				NWI classific		
Are climatic / hydrologic conditions on the site typical for this	time of yea	ar? Yes X				
Are Vegetation, Soil, or Hydrology sig	-			'Normal Circumstances"		No
Are Vegetation, Soil, or Hydrology na	-		(If ne	eeded, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map s						eatures, etc.
Hydrophytic Vegetation Present? Yes No	X	la 4h	- Campulad			
Hydric Soil Present? Yes No	X		ie Sampled in a Wetlar		No X	
Wetland Hydrology Present? Yes X No			iii a wetiai	<u></u>	NO	_
Remarks: Hydrologic indicator met due to the pres	ence o	f algae.				
VEGETATION – Use scientific names of plant						
	Absolute % Cover	Dominant Species?		Dominance Test work Number of Dominant S		
1				That Are OBL, FACW,	or FAC	
2				(excluding FAC-):	0	(A)
3				Total Number of Domir	^	<i>(</i> =)
4				Species Across All Stra	ata: <u>∠</u>	(B)
Sapling/Shrub Stratum (Plot size:)		= Total Co	ver	Percent of Dominant S That Are OBL, FACW,		(A/B)
1				Prevalence Index wor	rksheet:	
3				Total % Cover of:		
4.					x 1 = 0	
5				FACW species 0		
		= Total Co	ver	FAC species 20		
Herb Stratum (Plot size:) 1 Allium canadense	60	Yes	FACU	FACU species 110 UPL species 0	$x = 4 = \frac{44}{0}$	
Ambrosia artemisiifolia	40	Yes	FACU	Column Totals: 130		
3. Iva annua	20	No	FAC			(5)
4. Muhlenbergia capillaris	10	No	FACU	Prevalence Index		
5.				Hydrophytic Vegetati		
6.				1 - Rapid Test for		etation
7				2 - Dominance Tes		
8				3 - Prevalence Ind		. viala a comparable a
9				4 - Morphological / data in Remark	Adaptations (Pro	e sheet)
10				Problematic Hydro	ophytic Vegetation	n¹ (Explain)
Woody Vine Stratum (Plot size:) 50%	130	= Total Co		¹ Indicators of hydric so	oil and wetland hy	drology must
1		20% = 2		be present, unless dist		
2				Hydrophytic Vegetation		
% Bare Ground in Herb Stratum		= Total Co	ver	Present? Ye	es No <u>?</u>	<u> </u>
Remarks:				1		

SOIL Sampling Point: _____

	cription: (Describe	to the dept				or confirm	n the absence	of indicators.)
Depth (inches)	Matrix	0/		ox Feature	1	1 222	Tav#:	Domorko
(inches) 0-4	Color (moist) 10YR 4/1	<u>%</u> 98	Color (moist) 10YR 4/6	- <u>%</u> 2	Type'	Loc ²	<u>Texture</u> loamy	Remarks 2% redox
	10111 4/1	_ = = -	10111 7/0			-	Toarriy	
4+								bedrock
				_				
				_				
	oncentration, D=De					d Sand G		cation: PL=Pore Lining, M=Matrix.
_	Indicators: (Appli	cable to all L						for Problematic Hydric Soils ³ :
Histosol	,			Gleyed Ma				Muck (A9) (LRR I, J)
	pipedon (A2) istic (A3)		-	Redox (St d Matrix (•			Prairie Redox (A16) (LRR F, G, H) Surface (S7) (LRR G)
	en Sulfide (A4)			Mucky Mi	,			Plains Depressions (F16)
	d Layers (A5) (LRR	F)	-	Gleyed M			_	RR H outside of MLRA 72 & 73)
	uck (A9) (LRR F, G ,	•	-	ed Matrix (,	ced Vertic (F18)
	d Below Dark Surfa			Dark Surf	, ,			arent Material (TF2)
Thick Da	ark Surface (A12)		Deplete	ed Dark Si	urface (F7)		Very S	Shallow Dark Surface (TF12)
-	Mucky Mineral (S1)			Depression	. ,			(Explain in Remarks)
	Mucky Peat or Peat	. , .			essions (F			of hydrophytic vegetation and
5 cm Mu	ucky Peat or Peat (S	63) (LRR F)	(MI	_RA 72 &	73 of LRR	H)		d hydrology must be present,
Doctrictive	Layer (if present):						unless	s disturbed or problematic.
Type: be								
	ches): Starting at	4 inches on	—— ward				Hydric Soil	Present? Yes No X
Remarks:	Ciles)						Tryunc 3011	Tresent: resNo
Nemaiks.								
HYDROLO	GY							
Wetland Hy	drology Indicators):						
Primary India	cators (minimum of	one required	check all that app	ly)			Seconda	ary Indicators (minimum of two required)
Surface	Water (A1)		Salt Crus	t (B11)			Sur	face Soil Cracks (B6)
	ater Table (A2)		Aquatic Ir	vertebrate	es (B13)		Spa	arsely Vegetated Concave Surface (B8)
Saturati	on (A3)		Hydrogen	Sulfide O	dor (C1)		Dra	inage Patterns (B10)
Water M	larks (B1)		Dry-Seas	on Water	Table (C2)		Oxi	dized Rhizospheres on Living Roots (C3)
	nt Deposits (B2)		Oxidized	Rhizosphe	eres on Liv	ing Roots	(C3) (v	vhere tilled)
	posits (B3)		(where	not tilled)			yfish Burrows (C8)
_	at or Crust (B4)		Presence		-	!)	Sati	uration Visible on Aerial Imagery (C9)
Iron Dep	oosits (B5)		Thin Muc	k Surface	(C7)		Ged	omorphic Position (D2)
Inundati	on Visible on Aerial	Imagery (B7) Other (Ex	plain in Re	emarks)			C-Neutral Test (D5)
	tained Leaves (B9)						Fro:	st-Heave Hummocks (D7) (LRR F)
Field Obser								
Surface Wat			lo Depth (ir					
Water Table			lo Depth (ir					v
Saturation P		Yes N	lo Depth (ir	nches):		Wetl	land Hydrolog	y Present? Yes X No
(includes cap Describe Re	olliary fringe) corded Data (strear	n gauge. moi	nitoring well. aerial	photos. p	revious ins	pections).	if available:	
	,	5 5 ,	J ,	. , [-		. ,,		
Remarks:								
Algae pre	sent							

Applicant/Owner: Vulcan Materials Company State: TX Sampling Point: MA Upland Investigator(s): M. McKnight, R. Sulkers Section, Township, Range: Landform (hillslope, terrace, etc.): Plains Local relief (concave, convex, none): Concave Slope (%): 0-5 Subregion (LRR): LRRJ Lat: 32.611004 Long: -98.069486 Datum: NAD83 Soil Map Unit Name: Hensley Very Stony Clay Loam NWI classification: None Are climatic / hydrologic conditions 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 "Normal Circumstances" present? Yes X No (In the substitution of the substitution of year) No (In th	Project/Site: Weatherford Quarry		City/County	: Palo Pin	to & Parker Counties	_ Sampling Date:	September 16, 20
Investigator(s): M. McKnight, R. Sulkers			-				
Landform (hillslope, terrace, etc.): Plains		5	Section, To	wnship, Ra	nge:	- , -	
No Classification: None							ope (%): 0-5
None	Subregion (LRR): LRRJ	_ Lat: 32.6	311004		Long: -98.069486	Dat	um: NAD83
Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No No X (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No X (Is the Sampled Area within a Wetland? Yes No X (Wetland Hydrology Present? Yes X No X (Is the Sampled Area within a Wetland? Yes No X (Is the Sampled Area wit							
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No X within a Wetland? Yes No X yes No X within a Wetland? Yes Should yet No X within a Wetland? Yes Should yet Should yet No X yet No X within a Wetland? Yes Should yet No X yet	Are climatic / hydrologic conditions on the site typical for this	s time of yea	r? Yes X	No	(If no, explain in I	Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No	Are Vegetation, Soil, or Hydrologys	ignificantly o	listurbed?	Are '	'Normal Circumstances"	present? Yes X	No
Hydrophytic Vegetation Present? Yes No X within a Wetland? Yes No X within	Are Vegetation, Soil, or Hydrologyn	aturally prob	olematic?	(If ne	eeded, explain any answ	ers in Remarks.)	
Hydric Soil Present? Yes No Within a Wetland? Yes No X Within a Wetland Yes No X Within a Wetland? Yes No X Within a Wetland Yes No X	SUMMARY OF FINDINGS – Attach site map	showing	samplin	g point l	ocations, transects	s, important f	eatures, etc.
Hydric Soil Present? Yes No X within a Wetland? Yes No X within a Wetland Yes No	Hydrophytic Vegetation Present? Yes No	o_X	lo th	o Compled	I Aron		
Welland Hydrology Present? Yes \(^{\text{No}}\) No No No No No No No FACU No FACU N	Hydric Soil Present? Yes No	o <u>X</u>		_		No X	
Remarks: Hydrologic indicator met due to recent rainfall events resulting in saturation of the soil.	Wetland Hydrology Present? Yes X N	0	With	iii a wellai	10: 103	110	_
Tree Stratum (Plot size:			vents r	esulting	in saturation of	tne soil.	
Quercus virginiana 5					Dominance Test wor	ksheet:	
2.							
Total Number of Dominant Species Across All Strata: 3 (B)						or FAC 0	(A)
Species Across All Strata: 3 (B)							
Sapling/Shrub Stratum (Plot size: 50% = 2.5 20% = 1						2	(B)
Sapling/Shrub Stratum (Plot size:		5 .	= Total Cov	ver	Percent of Dominant S	Species	
2.		% = <u>2.5</u>	20% = _1				(A/B)
Total % Cover of: Multiply by:					Prevalence Index wo	rksheet:	
4					Total % Cover of:	Multip	oly by:
FACW species					OBL species 0	x 1 = <u>0</u>	
Herb Stratum (Plot size:) Muhlenbergia capillaris 20							
1. Muhlenbergia capillaris 20 Yes FACU UPL species 0 x 5 = 0 0 140 (B) 2. Croton capitatus 15 Yes NI Column Totals: 35 (A) 140 (B) 3. Opuntia spp (Prickly pear) 10 No FACU Prevalence Index = B/A = 4			= Total Cov	ver			
2. Croton capitatus 3. Opuntia spp (Prickly pear) 4. Cylindropuntia leptocaulis 5. No NI 7. S.		00		E4011			-0
3. Opuntia spp (Prickly pear) 10 No FACU 4. Cylindropuntia leptocaulis 5 No FACU 5. Cooperia drummondi 5 No FACU 6							
4. Cylindropuntia leptocaulis 5 No NI Prevalence Index = B/A = 4 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10					Column Totals: 33	(A) <u>1</u>	(B)
5. Cooperia drummondi 5. No FACU 6					Prevalence Inde	x = B/A = 4	
6	_ · · _ · _ · _ · _ · _ · _ · _ · _ · _	. ——			Hydrophytic Vegetat	ion Indicators:	
7		· ——			-		etation
8							
9							
10 Problematic Hydrophytic Vegetation¹ (Explain) Woody Vine Stratum (Plot size:) 50% = 27.5 20% = 11					4 - Morphological	Adaptations' (Pro	ovide supporting te sheet)
$\frac{55}{\text{Moody Vine Stratum}} = \text{Total Cover}$ $\frac{\text{Woody Vine Stratum}}{50\%} = \frac{27.5}{20\%} = \frac{11}{100\%}$ $\frac{50\%}{100\%} = \frac{27.5}{20\%} = \frac{11}{100\%}$ $\frac{1}{100\%} = \frac{11}{100\%}$ \frac	10					•	*
be present unless disturbed or problematic	, , , , , , , , , , , , , , , , , , ,	55	= Total Cov	ver	l		
2 Hydrophytic		<u> </u>					
= Total Cover Vegetation Present? Yes No X	% Rara Ground in Horb Stratum	=	= Total Cov	ver	vegetation Present? Yes	es No ²	x
% Bare Ground in Herb Stratum Present? Yes No ^ Remarks:	% bare Ground in Herb Stratum				1.7000		

US Army Corps of Engineers

SOIL Sampling Point: MA Up

Color (moist) % Color (moist) % Type Loc Texture Remarks	Depth	cription: (Describe Matrix			x Feature				
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.	(inches)	Color (moist)					Loc ²		
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. "Location: PL=Pore Lining, Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosci (A1) Histosci (A1) Histosci (A2) Sandy Redox (S5) Sandy Redox (S5) Sandy Side Matrix (S9) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Loamy Mucky Mineral (F2) Loamy Mucky Mineral (F2) Loamy Gleyed Matrix (F3) Depleted Board Surface (A1) Loamy Gleyed Matrix (F3) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Loamy Gleyed Matrix (F3) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Loamy Gleyed Matrix (F3) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Loamy Gleyed Matrix (F3) Loamy Gleyed Matrix (F2) Hiph Plains Depressions (F8) Redox Dark Surface (A12) Loamy Gleyed Matrix (F3) Redox Dark Surface (A17) Reduced Vertic (F18) Red Parent Material (TF2) Very Shallow Dark Surface (A17) Reduced Vertic (F18) Redox Dark Surface (F7) Redox Dark Surface (F7) Loamy Gleyed Matrix (F3) Redox Dark Surface (F7) Red	0-5	10YR 3/3	100					clay loam	no mottles
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histics (Applicable to all LRRs, unless otherwise noted.) Histic Epipedon (A2) Sandy Redox (55) Sandy Redox (55) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR F) Loamy Mucky Mineral (F1) Depleted Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Depleted Layers (A5) (LRR F) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Depleted Layers (A5) (LRR F, G, H) Depleted Dark Surface (F1) Thick Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Redox Dark Surface (F7) Redox Depressions (F16) Sandy Mucky Mineral (S1) Sem Mucky Peat or Peat (S2) (LRR G, H) Som Mucky Peat or Peat (S2) (LRR G, H) Som Mucky Peat or Peat (S3) (LRR F) MILRA 72 & 73 of LRR H) Depleted Dark Surface (F7) Restrictive Layer (if present): Type: bedrock Depth (inches): Starting at 5 inches onward Remarks: Very Stony YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface Water (A1) Salt Crust (B11) Surface Water (A1) Salt Crust (B11) Surface Water (A1) Salt Crust (B11) Surface Water (A1) Sparsely Vegetated Concave Drainage Patterns (B10) Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (C3) (where tilled) Iron Deposits (B3) Algal Mat Crust (B4) Presence of Reduced Iron (C4) Salturation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Presence of Reduced Iron (C4) Forst-Heave Hummocks (D7) Field Observations: Surface Water Present? Yes No Depth (inches): Wetter Table Pres	5+					_			bedrock
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Gleyed Matrix (S4)			<u> </u>						
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Gleyed Matrix (S4)		-							
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histics (Applicable to all LRRs, unless otherwise noted.) Histic Epipedon (A2) Sandy Redox (55) Sandy Redox (55) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR F) Loamy Mucky Mineral (F1) Depleted Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Depleted Layers (A5) (LRR F) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Depleted Layers (A5) (LRR F, G, H) Depleted Dark Surface (F1) Thick Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Redox Dark Surface (F7) Redox Depressions (F16) Sandy Mucky Mineral (S1) Sem Mucky Peat or Peat (S2) (LRR G, H) Som Mucky Peat or Peat (S2) (LRR G, H) Som Mucky Peat or Peat (S3) (LRR F) MILRA 72 & 73 of LRR H) Depleted Dark Surface (F7) Restrictive Layer (if present): Type: bedrock Depth (inches): Starting at 5 inches onward Remarks: Very Stony YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface Water (A1) Salt Crust (B11) Surface Water (A1) Salt Crust (B11) Surface Water (A1) Salt Crust (B11) Surface Water (A1) Sparsely Vegetated Concave Drainage Patterns (B10) Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (C3) (where tilled) Iron Deposits (B3) Algal Mat Crust (B4) Presence of Reduced Iron (C4) Salturation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Presence of Reduced Iron (C4) Forst-Heave Hummocks (D7) Field Observations: Surface Water Present? Yes No Depth (inches): Wetter Table Pres					-			-	-
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histics (Applicable to all LRRs, unless otherwise noted.) Histic Epipedon (A2) Sandy Redox (55) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR F) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Depleted Layers (A5) (LRR F) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Reduced Vertic (F18) Reduced Vertic (-						-	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histics (AT)		-	- 						
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histics (AF)									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histics (AT)			- <u> </u>						
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histics (Applicable to all LRRs, unless otherwise noted.) Histic Epipedon (A2) Sandy Redox (55) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR F) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Depleted Layers (A5) (LRR F) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F3) Reduced Vertic (F18) Reduced Vertic (Type: C=C	oncentration. D=Der	letion. RM=Redu	uced Matrix. CS	S=Covered	d or Coate	d Sand Gr	rains. ² Loc	cation: PL=Pore Lining, M=Matrix.
Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) (LRR 6) Black Histic (A3) Stripped Matrix (S6) Dark Surface (S7) (LRR 6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) High Plains Depressions (F16) Stratified Layers (A5) (LRR F) Loamy Mucky Mineral (F2) (LRR H outside of MLRA 7 1 cm Muck (A9) (LRR F, G, H) Depleted Matrix (F3) Reduced Vertic (F18) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Thick Dark Surface (A12) Depleted Dark Surface (F7) Reduced Vertic (F18) Sandy Mucky Mineral (S1) Redox Depressions (F16) Redox Depressions (F16) 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) 3 Indicators of hydrophytic vegetation wetland hydrology must be presently bedrock Depth (inches): Starting at 5 inches onward Remarks: Very Stony YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface Water (A1) Salt Crust (B11) Surface (F3) Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (C3) Water Marks (B1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (C3) Water Marks (B1) Present? Presence of Reduced Iron (C4) Saturation (Val) Presence (Val) Presence of Reduced Iron (C4) Saturation (Val) Presence (Val) Pr									
Histic Epipedon (A2) Sandy Redox (S5) Coast Prairie Redox (A16) (LRI Black Histic (A3) Stripped Matrix (S6) Dark Surface (S7) (LRR G) Hydrogen Sulfide (A4) Loamy Micky Mineral (F1) High Plains Depressions (F16) Stratified Layers (A5) (LRR F) Loamy Micky Mineral (F2) (LRR H outside of MLRA 7 1 cm Muck (A9) (LRR F, G, H) Depleted Matrix (F3) Redox Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Pepleted Below Dark Surface (A11) Redox Dark Surface (F6) Red Parent Material (TF2) Pepleted Below Dark Surface (A12) Depleted Dark Surface (F7) Per Sandy Mucky Mineral (S1) Redox Depressions (F8) Other (Explain in Remarks) Per Son Mucky Peat or Peat (S2) (LRR G, H) High Plains Depressions (F16) Per Son Mucky Peat or Peat (S2) (LRR G, H) Pigh Plains Depressions (F16) Per Son Mucky Peat or Peat (S2) (LRR G, H) Pigh Plains Depressions (F16) Per Son Mucky Peat or Peat (S2) (LRR G, H) Pigh Plains Depressions (F16) Per Son Mucky Peat or Peat (S2) (LRR G, H) Pigh Plains Depressions (F16) Per Son Mucky Peat or Peat (S2) (LRR G, H) Pigh Plains Depressions (F16) Per Son Mucky Peat or Peat (S2) (LRR G, H) Pigh Plains Depressions (F16) Per Son Mucky Peat or Peat (S2) (LRR G, H) Pigh Plains Depressions (F16) Pigh Plains Depressions (P16) Pigh Plains Depressions Plains Pla	Histosol	(A1)		Sandy 0	Gleyed Ma	trix (S4)		1 cm N	Muck (A9) (LRR I, J)
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				Loamy I	Mucky Mir	neral (F1)		High F	Plains Depressions (F16)
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Thick Dark Surface (A12)			•		•	•			,
Sandy Mucky Mineral (S1)			e (ATT)			. ,			
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5 cm Mucky Peat or Peat (S3) (LRR F) Restrictive Layer (if present):			(S2) (LRR G. H)			. ,	16)		
Restrictive Layer (if present): Type: bedrock Depth (inches): Starting at 5 inches onward Remarks: Very stony MYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Water Marks (B1) Water Marks (B1) Dry-Season Water Table (C2) Drift Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Mater-Stained Leaves (B9) Field Observations: Water Table Present? Yes Wetland Hydrology Present? Yes Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living Roots (C3) Where not tilled) Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Frost-Heave Hummocks (D7) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes X Metland Hydrology Present? Yes X Metland Hydrology Present? Yes X Metland Hydrology Present? Yes X Saturation Present? Yes Metland Hydrology Present? Yes X				-		-			
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Mater Marks (B1)	Surface	Water (A1)		Salt Crust	(B11)			Sur	face Soil Cracks (B6)
Water Marks (B1)	High Wa	ater Table (A2)		Aquatic In	vertebrate	s (B13)		Spa	rsely Vegetated Concave Surface (B8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) (where tilled) Crayfish Burrows (C8) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Saturation Visible on Aerial In 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) Frost-Heave Hummocks (D7) Frost-Heave Hummocks (D7) Saturation Present?	X Saturati	on (A3)		Hydrogen	Sulfide O	dor (C1)		Dra	inage Patterns (B10)
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Algal Mat or Crust (B4)	Sedime	nt Deposits (B2)		Oxidized F	Rhizosphe	res on Livi	ing Roots	(C3) (w	vhere tilled)
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	Iron De	posits (B5)		Thin Muck	Surface (C7)		Ged	omorphic Position (D2)
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes _X No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Inundati	ion Visible on Aerial	lmagery (B7)	Other (Exp	olain in Re	marks)		FAC	C-Neutral Test (D5)
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		resent? Y	'es X No _	Depth (in	ches): <u>1"</u>			and Hydrolog	y Present? Yes X No
	Describe Re	corded Data (stream	gauge, monitori	ng well, aerial ı	photos, pr	evious ins	pections).	if available:	
Remarks:		`	- - ·				. ,,		
• •	Remarks								
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Applicant/Owner	Project/Site: Weatherford Quarry	(City/Coun	_{tv:} Palo Pin	to & Parker Counties	Sampling Date: September 16,
			-	-		
Landform (hillslope, terrace, etc.): Plains	Investigator(s): M. McKnight, R. Sulkers		Section, T	ownship, Ra	nge:	
None						
None	Subregion (LRR): LRRJ	Lat: 32.0	62396	•	Long: -98.065693	Datum: NAD83
Are climatic / hydrologic conditions 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 "Normal Circumstances" present? Yes X No Are "Normal Circumstances" present? Yes X No Are Normal Circumstances" present? Yes X No Are Normal Circumstances present? Yes X 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? Yes No X Wetland Hydrology Present? Yes No X No X Wetland Hydrology Present? Yes No X No						
Are Vegetation	Are climatic / hydrologic conditions on the site typical for this t	time of yea	ar? Yes			
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present?		-				
Hydrophytic Vegetation Present? Yes No X Hydrophytic Vegetation Present? Yes No X Wetland Hydrology Present? Yes No X Within a Wetland? Yes No X Within a					·	
No X Wetland Hydrology Present? Yes No X Within a Wetland? Yes No X Within a Wetland? Yes No X Within a Wetland? Yes No X Wetland Hydrology Present? Yes No X Within a Wetland? Yes No X Wetland Hydrology Present? Yes No X Wetland Hydrology Present? Yes No X Wetland Hydrology Present? Yes No X Wetland Hydrology must be present, unless disturbed or problematic. Yes No X Wetland Hydrology must be present, unless disturbed or problematic. Yes No X Wetland Hydrology must be present, unless disturbed or problematic. Yes No X Wetland Hydrology must be present, unless disturbed or problematic. Yes No X Yes No X Wetland Hydrology must be present, unless disturbed or problematic. Yes No X Yes				•		·
Section Present? Yes	Hydrophytic Vegetation Present? Yes No	X				
VEGETATION - Use scientific names of plants. Tree Stratum (Plot size:)	Hydric Soil Present? Yes No	X		-		No X
VEGETATION - Use scientific names of plants. Dominant Indicator Number of Dominant Species Status Number of Dominant Species Status Number of Dominant Species Number of Domin	Wetland Hydrology Present? Yes No	X	Wit	inin a wetiai	10? Yes	NO <u>^</u>
Absolute	Remarks:					
Absolute						
Absolute	VEGETATION – Use scientific names of plants	<u> </u>				
1.	<u> </u>		Dominar	nt Indicator	Dominance Test work	sheet:
2	Tree Stratum (Plot size:)	% Cover	Species'	? Status	Number of Dominant S	pecies
Total Number of Dominant Species Across All Strata: 1						0
Sapling/Shrub Stratum (Plot size:)						
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)						
Sapling/Shrub Stratum (Plot size:) That Are OBL, FACW, or FAC: 0 (A/B)				over		
2			rotal O	0 7 0 1		
2					Prevalence Index wor	ksheet:
4. OBL species 0 x 1 = 0 5. FACW species 0 x 2 = 0 1. Croton capitatus 50 Yes NI 2. Ambrosia artemisiifolia 10 No FACU 3. Euphorbia marginata 5 No FACU 4. Eryngium leavenworthii 5 No NI 5. No NI Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 6. 1 - Rapid Test for Hydrophytic Vegetation 7. 2 - Dominance Test is >50% 8. 3 - Prevalence Index is ≤3.0¹ 9. 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10. Problematic Hydrophytic Vegetation¹ (Explain) 1 miles (Plot size: 1) 50% = 35 20% = 14 1 miles (Plot size) 1 miles disturbed or problematic. Hydrophytic Vegetation problematic. 1 miles (Plot size) 2 miles (Plot size) 2 miles (Plot size) 3 miles (Plot size) 4 miles (Plot size) 4 miles (
FACW species O						
FAC species 15						
Herb Stratum (Plot size:) Croton capitatus 50 Yes NI UPL species 15 x 4 = 60 UPL species 0 x 5 = 0 Column Totals: 15 (A) 60 (B)	J		= Total C	over	FAC species 0	x 3 = 0
2. Ambrosia artemisiifolia 10 No FACU Column Totals: 15 (A) 60 (B) (B) 3. Euphorbia marginata 5 No NI Prevalence Index = B/A = 4 4 4. Eryngium leavenworthii 5 No NI Hydrophytic Vegetation Indicators:						
3. Euphorbia marginata 5 No FACU 4. Eryngium leavenworthii 5 No NI 5. Hydrophytic Vegetation Indicators: 6. 1 - Rapid Test for Hydrophytic Vegetation 7. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10. 70 = Total Cover Woody Vine Stratum (Plot size: 1) 50% = 35 20% = 14 2. Hydrophytic Vegetation in Herb Stratum Hydrophytic Vegetation in Herb Stratum Hydrophytic Vegetation in Herb Stratum % Bare Ground in Herb Stratum = Total Cover Hydrophytic Vegetation in Herb Stratum Yes No X						
4. Eryngium leavenworthii 5 No NI Prevalence Index = B/A = 4 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10. 10. 10. 10. 10. 10. 10. 10					Column Totals: 15	(A) <u>60</u> (B)
Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 10.					Prevalence Index	= B/A = <u>4</u>
6	··· <u>···</u>			<u>NI</u>	Hydrophytic Vegetation	on Indicators:
7					1 - Rapid Test for I	Hydrophytic Vegetation
8						
9						
10					4 - Morphological A	Adaptations (Provide supporting s or on a separate sheet)
Woody Vine Stratum (Plot size:) 50% = 35	10					' '
2 Hydrophytic Vegetation Present? Yes No X		70	- T-4-L O	over	<u> </u>	
2 = Total Cover Hydrophytic Vegetation Present? Yes No X	<u>woody Vine Stratum</u> (Plot size:) 50% = 1	35	20% = _	14		
% Bare Ground in Herb Stratum = Total Cover					Hydrophytic	
70 Baro Ground III Trib Barotatani				over	Vegetation	o No X
					Present? Ye	s NO <u>^\</u>
Remarks:	Remarks:					

SOIL

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)
| Depth | Matrix | Description:
Depth	Matrix	<u>.</u>		x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	10YR 3/2	100					clay/loam	no mottles
	-							
								-
		<u> </u>						
	-							-
	oncentration, D=De					d Sand Gr		cation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appli	cable to all L	RRs, unless othe	rwise note	d.)		Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy (Gleyed Mat	rix (S4)		1 cm N	Muck (A9) (LRR I, J)
Histic E	pipedon (A2)		Sandy I	Redox (S5)			Coast	Prairie Redox (A16) (LRR F, G, H)
Black H	istic (A3)		Stripped	d Matrix (Se	3)		Dark S	Surface (S7) (LRR G)
Hydroge	en Sulfide (A4)			Mucky Mine				Plains Depressions (F16)
Stratifie	d Layers (A5) (LRR	F)	-	Gleyed Mat			_	RR H outside of MLRA 72 & 73)
1 cm Mi	uck (A9) (LRR F, G	, H)	Deplete	d Matrix (F	3)		Reduc	ced Vertic (F18)
Deplete	d Below Dark Surfa	ce (A11)	Redox I	Dark Surfac	ce (F6)		Red P	arent Material (TF2)
Thick D	ark Surface (A12)		Deplete	d Dark Sur	face (F7)	1	Very S	Shallow Dark Surface (TF12)
Sandy N	Mucky Mineral (S1)		Redox I	Depression	s (F8)		Other	(Explain in Remarks)
2.5 cm l	Mucky Peat or Peat	(S2) (LRR G	, H) High Pl	ains Depres	ssions (F	16)	³ Indicators	of hydrophytic vegetation and
5 cm Mi	ucky Peat or Peat (S3) (LRR F)	(ML	RA 72 & 7	3 of LRR	H)	wetlan	d hydrology must be present,
							unless	s disturbed or problematic.
Restrictive	Layer (if present):							
Type:								
Depth (in	ches).						Hydric Soil	Present? Yes No X
	onco).						Tiyano don	111c3ciii: 1c3 1t0
Remarks:								
HYDROLO	GY							
Wetland Hy	drology Indicators	s:						
Primary Indi	cators (minimum of	one required	check all that appl	v)			Seconda	ary Indicators (minimum of two required)
	Water (A1)	•	Salt Crust				<u>-</u>	face Soil Cracks (B6)
_	ater Table (A2)		Aquatic In	. ,	(D12)			arsely Vegetated Concave Surface (B8)
_								
Saturati	` '		Hydrogen					inage Patterns (B10)
	larks (B1)		Dry-Seaso					dized Rhizospheres on Living Roots (C3)
	nt Deposits (B2)		Oxidized F	•	es on Liv	ing Roots	. ,	vhere tilled)
Drift De	posits (B3)		(where	not tilled)			Cra	yfish Burrows (C8)
Algal Ma	at or Crust (B4)		Presence	of Reduced	d Iron (C4	1)	Sati	uration Visible on Aerial Imagery (C9)
Iron De	oosits (B5)		Thin Muck	Surface (C	27)		Ged	omorphic Position (D2)
Inundati	ion Visible on Aeria	I Imagery (B7) Other (Exp	olain in Ren	narks)		FAC	C-Neutral Test (D5)
	Stained Leaves (B9)				•		Fro:	st-Heave Hummocks (D7) (LRR F)
Field Obser	vations:						_ 	, , , ,
Surface Wat		Yes N	lo Depth (in	ches).				
				-				
Water Table			lo Depth (in					- Y
Saturation P		Yes N	lo Depth (in	ches):		_ Wetl	and Hydrolog	y Present? Yes No X
	pillary fringe) corded Data (strea	m dalide moi	nitoring well aerial	nhotos nre	vious ins	nections)	if available.	
20001100 110	22.404 Data (01104	gaago, 11101		F.10100, p10		r 5000110),	aranabio.	
Remarks:								

Project/Site: Weatherford Quarry			City/Count	_{y:} Palo Pin	to & Parker Count	ies_ _{Samplin}	g Date: S	September 16, 202
Applicant/Owner: Vulcan Materials	Company				State: TX	Samplin	g Point: N	/IB2 Wetland
Investigator(s): M. McKnight, R. Sul			Section, To	ownship, Ra	nge:		_	
Landform (hillslope, terrace, etc.): P								e (%): 0-5
Subregion (LRR): LRRJ		Lat: 32.0	624008		Long: -98.06555	9	Datum	n: NAD83
Soil Map Unit Name: Hensley Very					NWI cla			
Are climatic / hydrologic conditions on	the site typical for thi	s time of yea	ar? Yes X	(No	(If no, explair	n in Remarks.)		
Are Vegetation, Soil, o	r Hydrologys	significantly	disturbed?	Are '	"Normal Circumstand	ces" present?	Yes X	No
Are Vegetation, Soil, o	r Hydrologyr	naturally pro	blematic?	(If ne	eeded, explain any a	nswers in Rem	ıarks.)	
SUMMARY OF FINDINGS - A	Attach site map	showing	samplir	ng point l	ocations, transe	ects, impor	tant fea	ntures, etc.
Hydrophytic Vegetation Present?	Yes X N	lo	ls ti	he Sampled	I Area			
Hydric Soil Present? Wetland Hydrology Present?	Yes X N	lo <u>X</u>		hin a Wetlai		No	X	
Remarks:								
VEGETATION – Use scientifi	c names of plan							
Tree Stratum (Plot size:)	Absolute % Cover		t Indicator Status	Dominance Test			
1	,				Number of Domina That Are OBL, FA			
2.					(excluding FAC-):		1	(A)
3					Total Number of D		0	
4					Species Across Al	l Strata:	2	(B)
Sapling/Shrub Stratum (Plot size:			= Total Co	over	Percent of Domina That Are OBL, FA		_50	(A/B)
1					Prevalence Index	worksheet:		
2 3					Total % Cove	r of:	Multiply	by:
4					ODE species _	0 x		
5					FACW species 0			
			= Total Co	ver		X		
Herb Stratum (Plot size:)		V	ODI	FACU species 2		$4 = \frac{108}{9}$	
1 Eleocharis acicularis		60	Yes	OBL	UPL species 0			
2. Allium canadense 3. Ambrosia artemisiifolia		<u>20</u> 5	Yes No	FACU FACU	Column Totals: 9	(A) 103	(B)
4. Iva annua		- 5	No	FAC	Prevalence I	ndex = B/A =	1.989	
- Funbarbia marginata		2	No	FACU	Hydrophytic Veg	etation Indica	tors:	
6					1 - Rapid Test	t for Hydrophyt	ic Vegeta	tion
7					2 - Dominance			
8					X 3 - Prevalence			
9.					4 - Morpholog	ical Adaptatior marks or on a	าร' (Provid separate :	de supporting
10		_			Problematic H		•	*
		92	T-4-10-					
Woody Vine Stratum (Plot size:1.) 50%	6 = 46	20% = 1	8.4	¹ Indicators of hydr be present, unless			
2.					Hydrophytic			
			= Total Co	ver	Vegetation Present?	Yes X	No	
% Bare Ground in Herb Stratum					i lesent!	169		
Remarks:								

SOIL Sampling Point: MB2 Wetland

Depth	cription: (Describe Matrix	o to the dep		ox Feature		J. 00111111	ii tiic abscilec	or maroators.,
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-2	10YR 6/1	100					clay loam	
2-4	10YR 3/2	95	10YR 5/6	5				mottles
4+							· 	bedrock
4+	·						·	Deurock
				_				
	-						· 	-
1	·						. 2.	
	Concentration, D=De					d Sand G		cation: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
-	Indicators: (Appli	cable to all						•
Histoso	Epipedon (A2)			Gleyed Ma Redox (St				Muck (A9) (LRR I, J) Prairie Redox (A16) (LRR F, G, H)
	listic (A3)			d Matrix (-			Surface (S7) (LRR G)
	en Sulfide (A4)			Mucky Mi				Plains Depressions (F16)
	ed Layers (A5) (LRR	F)		Gleyed M				RR H outside of MLRA 72 & 73)
	uck (A9) (LRR F, G ,		-	ed Matrix (ed Vertic (F18)
Deplete	ed Below Dark Surfa	ce (A11)	Redox	Dark Surfa	ace (F6)		Red P	arent Material (TF2)
	ark Surface (A12)				urface (F7)			Shallow Dark Surface (TF12)
	Mucky Mineral (S1)			Depression				(Explain in Remarks)
	Mucky Peat or Peat				essions (F			of hydrophytic vegetation and
5 cm ivi	ucky Peat or Peat (S	53) (LRR F)	(IVII	-RA /2 &	73 of LRR	H)		d hydrology must be present, disturbed or problematic.
Restrictive	Layer (if present):						unless	disturbed of problematic.
Type: b								
Depth (ir	nches): Starting at	4 inches o	nward				Hydric Soil	Present? Yes No X
Remarks:							1.,,	
itemarks.	Ctom							
	Stony							
YDROLO	OGY							
Wetland Hy	drology Indicators	S:						
Primary Ind	icators (minimum of	one require	d; check all that app	ly)			Seconda	ary Indicators (minimum of two required)
Surface	e Water (A1)		Salt Crus	t (B11)			Sur	face Soil Cracks (B6)
High W	ater Table (A2)		Aquatic Ir	nvertebrate	es (B13)		Spa	rsely Vegetated Concave Surface (B8)
Saturat	ion (A3)		Hydrogen	Sulfide O	dor (C1)		Dra	inage Patterns (B10)
Water I	Marks (B1)		Dry-Seas	on Water ⁻	Table (C2)		Oxio	dized Rhizospheres on Living Roots (C3
Sedime	ent Deposits (B2)		Oxidized	Rhizosphe	eres on Liv	ng Roots	(C3) (w	vhere tilled)
X Drift Do	eposits (B3)		(where	not tilled))		Cra	yfish Burrows (C8)
/ Dilli De	lat or Crust (B4)		Presence	of Reduce	ed Iron (C4	.)	Sati	uration Visible on Aerial Imagery (C9)
	, ,		Thin Muc	k Surface			Geo	omorphic Position (D2)
Algal M	posits (B5)		1111111111111111111111111111111111				FΔC	C-Neutral Test (D5)
Algal M Iron De		l Imagery (B		plain in Re	emarks)			J-Nedital Test (DS)
Algal M Iron De Inunda	eposits (B5)			plain in Re	emarks)		· <u> </u>	st-Heave Hummocks (D7) (LRR F)
Algal M Iron De Inunda Water-	posits (B5) tion Visible on Aerial Stained Leaves (B9)			plain in Re	emarks)		· <u> </u>	` ,
Algal M Iron De Inundai Water-S	posits (B5) tion Visible on Aerial Stained Leaves (B9) rvations: tter Present?	Yes	7) X Other (Ex	nches):			· <u> </u>	` ,
Algal M Iron De Inundai Water-S	posits (B5) tion Visible on Aerial Stained Leaves (B9) rvations: tter Present?	Yes	7) <u>X</u> Other (Ex	nches):		_	Fros	st-Heave Hummocks (D7) (LRR F)
Algal M Iron De Inundal Water-S Field Obse Surface Water Table Saturation F	posits (B5) tion Visible on Aerial Stained Leaves (B9) rvations: ter Present? Present?	Yes Yes	7) X Other (Ex	nches):		_	Fros	, ,
Algal M Iron De Inundar Water- Field Obse Surface Wa Water Table Saturation F (includes ca	posits (B5) tion Visible on Aerial Stained Leaves (B9) rvations: ter Present? Present? apillary fringe)	Yes Yes Yes	7) X Other (Ex No Depth (ir No Depth (ir	nches): nches): nches):		_ _ Wet	Fros	st-Heave Hummocks (D7) (LRR F)
Algal M Iron De Inundar Water- Field Obse Surface Wa Water Table Saturation F (includes ca	posits (B5) tion Visible on Aerial Stained Leaves (B9) rvations: ter Present? Present?	Yes Yes Yes	7) X Other (Ex No Depth (ir No Depth (ir	nches): nches): nches):		_ _ Wet	Fros	st-Heave Hummocks (D7) (LRR F)
Algal M Iron De Inundat Water-t Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re	posits (B5) tion Visible on Aerial Stained Leaves (B9) rvations: ter Present? Present? apillary fringe)	Yes Yes Yes	7) X Other (Ex No Depth (ir No Depth (ir	nches): nches): nches):		_ _ Wet	Fros	st-Heave Hummocks (D7) (LRR F)
Algal M Iron De Inundat Water-t Field Obse Surface Wa Water Table Saturation F includes ca Describe Re	posits (B5) tion Visible on Aerial Stained Leaves (B9) rvations: ter Present? Present? apillary fringe)	Yes Yes Yes m gauge, mo	No Depth (ir No Depth (ir No Depth (ir nonitoring well, aerial	nches): nches): nches):		_ _ Wet	Fros	st-Heave Hummocks (D7) (LRR F)

Project/Site: Weatherford Quarry		City/Count	_{v:} Palo Pir	nto & Parker Counties	Sampling Date: S	eptember 16, 2
pplicant/Owner: Vulcan Materials Company				State: TX		
vestigator(s): R. Sulkers, M. McKnight		Section, To	ownship, Ra	ange:		
andform (hillslope, terrace, etc.): Plains						e (%): 1-5
ubregion (LRR): LRRJ			•	, -		
oil Map Unit Name: Truce Fine Sandy Loam				NWI classific		
re climatic / hydrologic conditions on the site typical for th						
re Vegetation, Soil, or Hydrology	-			"Normal Circumstances"		No
re Vegetation, Soil, or Hydrology				eeded, explain any answe		
SUMMARY OF FINDINGS – Attach site map					·	tures, etc.
Hydrophytic Vegetation Present? Yes	No X	lo ti	he Sampled	d Arao		
Hydric Soil Present? Yes	No <u>X</u>		ne Sampled hin a Wetla		No X	
Wetland Hydrology Present? Yes	No X	With	illi a Wella	iiu: 165		
Remarks:						
EGETATION – Use scientific names of pla	Absolute	Dominan	t Indicator	Dominance Test work	ksheet:	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant S	Species	
1				That Are OBL, FACW, (excluding FAC-):	or FAC 0	(A)
2				,		(//)
3 1				Total Number of Domir Species Across All Stra	4	(B)
T		= Total Co	ver	Percent of Dominant S	necies	
Sapling/Shrub Stratum (Plot size:)				That Are OBL, FACW,		(A/B)
1				Prevalence Index wor	rksheet:	
2				Total % Cover of:	Multiply	by:
3 1				OBL species 0	x 1 = 0	
*		-		FACW species 10		
<u> </u>		= Total Co	ver	FAC species 0	x 3 = 0	
Herb Stratum (Plot size:)				FACU species 70		
1. Ambrosia artemisiifolia	65	Yes	FACU		x 5 = 0	
2. Croton capitatus		No	NI	Column Totals: 80	(A) <u>300</u>	(B)
3. <u>Urochloa mutica</u> 4. Allium canadense	<u>10</u> 5	No No	FACU	Prevalence Index	$c = B/A = \frac{3.75}{}$	
	— 		FACU	Hydrophytic Vegetati		
5				1 - Rapid Test for	Hydrophytic Vegetat	ion
S				2 - Dominance Tes	st is >50%	
7				3 - Prevalence Ind		
9				4 - Morphological /	Adaptations ¹ (Provid s or on a separate s	e supporting
10				Problematic Hydro	·	*
	95	- Total Co				
Woody Vine Stratum (Plot size:) 50%	% = <u>47.5</u> 2	20% = 19		¹ Indicators of hydric so be present, unless dist		
2				Hydrophytic		
۷		= Total Co	ver	Vegetation	V	
% Bare Ground in Herb Stratum		- Total Oc		Present? Ye	esNo_X	

SOIL Sampling Point:

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator (or confirn	n the absence	of indicators.)	
Depth	Matrix			x Feature						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-3	10YR 4/2	95	10YR 4/6	5			loamy sand	mottles		
3+								bedrock		
	-									
			-	_	- ——			•		
								•		
	-						 -			
¹ Type: C=Co	oncentration, D=Dep	oletion, RM=	Reduced Matrix, C	S=Covere	d or Coate	d Sand Gı	rains. ² Loc	cation: PL=Por	e Lining, M=N	Лatrix.
Hydric Soil I	ndicators: (Applic	able to all	LRRs, unless othe	rwise not	ted.)		Indicators	for Problema	tic Hydric So	ils³:
Histosol	(A1)		Sandy	Gleyed Ma	atrix (S4)		1 cm N	/luck (A9) (LRF	R I, J)	
	pipedon (A2)			Redox (S				Prairie Redox (, G , H)
Black Hi	stic (A3)		Strippe	d Matrix (S6)		Dark S	Surface (S7) (L	.RR G)	
Hydroge	n Sulfide (A4)		Loamy	Mucky Mi	neral (F1)		High P	lains Depressi	ons (F16)	
	l Layers (A5) (LRR	•	Loamy	Gleyed M	atrix (F2)		(LR	R H outside o	f MLRA 72 8	73)
	ck (A9) (LRR F, G ,			ed Matrix (,			ed Vertic (F18)		
	Below Dark Surfac	ce (A11)		Dark Surf	. ,			arent Material (,	
	ark Surface (A12)				urface (F7)		-	Shallow Dark Su		
-	lucky Mineral (S1)	(CO) (LDD (Depressio		10)		(Explain in Ren		1
	Mucky Peat or Peat icky Peat or Peat (S				essions (F 73 of LRR			of hydrophytic d hydrology mu	-	
3 CITI WILL	icky real of real (S	55) (LKK F)	(IAIT	.NA 12 Q	73 OI LKK	п)		disturbed or p		••
Restrictive I	_ayer (if present):						uniess	disturbed or pr	iobiematic.	
Type: be										
Type. <u>~~</u>	ches): Starting at	3 inches o	nward				11	D	·	No X
	ches): Otarting at	0 11101103 0	<u> </u>				Hydric Soil	Present? Y	es	No <u>************************************</u>
Remarks:										
HYDROLO	GV									
_	drology Indicators									
Primary Indic	cators (minimum of o	one required	d; check all that app	<u>y)</u>			Seconda	ary Indicators (r	minimum of tw	vo required)
Surface	Water (A1)		Salt Crust					face Soil Crack		
High Wa	ter Table (A2)		Aquatic In				Spa	rsely Vegetate	d Concave Si	ırface (B8)
Saturatio	on (A3)		Hydrogen	Sulfide O	dor (C1)		Drai	nage Patterns	(B10)	
Water M	arks (B1)		Dry-Seaso	on Water	Table (C2)		Oxid	dized Rhizosph	eres on Livin	g Roots (C3)
Sedimer	nt Deposits (B2)		Oxidized I	Rhizosphe	eres on Livi	ing Roots	(C3) (w	here tilled)		
Drift Dep	oosits (B3)		(where	not tilled)		Cra	yfish Burrows (C8)	
Algal Ma	it or Crust (B4)		Presence	of Reduc	ed Iron (C4	-)	Satı	uration Visible o	on Aerial Ima	gery (C9)
Iron Dep	osits (B5)		Thin Mucl	Surface	(C7)		Geo	morphic Positi	on (D2)	
Inundation	on Visible on Aerial	Imagery (B	7) Other (Ex	plain in Re	emarks)		FAC	C-Neutral Test ((D5)	
Water-St	tained Leaves (B9)						Fros	st-Heave Humn	nocks (D7) (I	_RR F)
Field Observ	vations:									
Surface Water	er Present?	/es	No Depth (in	ches):						
Water Table	Present?	⁄es	No Depth (in	ches):						
Saturation Pr			No Depth (in				and Hydrolog	v Present? Y	es/es	No X
(includes cap	oillary fringe)					_		,		
Describe Red	corded Data (strean	n gauge, mo	onitoring well, aerial	photos, p	revious ins	pections),	if available:			
Remarks:										

Project/Site: Weatherford Quarry	С	itv/Countv	, Palo Pin	to & Parker Counties	Sampling Date:	September 16, 20
Applicant/Owner: Vulcan Materials Company		-		State: TX	· -	
Investigator(s): R. Sulkers, M. McKnight	s	Section, To	wnship, Ra	nge:		
_andform (hillslope, terrace, etc.): Plains		_ocal reliet	f (concave,	convex, none): concave	Slo	pe (%): <u>1-5</u>
Subregion (LRR): LRRJ	Lat: 32.6	26322		Long: <u>-</u> 98.072204	Datu	ım: NAD83
Soil Map Unit Name: Truce Fine Sandy Loam				NWI classific		
Are climatic / hydrologic conditions on the site typical for thi	s time of yea	r? Yes X				
Are Vegetation, Soil, or Hydrologys	significantly d	isturbed?	Are "	'Normal Circumstances" p	resent? Yes X	No
Are Vegetation, Soil, or Hydrology ı	naturally prob	lematic?	(If ne	eeded, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing	samplin	g point l	ocations, transects	, important fe	eatures, etc.
Hydrophytic Vegetation Present? Yes X N	lo	lo th	ne Sampled	I Aron		
Hydric Soil Present? Yes X N	lo			nd? Yes $\frac{X}{X}$	No	
Wetland Hydrology Present? Yes X	lo	With	iii a wedai	103		_
Remarks:						
/EGETATION – Use scientific names of plar	nts.					
		Dominant	Indicator	Dominance Test work	sheet:	
Tree Stratum (Plot size:)	% Cover			Number of Dominant S		
1				That Are OBL, FACW, (excluding FAC-):	or FAC 1	(A)
2					-	(^)
3				Total Number of Domin Species Across All Stra		(B)
4	· =					(-)
Sapling/Shrub Stratum (Plot size:)		- Total Co	VCI	Percent of Dominant Sp That Are OBL, FACW,		(A/B)
1				Prevalence Index wor	ksheet:	
2				Total % Cover of:		lv bv:
3					x 1 = 70	
4				FACW species 0		
5		= Total Co		FAC species 0	x 3 = 0	
Herb Stratum (Plot size:)		- Total Co	VCI	FACU species 15	x 4 = <u>60</u>	
1. Eleocharis acicularis	70	Yes	OBL	UPL species 0	x 5 =	
2. Ambrosia artemisiifolia	10	No	FACU	Column Totals: 85	(A) <u>130</u>) (B)
3. Juncus spp.		No		Prevalence Index	= B/A = 1.53	
4				Hydrophytic Vegetation	on Indicators:	-
5				X 1 - Rapid Test for H	Hydrophytic Veget	tation
6 7				X 2 - Dominance Tes	it is >50%	
8				X 3 - Prevalence Inde		
9.				4 - Morphological A	Adaptations¹ (Prov s or on a separate	vide supporting
10				Problematic Hydro	•	*
		= Total Co			-	
Woody Vine Stratum (Plot size:) 50)% = 45	20% = _	18	¹ Indicators of hydric soi be present, unless distu		
2.				Hydrophytic		
	=	Total Co	ver	Vegetation	. X	
% Bare Ground in Herb Stratum				Present? Yes	s <u>X</u> No_	
Remarks:						

Great Plains – Version 2.0

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SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth

Matrix

Pade: Factoria

Depth	Matrix			x Feature			_	
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-5	10YR 4/1	95	10YR 4/6	5			loamy sand	mottles
5+								bedrock
-	-						-	•
	-							
	-				-			·
1							. 2.	
			=Reduced Matrix, C			d Sand Gr		cation: PL=Pore Lining, M=Matrix.
		cable to all	LRRs, unless othe					for Problematic Hydric Soils ³ :
Histoso	` '			Gleyed Ma				Muck (A9) (LRR I, J)
	pipedon (A2) istic (A3)		-	Redox (S5 d Matrix (S				Prairie Redox (A16) (LRR F, G, H) Surface (S7) (LRR G)
	en Sulfide (A4)			Mucky Mir				Plains Depressions (F16)
	d Layers (A5) (LRR	F)		Gleyed Ma				RR H outside of MLRA 72 & 73)
	uck (A9) (LRR F, G ,			ed Matrix (I			•	ed Vertic (F18)
	d Below Dark Surfa	,		Dark Surfa	,			arent Material (TF2)
	ark Surface (A12)			ed Dark Su	, ,	1		Shallow Dark Surface (TF12)
	Mucky Mineral (S1)			Depression	. ,			(Explain in Remarks)
	Mucky Peat or Peat		· · · — ·	ains Depre	•	,		of hydrophytic vegetation and
5 cm M	ucky Peat or Peat (S	83) (LRR F)	(ML	RA 72 & 7	73 of LRR	H)		d hydrology must be present,
Doctrictive	Lavor (if procept).						uniess	disturbed or problematic.
Type: be	Layer (if present):							
	ches): Starting at	5 inches o	 nward					5 10 W X 11
	cnes): Otarting at	0 11101103 0	<u> </u>				Hydric Soil	Present? Yes X No
Remarks:								
HYDROLO	icv							
_	drology Indicators							
	•	one require	d; check all that app				· ·	ary Indicators (minimum of two required)
	Water (A1)		Salt Crust	, ,				face Soil Cracks (B6)
_	ater Table (A2)		Aquatic Ir		, ,			rsely Vegetated Concave Surface (B8)
X Saturati	, ,			Sulfide O				inage Patterns (B10)
· ——	Marks (B1)		-	on Water T				dized Rhizospheres on Living Roots (C3)
·	nt Deposits (B2)					ing Roots		vhere tilled)
·	posits (B3)		`	not tilled)				yfish Burrows (C8)
_	at or Crust (B4)			of Reduce	-	+)		uration Visible on Aerial Imagery (C9)
	posits (B5)	lm = /=		ς Surface (omorphic Position (D2)
	ion Visible on Aerial		7) Other (Ex	piain in Re	emarks)			C-Neutral Test (D5)
	Stained Leaves (B9)						Fros	st-Heave Hummocks (D7) (LRR F)
Field Obser		. ,						
Surface Wat			No Depth (ir	-				
Water Table	Present?	Yes	No Depth (ir	iches):				v
Saturation F	resent?	Yes X	No Depth (ir	iches): <u>2"</u>		Wetla	and Hydrolog	y Present? Yes X No
	pillary fringe) corded Data (strear	n gauge me	onitoring well, aerial	photos pr	evious ins	pections)	if available.	
20001100110	ss.aca Bata (otroat	gaago, iii		F.10100, pr	271000 1110	r 30110110),	aranabio.	
Domorko								
Remarks: Saturate	d soil							
Jaiurale	u suii							

roject/Site: Weatherford Quarry	(City/County	Palo Pin	to & Parker Counties Sampling Date: September 1
pplicant/Owner: Vulcan Materials Company				State: TX Sampling Point: WRB2 Wet
nvestigator(s): R. Sulkers, M. McKnight	;	Section, To	wnship, Ra	inge:
andform (hillslope, terrace, etc.): Plains		Local relief	(concave,	convex, none): none Slope (%): 1-5
ubregion (LRR): LRRJ	Lat: 32.6	627805		Long: <u>-98.071943</u> Datum: <u>NAD83</u>
oil Map Unit Name: Truce Fine Sandy Loam				NWI classification: none
re climatic / hydrologic conditions on the site typical for	this time of yea	ar? Yes X	No _	(If no, explain in Remarks.)
re Vegetation, Soil, or Hydrology	_ significantly	disturbed?	Are	"Normal Circumstances" present? Yes X No
re Vegetation, Soil, or Hydrology	_ naturally pro	blematic?	(If ne	eeded, explain any answers in Remarks.)
UMMARY OF FINDINGS - Attach site ma	p showing	samplin	g point l	ocations, transects, important features, etc
Hydrophytic Vegetation Present? Yes X	No			
Hydric Soil Present? Yes X	No		e Sampled	nd?
Wetland Hydrology Present? Yes X	No	with	ın a wetia	nd? Tes No
Remarks:				
EGETATION – Use scientific names of pl				
ree Stratum (Plot size:)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
Quercus fusiformis	60	Yes	NI	Number of Dominant Species That Are OBL, FACW, or FAC
Ulmus crassifolia	20	Yes	FAC	(excluding FAC-): 3 (A)
				Total Number of Dominant
				Species Across All Strata: 4 (B)
Sanling/Shruh Stratum (Plot size:	80	= Total Cov	/er	Percent of Dominant Species That Are OBL FACW or FAC: 75 (A/R)
Sapling/Shrub Stratum (Plot size:)	50% = 40	_ 20% =	16	That Are OBL, FACW, or FAC: 75 (A/B)
				Prevalence Index worksheet:
٠				Total % Cover of: Multiply by:
				OBL species 0 $x = 0$ FACW species 0 $x = 0$
•				FAC species 95 x 2 = 285
lerb Stratum (Plot size:)		= Total Cov	/er	FACU species $0 \times 4 = 0$
Iva annua	50	Yes	FAC	UPL species $0 \times 5 = 0$
Paspalum dilatatum	25	Yes	FAC	Column Totals: <u>95</u> (A) <u>285</u> (B)
				Prevalence Index = B/A = 3
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
-				X 2 - Dominance Test is >50%
·				X 3 - Prevalence Index is ≤3.0 ¹
				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
0.				Problematic Hydrophytic Vegetation¹ (Explain)
O	75	- Total Cay	or	
			15	¹ Indicators of hydric soil and wetland hydrology must
Noody Vine Stratum (Plot size:)	50% = 37.5	_ 20% =		be present, unless disturbed or problematic.
Noody Vine Stratum (Plot size:) 1	50% = 37.5			
Woody Vine Stratum (Plot size:) 1 2	50% = 37.5			Hydrophytic Vegetation
Noody Vine Stratum (Plot size:) 1	50% = 37.5			Hydrophytic

US Army Corps of Engineers

SOIL Sampling Point: _____

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirm	m the absence	of indicators.)
Depth	Matrix			x Feature				_
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	10YR 3/1	100					sandy loam	
3-6	10YR 4/1	70	10YR 4/6	30	<u>C</u>	M	sandy loam	
6+								bedrock
				_				
					- 		· -	
					- ———			
¹ Type: C=C	oncentration, D=De	pletion, RM	=Reduced Matrix, C	S=Covere	ed or Coate	ed Sand G	rains. ² Loc	cation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appli	cable to all	LRRs, unless othe	rwise no	ted.)		Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)			-	atrix (S4)			Muck (A9) (LRR I, J)
	oipedon (A2)		-	Redox (S				Prairie Redox (A16) (LRR F, G, H)
	stic (A3)			d Matrix (,			Surface (S7) (LRR G)
	en Sulfide (A4)			-	neral (F1)		_	Plains Depressions (F16)
	d Layers (A5) (LRR	•		-	latrix (F2)		•	RR H outside of MLRA 72 & 73)
	ick (A9) (LRR F, G, d Below Dark Surfa			ed Matrix Dark Surf	. ,			ed Vertic (F18) arent Material (TF2)
-	ark Surface (A12)	ce (ATT)			urface (F7))		Shallow Dark Surface (TF12)
	Mucky Mineral (S1)		X Redox			,		(Explain in Remarks)
-	Mucky Peat or Peat	(S2) (LRR		•	essions (F	16)		of hydrophytic vegetation and
5 cm Mu	ıcky Peat or Peat (S	3) (LRR F)			73 of LRR			d hydrology must be present,
							unless	disturbed or problematic.
	Layer (if present):							
Type: Be		Cinahaa a						Y
Depth (in	ches): Starting at	6 inches d	<u>nwa</u> rd				Hydric Soil	Present? Yes X No
Remarks:								
HYDROLO	GY							
Wetland Hy	drology Indicators	:						
_			d; check all that appl	lv)			Seconda	ary Indicators (minimum of two required)
Surface	Water (A1)	•	Salt Crust	(B11)			Surf	face Soil Cracks (B6)
·	ater Table (A2)		Aquatic In		es (B13)			rsely Vegetated Concave Surface (B8)
X Saturation			Hydrogen					inage Patterns (B10)
	larks (B1)		Dry-Seaso)		dized Rhizospheres on Living Roots (C3)
	nt Deposits (B2)		Oxidized F					/here tilled)
	posits (B3)		· · · · · · · · · · · · · · · · · · ·	not tilled		3	. ,	yfish Burrows (C8)
	at or Crust (B4)		Presence			4)		uration Visible on Aerial Imagery (C9)
Iron Dep			Thin Muck		-	,		omorphic Position (D2)
-	on Visible on Aerial	Imagery (B						C-Neutral Test (D5)
	tained Leaves (B9)	3 , (,	•	,			st-Heave Hummocks (D7) (LRR F)
Field Obser	, ,							, , , , ,
Surface Wat	er Present?	Yes	No Depth (in	ches):				
Water Table			No Depth (in					
Saturation P			No Depth (in				land Hydrolog	y Present? Yes X No
(includes car	oillary fringe)							,
Describe Re	corded Data (strear	n gauge, m	onitoring well, aerial	photos, p	revious ins	spections),	, if available:	
Remarks:	NA/							
Water flo) VV							

Project/Site: Weatherford Quarry	С	ity/County: Palo Pin	to & Parker Counties	Sampling Date: September 16, 2
•		, ,		Sampling Point: WRB Upland
			nge:	
Landform (hillslope, terrace, etc.): Plains				
, ,	<u> </u>	•	, 	Datum: NAD83
Soil Map Unit Name: Truce Fine Sandy Loam				eation: none
Are climatic / hydrologic conditions on the site typical for				
Are Vegetation, Soil, or Hydrology	_			present? Yes X No
Are Vegetation, Soil, or Hydrology	_		eded, explain any answe	<u> </u>
SUMMARY OF FINDINGS – Attach site ma	_ ,	•	•	,
Hydrophytic Vegetation Present? Yes	No X	la the Complet	Area	
	No X	Is the Sampled within a Wetlar		No X
Wetland Hydrology Present? Yes	No X	within a wetian	iu: Tes	
Remarks:				
VEGETATION – Use scientific names of p	lante			
7LOLIATION - Ose scientific flames of p		Dominant Indicator	Dominance Test work	sheet:
Tree Stratum (Plot size:)		Species? Status	Number of Dominant S	
1			That Are OBL, FACW,	^
2			(excluding FAC-):	<u>U</u> (A)
3			Total Number of Domin Species Across All Stra	4
4			Species Across Air Stra	(B)
Sapling/Shrub Stratum (Plot size:)		Total Cover	Percent of Dominant Sp That Are OBL, FACW,	
1			Prevalence Index wor	ksheet:
3.			Total % Cover of:	
4				x 1 = 0
5				$x = \frac{0}{20}$
		Total Cover		x = 30
Herb Stratum (Plot size:) 1 Ambrosia artemisiifolia	00	Yes FACU	FACU species 90	x 4 = 360
Amorosia artemisiiolia Iva annua		No FAC	UPL species 0 Column Totals: 100	
·	 - .		Column Totals. 100	(A) <u>390</u> (B)
3			Prevalence Index	$= B/A = \underline{3.9}$
4.			Hydrophytic Vegetation	on Indicators:
6			1 - Rapid Test for I	
7.			2 - Dominance Tes	
8.			3 - Prevalence Inde	
9.			4 - Morphological A	Adaptations ¹ (Provide supporting s or on a separate sheet)
10				phytic Vegetation ¹ (Explain)
	100 -	Total Cover		
Woody Vine Stratum (Plot size:) 1			be present, unless distu	I and wetland hydrology must urbed or problematic.
2.			Hydrophytic	
		Total Cover	Vegetation	s No X
% Bare Ground in Herb Stratum				

SOIL Sampling Point: _____

Depth Matrix (inches) Color (moist) %			
	Redox Features Color (moist) % Type ¹ Lo	oc ² Texture	Remarks
0-3 10YR 4/1		sandy loam	
3-6 10YR 5/1			rocky pebbles & clay pieces
6+			Bedrock
			Boarook
¹ Type: C=Concentration, D=Depletion, RM=l	Reduced Matrix, CS=Covered or Coated Sa	and Grains. ² Loc	ation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L	.RRs, unless otherwise noted.)	Indicators	or Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)		uck (A9) (LRR I, J)
Histic Epipedon (A2)	Sandy Redox (S5)		Prairie Redox (A16) (LRR F, G, H)
Black Histic (A3) Hydrogen Sulfide (A4)	Stripped Matrix (S6) Loamy Mucky Mineral (F1)		urface (S7) (LRR G) ains Depressions (F16)
Stratified Layers (A5) (LRR F)	Loamy Gleyed Matrix (F2)	-	R H outside of MLRA 72 & 73)
1 cm Muck (A9) (LRR F, G, H)	Depleted Matrix (F3)	•	d Vertic (F18)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)		rent Material (TF2)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	-	nallow Dark Surface (TF12)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)		Explain in Remarks)
2.5 cm Mucky Peat or Peat (S2) (LRR G5 cm Mucky Peat or Peat (S3) (LRR F)	, H) High Plains Depressions (F16) (MLRA 72 & 73 of LRR H)		of hydrophytic vegetation and hydrology must be present,
3 cm macky r cat of r cat (63) (ERRY)	(MERCA 72 & 73 01 ERR 11)		disturbed or problematic.
Restrictive Layer (if present):			·
Type: bedrock	<u> </u>		
Depth (inches): Starting at 6 inches on	<u>wa</u> rd	Hydric Soil	Present? Yes No X
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:	check all that apply)	Seconda	ry Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required:		<u> </u>	ry Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1)	Salt Crust (B11)	Surfa	ace Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2)	Salt Crust (B11) Aquatic Invertebrates (B13)	Surfa	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1)	Salt Crust (B11)	Surfa Spar Drair	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3)	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Surfa Spar Drair Oxid	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	 Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) 	Surfa Spar Drain Oxid Roots (C3) (w	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10) zed Rhizospheres on Living Roots (C3)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	 Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living F 	Surfa Spar Drain Oxid Roots (C3) (w) Cray	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10) zed Rhizospheres on Living Roots (C3) nere tilled)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living R	Surfa Spar Drain Oxid Roots (C3) (w Cray Satu	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10) zed Rhizospheres on Living Roots (C3) nere tilled) fish Burrows (C8)
Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living F	Surfa Spar Drair Oxid Roots (C3)	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10) zed Rhizospheres on Living Roots (C3) nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) morphic Position (D2) Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living F	Surfa Spar Drair Oxid Roots (C3)	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10) zed Rhizospheres on Living Roots (C3) nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations:	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living F	Surfa Spar Drair Oxid Roots (C3)	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10) zed Rhizospheres on Living Roots (C3) nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) morphic Position (D2) Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes N	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living F	Surfa Spar Drair Oxid Roots (C3)	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10) zed Rhizospheres on Living Roots (C3) nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) morphic Position (D2) Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7 Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes N	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living F	Surfa Spar Drain Oxid Roots (C3)	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10) zed Rhizospheres on Living Roots (C3) nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7 Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes N Saturation Present? Yes N	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living F	Surfa Spar Drain Oxid Roots (C3)	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10) zed Rhizospheres on Living Roots (C3) nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) morphic Position (D2) Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7 Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes N	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living F	Surfa Spar Spar Oxid Roots (C3) (w Cray Satu Geor FAC Fros	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10) zed Rhizospheres on Living Roots (C3) nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes N Saturation Present? Yes N Saturation Present? Yes N (includes capillary fringe)	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living F	Surfa Spar Spar Oxid Roots (C3) (w Cray Satu Geor FAC Fros	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10) zed Rhizospheres on Living Roots (C3) nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes N Water Table Present? Yes N Saturation Present? Yes N (includes capillary fringe)	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living F	Surfa Spar Spar Oxid Roots (C3) (w Cray Satu Geor FAC Fros	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10) zed Rhizospheres on Living Roots (C3) nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes N Water Table Present? Yes N Saturation Present? Yes N (includes capillary fringe) Describe Recorded Data (stream gauge, more	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living F	Surfa Spar Spar Oxid Roots (C3) (w Cray Satu Geor FAC Fros	ace Soil Cracks (B6) sely Vegetated Concave Surface (B8) nage Patterns (B10) zed Rhizospheres on Living Roots (C3) nere tilled) fish Burrows (C8) ration Visible on Aerial Imagery (C9) norphic Position (D2) Neutral Test (D5) -Heave Hummocks (D7) (LRR F)

Project/Site: Weatherford Quarry			City/County	. Palo Pin	ito & Parker Count	ies _{Samp}	oling Date: Sep	tember 16, 2020
Applicant/Owner: Vulcan Materials			-		State: TX		-	
Investigator(s): R. Sulkers, M. Mck							-	
Landform (hillslope, terrace, etc.): PI								(%): 1-5
Subregion (LRR): LRRJ				•	Long: -98.07173			· ,
Soil Map Unit Name: Truce Fine Sa					NWI cla			
Are climatic / hydrologic conditions or		his time of ve						
Are Vegetation, Soil,		-			"Normal Circumstand		•	No
Are Vegetation, Soil,		-			eeded, explain any a			
SUMMARY OF FINDINGS –				•	, ,		•	ures, etc.
Hydrophytic Vegetation Present?	Yes	_{No.} X						
Hydric Soil Present?	Yes	No <u>X</u>		e Sampled			uo X	
Wetland Hydrology Present?	Yes	No <u>X</u>	with	in a Wetlaı	na? res	r	NO <u>//</u>	
Remarks:								
VEGETATION – Use scientif	ic names of pla				_			
Tree Stratum (Plot size:	1		Dominant Species?		Dominance Test			
1					Number of Domini That Are OBL, FA			
2.					(excluding FAC-):		0	(A)
3.					Total Number of D	Oominant		
4.					Species Across A		0	(B)
Sapling/Shrub Stratum (Plot size:)		= Total Cov	/er	Percent of Domina That Are OBL, FA	ant Species CW, or FAC	: <u>0</u>	(A/B)
1					Prevalence Index	workshoot	·•	
2					Total % Cove			v-
3.					OBL species 0		x = 0	
4			-		FACW species C			
5			= Total Cov				x 3 = 0	
<u>Herb Stratum</u> (Plot size:)		- Total Cov	/ei	FACU species		x 4 = <u>360</u>	
1. Ambrosia artemisiifolia		70	Yes	FACU)	x 5 = 0	
2. Muhlenbergia capillaris		20	No	FACU	Column Totals:	90	(A) <u>360</u>	(B)
3					Prevalence	Index - R/A	_ 4	
4				-	Hydrophytic Veg			
5					1 - Rapid Tes			on
6					2 - Dominanc			
7					3 - Prevalence			
8					4 - Morpholog	jical Adaptat	tions¹ (Provide	supporting
9 10							a separate sh	,
10			= Total Cov		Problematic H	Hydrophytic \	Vegetation' (E	xplain)
Woody Vine Stratum (Plot size:	5	50% = 45			¹ Indicators of hydr be present, unless			
2					Hydrophytic			
O/ Dama Channel in 11 and Others			= Total Cov	/er	Vegetation Present?	Yes	No X	
% Bare Ground in Herb Stratum Remarks:								_

SOIL Sampling Point: _____

	-	e to the dep	oth needed to docu	ment the ox Feature		or confirm	n the absence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	<u>x Feature</u> %	<u>Type¹</u>	Loc ²	Texture	Remarks	
0-1	10 YR 4/2		10YR 4/6	5	C	M	· small	Tomano	
								cobble	
1+				-				CODDIE	
			-	_					
					-				
			-						
		•	=Reduced Matrix, C			ed Sand G		cation: PL=Pore Lining, I	
Hydric Soil	Indicators: (Appl	icable to all	LRRs, unless othe	rwise no	ted.)		Indicators	for Problematic Hydric	Soils ³ :
Histosol			Sandy	Gleyed M	atrix (S4)		1 cm N	Muck (A9) (LRR I, J)	
	pipedon (A2)		-	Redox (S			Coast	Prairie Redox (A16) (LR	R F, G, H)
Black Hi	` '			d Matrix (,			Surface (S7) (LRR G)	
	en Sulfide (A4)			-	neral (F1)			Plains Depressions (F16)	
	d Layers (A5) (LRR	-	-	Gleyed M			,	RR H outside of MLRA 7	2 & 73)
	ick (A9) (LRR F, G			ed Matrix (,			ed Vertic (F18)	
	d Below Dark Surfa ark Surface (A12)	ice (ATT)		Dark Surf	ace (F6) urface (F7)		arent Material (TF2) Shallow Dark Surface (TF	12)
	lucky Mineral (S1)			Depression	•	,	-	(Explain in Remarks)	12)
-	Mucky Peat or Peat	(S2) (LRR			essions (F	- 16)		of hydrophytic vegetation	n and
	ıcky Peat or Peat (73 of LRF	-		d hydrology must be pres	
							unless	disturbed or problemation).
	Layer (if present):								
Type: Co			 .						V
Depth (inc	ches): Starting at	1 inches o	<u>nwa</u> rd				Hydric Soil	Present? Yes	No _X
Remarks:							•		
HYDROLO	GY								
	drology Indicators								
_			d; check all that app	lv)			Second	ary Indicators (minimum d	of two required)
	•	one require						ary Indicators (minimum o	or two required)
	Water (A1)		Salt Crust		(D40)			face Soil Cracks (B6)	O
	iter Table (A2)		Aquatic In		, ,			rsely Vegetated Concave	e Surrace (B8)
Saturation			Hydrogen					inage Patterns (B10)	
	larks (B1)		Dry-Seaso					dized Rhizospheres on Li	ving Roots (C3)
	nt Deposits (B2)		Oxidized I			ing Roots		vhere tilled)	
	posits (B3)		•	not tilled		4)		yfish Burrows (C8)	(00)
	at or Crust (B4)		Presence		•	4)		uration Visible on Aerial I	magery (C9)
	oosits (B5)	(5	Thin Muck		` '			omorphic Position (D2)	
	on Visible on Aeria		7) Other (Ex	plain in R	emarks)			C-Neutral Test (D5)	\
	tained Leaves (B9))					Fros	st-Heave Hummocks (D7) (LRR F)
Field Obser									
Surface Water			No Depth (in						
Water Table	Present?		No Depth (in						V
Saturation P		Yes	No Depth (in	iches):		Wetl	and Hydrolog	y Present? Yes	No X
(includes cap		m dalide mi	onitoring well, aerial	nhotos n	revious in	spections)	if available.		
Describe Mer	co. dod Dala (silea	gaage, III	ormorning won, acriai	μποιου, μ	OVIOUS III	-poonons),	available.		
Domarka									
Remarks:									

Project/Site: Weatherford Quarry	Cit	y/County:	Palo Pint	o & Parker Counties	Sampling	Date: Se	ptember 16, 2
Applicant/Owner: Vulcan Materials Company				State: TX			
nvestigator(s): R. Sulkers, M. McKnight	Se	ection, Tov	vnship, Ran	nge:			
andform (hillslope, terrace, etc.): Plains							(%): <u>1-5</u>
subregion (LRR): LRRJ	Lat: 32.62	625		Long: <u>-98.071622</u>		_ Datum:	NAD83
oil Map Unit Name: Truce Fine Sandy Loam				NWI classifi			
re climatic / hydrologic conditions on the site typical for this	time of year?	Yes X					
re Vegetation, Soil, or Hydrologysi	-			Normal Circumstances"	•	res X	No
re Vegetation, Soil, or Hydrologyn	-		(If ne	eded, explain any answ	· ers in Rema	ırks.)	
UMMARY OF FINDINGS – Attach site map							ures, etc.
Hydrophytic Vegetation Present? Yes X No	o	le the	e Sampled	Aroa			
Hydric Soil Present? Yes X No	o		n a Wetlan	,	X No		
Wetland Hydrology Present? Yes X No	o						
Remarks:							
EGETATION – Use scientific names of plant	ts.						
Tree Stratum (Plot size:)	Absolute E % Cover S	Dominant		Dominance Test wor			
1	<u> </u>		-	Number of Dominant S That Are OBL, FACW,			
2				(excluding FAC-):	-	2	(A)
				Total Number of Domi	nant		
				Species Across All Str		2	(B)
	=		er	Percent of Dominant S	Species		
Sapling/Shrub Stratum (Plot size:)	- \	/oo		That Are OBL, FACW,		100	(A/B)
1.Cephalanthus occidentalis			OBL	Prevalence Index wo	rksheet:		
2.				Total % Cover of:		Multiply b	y:
3				OBL species 99		= 95	<u> </u>
ł 5				FACW species) x 2	=0	
J	_	Total Cov	er	FAC species0			
Herb Stratum (Plot size:) 50% =	2.5 20%	% = <u>1</u>	_	FACU species) x 4	=0	
Eleocharis acicularis		Yes	OBL	UPL species			
Juncus spp.				Column Totals:	95 (A)	95	(B)
8				Prevalence Inde	x = B/A =	1	
				Hydrophytic Vegetat	· -		
j				X 1 - Rapid Test for	Hydrophytic	c Vegetatio	on
i				X 2 - Dominance Te	est is >50%		
7				X 3 - Prevalence Inc			
). 				4 - Morphological data in Remarl	Adaptations	s ¹ (Provide	supporting
0				Problematic Hydro		•	*
	105 -	Total Cov	or				
Noody Vine Stratum (Plot size:) 50%	<u>52.5</u>	20% = _	21	¹ Indicators of hydric so be present, unless dis			
2				Hydrophytic			
	=	Total Cov	er	Vegetation Present? You	es X	No	
				i i cociii: I (110	
% Bare Ground in Herb Stratum							

SOIL Sampling Point: _____

Profile Desc	cription: (Describ	e to the depth	needed to docu	ment the	indicator	or confir	m the absence	of indicators.)
Depth	Matrix			x Feature	- 1	2		
(inches)	Color (moist)		Color (moist)		Type'	Loc ²	Texture	Remarks
0-6	10 YR 4/2	85 1	0 YR 4/6	15	С	M	loamy	
6+								bedrock
	-							
					-			
	-							
·	-	_			-		· -	
						-	<u> </u>	
	oncentration, D=De					ed Sand G		cation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appl	cable to all LF						s for Problematic Hydric Soils ³ :
Histosol	` '		Sandy	-				Muck (A9) (LRR I, J)
	pipedon (A2)		-	Redox (S	-			Prairie Redox (A16) (LRR F, G, H)
	istic (A3)			d Matrix (Surface (S7) (LRR G)
	en Sulfide (A4)				neral (F1)		_	Plains Depressions (F16)
	d Layers (A5) (LRR	•	-	Gleyed M			`	RR H outside of MLRA 72 & 73)
	uck (A9) (LRR F, G			ed Matrix (ced Vertic (F18)
	d Below Dark Surfa ark Surface (A12)	ice (ATT)		Dark Surfa	urface (F7	`		Parent Material (TF2) Shallow Dark Surface (TF12)
	Mucky Mineral (S1)		X Redox)	-	(Explain in Remarks)
	Mucky Peat or Peat	(S2) (I RR G			essions (F	16)		of hydrophytic vegetation and
	ucky Peat or Peat (73 of LRF	-		d hydrology must be present,
	,	, (=:::::,	(/		s disturbed or problematic.
Restrictive	Layer (if present):							·
Type: be			<u></u>					
Depth (in	ches): Starting at	6 inches onw	/ard				Hydric Soi	I Present? Yes X No
Remarks:	,							
rtomanto.								
HYDROLO								
Wetland Hy	drology Indicators	s:						
Primary Indi	cators (minimum of	one required;	check all that app	ly)			Second	ary Indicators (minimum of two required)
X Surface	Water (A1)		Salt Crust	(B11)			Sur	face Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic In	vertebrate	es (B13)		Spa	arsely Vegetated Concave Surface (B8)
Saturati	on (A3)		Hydrogen	Sulfide O	dor (C1)		Dra	inage Patterns (B10)
Water M	/larks (B1)		Dry-Seaso	on Water	Table (C2))	Oxi	dized Rhizospheres on Living Roots (C3)
Sedime	nt Deposits (B2)		Oxidized I	Rhizosphe	res on Liv	ing Roots	(C3) (v	vhere tilled)
Drift De	posits (B3)		(where	not tilled)		Cra	yfish Burrows (C8)
Algal Ma	at or Crust (B4)		Presence	of Reduce	ed Iron (C	4)	Sat	uration Visible on Aerial Imagery (C9)
	posits (B5)		Thin Muck	Surface	(C7)		Geo	omorphic Position (D2)
Inundati	ion Visible on Aeria	I Imagery (B7)	Other (Ex				FAC	C-Neutral Test (D5)
	Stained Leaves (B9)		_ ` `		,			st-Heave Hummocks (D7) (LRR F)
Field Obser								, , , ,
Surface Wat		Yes X No	Depth (in	ches). 1'	1			
Water Table			Depth (in					
							land Uvdvalani	y Present? Yes X No
Saturation P	resent? pillary fringe)	res No	Depth (in	icnes):		_ wet	iana nyarolog	y Present? Yes _^ No
	corded Data (strea	m gauge, moni	toring well, aerial	photos, pi	evious ins	spections)	, if available:	
Remarks:								
Ì								

Project/Site: Weatherford Quarry	1		City/Cou	_{inty:} Lipan/P	alo Pinto County	Sampling Date: 2020-09-16
Applicant/Owner: Vulcan Material	s Company				State: Texas	Sampling Point: A1
Investigator(s): Boe, B. & Hight, S	_				ange: N/A	· -
Landform (hillslope, terrace, etc.): U					=	
						Datum: WGS 84
Soil Map Unit Name: 20 - Hensley						
Are climatic / hydrologic conditions o						
Are Vegetation, Soil,						present? Yes No
Are Vegetation, Soil,					eeded, explain any answe	·
						•
SUMMARY OF FINDINGS –	Attach site map	snowing	samp	ling point i	ocations, transects	i, important features, etc.
Hydrophytic Vegetation Present?	Yes N Yes N Yes N	10 <u>′</u>	ls	s the Sampled	d Area	
Hydric Soil Present?	Yes N	10	v	vithin a Wetlaı	nd? Yes	No
Wetland Hydrology Present? Remarks:	Yes N	No				
Upland herbaceous. While the DAR during the month of September. 8.0 inches. VEGETATION – Use scienti	6 inches of precipitatio	n were repo				
	<u> </u>	Absolute	Domin	ant Indicator	Dominance Test work	sheet:
Tree Stratum (Plot size: 30 ft r				es? Status	Number of Dominant S	pecies
					That Are OBL, FACW, (excluding FAC-):	or FAC (A)
2					, , ,	
3					Total Number of Domir Species Across All Stra	_
4		15%	- Total	Cover		
Sapling/Shrub Stratum (Plot size:	<u>15 ft r</u>)	1370	= Total	Covei	Percent of Dominant S That Are OBL, FACW,	
1. Prosopis glandulosa		5		FACU		、 ,
2					Prevalence Index wor	
3					Total % Cover of: OBL species 0	$ \qquad $
4						$x = \frac{0}{0}$
5						x 3 = 0
Herb Stratum (Plot size: 5 ft r)	5%	= Total	Cover	FACU species 15	
1. Aristida oligantha		70	~	NI	· · · · · · · · · · · · · · · · · · ·	x 5 = 0
2. Heterotheca canescens		20		NI	Column Totals: 15	(A) <u>60</u> (B)
3. Bromus arvensis		10		FACU		D/A 4.0
4. Quercus fusiformis		3		<u>NI</u>	Prevalence Index Hydrophytic Vegetati	<u></u>
5						Hydrophytic Vegetation
6					2 - Dominance Tes	
7					3 - Prevalence Ind	
8						Adaptations ¹ (Provide supporting
9					data in Remark	s or on a separate sheet)
10					Problematic Hydro	phytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size: 3		103%			¹ Indicators of hydric so be present, unless dist	il and wetland hydrology must urbed or problematic.
2.					Hydrophytic	
% Bare Ground in Herb Stratum 0			= Total	Cover	Vegetation	es No <u> </u>
Remarks:	<u>-</u>				1	
Upland herbaceous.						

SOIL Sampling Point: A1

Profile Desci	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confir	m the absence	of indicators.)
Depth	Matrix			ox Feature				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc²	<u>Texture</u>	Remarks
0 - 12	7.5YR 4/3	98	10YR 5/6	_ 2	<u>C</u>	M	Silty clay	
12 - 16	10YR 5/4	100			_		Silty clay	5% small limestone pieces
-								
·				-				
					_			
-								
¹Type: C=Co	ncentration D=Dec	letion RM	Reduced Matrix, C	S=Covere	d or Coate	ed Sand C	Grains ² Lo	cation: PL=Pore Lining, M=Matrix.
			LRRs, unless othe			ou cuna c		for Problematic Hydric Soils ³ :
Histosol (Sandy					Muck (A9) (LRR I, J)
	ipedon (A2)			Redox (S				Prairie Redox (A16) (LRR F, G, H)
Black His	stic (A3)		Strippe	d Matrix (S6)		Dark S	Surface (S7) (LRR G)
	n Sulfide (A4)			Mucky Mi			High F	Plains Depressions (F16)
	Layers (A5) (LRR	•		Gleyed M			•	RR H outside of MLRA 72 & 73)
	ck (A9) (LRR F, G,			ed Matrix (ced Vertic (F18)
	Below Dark Surfacture Reference (A12)	e (ATT)		Dark Surfa ed Dark Si	` ,	`		arent Material (TF2) Shallow Dark Surface (TF12)
·	ucky Mineral (S1)			Depression		,		(Explain in Remarks)
	lucky Peat or Peat ((S2) (LRR (lains Depr	. ,	16)		of hydrophytic vegetation and
	cky Peat or Peat (S			_RA 72 &	73 of LR	R H)	wetlan	d hydrology must be present,
							unless	s disturbed or problematic.
Restrictive L	ayer (if present):							
Type:								
Depth (inc	hes):						Hydric Soil	Present? Yes No
Remarks:								
No hydric soil	indicators observed	d.						
HYDROLOG	2V							
	Irology Indicators:							
-			di abaak all that ann	l. A			Cocond	and Indicators (minimum of two required)
-		ne required	d; check all that app				·	ary Indicators (minimum of two required)
	Nater (A1)		Salt Crus	, ,	oo (D12)			face Soil Cracks (B6)
Saturatio	ter Table (A2)		Aquatic Ir Hydroger		, ,			arsely Vegetated Concave Surface (B8) inage Patterns (B10)
Saturatio	` '		Dry-Seas			`		dized Rhizospheres on Living Roots (C3)
	t Deposits (B2)		Oxidized		•			where tilled)
	osits (B3)		· · · · · · · · · · · · · · · · · · ·	not tilled		ning ixoots	. ,	yfish Burrows (C8)
	t or Crust (B4)		Presence			4)		uration Visible on Aerial Imagery (C9)
Iron Depo	` ,		Thin Muc		•	7)		omorphic Position (D2)
	on Vis ble on Aerial	Imagery (B						C-Neutral Test (D5)
	ained Leaves (B9)				,			st-Heave Hummocks (D7) (LRR F)
Field Observ							<u> </u>	, , , ,
Surface Wate	er Present? Y	'es	No Depth (ir	nches):				
Water Table F			No Depth (in					
Saturation Pro			No <u> </u>				land Hydrolog	y Present? Yes No
(includes cap	illary fringe)							
Describe Rec	orded Data (stream	gauge, mo	onitoring well, aerial	photos, p	revious in	spections)	, if available:	
Remarks:								
No hydrology	indicators observed	d.						

Project/Site: Weatherford Quarry		City/County	_{y:} Lipan/Pa	alo Pinto County	Sampling Date: 2020-09-16
		-		State: Texas	
Investigator(s): Boe, B. & Hight, S.					
Landform (hillslope, terrace, etc.): Upland					Slope (%): <u>1</u>
Subregion (LRR): H	Lat: 32.	628682		Long: -98.070289	Datum: WGS 84
Soil Map Unit Name: 20 - Hensley very stony clay loar					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology si					present? Yes No
Are Vegetation, Soil, or Hydrology na	aturally pro	blematic?	(If ne	eeded, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing	samplir	ng point l	ocations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes No	· ·				
Hydric Soil Present? Yes No.	, <u> </u>		he Sampled hin a Wetlaı		No
Wetland Hydrology Present? Yes No Remarks:	· <u> </u>	Witi	nin a vvenai	iu! Tes	
Upland woodland. While the DAREM calculation indicates a during the month of September. 8.06 inches of precipitation inches.	were repo				
VEGETATION – Use scientific names of plant				,	
Tree Stratum (Plot size: 30 ft r	Absolute % Cover		t Indicator Status	Dominance Test work	
1. Prosopis glandulosa	20		FACU	Number of Dominant S That Are OBL, FACW,	
2. Ulmus crassifolia	20	~	FAC	(excluding FAC-):	<u>2</u> (A)
3				Total Number of Domir	
4		-		Species Across All Stra	ata: <u>5</u> (B)
Sapling/Shrub Stratum (Plot size: 15 ft r)	40%	= Total Co	over	Percent of Dominant S	
1. Ulmus crassifolia	30	~	FAC	That Are OBL, FACW,	or FAC: <u>40</u> (A/B)
2. Quercus stellata	5		FACU	Prevalence Index wor	ksheet:
3.					Multiply by:
4.					x 1 = 0
5.					x 2 = 0
	35%	= Total Co	ver		x 3 = 150
Herb Stratum (Plot size: 5 ft r)	50		NII	FACU species 45	
1. Sporobolus compositus	50		NI	UPL species 0	
2. Aristida oligantha 3 Bromus arvensis	30 15		NI	Column Totals: 95	(A) <u>330</u> (B)
Ambrosia psilostachya	5		FACU FACU	Prevalence Index	c = B/A = 3.5
''-				Hydrophytic Vegetation	on Indicators:
5				1 - Rapid Test for I	Hydrophytic Vegetation
6				2 - Dominance Tes	st is >50%
7				3 - Prevalence Inde	ex is ≤3.0 ¹
9.				4 - Morphological A	Adaptations ¹ (Provide supporting
10.					s or on a separate sheet)
	100%	= Total Co	ver	_	phytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size: 30 ft r) 1				¹ Indicators of hydric so be present, unless disti	il and wetland hydrology must urbed or problematic.
2.				Hydrophytic Vegetation	
% Bare Ground in Herb Stratum 0				Present? Ye	es No
Remarks:					
Upland woodland.					

SOIL

Sampling Point: A2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				
(inches)	Color (moist)	<u> </u>	Color (moist) % Type ¹	Loc ²	Texture	Remarks	
0 - 16	7.5YR 3/4	100		Si	ilty clay loam	10% limestone gravel	
							
		- — —					
-							
-							
	-						
-							
	-						
¹ Type: C=Co	oncentration. D=Dec	oletion, RM=Re	educed Matrix, CS=Covered or Coated	Sand Grain	ns. ² Loc	ation: PL=Pore Lining, M=Matr	ix.
			Rs, unless otherwise noted.)			for Problematic Hydric Soils ³ :	
-		abio to all Elt				•	
Histosol			Sandy Gleyed Matrix (S4)			luck (A9) (LRR I, J)	
Histic Ep	pipedon (A2)		Sandy Redox (S5)			Prairie Redox (A16) (LRR F, G,	H)
Black His	stic (A3)		Stripped Matrix (S6)		Dark S	urface (S7) (LRR G)	
Hydroge	n Sulfide (A4)		Loamy Mucky Mineral (F1)		High P	lains Depressions (F16)	
	Layers (A5) (LRR I	F)	Loamy Gleyed Matrix (F2)		_	R H outside of MLRA 72 & 73)	١
	ck (A9) (LRR F, G ,		Depleted Matrix (F3)		•	ed Vertic (F18)	'
			,			` '	
	d Below Dark Surfac	e (ATT)	Redox Dark Surface (F6)			arent Material (TF2)	
	ark Surface (A12)		Depleted Dark Surface (F7)			hallow Dark Surface (TF12)	
Sandy M	lucky Mineral (S1)		Redox Depressions (F8)			Explain in Remarks)	
2.5 cm N	/lucky Peat or Peat ((S2) (LRR G, F	 H) High Plains Depressions (F16) 	6)	³ Indicators	of hydrophytic vegetation and	
5 cm Mu	cky Peat or Peat (S	3) (LRR F)	(MLRA 72 & 73 of LRR H	- I)	wetland	d hydrology must be present,	
					unless	disturbed or problematic.	
Restrictive L	ayer (if present):					·	
_	ayor (ii procont).						
Type:			_				
Depth (inc	ches):		<u> </u>		Hydric Soil	Present? Yes No	
Remarks:				1			
Remarks:	indicators observed	1					
	indicators observed	d.					
	indicators observed	d.					
No hydric soil		d.		, t			
		1.					
No hydric soil	GY						
No hydric soil HYDROLO Wetland Hyd	GY drology Indicators:						
No hydric soil HYDROLO Wetland Hyd	GY		heck all that apply)		Seconda	rry Indicators (minimum of two re	equired)
No hydric soil HYDROLO Wetland Hyd Primary Indic	GY drology Indicators:		heck all that apply) Salt Crust (B11)			ry Indicators (minimum of two re ace Soil Cracks (B6)	equired)
HYDROLO Wetland Hyd Primary Indic Surface	GY drology Indicators: cators (minimum of c		Salt Crust (B11)		Surf	ace Soil Cracks (B6)	<u> </u>
HYDROLO Wetland Hyd Primary Indic Surface High Wa	GY drology Indicators: cators (minimum of c Water (A1) ter Table (A2)		Salt Crust (B11) Aquatic Invertebrates (B13)		Surf	ace Soil Cracks (B6) rsely Vegetated Concave Surface	<u> </u>
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturation	GY drology Indicators: eators (minimum of c Water (A1) ter Table (A2) on (A3)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)		Surf Spa Drai	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10)	ce (B8)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturation	GY drology Indicators: cators (minimum of c Water (A1) ter Table (A2)		Salt Crust (B11) Aquatic Invertebrates (B13)		Surf Spa Drai	ace Soil Cracks (B6) rsely Vegetated Concave Surface	ce (B8)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M	GY drology Indicators: eators (minimum of c Water (A1) ter Table (A2) on (A3)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	ng Roots (C3	Surf Spa Drai	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10)	ce (B8)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer	drology Indicators: cators (minimum of control of contr		 Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living 	ng Roots (C3	Surf Spa Drai Oxio	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled)	ce (B8)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep	drology Indicators: cators (minimum of compared (Mater (A1)) tter Table (A2) on (A3) arks (B1) arks (B1) on Deposits (B2) on on (B3)		 Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) 	,	Surf Spa Drai Oxio (w Cray	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Ro rhere tilled) rfish Burrows (C8)	ce (B8)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma	drology Indicators: cators (minimum of compared (A1) ter Table (A2) on (A3) arks (B1) arks (B1) on to Deposits (B2) on to Crust (B4)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4)	,	Surf Spa Drai Oxic 3) (w Cray Satu	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery	ce (B8)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep	GY drology Indicators: cators (minimum of compared to the com	one required; c	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7)	,	Surf Spa Oxio Oxio Cray Satu Geo	rsely Vegetated Concave Surfacenage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2)	ce (B8)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep	drology Indicators: cators (minimum of compared (A1) ter Table (A2) on (A3) arks (B1) arks (B1) on to Deposits (B2) on to Crust (B4)	one required; c	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4)	,	Surf Spa Oxio Oxio Cray Satu Geo	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery	ce (B8)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep	GY drology Indicators: cators (minimum of compared to the com	one required; c	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7)	,	Surf Spa Oxic Oxic 3) (w Cray Satu Geo FAC	rsely Vegetated Concave Surfacenage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2)	ce (B8) pots (C3) (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si	drology Indicators: cators (minimum of control of contr	one required; c	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7)	,	Surf Spa Oxic Oxic 3) (w Cray Satu Geo FAC	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) i-Neutral Test (D5)	ce (B8) pots (C3) (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si	drology Indicators: cators (minimum of control of contr	one required; c	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living		Surf Spa Oxic Oxic 3) (w Cray Satu Geo FAC	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) i-Neutral Test (D5)	ce (B8) pots (C3) (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water	GY drology Indicators: cators (minimum of comparison of c	one required; c	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)		Surf Spa Oxic Oxic 3) (w Cray Satu Geo FAC	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) i-Neutral Test (D5)	ce (B8) pots (C3) (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si	GY drology Indicators: cators (minimum of comparison of c	one required; c	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living		Surf Spa Oxic Oxic 3) (w Cray Satu Geo FAC	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) i-Neutral Test (D5)	ce (B8) pots (C3) (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water	GY drology Indicators: cators (minimum of control of c	Imagery (B7) 'es No 'es No	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks) v Depth (inches): Depth (inches):	- -	Surf Spa Spa Oxio (w Cray Satu Geo FAC	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) -Neutral Test (D5) st-Heave Hummocks (D7) (LRR	ce (B8) cots (C3) (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water Saturation Pr	GY drology Indicators: cators (minimum of control of c	Imagery (B7) 'es No 'es No	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	- -	Surf Spa Spa Oxio (w Cray Satu Geo FAC	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) i-Neutral Test (D5)	ce (B8) cots (C3) (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water Water Table Saturation Pr (includes cap	drology Indicators: cators (minimum of	Imagery (B7) 'es No 'es No 'es No	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	- - - Wetland	Surf Spa Spa Oxic S) (w Cray Satu Geo FAC Fros	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) -Neutral Test (D5) st-Heave Hummocks (D7) (LRR	ce (B8) cots (C3) (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water Water Table Saturation Pr (includes cap	drology Indicators: cators (minimum of	Imagery (B7) 'es No 'es No 'es No	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks) v Depth (inches): Depth (inches):	- - - Wetland	Surf Spa Spa Oxic S) (w Cray Satu Geo FAC Fros	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) -Neutral Test (D5) st-Heave Hummocks (D7) (LRR	ce (B8) cots (C3) (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec	drology Indicators: cators (minimum of	Imagery (B7) 'es No 'es No 'es No	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	- - - Wetland	Surf Spa Spa Oxic S) (w Cray Satu Geo FAC Fros	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) -Neutral Test (D5) st-Heave Hummocks (D7) (LRR	ce (B8) cots (C3) (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water Water Table Saturation Pr (includes cap	drology Indicators: cators (minimum of	Imagery (B7) 'es No 'es No 'es No	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	- - - Wetland	Surf Spa Spa Oxic S) (w Cray Satu Geo FAC Fros	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) -Neutral Test (D5) st-Heave Hummocks (D7) (LRR	ce (B8) cots (C3) (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec	drology Indicators: cators (minimum of	Imagery (B7) Yes No Yes No Yes No To gauge, monitor	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	- - - Wetland	Surf Spa Spa Oxic S) (w Cray Satu Geo FAC Fros	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) -Neutral Test (D5) st-Heave Hummocks (D7) (LRR	ce (B8) cots (C3) (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec	GY drology Indicators: cators (minimum of or Water (A1) ther Table (A2) on (A3) arks (B1) th Deposits (B2) cosits (B3) th or Crust (B4) cosits (B5) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? Y resent?	Imagery (B7) Yes No Yes No Yes No To gauge, monitor	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	- - - Wetland	Surf Spa Spa Oxic S) (w Cray Satu Geo FAC Fros	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) -Neutral Test (D5) st-Heave Hummocks (D7) (LRR	ce (B8) cots (C3) (C9)
HYDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water Water Table Saturation Pr (includes cap Describe Rec	GY drology Indicators: cators (minimum of or Water (A1) ther Table (A2) on (A3) arks (B1) th Deposits (B2) cosits (B3) th or Crust (B4) cosits (B5) on Vis ble on Aerial tained Leaves (B9) vations: er Present? Present? Y resent?	Imagery (B7) Yes No Yes No Yes No To gauge, monitor	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	- - - Wetland	Surf Spa Spa Oxic S) (w Cray Satu Geo FAC Fros	ace Soil Cracks (B6) rsely Vegetated Concave Surface nage Patterns (B10) lized Rhizospheres on Living Rochere tilled) rfish Burrows (C8) uration Visible on Aerial Imagery morphic Position (D2) -Neutral Test (D5) st-Heave Hummocks (D7) (LRR	ce (B8) cots (C3) (C9)

Project/Site: Weatherford Quarry		City/Co	ounty	Lipan/Pa	alo Pinto County	_ Sampling	g Date: 2020	-09-16
Applicant/Owner: Vulcan Materials Company	_	-	-		State: Texas		-	
Investigator(s): Boe, B. & Hight, S.								
					convex, none): None		Slope (%): 0
Subregion (LRR): H				•				
Soil Map Unit Name: 24 - Lindy clay loam, 0-3% slop								
Are climatic / hydrologic conditions on the site typical for the								
Are Vegetation, Soil, or Hydrology					'Normal Circumstances"		_	No
Are Vegetation, Soil, or Hydrology					eeded, explain any answ			
SUMMARY OF FINDINGS – Attach site map				,			,	es, etc.
Hydrophytic Vegetation Present? Yes	No 🗸		la 4h	- Cl-d				
Hydric Soil Present? Yes	No 🔽			e Sampled in a Wetlar		No	~	
Wetland Hydrology Present? Yes	No 🔽		WILII	iii a vvetiai	iu: 165	NO		
Upland scrub-shrub. While the DAREM calculation indica during the month of September. 8.06 inches of precipitati inches. VEGETATION – Use scientific names of pla	on were repo							
00.5	Absolute	Dom	inant	Indicator	Dominance Test wor	ksheet:		
Tree Stratum (Plot size: 30 ft r	% Cover				Number of Dominant S			
1					That Are OBL, FACW, (excluding FAC-):	or FAC	0	(A)
2.								_ ()
3					Total Number of Domi Species Across All Str		3	_ (B)
			al Cov	/er	Percent of Dominant S	enocios		
Sapling/Shrub Stratum (Plot size: 15 ft r)					That Are OBL, FACW,		0	_ (A/B)
1. Prosopis glandulosa	30			FACU	Prevalence Index wo	rksheet:		
2					Total % Cover of:		Multiply by:	
3							1 = 0	
4					FACW species 0			
5	30%		al Cov	uor.	FAC species 10			
Herb Stratum (Plot size: 5 ft r	0070	- 1018	ai CU	/CI	FACU species 65	x 4	4 = 260	
1. Aegilops cylindrica	40		_	NI	UPL species 0	x 5	5 = <u>0</u>	
2. Ambrosia psilostachya	30			FACU	Column Totals: 75	(A)) 290	(B)
3. Solanum elaeagnifolium	15			NI	Prevalence Inde	x = R/A =	3.9	
4. Panicum obtusum	_ 10			FACU	Hydrophytic Vegetati			
5. Bromus arvensis 6. Croton capitatus	<u>5</u>				1 - Rapid Test for			
		-		<u>NI</u>	2 - Dominance Te		-	
7					3 - Prevalence Inc	lex is ≤3.0¹	1	
8 9					4 - Morphological			
10					data in Remark		•	•
10.	105%	= Tota	al Cov	/er	Problematic Hydro	pnytic veg	getation" (Expi	ain)
Woody Vine Stratum (Plot size: 30 ft r) 1.					¹ Indicators of hydric so be present, unless dis			must
2.					Hydrophytic			
% Bare Ground in Herb Stratum 0		= Tota	al Cov	/er	Vegetation	es	No	
Remarks:					1			
Upland scrub-shrub.								

SOIL

Sampling Point: B1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features		
(inches)	Color (moist)		Color (moist) % Type ¹	Loc ² Texture	Remarks
0 - 16	7.5YR 3/4	100		Silty clay loam	
					
-					
-					
					-
-					
	-	·			
¹ Type: C=Co	oncentration. D=Dep	letion. RM=Red	uced Matrix, CS=Covered or Coated	Sand Grains. ² Locat	ion: PL=Pore Lining, M=Matrix.
			s, unless otherwise noted.)		or Problematic Hydric Soils ³ :
-		abio to all 21111			•
Histosol			Sandy Gleyed Matrix (S4)		ck (A9) (LRR I, J)
Histic Ep	pipedon (A2)		Sandy Redox (S5)		airie Redox (A16) (LRR F, G, H)
Black His	stic (A3)		Stripped Matrix (S6)	Dark Sur	face (S7) (LRR G)
Hydroge	n Sulfide (A4)		Loamy Mucky Mineral (F1)	High Plai	ns Depressions (F16)
Stratified	Layers (A5) (LRR I	F)	Loamy Gleyed Matrix (F2)	-	H outside of MLRA 72 & 73)
	ick (A9) (LRR F, G ,		Depleted Matrix (F3)	,	Vertic (F18)
					` ,
-	d Below Dark Surfac	e (A11)	Redox Dark Surface (F6)	· 	ent Material (TF2)
	ark Surface (A12)		Depleted Dark Surface (F7)		illow Dark Surface (TF12)
Sandy M	lucky Mineral (S1)		Redox Depressions (F8)		xplain in Remarks)
2.5 cm N	/lucky Peat or Peat ((S2) (LRR G, H)	High Plains Depressions (F16	Indicators of	hydrophytic vegetation and
5 cm Mu	icky Peat or Peat (S	3) (LRR F)	(MLRA 72 & 73 of LRR H	wetland h	nydrology must be present,
				unless di	sturbed or problematic.
Restrictive L	_ayer (if present):				•
_	zayor (proconty.				
Type:					
Depth (inc	ches):			Hydric Soil P	resent? Yes No
Remarks:					
	I indicators observed	4			
140 Hydrid 30H	i ilialoatoro oboci vet				
HYDROLO					
	GY				
Wetland Hyd	GY drology Indicators:			0	
Wetland Hyd	GY		eck all that apply)	<u>Secondary</u>	Indicators (minimum of two required)
Primary Indic	GY drology Indicators:		eck all that apply) Salt Crust (B11)		Indicators (minimum of two required) se Soil Cracks (B6)
Wetland Hyd Primary Indic	GY drology Indicators: cators (minimum of c		Salt Crust (B11)	Surfac	e Soil Cracks (B6)
Wetland Hyd Primary Indic Surface High Wa	GY drology Indicators: cators (minimum of c Water (A1) tter Table (A2)		Salt Crust (B11) Aquatic Invertebrates (B13)	Surfac	e Soil Cracks (B6) ely Vegetated Concave Surface (B8)
Wetland Hyd Primary Indic Surface High Wa Saturatio	GY drology Indicators: cators (minimum of c Water (A1) tter Table (A2) on (A3)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Surfac Sparse Draina	ely Vegetated Concave Surface (B8) age Patterns (B10)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M	drology Indicators: cators (minimum of c Water (A1) ater Table (A2) on (A3) larks (B1)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)	Surfac Sparse Draina Oxidiz	ee Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) ed Rhizospheres on Living Roots (C3)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M	GY drology Indicators: cators (minimum of c Water (A1) tter Table (A2) on (A3)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Surfac Sparse Draina Oxidiz	ely Vegetated Concave Surface (B8) age Patterns (B10)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer	drology Indicators: cators (minimum of c Water (A1) ater Table (A2) on (A3) larks (B1)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)	Surface Sparse Draina Oxidiz Roots (C3)	ee Soil Cracks (B6) ely Vegetated Concave Surface (B8) age Patterns (B10) ed Rhizospheres on Living Roots (C3)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep	drology Indicators: cators (minimum of compared (Mater (A1)) atter Table (A2) and (A3) arks (B1) arks (B1) arks (B2) and Deposits (B2) and Deposits (B3)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled)	Surface Sparse Draina Oxidiz Roots (C3) Crayfis	ee Soil Cracks (B6) ely Vegetated Concave Surface (B8) ege Patterns (B10) ed Rhizospheres on Living Roots (C3) ere tilled) sh Burrows (C8)
Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	drology Indicators: cators (minimum of compared (A1) atter Table (A2) on (A3) arks (B1) att Deposits (B2) cosits (B3) att or Crust (B4)		Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4)	Surface Sparse Draina Oxidiz Roots (C3) (whe	ee Soil Cracks (B6) ely Vegetated Concave Surface (B8) ege Patterns (B10) ed Rhizospheres on Living Roots (C3) ere tilled) sh Burrows (C8) etion Visible on Aerial Imagery (C9)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep	drology Indicators: cators (minimum of compared (Mater (A1)) atter Table (A2) on (A3) arks (B1) att Deposits (B2) cosits (B3) att or Crust (B4) cosits (B5)	one required; ch	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living	Surface Sparse Draina Oxidiz Roots (C3) Crayfis Satura Geom	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep	drology Indicators: cators (minimum of compared (A1) atter Table (A2) on (A3) arks (B1) att Deposits (B2) cosits (B3) att or Crust (B4)	one required; ch	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4)	Surface Sparse Draina Oxidiz Roots (C3) Crayfis Satura Geom	ee Soil Cracks (B6) ely Vegetated Concave Surface (B8) ege Patterns (B10) ed Rhizospheres on Living Roots (C3) ere tilled) sh Burrows (C8) etion Visible on Aerial Imagery (C9)
Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep	drology Indicators: cators (minimum of compared (Mater (A1)) atter Table (A2) on (A3) arks (B1) att Deposits (B2) cosits (B3) att or Crust (B4) cosits (B5)	one required; ch	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfise Satura Geome	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) tion Visible on Aerial Imagery (C9) orphic Position (D2)
Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep	drology Indicators: cators (minimum of control of contr	one required; ch	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7)	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfise Satura Geome	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) lition Visible on Aerial Imagery (C9) orphic Position (D2) leutral Test (D5)
Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si	drology Indicators: cators (minimum of control of contr	one required; che	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfise Satura Geome	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) lition Visible on Aerial Imagery (C9) orphic Position (D2) leutral Test (D5)
Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Water-Si Field Observ Surface Water	drology Indicators: cators (minimum of comparison of compa	one required; che	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfise Satura Geome	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) lition Visible on Aerial Imagery (C9) orphic Position (D2) leutral Test (D5)
Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si	drology Indicators: cators (minimum of comparison of compa	one required; che	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks)	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfis Satura Geom FAC-N Frost-I	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) lition Visible on Aerial Imagery (C9) orphic Position (D2) leutral Test (D5) Heave Hummocks (D7) (LRR F)
Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Water-Si Field Observ Surface Water	GY drology Indicators: cators (minimum of control of co	one required; cho	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks) v Depth (inches): Depth (inches):	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfis Satura Geom FAC-N Frost-I	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) lition Visible on Aerial Imagery (C9) orphic Position (D2) leutral Test (D5)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water Vater Table Saturation Pr (includes cap	drology Indicators: cators (minimum of control of contr	Imagery (B7) 'es No _ 'es No _ 'es No _	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfise Satura Geom FAC-N Frost-I	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) lition Visible on Aerial Imagery (C9) orphic Position (D2) leutral Test (D5) Heave Hummocks (D7) (LRR F)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water Vater Table Saturation Pr (includes cap	drology Indicators: cators (minimum of control of contr	Imagery (B7) 'es No _ 'es No _ 'es No _	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks) v Depth (inches): Depth (inches):	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfise Satura Geom FAC-N Frost-I	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) lition Visible on Aerial Imagery (C9) orphic Position (D2) leutral Test (D5) Heave Hummocks (D7) (LRR F)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water Vater Table Saturation Pr (includes cap	drology Indicators: cators (minimum of control of contr	Imagery (B7) 'es No _ 'es No _ 'es No _	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfise Satura Geom FAC-N Frost-I	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) lition Visible on Aerial Imagery (C9) orphic Position (D2) leutral Test (D5) Heave Hummocks (D7) (LRR F)
Wetland Hyderimary Indices Surfaces High Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation Water-Si Field Observ Surface Water Water Table Saturation Pr (includes cap	drology Indicators: cators (minimum of control of contr	Imagery (B7) 'es No _ 'es No _ 'es No _	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfise Satura Geom FAC-N Frost-I	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) lition Visible on Aerial Imagery (C9) orphic Position (D2) leutral Test (D5) Heave Hummocks (D7) (LRR F)
Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Water-Si Field Observ Surface Water Vater Table Saturation Pr (includes cap	drology Indicators: cators (minimum of control of contr	Imagery (B7) 'es No _ 'es No _ 'es No _	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfise Satura Geom FAC-N Frost-I	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) lition Visible on Aerial Imagery (C9) orphic Position (D2) leutral Test (D5) Heave Hummocks (D7) (LRR F)
Wetland Hyderimary Indices Surface High Water Management Sedimer Drift Dep Algal Management Inundation Water Stried Observ Surface Water Table Saturation Profincludes cap Describe Recomment Indices Cap Remarks:	drology Indicators: cators (minimum of control of contr	Imagery (B7) Yes No Yes No Yes No I gauge, monitor	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks) v Depth (inches): Depth (inches): Depth (inches):	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfise Satura Geom FAC-N Frost-I	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) lition Visible on Aerial Imagery (C9) orphic Position (D2) leutral Test (D5) Heave Hummocks (D7) (LRR F)
Wetland Hyderimary Indices Surface High Water Management Sedimer Drift Dep Algal Management Inundation Water Stried Observ Surface Water Table Saturation Profincludes cap Describe Recomment Indices Cap Remarks:	drology Indicators: cators (minimum of control of contr	Imagery (B7) Yes No Yes No Yes No I gauge, monitor	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks) v Depth (inches): Depth (inches): Depth (inches):	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfise Satura Geom FAC-N Frost-I	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) lition Visible on Aerial Imagery (C9) orphic Position (D2) leutral Test (D5) Heave Hummocks (D7) (LRR F)
Wetland Hyd Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Water-Si Field Observ Surface Water Surface Water Cincludes cap Describe Rec	drology Indicators: cators (minimum of control of contr	Imagery (B7) Yes No Yes No Yes No I gauge, monitor	Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Oxidized Rhizospheres on Living (where not tilled) Presence of Reduced Iron (C4) Thin Muck Surface (C7) Other (Explain in Remarks) v Depth (inches): Depth (inches): Depth (inches):	Surface Sparse Draina Oxidiz Roots (C3) (whe Crayfise Satura Geom FAC-N Frost-I	be Soil Cracks (B6) bely Vegetated Concave Surface (B8) lige Patterns (B10) ed Rhizospheres on Living Roots (C3) bere tilled) sh Burrows (C8) lition Visible on Aerial Imagery (C9) orphic Position (D2) leutral Test (D5) Heave Hummocks (D7) (LRR F)

Project/Site: Weatherford Quarry	Cit	ty/County:	Lipan/Pa	arker County	Sampling Date: 2020-09-1	15
Applicant/Owner: Vulcan Materials Company		-			Sampling Point: C1	
	Se	ection, Tov	vnship, Rar	nge: N/A		
Landform (hillslope, terrace, etc.): Swale					e Slope (%): 1	
Subregion (LRR): J	Lat: 32.62	27386		Long: -98.060209	Datum: WGS 8	84
Soil Map Unit Name: HnB - Hensley complex, 0-3% s						
Are climatic / hydrologic conditions on the site typical for thi						
Are Vegetation, Soil, or Hydrology					oresent? Yes <u> </u>	
Are Vegetation, Soil, or Hydrology				eded, explain any answe		
SUMMARY OF FINDINGS – Attach site map			point lo	ocations, transects	, important features, e	etc.
Hydrophytic Vegetation Present? Yes N	No	la tha	Camandad	A		
Hydric Soil Present? Yes N	10 V		e Sampled n a Wetlan		No 🗸	
Wetland Hydrology Present? Yes N	No	Within	ii a vvetiaii	id: 165		
Remarks:						
Upland herbaceous. While the DAREM calculation indicate during the month of September. 8.06 inches of precipitation inches. Additionally, the channel in which the sampling polynomero.	n were reporte int was collecte	ed as of Se	eptember 2	5, 2020, which well exceed	eds the 70th percentile of 3.03	
VEGETATION – Use scientific names of plan		Dominant	Indicator	Deminence Test week	rahaat.	
Tree Stratum (Plot size: 30 ft r	Absolute E <u>% Cover</u> S			Dominance Test work Number of Dominant S		
1				That Are OBL, FACW,		
2				(excluding FAC-):	<u>1</u> (A	.)
3				Total Number of Domin	nant	
4				Species Across All Stra	ata: <u>1</u> (B))
Sapling/Shrub Stratum (Plot size: 15 ft r)	=	Total Cove	er	Percent of Dominant S		
	3		FACW	That Are OBL, FACW,	or FAC: 100 (A/	/B)
1. Salix nigra 2.				Prevalence Index wor	ksheet:	
3.				Total % Cover of:	Multiply by:	
4				•	x 1 = <u>55</u>	
5.					x 2 = 6	
	3% =	Total Cove	er		x 3 = 15	
Herb Stratum (Plot size: 5 ft r)					x 4 = 0	
1. Eleocharis acicularis	_ <u>50</u>		OBL		x = 0	_,
2. Iva annua Typha domingensis	_ 5		FAC	Column Totals: 63	(A) <u>76</u> (E	3)
0. <u>71</u>	- -		OBL	Prevalence Index	= B/A = <u>1.2</u>	
4				Hydrophytic Vegetation	on Indicators:	
5				✓ 1 - Rapid Test for I	Hydrophytic Vegetation	
6				✓ 2 - Dominance Tes	st is >50%	
8.				✓ 3 - Prevalence Inde		
9.				4 - Morphological A	Adaptations ¹ (Provide supporti s or on a separate sheet)	ing
10.					phytic Vegetation ¹ (Explain)	
	60% =	Total Cove	er	_		
Woody Vine Stratum (Plot size: 30 ft r) 1				¹ Indicators of hydric soi be present, unless disti	il and wetland hydrology must urbed or problematic.	Ċ
2.				Hydrophytic		
40	=	Total Cove	er	Vegetation Present? Ye	s No	
% Bare Ground in Herb Stratum 40				riesent: Te	3 NU	
Remarks: In addition to the industrial water discharge, hog rooting/wacharacteristics may be altered, thus allowing opportunistic					e, hydrology and soil	

US Army Corps of Engineers

SOIL Sampling Point: C1

Profile Desc	cription: (Describe	to the depth ne	eeded to docu	ment the i	indicator	or confirm	n the absence o	of indicators.)
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0 - 2	10YR 6/3	100					Clay	
2 - 4	10YR 2/1	100					Clay	
4 - 8	10YR 3/1	100					Clay	
-								
-								
-		<u> </u>						
-								
¹Type: C=C	oncentration, D=Dep	letion, RM=Rec	luced Matrix, C	S=Covered	d or Coate	d Sand G	rains. ² Loca	ation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all LRR	s, unless othe	rwise not	ed.)			or Problematic Hydric Soils ³ :
Histosol	I (A1)		Sandy	Gleyed Ma	atrix (S4)		1 cm Mu	uck (A9) (LRR I, J)
Histic E	pipedon (A2)		Sandy	Redox (S5	5)		Coast P	rairie Redox (A16) (LRR F, G, H)
Black H	istic (A3)		Strippe	d Matrix (S	86)		Dark Su	ırface (S7) (LRR G)
Hydroge	en Sulfide (A4)		Loamy	Mucky Mir	neral (F1)		High Pla	ains Depressions (F16)
Stratifie	d Layers (A5) (LRR	F)	Loamy	Gleyed Ma	atrix (F2)		(LRF	R H outside of MLRA 72 & 73)
1 cm Mı	uck (A9) (LRR F, G ,	H)	Deplete	ed Matrix (I	F3)		Reduce	d Vertic (F18)
Deplete	d Below Dark Surfac	e (A11)	Redox	Dark Surfa	ace (F6)			rent Material (TF2)
	ark Surface (A12)			ed Dark Su				allow Dark Surface (TF12)
-	Mucky Mineral (S1)			Depressio				Explain in Remarks)
	Mucky Peat or Peat (-	ains Depre				of hydrophytic vegetation and
5 cm Mu	ucky Peat or Peat (S	3) (LRR F)	(ML	.RA 72 & 7	73 of LRR	H)		hydrology must be present,
							unless o	disturbed or problematic.
	Layer (if present):							
Type: Be							Unadaia Cail F	Dunganda Van Na V
	cnes): <u>o</u>		-				Hydric Soil F	Present? Yes No
Remarks:	il indicatora abaarua	1						
No nyaric so	il indicators observed	1.						
HYDROLO	GY							
Wetland Hy	drology Indicators:							
Primary Indi	cators (minimum of o	one required; ch	eck all that app	ly)			Secondar	y Indicators (minimum of two required)
✓ Surface	Water (A1)		Salt Crust	(B11)			Surfa	ce Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic In	vertebrate	s (B13)		Spars	sely Vegetated Concave Surface (B8)
✓ Saturati	on (A3)		Hydrogen	Sulfide O	dor (C1)		<u>✓</u> Drain	age Patterns (B10)
	Marks (B1)		Dry-Seaso					zed Rhizospheres on Living Roots (C3)
Sedime	nt Deposits (B2)		Oxidized I			ing Roots		nere tilled)
	posits (B3)			not tilled)		9		ish Burrows (C8)
	at or Crust (B4)		Presence			1)		ration Visible on Aerial Imagery (C9)
_	posits (B5)		Thin Muck			• /	·	norphic Position (D2)
	ion Vis ble on Aerial	Imagery (R7)	Other (Ex		` '		·	Neutral Test (D5)
	Stained Leaves (B9)	inagery (br)	Outer (Ex	piaiii iii ike	illains)		' 	-Heave Hummocks (D7) (LRR F)
Field Obser	, ,						11031	-ricave riammocks (Dr) (ERRT)
Surface Wat		′es No _	Denth (in	iches): 2				
Water Table		es No _ es No _				_		
Saturation P		es / No_					land Hydrology	Present? Yes No
	pillary fringe)	es NO _	Deptil (iii	iches). <u>-</u>		_ •••••	and Hydrology	rieseitt: iesino
	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Remarks:								
Presence of	surface water and sa	aturation wetlan	d hydrology indi	cators due	e to recent	precipitat	ion and industria	ıl water discharge.
			. 3,			•		-

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WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: Weatherford Quarry	Cir	ty/County:	Lipan/Pa	arker County	Sampling Date: 2020-09-15
•				State: Texas	·
	Se	ection, To	wnship, Rar	nge: N/A	
Landform (hillslope, terrace, etc.): Swale					
Subregion (LRR): J	Lat: 32.6°	18094		Long: -98.056274	Datum: WGS 84
Soil Map Unit Name: HnB - Hensley complex, 0-3% sl					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology s					present? Yes No
Are Vegetation, Soil, or Hydrology n				eded, explain any answe	
SUMMARY OF FINDINGS – Attach site map					
Hydrophytic Vegetation Present? Yes No	0	1- 41	- 0	A	
Hydric Soil Present? Yes No	0		e Sampled in a Wetlan		No
Wetland Hydrology Present? Yes No	0	With	iii a wellali	iur res	NO
Remarks:					
Emergent wetland. While the DAREM calculation indicates during the month of September. 8.06 inches of precipitation inches. Additionally, the channel in which the sampling poir	were reporte	ed as of S	eptember 2	5, 2020, which well excee	eds the 70th percentile of 3.03
VEGETATION – Use scientific names of plant	ts.				
	Absolute [Dominance Test work	sheet:
	% Cover S		·	Number of Dominant S	
1				That Are OBL, FACW, (excluding FAC-):	or FAC (A)
2					
3				Total Number of Domin Species Across All Stra	
4	=				
Sapling/Shrub Stratum (Plot size: 15 ft r)		Total Cov	Ci	Percent of Dominant Sp That Are OBL, FACW,	
1				Prevalence Index wor	ksheet:
2					Multiply by:
3				· ·	x 1 = 95
4				· · · · · · · · · · · · · · · · · · ·	x 2 = 10
5		Total Cov		FAC species 5	
Herb Stratum (Plot size: 5 ft r)	=	Total Cov	еі		x 4 = <u>0</u>
1. Typha domingensis	95	~	OBL	UPL species 0	x 5 = <u>0</u>
2. Cyperus odoratus	5		FACW	Column Totals: 105	(A) <u>120</u> (B)
3. Echinochloa crus-galli	5		FAC	Prevalence Index	= R/A = 1.1
4	·			Hydrophytic Vegetation	
5	· —— -			✓ 1 - Rapid Test for H	
6				✓ 2 - Dominance Tes	
7				✓ 3 - Prevalence Inde	
8				4 - Morphological A	Adaptations ¹ (Provide supporting
9					s or on a separate sheet)
10	105% =	Total Cov		Problematic Hydro	phytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size: 30 ft r 1.				¹ Indicators of hydric soi be present, unless distu	l and wetland hydrology must urbed or problematic.
2.				Hydrophytic	
	=	Total Cov	er	Vegetation	s No
% Bare Ground in Herb Stratum 0				Present? Ye	S NU
Remarks: In addition to the industrial water discharge, hog rooting/wa characteristics may be altered, thus allowing opportunistic h	llowing was o	observed a	along this sa		e, hydrology and soil

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SOIL Sampling Point: E1

Profile Desc	ription: (Describe	to the dep	th needed to docum	ent the	indicator	or confiri	m the absence of i	ndicators.)
Depth	Matrix		Redox	c Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0 - 0.5	2.5Y 6/3	100	/				Silty clay	
0.5 - 4	10YR 2/1	70	10YR 5/4	20	С	М	Clay	
0.5 - 4	10YR 3/2	10					Clay	-
4 - 16	10YR 3/2	100					Clay	
						-		
		·					· 	
						-		
	-							
						-	. <u> </u>	
¹ Type: C=Co	oncentration, D=Dep	letion, RM:	Reduced Matrix, CS	=Covere	d or Coate	d Sand G	Grains. ² Locatio	n: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applic	able to all	LRRs, unless other	wise not	ed.)		Indicators for	Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy G	leyed Ma	atrix (S4)		1 cm Muck	(A9) (LRR I, J)
Histic Ep	pipedon (A2)		Sandy R	ledox (S5	5)		Coast Prai	rie Redox (A16) (LRR F, G, H)
Black His	` '		Stripped	,	,		Dark Surfa	ice (S7) (LRR G)
	n Sulfide (A4)		Loamy N	/lucky Mi	neral (F1)		High Plains	s Depressions (F16)
	l Layers (A5) (LRR F	•		-	atrix (F2)		,	outside of MLRA 72 & 73)
	ck (A9) (LRR F, G, I			Matrix (•		_	/ertic (F18)
	Below Dark Surface	e (A11)	Redox D		` ,			t Material (TF2)
	ark Surface (A12)				urface (F7)			ow Dark Surface (TF12)
	lucky Mineral (S1)	CO) /I DD /	Redox D	•	. ,	16)		plain in Remarks) ydrophytic vegetation and
	Mucky Peat or Peat (cky Peat or Peat (S				essions (F 73 of LRR			drology must be present,
3 CITI WILL	icky real of real (3)	5) (L KK F)	(MILI	\A 12 Q	73 OI LKK	П)	•	curbed or problematic.
Restrictive L	_ayer (if present):							iansea or presionnatio.
_	, , ,							
,. <u> </u>	ches):						Hydric Soil Pre	sent? Yes No
Remarks:	,							
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary Indic	cators (minimum of o	ne require	d; check all that apply	/)			Secondary In	ndicators (minimum of two required)
✓ Surface	Water (A1)		Salt Crust	(B11)			Surface	Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic Inv				Sparsely	y Vegetated Concave Surface (B8)
✓ Saturation	on (A3)		Hydrogen S	Sulfide O	dor (C1)		Drainag	e Patterns (B10)
Water M	arks (B1)		Dry-Seaso	n Water ⁻	Table (C2)		Oxidized	d Rhizospheres on Living Roots (C3)
Sedimer	nt Deposits (B2)		Oxidized R	hizosphe	res on Liv	ing Roots	(C3) (where	e tilled)
Drift Dep	oosits (B3)		(where n	ot tilled))		Crayfish	Burrows (C8)
Algal Ma	it or Crust (B4)		Presence of	of Reduce	ed Iron (C4	!)	Saturation	on Visible on Aerial Imagery (C9)
Iron Dep	osits (B5)		Thin Muck	Surface	(C7)		✓ Geomor	phic Position (D2)
Inundation	on Vis ble on Aerial I	magery (B	7) Other (Exp	lain in Re	emarks)		FAC-Ne	eutral Test (D5)
Water-St	tained Leaves (B9)						Frost-He	eave Hummocks (D7) (LRR F)
Field Observ	vations:							
Surface Water	er Present? Y	es 🗸	No Depth (inc	thes): 2				
Water Table			No Depth (inc			_		
Saturation Pr			No Depth (inc				land Hydrology Pr	esent? Yes V No No
(includes cap			Deptii (iiie	, ico). <u></u>		_ '''	idila riyarology i r	
Describe Red	corded Data (stream	gauge, mo	onitoring well, aerial p	hotos, pr	evious ins	pections)	, if available:	
Remarks:								
Presence of s	surface water and sa	turation we	etland hydrology indic	ators due	e to recent	precipita	tion and industrial w	ater discharge.

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WETLAND DETERMINATION DATA FORM – Great Plains Region

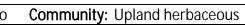
Project/Site: Weatherford Quarry	(City/Count	_{:y:}	arker County	Sampling Date: 2020-09-15	;
Applicant/Owner: Vulcan Materials Company				State: Texas	Sampling Point: E2	
Investigator(s): Boe, B. & Hight, S.		Section, T	ownship, Ra	nge: N/A		
Landform (hillslope, terrace, etc.): Upland		Local relie	ef (concave,	convex, none): Undulat	ting Slope (%): 2	
Subregion (LRR): J	Lat: 32.0	618084		Long: -98.056238	Datum: WGS 84	1
Soil Map Unit Name: HnB - Hensley complex, 0-3%				-		
Are climatic / hydrologic conditions on the site typical for th						
Are Vegetation, Soil, or Hydrology	-				present? Yes 🖍 No	
Are Vegetation, Soil, or Hydrology				eeded, explain any answe	·	
SUMMARY OF FINDINGS – Attach site map						c.
Hydrophytic Vegetation Present? Yes 1	vlo. 🗸					
Hydric Soil Present? Yes 1	10 <u> </u>		he Sampled		🗸	
Wetland Hydrology Present? Yes	No V	wit	hin a Wetlar	nd? Yes	No	
Remarks:		1				
Upland herbaceous. While the DAREM calculation indicat during the month of September. 8.06 inches of precipitation inches.	on were repo					
VEGETATION – Use scientific names of plan				1 -		
Tree Stratum (Plot size: 30 ft r)	Absolute <u>% Cover</u>	Species'		Number of Dominant S That Are OBL, FACW,	Species or FAC	
2.				(excluding FAC-):	<u>0</u> (A)	
3 4				Total Number of Domir Species Across All Stra		
				Percent of Dominant S		
Sapling/Shrub Stratum (Plot size: 15 ft r) 1. Prosopis glandulosa	5	~	FACU	That Are OBL, FACW,	or FAC: 0 (A/B))
2		-		Prevalence Index wor	ksheet:	_
3.				Total % Cover of:	Multiply by:	
4.					x 1 = <u>0</u>	
5.				· · · · · ·	x 2 = 0	
	5%	= Total Co	over	·	x 3 = 0	
Herb Stratum (Plot size: 5 ft r	70		NII	FACU species 30		
1. Iva angustifolia		<u></u>	NI	UPL species 0	x = 0 (A) 120 (B)	
2. Ambrosia psilostachya 3. Euphorbia bicolor	20		FACU NI	Column Totals: 30	(A) <u>120</u> (B)	
Sorghastrum nutans	- 5		FACU	Prevalence Index	c = B/A = 4.0	
"			17100	Hydrophytic Vegetati	on Indicators:	_
5 6				1 - Rapid Test for	Hydrophytic Vegetation	
7				2 - Dominance Tes	st is >50%	
8.				3 - Prevalence Ind		
9.					Adaptations ¹ (Provide supporting s or on a separate sheet)	g
10					ophytic Vegetation ¹ (Explain)	
Woody Vine Stratum (Plot size: 30 ft r	100%		over		il and wetland hydrology must	
1					2.234 or problematic.	
2			over	Hydrophytic Vegetation Present? Ye	es No	
% Bare Ground in Herb Stratum 0						
Upland herbaceous.						

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SOIL Sampling Point: E2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix			x Feature				
	Color (moist)		Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0 - 11 10	OYR 2/2	100					Clay loam	
-								
		· — — —				-		
				· -				
		<u> </u>						
-								
								
1							21 11	
¹ Type: C=Conce			•			ed Sand G		PL=Pore Lining, M=Matrix. bblematic Hydric Soils ³ :
Hydric Soil Indi		able to all LKF						•
Histosol (A1			Sandy (-			1 cm Muck (A	
Histic Epiped				Redox (S5 d Matrix (S				Redox (A16) (LRR F, G, H) (S7) (LRR G)
Black Histic				Mucky Mir	,			epressions (F16)
	yers (A5) (LRR I	=)	-	Gleyed Ma			-	Itside of MLRA 72 & 73)
	(A9) (LRR F, G ,			d Matrix (I			Reduced Vert	,
	low Dark Surfac			Dark Surfa			Red Parent M	
Thick Dark S	Surface (A12)		Deplete	d Dark Su	ırface (F7))	Very Shallow	Dark Surface (TF12)
Sandy Muck	xy Mineral (S1)			Depressio			Other (Explain	
	ky Peat or Peat (_		essions (F		·	ophytic vegetation and
5 cm Mucky	Peat or Peat (S	3) (LRR F)	(ML	RA 72 & 7	73 of LRR	(H)		logy must be present,
Dootsietive Leve	('f						unless disturb	ed or problematic.
Restrictive Layer Type: Bedro								
· · ·			-					
Depth (inches	S):		_				Hydric Soil Presei	nt? Yes No
Remarks:								
No hydric soil ind	licators observed	1.						
HYDROLOGY	,							
Wetland Hydrol								
Primary Indicator		ne required; ch	eck all that appl	y)			·	cators (minimum of two required)
Surface Wat	, ,		Salt Crust	' '				il Cracks (B6)
High Water			Aquatic In		, ,			egetated Concave Surface (B8)
Saturation (A	•		Hydrogen				Drainage P	
Water Marks	, ,		Dry-Seaso		, ,			hizospheres on Living Roots (C3)
Sediment De			Oxidized F			ing Roots	` '	, ,
Drift Deposit	, ,		•	not tilled)			Crayfish Bu	, ,
Algal Mat or	` ,		Presence		`	4)		Visible on Aerial Imagery (C9)
Iron Deposit	` '		Thin Muck					c Position (D2)
Inundation V		magery (B7)	Other (Exp	olain in Re	emarks)		FAC-Neutra	
Water-Stain							Frost-Heav	e Hummocks (D7) (LRR F)
Field Observation								
Surface Water P			Depth (in					
Water Table Pre			Depth (in					
Saturation Prese		es No _	Depth (in	ches):		Wetl	land Hydrology Prese	ent? Yes No V
	(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
Domarka								
Remarks:	lootore -b							
No hydrology ind	icators observed	l .						













Transect: A





Transect: B Data Point: 1 Wetland: No Community: Upland scrub-shrub











Transect: E Data Point: 1 Wetland: Yes Community: Emergent wetland













APPENDIX E – STREAM DATA FORMS

Stream: EMB

NC DWQ Stream Identification Form Version 4.11

Date: September 16, 2020	Project/Site: Weatherford Quarry	Latitude: 32.61782
Evaluator: M. McKnight, R. Sulkers	County: Palo Pinto & Parker Counties	Longitude: -98.06463
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$ 12.5	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other e.g. Quad Name: Brazos East/ Lipan

A. Geomorphology (Subtotal = 4.5)	Absent	Weak	Moderate	Strong
1 ^{a.} Continuity of channel bed and bank	0 0	5 1	2	3
2. Sinuosity of channel along thalweg	0 0	.5 1	2	3
In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	9	1	2	3
6. Depositional bars or benches		1	2	3
7. Recent alluvial deposits	0 0	5 1	2	3
8. Headcuts		1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No €0		Yes = 3	
^a artificial ditches are not rated; see discussions in manual				
B. Hydrology (Subtotal = 3)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No 10 Yes		= 3	
C. Biology (Subtotal = 5				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
00 Manualandana (4	0	2

20. Macrobenthos (note diversity and abundance) 1 2 3 1.5 2 3 21. Aquatic Mollusks 1 22. Fish 0 0.5 1 1.5 23. Crayfish 0.5 1 1.5 0.51.5 24. Amphibians 1 0 \square 25. Algae 0 0.5 1.5 FACW = 0.75; OBL = 1.5 Other = 0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

26. Wetland plants in streambed

For features that exceeded the threshold of a category but did not meet the conditions of the next highest category, we provided half points. As there wasn't a canopy with leaves, we excluded the leaf litter category from our review.

Mostly straight stream with some slight bends. Particle size of substarte varies from sediment to cobble. Bigger particles act as slight grade control. Stream appears to be lightly flowing with some organice debris piles. Some FACU species present along the length of the channel. Weak to moderate presence of aquatic mollusks and amphibians. No evidence of fish or crayfish.

NC DWO Stream Identification Form Version 4.11

Date: September 16, 2020	Project/Site: Weatherford Quarry	Latitude: 32.61782
Evaluator: M. McKnight, R. Sulkers	County: Palo Pinto & Parker Counties	Longitude: -98.06463
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$ 7.5	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other e.g. Quad Name: Brazos East/ Lipan

Stream: EME

A. Geomorphology (Subtotal = 4.5)	Absent	Weak	Moderate	Strong		
1 ^{a.} Continuity of channel bed and bank	0	1	2	3		
2. Sinuosity of channel along thalweg	0 0	5 1	2	3		
In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0 0	5 1	2	3		
4. Particle size of stream substrate	0	1	2	3		
5. Active/relict floodplain	0	1	2	3		
6. Depositional bars or benches		1	2	3		
7. Recent alluvial deposits		1	2	3		
8. Headcuts	0	1	2	3		
9. Grade control	0	0.5	1	1.5		
10. Natural valley	0	0.5	1	1.5		
11. Second or greater order channel	N	o = 0	Yes :	= 3		
artificial ditches are not rated; see discussions in manual						
B. Hydrology (Subtotal = 1)						
12. Presence of Baseflow	0	1	2	3		
13. Iron oxidizing bacteria	0	1	2	3		
14. Leaf litter	1.5	1	0.5	0		
15. Sediment on plants or debris	0	0.5	1	1.5		
16. Organic debris lines or piles	0	0.5	1	1.5		
17. Soil-based evidence of high water table?	N	o = 0	Yes :	= 3		
C. Biology (Subtotal = 2)						
18. Fibrous roots in streambed	3	2	1	0		
19. Rooted upland plants in streambed	3	2	1	0		
20. Macrobenthos (note diversity and abundance)	0	1	2	3		
21. Aquatic Mollusks	0	1	2	3		
22. Fish	0	0.5	1	1.5		
23. Crayfish	0	0.5	1	1.5		
24. Amphibians	0	0.5	1	1.5		
25. Algae	0	0.5	1	1.5		
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other 1 0					
*perennial streams may also be identified using other method	ds. See p. 35 of manu	al.	_			

Notes:

For features that exceeded the threshold of a category but did not meet the conditions of the next highest category, we provided half points.

Extremely weak sinuosity of channel but not completely straight. Weak continuity of bed and bank, slight variation in substrate size along the channel contributes to in-channel structure and grade control. Some leaf litter and organic debris noted along the length of the channel. Moderate presence of FACU plant Muhlenbergia capillaris present in streambed. No other biotic organisms noted.

NC DWO Stream Identification Form Version 4.11

Date: September 16, 2020	Project/Site: Weatherford Quarry	Latitude: 32.61782	
Evaluator: R. Sulkers, M. McKnight	County: Palo Pinto & Parker Counties	Longitude: -98.06463	
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$ 22.5	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other e.g. Quad Name: Brazos East/ Lipan	

Stream: ERA

1

2

A. Geomorphology (Subtotal = 9)	Absent	Weak	Moderate	Strong
1 ^{a.} Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	N	o = 0	Yes	€ 3
^a artificial ditches are not rated; see discussions in manual	<u>.</u>			
B. Hydrology (Subtotal = 5)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No =0		Yes	= 3
C. Biology (Subtotal = 8.5	•		•	
18. Fibrous roots in streambed	3	2	1	0

18. Fibrous roots in streambed	3	2
19. Rooted upland plants in streambed	3	2
20. Macrobenthos (note diversity and abundance)		1
21. Aquatic Mollusks	0	1
22 Fish	0	0.5

3 1 1.5 22. Fish 1.5 23. Crayfish 0 0.5 1 (1)1.5 24. Amphibians 0.5 0 1.5 25. Algae 0 0.5 26. Wetland plants in streambed FACW = 0.75; OBL = 1.5 Other = 0

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

As there wasn't a canopy with leaves, we excluded the leaf litter category from our review.

Moderately flowing channel with few bends and moderate variation in substrate size, some cobble present as well as sediment. No obvious floodplain, alluvial deposits, or depositional bars. Some cobble clusters contributing to grade control. Roots from FACU plants noted in streambed along channel, some being rooted in the streambed. Strong algae presence, a fair amount of amphibians noted.

N/A

0

3

NC DWQ Stream Identification Form Version 4.11

Date: September 16, 2020	Project/Site: Weatherford Quarry	Latitude: 32.626636		
Evaluator: R. Sulkers, M. McKnight	County: Palo Pinto & Parker Counties	Longitude: -98.071765		
Total Points: Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	Stream Determination (circle one) <u>Ephemeral</u> Intermittent Perennial	Other e.g. Quad Name: Brazos East/Lipan		

A. Geomorphology (Subtotal = $\frac{7}{2}$)	Absent	Weak	Moderate	Strong	
1 ^{a.} Continuity of channel bed and bank	0	1	2	3	
2. Sinuosity of channel along thalweg	0	1	2	3	
In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3	
4. Particle size of stream substrate	0	1	2	3	
5. Active/relict floodplain	0	1	2	3	
6. Depositional bars or benches	0	1	2	3	
7. Recent alluvial deposits	0	1	2	3	
8. Headcuts	0	1	2	3	
9. Grade control	0	0.5	1	1.5	
10. Natural valley	0	0.5	1	1.5	
11. Second or greater order channel	N	lo =0	Yes :	s = 3	
^a artificial ditches are not rated; see discussions in manual B. Hydrology (Subtotal = 6)					
12. Presence of Baseflow	0	1	2	3	
13. Iron oxidizing bacteria	0	1	2	3	
14. Leaf litter	1.5	1	0.5	0	
15. Sediment on plants or debris	0	0.5	1	1.5	
16. Organic debris lines or piles	0	0.5	1	1.5	
17. Soil-based evidence of high water table?	N	lo = 0	Yes =3		
C. Biology (Subtotal = 4)					
18. Fibrous roots in streambed	3	2	1	0	
19. Rooted upland plants in streambed	3	2	1	0	
20. Macrobenthos (note diversity and abundance)	0	1	2	3	
21. Aquatic Mollusks	0	1	2	3	
22. Fish	0	0.5	1	1.5	
23. Crayfish		0.5	1	1.5	
- · · · · · · · · · · · · · · · · · · ·					

 * perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

24. Amphibians

26. Wetland plants in streambed

25. Algae

As there wasn't a canopy with leaves, we excluded the leaf litter category from our review.

Fairly straight channel with some slight bends and weak continuity of bed and bank. Substrate size ranges from sediment to small boulders. Stream appeared to be lightly flowing, indicating some presence of baseflow. Several FACU plant species noted growing in the streambed along the channel. Moderate amount of frogs were seen and algae was present in some parts of the water.

0

0

0.5

0.5

N/A

1.5

1.5

<u>(1)</u> (1)

FACW = 0.75; OBL = 1.5 Other = 0

Stream: ERD

NC DWO Stream Identification Form Version 4.11

Date: September 16, 2020	Project/Site: Weatherford Quarry	Latitude: 32.61782
Evaluator: R. Sulkers, M. McKnight	County: Palo Pinto & Parker Counties	Longitude: 98.06463
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$ 18	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other e.g. Quad Name: Brazos East/ Lipan

A. Geomorphology (Subtotal = 6)	Absent	Weak	Moderate	Strong
1 ^{a.} Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain		1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	N	lo 🚺	Yes	= 3
artificial ditches are not rated; see discussions in manual B. Hydrology (Subtotal = 6)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	N	lo = 0	Yes	€3
C. Biology (Subtotal = 6				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
22 Crayfich		0.5	4	4.5

19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75: OBL = 1.5 Other f 0			ח

*perennial streams may also be identified using other methods. See p. 35 of manual.

As there wasn't a canopy with leaves, we excluded the leaf litter category from our review.

Fairly straight stream with a few bends and areas of little to no overland flow. Weak continuity of channel bed and bank. Substrate size rangs from sediment to small boulders/cobble acting as grade control. No noticeable floodplain or head-cuts. Soil sample shows evidence of a high water table. Some presence of FACU species Muhlenbergia capillaris noted along the channel. Some mollusks, algae, and amphibians noted.

N/A

Stream: ERF

NC DWQ Stream Identification Form Version 4.11

Date: September 16, 2020	Project/Site: Weatherford Quarry	Latitude: 32.61782
Evaluator: R. Sulkers, M. McKnight	County: Palo Pinto & Parker Counties	Longitude: -98.06463
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other e.g. Quad Name: Brazos East/ Lipan

A. Geomorphology (Subtotal = 5)	Absent	Weak	Moderate	Strong
1 ^{a.} Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0 (.5 1	2	3
In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	N	lo = 0	Yes	= 3

^a artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 4.5

12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	N	No = 0		₹ 3

C. Biology p(Suitabettathalf points. As there wasn't a canopy with leaves, we excluded the leaf litter category from our review.

18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75: OBL = 1.5 Other = 0			

^{*}perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

For features that exceeded the threshold of a category but did not meet the conditions of the next highest category, we

Fairly straight stream with very few bends. Particle size of substrate varies from sediment to cobble, contributing to some very slight grade control and in-channel structure. Stream appears to be lightly flowing. FACU plants rooted along the channel and in the streambed. Algal mat present as well as algae in the stream.

N/A

Stream: ERH

NC DWQ Stream Identification Form Version 4.11

Date: September 16, 2020	Project/Site: Weatherford Quarry	Latitude: 32.625123
Evaluator: R. Sulkers, M. McKnight	County: Palo Pinto & Parker Counties	Longitude: _98.057009
Total Points: Stream is at least intermittent if ≥ 19 or perennial if $\geq 30^*$	Stream Determination (circle one) Ephemeral Intermittent Perennial	Other e.g. Quad Name: Brazos East/ Lipan

A. Geomorphology (Subtotal = 8.5)	Absent	Weak	Moderate	Strong
1 ^{a.} Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1 (.5 2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	N	o [0]	Yes	= 3
^a artificial ditches are not rated; see discussions in manual				
B. Hydrology (Subtotal = 3				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	N	o = 0	Yes	= 3
C. Biology (Subtotal = <u>6.5</u>)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed		FACW = 0.75;	OBL = 1.5 Other = 0)
*perennial streams may also be identified using other method	ods. See p. 35 of manu	al.		
Notes:				

Sketch

For features that exceeded the threshold of a category but did not meet the conditions of the next highest category, we provided half points. As there wasn't a canopy with leaves, we excluded the leaf litter category from our review.

N/A

APPENDIX F – SITE PHOTOGRAPHS



PHOTO 1: WRA Upland at Flag WRA2



PHOTO 2: WRA Wetland at Flag WRA2

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PHOTO 3: WRB Upland at Flag WRB1



PHOTO 4: WRB Wetland at Flag WRB1

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PHOTO 5: WRC Upland at Flag WRC3



PHOTO 6: WRC Wetland at Flag WRC3

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PHOTO 7: Intermittent Stream at Flag ERA10



PHOTO 8: Ephemeral Stream at Flag ERA11 / ERE1

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PHOTO 9: Potential Wetland at Stream Flag ERA17, Does Not Meet 50/20 Rule



PHOTO 10: Potential Wetland at Stream Flag ERA27, Does Not Have Hydric Soil Indicators

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PHOTO 11: Looking Downstream at Stream Flag ERA31



PHOTO 12: Photo at Stream Flag ERE7

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PHOTO 13: Potential Wetland at ERE9, Does Not Meet 50/20 Rule



PHOTO 14: Potential Wetland at Stream Flag ERE14, Does Not Meet 50/20 Rule

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PHOTO 15: _Ephemeral Stream With Overland Flow at Stream Flag ERE16



PHOTO 16: Ephemeral Stream at Flag ERF2

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PHOTO 17: Ephemeral Stream at Stream Flag ERF8



PHOTO 18: Ephemeral Channel With No OHWM at Stream Flag ERF11

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PHOTO 19: Overland Flow at Stream Flag ERF13



PHOTO 20: Stream Photo at Stream Flag ERF15

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PHOTO 21: Loose Stream OHWM and Bed and Bank at Flag ERF16



PHOTO 22: Confluence of Stream ERE and Stream ERG Into Stream ERA

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PHOTO 23: Ephemeral Stream at Stream Flag ERH2



PHOTO 24: Potential Wetland at Stream Flag ERH11

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PHOTO 25: Stream Form Photo at Stream Flag ERH12



PHOTO 26: Photo at ERH14, Loose OHWM and Bed and Bank

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PHOTO 27: Photo at Stream Flag ERH20



PHOTO 28: Photo of Stream at Stream Flag ERJ3

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PHOTO 29: Photo at Flag ERJ5, No OHWM or Bed or Bank Features



PHOTO 30: Overland Sheet Flow at Flag ERJ12

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PHOTO 31: No OHWM or Bed and Bank Features at Flag ERK7



PHOTO 32: Wetland Data Point at Wetland Flag MB2

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PHOTO 33: Upland Data Point at Wetland Flag MB2



PHOTO 34: Intermittent Stream HI3 Facing North (Photo by HHNT)

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PHOTO 35: Intermittent Stream HI3 Facing South (Photo by HHNT)



PHOTO 36: Ephemeral Stream at Stream Data Point Taken at Stream Flag EME10

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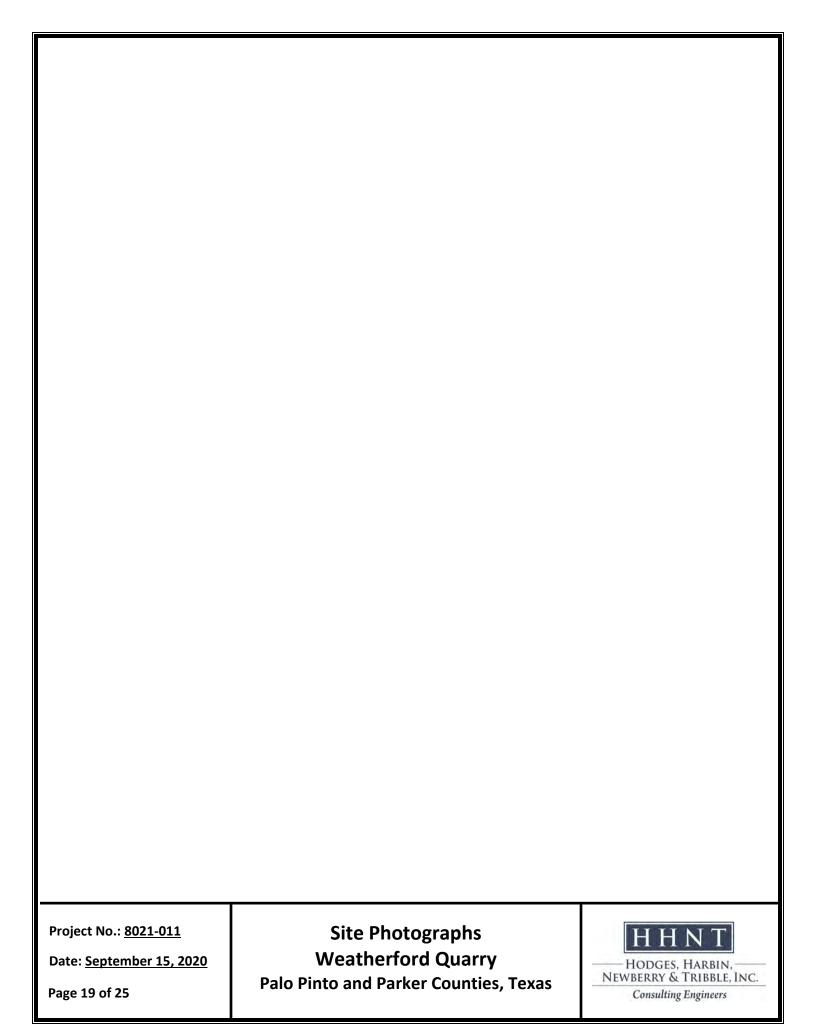




PHOTO PP2: _____ Wetland HW4 Facing South (Photo by Halff Associates)



PHOTO PP6: Intermittent Stream HI3 (Photo by Halff Associates)

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PHOTO PP11: _____Stream HE5 Flowing North (Photo by Halff Associates)



PHOTO PP12: Facing In To Wetland HW2 (Photo by Halff Associates)

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PHOTO PP13: Facing In To Wetland HW1_(Photo by Halff Associates)



PHOTO PP21: Surface Water HSW1 Facing East (Photo by Halff Associates)

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PHOTO PP24: _Ephemeral Channel HE1 Flowing North_(Photo by Halff Associates)



PHOTO PP31: Intermittent Stream HI2 downstream of OLSF6 (Photo by Halff Associates)

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PHOTO PP43: Previously Mined Area (Photo by Halff Associates)



PHOTO PP46: Ephemeral Channel HE6 Flowing Northwest (Photo by Halff Associates)

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PHOTO PP51: Surface Water HSW2 Facing South_(Photo by Halff



PHOTO PP53: Surface Water HSW2 Facing Northwest (Phot by Halff Associates)

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APPENDIX G – ORM AQUATIC RESOURCES UPLOAD TABLE

					Maria Tarana I and a same a		NIMED D. C. C. C. C.			Land Makaman
Waters_Nam	e State	Cowardin_Code	HGM_Code	Meas_Type	Amount Units	Waters_Type	NWPR_Determine_Code	Latitude	Longitude	Local_Waterway
ERA(e)	TEXAS	R6	RIVERINE	Linear	2277 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.622552	-98.07421 Brazos River	
ERA(i)	TEXAS	R4	RIVERINE	Linear	1396 FOOT	A2TRIBINT		32.626591	-98.072137	
ERB	TEXAS	R6	RIVERINE	Linear	186 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.627837	-98.072033	
ERC	TEXAS	R6	RIVERINE	Linear	73 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.62755	-98.071904	
ERD	TEXAS	R6	RIVERINE	Linear	225 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.626642	-98.07178	
ERE1	TEXAS	R6	RIVERINE	Linear	805 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.623964	-98.0711	
ERE2	TEXAS	R6	RIVERINE	Linear	929 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.621058	-98.0686	
ERF1	TEXAS	R6	RIVERINE	Linear	728 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.61888	-98.069658	
ERF2	TEXAS	R6	RIVERINE	Linear	1040 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.623408	-98.071626	
ERH	TEXAS	R6	RIVERINE	Linear	2743 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.618566	-98.06197	
ERJ	TEXAS	R6	RIVERINE	Linear	1564 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.618012	-98.075915	
ERK	TEXAS	R6	RIVERINE	Linear	640 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.611985	-98.0725	
EMA	TEXAS	R6	RIVERINE	Linear	2337 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.616846	-98.06771	
EMB	TEXAS	R6	RIVERINE	Linear	710 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.621745	-98.074113	
EMB2	TEXAS	R6	RIVERINE	Linear	1628 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.617932	-98.07324	
EMC	TEXAS	R6	RIVERINE	Linear	1016 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.62271	-98.06477	
EMD	TEXAS	R6	RIVERINE	Linear	1236 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.625227	-98.067222	
EME	TEXAS	R6	RIVERINE	Linear	1046 FOOT	B3EPHEMERAL	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.629562	-98.071128	
EMF	TEXAS	R6	RIVERINE	Linear	352 FOOT	B3EPHEMERAL	Yes - would have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion and is therefore also not a (b)(1) exclusion	32.614867	-98.072607	
HE1	TEXAS	R6	RIVERINE	Linear	1113 FOOT	B3EPHEMERAL	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.629646	-98.06169	
HI2	TEXAS	R4	RIVERINE	Linear	598 FOOT	B3EPHEMERAL	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.628053	-98.061418	
HI3	TEXAS	R4	RIVERINE	Linear	4501 FOOT	B3EPHEMERAL	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.623283	-98.057627	
HE4	TEXAS	R6	RIVERINE	Linear	700 FOOT	B3EPHEMERAL	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.624432	-98.056271	
HE5	TEXAS	R6	RIVERINE	Linear	1576 FOOT	B3EPHEMERAL	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.622039	-98.05487	
HE6	TEXAS	R6	RIVERINE	Linear	1380 FOOT	B3EPHEMERAL	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.618837	-98.04847	
SWA	TEXAS	L2	LACUSTRINF	Area	6.33 ACRE	A3LPIFLOOD		32.627013	-98.070872	
SWB	TEXAS	L2	LACUSTRINF	Area	0.12 ACRE	B8LPIART	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.629015	-98.068334	
SWRA	TEXAS	L2	LACUSTRINF	Area	0.48 ACRE	A3LPIFLOOD		32.625573	-98.069512	
SWRC	TEXAS	L2	LACUSTRINF	Area	0.68 ACRE	B8LPIART	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.61876	-98.072266	
WRA	TEXAS	PEM	DEPRESS	Area	0.28 ACRE	A4WETABUT		32.626534	-98.0721	
WRB	TEXAS	PEM	DEPRESS	Area	0.14 ACRE	A4WETFLOOD		32.627878	-98.071842	
WRC	TEXAS	PEM	DEPRESS	Area	0.1 ACRE	A4WETFLOOD		32.626269	-98.071567	
MB	TEXAS	PEM	DEPRESS	Area	0.14 ACRE	B1WETNONADJ	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.624115	-98.06559	
MA	TEXAS	PEM	DEPRESS	Area	0.29 ACRE	B1WETNONADJ	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.62359	-98.065319	
HSW1	TEXAS	L2	LACUSTRINF	Area	0.17 ACRE	B8LPIART	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.628444	-98.062472	
HSW2	TEXAS	L2	LACUSTRINF	Area	0.64 ACRE	B8LPIART	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.619593	-98.053987	
HW1	TEXAS	PEM	DEPRESS	Area	0.05 ACRE	B1WETNONADJ	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.623844	-98.055668	
HW2	TEXAS	PEM	DEPRESS	Area	0.02 ACRE	B1WETNONADJ	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.623467	-98.055073	
HW3	TEXAS	PEM	DEPRESS	Area	0.07 ACRE	B1WETNONADJ	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.620048	-98.053901	
HW4	TEXAS	PEM	DEPRESS	Area	0.05 ACRE	B1WETNONADJ	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.619261	-98.053852	
HW5		PEM	DEPRESS	Area	0.16 ACRE	B1WETNONADJ	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.617855	-98.056213	
OLS1	TEXAS	U		Linear	652 FOOT	B4SHEETFLOW	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.61375000	-98.07222000	
OLS2	TEXAS	U		Linear	187 FOOT	B4SHEETFLOW	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.61578000	-98.07284000	
OLS3	TEXAS	U		Linear	338 FOOT	B4SHEETFLOW	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.62040000	-98.07400000	
OLS4	TEXAS	U		Linear	1020 FOOT	B4SHEETFLOW	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.62087000	-98.06992000	
OLS5	TEXAS	U		Linear	553 FOOT	B4SHEETFLOW	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.62269000	-98.06980000	
OLS6	TEXAS	U		Linear	265 FOOT	B4SHEETFLOW	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.627273	-98.060343	
OLS1 OLS2 OLS3 OLS4 OLS5	TEXAS TEXAS TEXAS TEXAS TEXAS TEXAS TEXAS	PEM U U U U U U U	1	Area Linear Linear Linear Linear Linear Linear	0.16 ACRE 652 FOOT 187 FOOT 338 FOOT 1020 FOOT 553 FOOT	B1WETNONADJ B4SHEETFLOW B4SHEETFLOW B4SHEETFLOW B4SHEETFLOW B4SHEETFLOW	Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion Yes - would NOT have been an (a)(1)-(4) water absent the (b)(2)-(12) exclusion is therefore also a (b)(1) exclusion	32.617855 32.61375000 32.61578000 32.62040000 32.62087000 32.62269000	-98.056213 -98.07222000 -98.07284000 -98.07400000 -98.06992000 -98.06980000	

APPENDIX H – OWNERSHIP INFORMATION

October 6, 2020

Regulatory Division U.S. Army Corps of Engineers 819 Taylor Street, Room 3A37 P.O. Box 17300 Fort Worth, TX 76102

Re: Approved Jurisdictional Determination

Property Address: 1111 Gilbert Pit Rd, Millsap, TX 76066

County: Palo Pinto and Parker Counties, Texas

Parcel Number(s): R000009799, R000095166, R000059301

Acreage: +/- 1,534.81

To Whom It May Concern,

I own the property described above and I have legal authority to allow access to the property. I consent to any site visit on the property by agents or personnel from Army Corps of Engineers, and/or Hodges, Harbin, Newberry & Tribble (HHNT). Additionally, I am providing authority to Vulcan to apply and receive an Approved Jurisdictional Determination on the Property.

Sincerely,

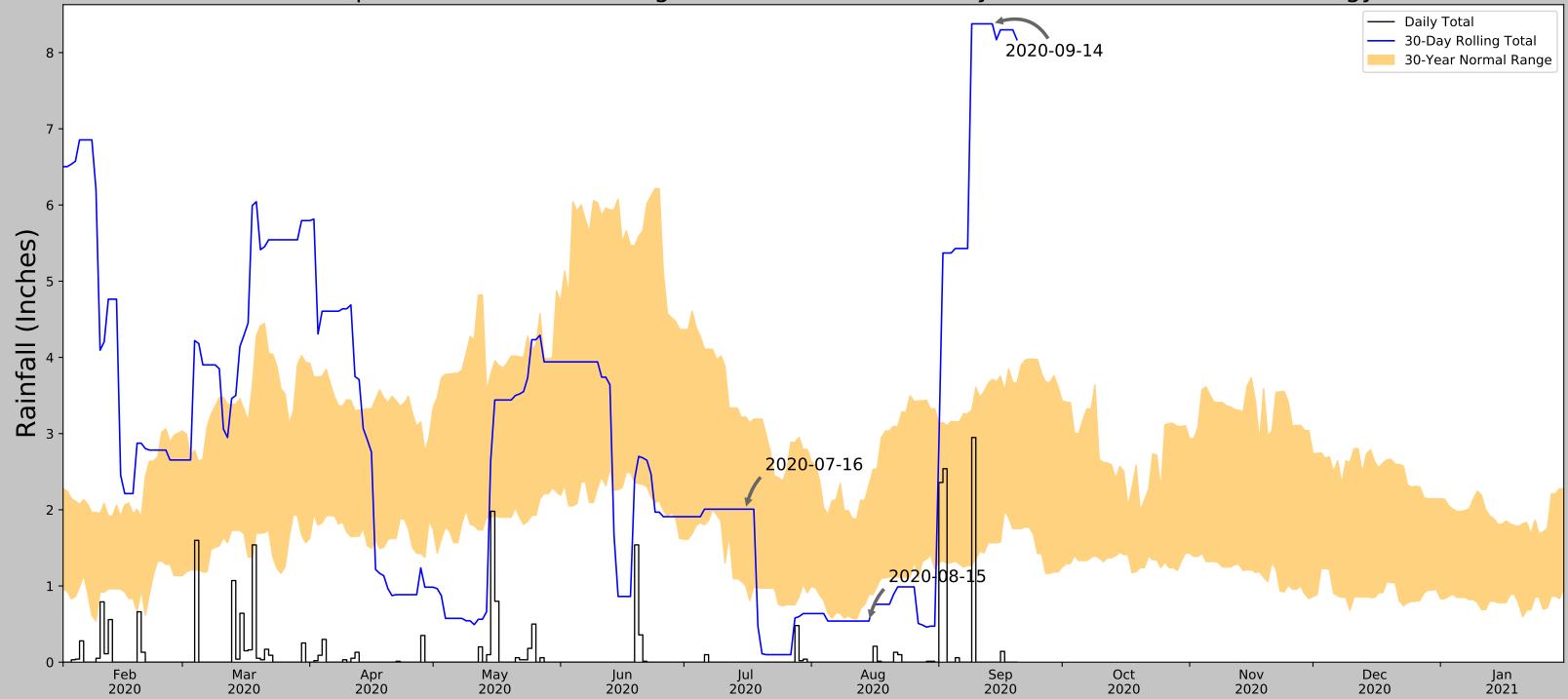
Parker County:
Parcels R000095166, R000059301
Vulcan Lands Inc.
1200 Urban Center Dr.
Birmingham, AL 35242

Encl: Property Map

Palo Pinto County: Parcel R00000979 Florida Rock Industries 6200 UTSA Blvd. San Antonio, TX 78249

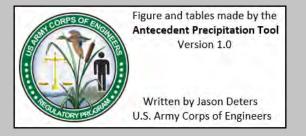
APPENDIX I – ANTECEDENT PRECIPITATION

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



Coordinates	32.618876, -98.053756
Observation Date	2020-09-14
Elevation (ft)	919.31
Drought Index (PDSI)	Mild wetness (2020-08)
WebWIMP H ₂ O Balance	Dry Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2020-09-14	1.565748	3.712992	8.377953	Wet	3	3	9
2020-08-15	0.888583	2.324803	0.53937	Dry	1	2	2
2020-07-16	1.005512	3.222441	2.007874	Normal	2	1	2
Result							Normal Conditions - 13



Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days (Normal)	Days (Antecedent)
MINERAL WELLS AP	32.7817, -98.0603	930.118	11.256	10.808	5.187	11074	90
LIPAN 4NW	32.5725, -98.0803	988.845	3.557	69.535	1.848	244	0
BRAZOS	32.6489, -98.1336	839.895	5.088	79.415	2.694	34	0