

Incident ID	nAPP2114445036	-
District RP		
Facility ID		
Application ID		

### **Site Assessment/Characterization**

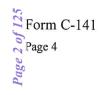
This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)				
Did this release impact groundwater or surface water?	☐ Yes ⊠ No				
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No				
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No				
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No				
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No				
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No				
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No				
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No				
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No				
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No				
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No				
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	☐ Yes ⊠ No				
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.					
Characterization Report Checklist: Each of the following items must be included in the report.					

Cn	aracterization Report Checklist: Each of the following items must be included in the report.
	Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data
	Data table of soil contaminant concentration data
	Depth to water determination
	Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
	Boring or excavation logs
	Photographs including date and GIS information
	Topographic/Aerial maps
	Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation an. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 9.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Released to Imaging: 4/5/2022 8:25:58 AM



Incident ID	nAPP2114445036
District RP	
Facility ID	
Application ID	

regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endang public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations has failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local law and/or regulations.	ive
Printed Name: Nikki Mishler Title: Sr. Environmental Representative	
Signature: Date: 3/8/2022	
email: Nikki.Mishler@cdevinc.com Telephone: 432-315-0134	
OCD Only	
Received by: Date:	

Form	C-141
Page 5	

Incident ID	nAPP2114445036	200
District RP		276
Facility ID		
Application ID		

## **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan.					
<ul> <li>Detailed description of proposed remediation technique</li> <li>Scaled sitemap with GPS coordinates showing delineation points</li> <li>Estimated volume of material to be remediated</li> <li>Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> </ul>					
Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.					
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.					
Extents of contamination must be fully delineated.					
Contamination does not cause an imminent risk to human health, the environment, or groundwater.					
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.  Printed Name: Nikki Mishler Title: Sr. Environmental Representative  Date: 3/8/2022  Email: Nikki.Mishler@cdevinc.com  Telephone: 432-315-0134					
OCD Only					
Received by: Date:					
Approved					
Signature: Date:					



Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

Incident ID	nAPP2114445036
District RP	
Facility ID	
Application ID	

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
Description of remediation activities
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.
Printed Name: Nikki Mishler Title: Sr. Environmental Representative
Signature: Date: 3/8/2022
email: Nikki.Mishler@cdevinc.com Telephone: 432-315-0134
OCD Only
Received by: Chad Hensley Date: 04/05/2022
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and emediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.
Closure Approved by: Date: Date:
Printed Name: Chad Hensley Title: Environmental Specialist Advanced



# CLOSURE REQUEST AND REMEDIATION SUMMARY REPORT

Centennial Resource Development, Inc.
Chorizo 12 CTB
Lea County, New Mexico
Unit Letter "N", Section 36, Township 21 South, Range 34 East
Latitude 32.43125° North, Longitude 103.42602° West
NMOCD Incident: nAPP2114445036

#### Prepared For:

#### Centennial Resource Development, Inc.

500 W. Illinois Avenue Suite 500 Midland, TX 79701

Prepared By:

**Etech Environmental & Safety Solutions, Inc.** 

P.O. Box 62228 Midland, Texas 79711

February 2022

Wesley A. Desilets

Project Manager

Timothy McMinn Senior Project Manager

#### TABLE OF CONTENTS

INTRODUCTION	1
NMOCD SITE CLASSIFICATION	1
SUMMARY OF SOIL REMEDIATION ACTIVITIES	1
SOIL DISPOSAL AND BACKFILL ACTIVITIES	3
SITE CLOSURE REQUEST	3
LIMITATIONS	3
DISTRIBUTION	4

#### **FIGURES**

Figure 1 – Site Location Map

Figure 2 – Confirmation Soil Sample Location Map

#### **TABLES**

Table 1 – Concentrations of Benzene, BTEX, TPH, and Chlorides in Soil

#### **APPENDICES**

Appendix A – Photographic Documentation

 $Appendix \ B-Analytical \ Reports$ 

Appendix C – Release Notification and Corrective Action (Form C-141)

#### INTRODUCTION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Centennial Resource Development, Inc. (Centennial), has prepared this Closure Request and Remediation Summary Report for the Release Site known as Chorizo 12 CTB. The legal description of the Release Site is Unit Letter "N", Section 36, Township 21 South, Range 34 East, in Lea County, New Mexico. The subject property is owned by The New Mexico State Land Office (NMSLO). The Release Site GPS coordinates are 32.43125° North and 103.42602° West. Please reference Figure 1 for the Site Location Map and Figure 2 for the Confirmation Soil Sample Location Map.

On May 21, 2021, Centennial discovered that a release had occurred due to an open choke valve which caused the gun barrel to overfill. Approximately seven (7) barrels of crude oil were released with five (5) barrels recovered, resulting in a net loss of approximately two (2) barrels of crude oil. On June 2, 2021, Centennial filed a *Release Notification and Corrective Action Form* (Form C-141) with the New Mexico Oil Conservation Division (NMOCD) and NMSLO documenting the release. The Form C-141 is provided as Appendix C. Photographic documentation for the site are provided as Appendix A.

#### NMOCD SITE CLASSIFICATION

A search of the groundwater database maintained by United States Geological Survey (USGS) did not identify any registered water wells within a quarter (1/4) mile of the Chorizo 12 CTB Release Site. A further search of the USGS database identified the closest registered water well is USGS Well #: 322657103255201 located approximately one and a quarter (1.25) miles northwest of the Release Site. The average depth to groundwater for USGS Well #: 322657103255201 should be encountered at approximately ninety-nine (99) feet below ground surface (bgs). Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion. No water wells were observed within one thousand (1,000) feet of the Release Site. Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion. No surface water was observed within one thousand (1,000) feet of the release. Based on the NMOCD site classification system, zero (0) points will be assigned to the Chorizo 12 CTB Release Site as a result of this criterion. Based on this score, the soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene 10 mg/Kg (ppm)
- BTEX -50 mg/Kg (ppm)
- TPH 100 mg/Kg (ppm)
- Chloride 600 mg/Kg (ppm)

#### SUMMARY OF SOIL REMEDIATION ACTIVITIES

On June 14, 2021, Etech commenced excavation activities at the Release Site utilizing heavy equipment and manual means. Excavation activities were conducted in a manner that protected the integrity of the production equipment. Etech hand spotted around all surface equipment and excavated by hand all impacted material within two (2) feet of any production equipment. Excavated soil was stockpiled on site and remediated utilizing blending and aerating techniques.

From June 16 through June 22, 2021, Etech, on behalf of Centennial, collected sixteen (16) composite confirmation soil samples from the base of the excavated areas, two (2) composite confirmation soil samples from the sidewalls of the excavation, and one (1) composite soil sample from the stockpiled soil. Soil samples were submitted to Permian Basin Environmental Lab, LP. (PBELAB) in Midland, Texas and analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) using EPA Method SW 846-8021B, Total Petroleum Hydrocarbons (TPH) using EPA Method SW 846-8015M, and chloride using EPA Method E 300.0. A review of laboratory analytical results indicated additional excavation activities were necessary in the areas represented as Bottom Hole 2 @ 1' and South Wall @ 6" due to elevated chloride concentrations and it was determined that further remediation activities were necessary for the impacted stockpile. Please reference Figure 2 for soil sampling locations.

On July 26, 2021, following further excavation activities, two (2) composite confirmation soil samples (Bottom Hole 2 @ 24" and South Wall @ 24") were collected from the excavated areas, and one (1) composite soil sample (Stockpile) was collected from the stockpiled soil. The samples were submitted to PBELAB for TPH and/or chloride analysis. Please reference Figure 2 for site details and soil sampling locations. Based on the analytical results it was determined that the impacted stockpiled soil would require disposal due to elevated TPH and chloride concentrations.

On August 11, 2021, hydrocarbon staining was observed in the vicinity of the containment during disposal activities. Following excavation activities, one (1) composite confirmation soil sample was collected from the base of the excavated area (Bottom Hole 17 @ 1') and one (1) composite confirmation soil sample was collected from the side wall of the excavation (South Wall 2 @ 1'). The samples were submitted to PBELAB for BTEX, TPH and chloride analysis. The excavated soil was added to the existing stockpiled soil pending disposal. Please reference Figure 2 for site details and soil sampling locations. A review of laboratory analytical results indicated all collected soil samples were below applicable NMOCD limits.

On September 15, 2021, eleven (11) composite confirmation soil samples were collected from the perimeter of the excavated areas. The samples were submitted to PBELAB for BTEX, TPH and chloride analysis. A review of laboratory analytical results indicated all collected soil samples were below applicable NMOCD limits, with the exception of the area associated with composite confirmation soil sample Perimeter #10 which exhibited chloride concentrations above the regulatory limits.

On October 21, 2021, following further excavation activities, one (1) composite confirmation soil sample was collected from the further excavated area (Perimeter #10A) and submitted to PBELAB for chloride analysis. A review of laboratory analytical results indicated the collected soil sample was below applicable NMOCD limits.

Table 1 summarizes the Concentrations of Benzene, BTEX, TPH, and Chlorides in Soil. Analytical reports are provided as Appendix B.

#### SOIL DISPOSAL AND BACKFILL ACTIVIES

In August 2021, Etech transported approximately two hundred (200) cubic yards of impacted soil to the Sundance disposal facility in Lea County, NM.

On December 3, 2021, the excavated areas were backfilled with non-impacted like soil from a local source and the site was contoured to fit the surrounding area.

#### SITE CLOSURE REQUEST

Based on the analytical results, Etech, on the behalf of Centennial, requests NMOCD and NMSLO grant Site Closure Status to the Chorizo 12 CTB Release Site NMOCD Incident: nAPP2114445036.

#### **LIMITATIONS**

Etech has prepared this Closure Request and Remediation Summary Report to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Etech has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Etech has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Centennial Resource Development, Inc. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Etech and/or Centennial Resource Development, Inc.

#### **DISTRIBUTION**

Copy 1: New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division, District 1

1624 N. French Drive Hobbs, New Mexico 88210

Copy 2: Ryan Mann

New Mexico State Land Office

Remediation Specialist 2827 N. Dal Paso Suite 117 Hobbs, NM 88240

,

Copy 3: Nikki Mishler

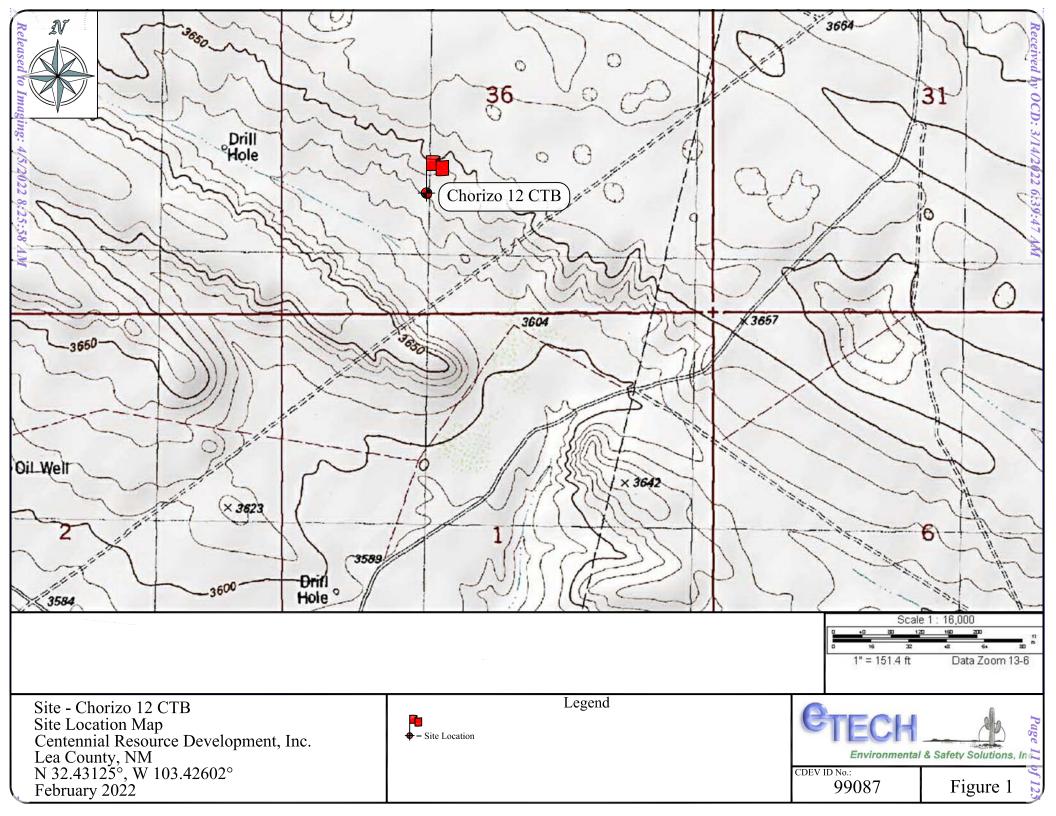
Centennial Resource Development, Inc.

500 W. Illinois Avenue Suite 500

Midland, TX 79701

Copy 4: Etech Environmental & Safety Solutions, Inc.

P.O. Box 62228 Midland, TX 79711



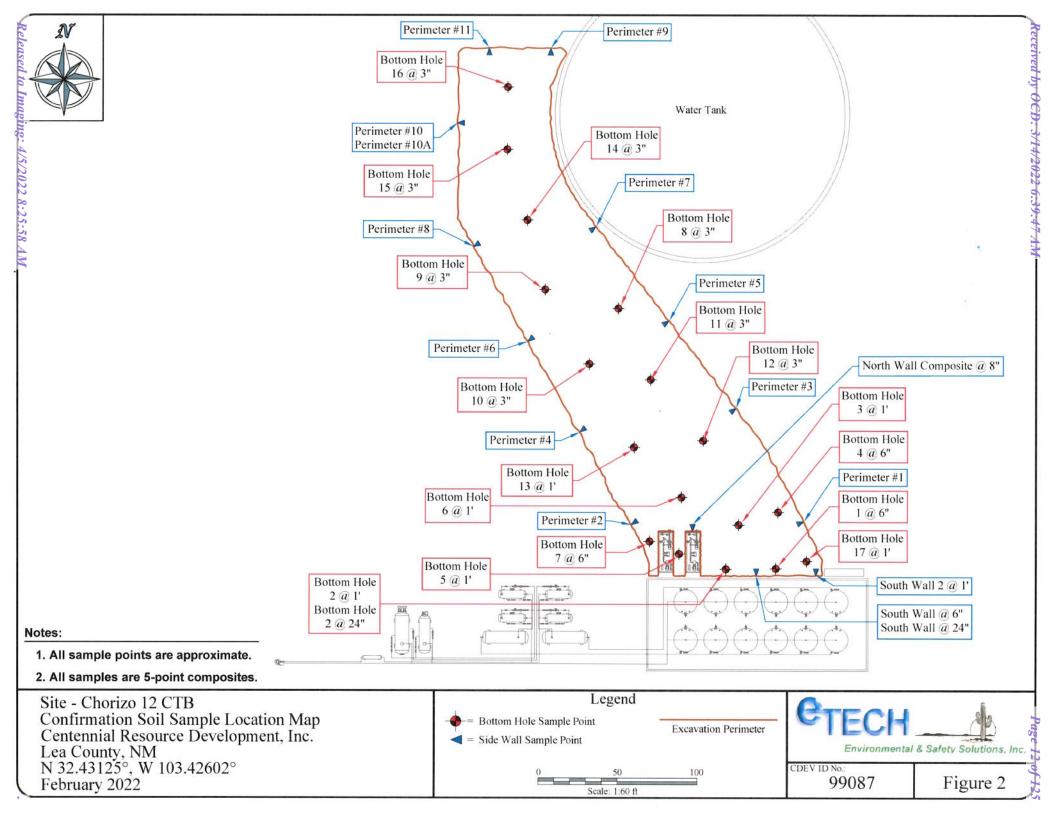


TABLE 1

#### CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

#### CENTENNIAL RESOURCE DEVELOPMENT, INC.

#### CHORIZO 12 CTB RELEASE SITE

LEA COUNTY, NEW MEXICO
All concentrations are reported in mg/Kg

All concentrations are reported in mg/Kg													
	SAMPLE	METHODS: SW 846-8021B						METHOD: SW 8015M				E 300.0	
SAMPLE LOCATION	DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C <sub>6</sub> -C <sub>12</sub>	TPH DRO C <sub>12</sub> -C <sub>28</sub>	TPH ORO C <sub>28</sub> -C <sub>35</sub>	TOTAL TPH C <sub>6</sub> -C <sub>35</sub>	CHLORIDE
Limits		10 mg/Kg						50 mg/Kg				100 mg/Kg	600 mg/Kg
Bottom Hole Sample Results													
Bottom Hole 1 @ 6"	6/16/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	471
Bottom Hole 2 @ 1'	6/16/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	665
Bottom Hole 2 @ 24"	7/26/2021	-		•	-	•	•	•	1	-	-	-	2.84
Bottom Hole 3 @ 1'	6/16/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	328
Bottom Hole 4 @ 6"	6/16/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	147
Bottom Hole 5 @ 1'	6/16/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	494
Bottom Hole 6 @ 1'	6/16/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	128
Bottom Hole 7 @ 6"	6/16/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	86.7
Bottom Hole 8 @ 3"	6/17/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	125
Bottom Hole 9 @ 3"	6/17/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.9
Bottom Hole 10 @ 3"	6/17/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	98.3
Bottom Hole 11 @ 3"	6/21/2021	ND	ND	ND	ND	ND	ND	ND	ND	43.2	ND	43.2	372
Bottom Hole 12 @ 3"	6/21/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	127
Bottom Hole 13 @ 3"	6/21/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	116
Bottom Hole 14 @ 3"	6/21/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	124
Bottom Hole 15 @ 3"	6/21/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	545
Bottom Hole 16 @ 3"	6/21/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	566
Bottom Hole 17 @ 1'	8/11/2021	ND	ND	ND	ND	ND	ND	ND	ND	37.2	ND	37.2	28.8
					Sie	de Wall Samp	le Results						
North Wall Composite @ 8"	6/21/2021	ND	ND	ND	ND	ND	ND	ND	ND	51.3	ND	51.3	454
South Wall @ 6"	6/16/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,250
South Wall @ 24"	7/26/2021	-	-	-	-	-	-	-	-	-	-	-	5.27
South Wall 2 @ 1'	8/11/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.7
Perimeter #1	9/15/2021	ND	ND	ND	ND	ND	ND	ND	ND	47.0	ND	47.0	10.0
Perimeter #2	9/15/2021	ND	ND	ND	ND	ND	ND	ND	ND	35.4	ND	35.4	5.22
Perimeter #3	9/15/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.8
Perimeter #4	9/15/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	28.3
Perimeter #5	9/15/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	427
Perimeter #6	9/15/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	46.2

Released to Imaging: 4/5/2022 8:25:58 AM

TABLE 1

#### CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

#### CENTENNIAL RESOURCE DEVELOPMENT, INC.

#### CHORIZO 12 CTB RELEASE SITE

LEA COUNTY, NEW MEXICO
All concentrations are reported in mg/Kg

	a			METHODS:	SW 846-80211	3			M	ETHOD: SW 801	5M		E 300.0
SAMPLE LOCATION	SAMPLE DATE	BENZENE	TOLUENE	ETHYL- BENZENE	m, p - XYLENES	o - XYLENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C <sub>6</sub> -C <sub>12</sub>	TPH DRO C <sub>12</sub> -C <sub>28</sub>	TPH ORO C <sub>28</sub> -C <sub>35</sub>	TOTAL TPH C <sub>6</sub> -C <sub>35</sub>	CHLORIDE
Limits		10 mg/Kg						50 mg/Kg				100 mg/Kg	600 mg/Kg
Perimeter #7	9/15/2021	ND	ND	ND	ND	ND	ND	ND	ND	29.1	ND	29.1	402
Perimeter #8	9/15/2021	ND	0.00156	ND	ND	ND	0.00156	ND	ND	ND	ND	ND	127
Perimeter #9	9/15/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	179
Perimeter #10	9/15/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,050
Perimeter #10A	10/21/2021	-	-	-	-	i	-	-	-	1	-	-	247
Perimeter #11	9/15/2021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	118
					St	ockpile Samp	le Results						
Stockpile	6/22/2021	ND	ND	ND	ND	ND	ND	ND	30.1	1,580	270	1,880	1,750
Stockpile	7/26/2021	-	-	-	-	-	-	-	42.8	3,120	698	3,860.8	2,300

**Bold and Yellow Highlighted indicates Analyte Above NMOCD Regulatory Limit** 

Project Name: Chorizo 12 CTB

Project No: 14229

# Photo No:

#### **Direction Taken:**

Southwest

#### Description:

View of the impacted area.



# Photo No: 2.

#### **Direction Taken:**

Northwest

#### Description:

View of the impacted area.



Project Name: Chorizo 12 CTB Project No: 14229

Photo No: 3.

**Direction Taken:** 

East

Description:

View of the impacted area.



Photo No: 4.

**Direction Taken:** 

North

Description:

View of the impacted area.



**Project Name:** Chorizo 12 CTB **Project No:** 14229

Photo No: 5.

**Direction Taken:** 

Northwest

Description:

View of the impacted area.



Photo No:

Direction Taken:

West

Description:

View of the impacted area.



Project Name: Chorizo 12 CTB

Project No: 14229

Photo No: 7.

**Direction Taken:** 

South

Description:

View of the excavated area.



Photo No:

**Direction Taken:** 

West

Description:

View of the excavated area.



Project Name: Chorizo 12 CTB Project No: 14229

Photo No: 9.

**Direction Taken:** 

Southeast

Description:

View of the excavated area.



Photo No: 10.

**Direction Taken:** 

North

Description:

View of the excavated area.



Project Name: Chorizo 12 CTB Project No: 14229

#### Photo No: 11.

#### **Direction Taken:**

Southwest

#### Description:

View of the excavated area.



#### Photo No: 12.

#### **Direction Taken:**

Northwest

#### Description:

View of the excavated area.



Project Name: Chorizo 12 CTB Project No: 14229

Photo No: 13.

**Direction Taken:** 

South

Description:

View of the backfilled area.



Photo No: 14.

**Direction Taken:** 

Northwest

Description:

View of the backfilled area.



Project Name: Chorizo 12 CTB Project No: 14229

#### Photo No: 15.

#### **Direction Taken:**

Southwest

#### Description:

View of the backfilled area.



#### Photo No: 16.

#### **Direction Taken:**

Southeast

#### Description:

View of the backfilled area.



### PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



# Analytical Report

#### **Prepared for:**

Tim McMinn
E Tech Environmental & Safety Solutions, Inc. [1]
13000 West County Road 100
Odessa, TX 79765

Project: Chorizo 12 CTB Project Number: 14229 Location: New Mexico

Lab Order Number: 1F24002



**Current Certification** 

Report Date: 07/01/21

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Bottom Hole 1 @ 6"	1F24002-01	Soil	06/16/21 07:30	06-23-2021 16:31
Bottom Hole 2 @ 1'	1F24002-02	Soil	06/16/21 08:25	06-23-2021 16:31
Bottom Hole 3 @ 1'	1F24002-03	Soil	06/16/21 09:00	06-23-2021 16:31
Bottom Hole 4 @ 6"	1F24002-04	Soil	06/16/21 09:45	06-23-2021 16:31
Bottom Hole 5 @ 1'	1F24002-05	Soil	06/16/21 12:00	06-23-2021 16:31
Bottom Hole 6 @ 1'	1F24002-06	Soil	06/16/21 13:25	06-23-2021 16:31
Bottom Hole 7 @ 6"	1F24002-07	Soil	06/16/21 14:40	06-23-2021 16:31
Bottom Hole 8 @ 3"	1F24002-08	Soil	06/17/21 13:35	06-23-2021 16:31
Bottom Hole 9 @ 3"	1F24002-09	Soil	06/17/21 13:45	06-23-2021 16:31
Bottom Hole 10 @ 3"	1F24002-10	Soil	06/17/21 14:00	06-23-2021 16:31
Bottom Hole 11 @ 3"	1F24002-11	Soil	06/21/21 08:30	06-23-2021 16:31
Bottom Hole 12 @ 3"	1F24002-12	Soil	06/21/21 09:39	06-23-2021 16:31
Bottom Hole 13 @ 3"	1F24002-13	Soil	06/21/21 08:56	06-23-2021 16:31
Bottom Hole 14 @ 3"	1F24002-14	Soil	06/21/21 13:30	06-23-2021 16:31
Bottom Hole 15 @ 3"	1F24002-15	Soil	06/21/21 13:50	06-23-2021 16:31
Bottom Hole 16 @ 3"	1F24002-16	Soil	06/21/21 14:10	06-23-2021 16:31
North Wall Composite @ 8"	1F24002-17	Soil	06/21/21 08:52	06-23-2021 16:31
South Wall @ 6"	1F24002-18	Soil	06/16/21 07:05	06-23-2021 16:31
Stockpile	1F24002-19	Soil	06/22/21 13:25	06-23-2021 16:31

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

> Bottom Hole 1 @ 6" 1F24002-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		P	ermian B	asin Envi	ronmental L	ah, L.P.			
BTEX by 8021B		-			· • • • • • • • • • • • • • • • • • • •	, 2010			
Benzene	ND	0.00106	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 17:27	EPA 8021B	
Toluene	ND	0.00106	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 17:27	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 17:27	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 17:27	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 17:27	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		84.4 %	80-120		P1F2403	06/24/21 12:04	06/24/21 17:27	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		93.8 %	80-120		P1F2403	06/24/21 12:04	06/24/21 17:27	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Metl	hods						
Chloride	471	1.06	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 16:26	EPA 300.0	
% Moisture	6.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EP	A Method	8015M						
C6-C12	ND	26.6	mg/kg dry	1	P1F2404	06/24/21 12:30	06/24/21 23:03	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P1F2404	06/24/21 12:30	06/24/21 23:03	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P1F2404	06/24/21 12:30	06/24/21 23:03	TPH 8015M	
Surrogate: 1-Chlorooctane		110 %	70-130		P1F2404	06/24/21 12:30	06/24/21 23:03	TPH 8015M	
Surrogate: o-Terphenyl		116 %	70-130		P1F2404	06/24/21 12:30	06/24/21 23:03	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	06/24/21 12:30	06/24/21 23:03	cale	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### Bottom Hole 2 @ 1' 1F24002-02 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00112	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 17:48	EPA 8021B	
Toluene	ND	0.00112	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 17:48	EPA 8021B	
Ethylbenzene	ND	0.00112	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 17:48	EPA 8021B	
Xylene (p/m)	ND	0.00225	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 17:48	EPA 8021B	
Xylene (o)	ND	0.00112	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 17:48	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		94.8 %	80-120		P1F2403	06/24/21 12:04	06/24/21 17:48	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		86.0 %	80-120		P1F2403	06/24/21 12:04	06/24/21 17:48	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Metl	hods						
Chloride	665	1.12	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 16:41	EPA 300.0	
% Moisture	11.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EPA	A Method	8015M						
C6-C12	ND	28.1	mg/kg dry	1	P1F2404	06/24/21 12:30	06/24/21 23:25	TPH 8015M	
>C12-C28	ND	28.1	mg/kg dry	1	P1F2404	06/24/21 12:30	06/24/21 23:25	TPH 8015M	
>C28-C35	ND	28.1	mg/kg dry	1	P1F2404	06/24/21 12:30	06/24/21 23:25	TPH 8015M	
Surrogate: 1-Chlorooctane		118 %	70-130		P1F2404	06/24/21 12:30	06/24/21 23:25	TPH 8015M	
Surrogate: o-Terphenyl		124 %	70-130		P1F2404	06/24/21 12:30	06/24/21 23:25	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.1	mg/kg dry	1	[CALC]	06/24/21 12:30	06/24/21 23:25	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

> Bottom Hole 3 @ 1' 1F24002-03 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		P	ermian B	asin Envi	ronmental I	Lab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:10	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:10	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:10	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:10	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:10	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		85.6 %	80-120		P1F2403	06/24/21 12:04	06/24/21 18:10	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		94.8 %	80-120		P1F2403	06/24/21 12:04	06/24/21 18:10	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Met	hods						
Chloride	328	1.05	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 16:56	EPA 300.0	
% Moisture	5.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EPA	A Method	8015M						
C6-C12	ND	26.3	mg/kg dry	1	P1F2404	06/24/21 12:30	06/24/21 23:47	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P1F2404	06/24/21 12:30	06/24/21 23:47	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P1F2404	06/24/21 12:30	06/24/21 23:47	TPH 8015M	
Surrogate: 1-Chlorooctane		122 %	70-130		P1F2404	06/24/21 12:30	06/24/21 23:47	TPH 8015M	
Surrogate: o-Terphenyl		128 %	70-130		P1F2404	06/24/21 12:30	06/24/21 23:47	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	06/24/21 12:30	06/24/21 23:47	cale	

13000 West County Road 100 Odessa TX, 79765

Project Number: 14229

Project: Chorizo 12 CTB

Project Manager: Tim McMinn

#### Bottom Hole 4 @ 6" 1F24002-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
<del>-</del>	Kesuit	Lillit	Omis	Dilution	Daten	Терагеи	7 mary 200	menou	1100
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00110	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:31	EPA 8021B	
Toluene	ND	0.00110	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:31	EPA 8021B	
Ethylbenzene	ND	0.00110	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:31	EPA 8021B	
Xylene (p/m)	ND	0.00220	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:31	EPA 8021B	
Xylene (o)	ND	0.00110	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:31	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		93.7 %	80-120		P1F2403	06/24/21 12:04	06/24/21 18:31	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		84.2 %	80-120		P1F2403	06/24/21 12:04	06/24/21 18:31	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Metl	hods						
Chloride	147	1.10	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 17:11	EPA 300.0	
% Moisture	9.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EPA	A Method	8015M						
C6-C12	ND	27.5	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 00:09	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 00:09	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 00:09	TPH 8015M	
Surrogate: 1-Chlorooctane		117 %	70-130		P1F2404	06/24/21 12:30	06/25/21 00:09	TPH 8015M	
Surrogate: o-Terphenyl		123 %	70-130		P1F2404	06/24/21 12:30	06/25/21 00:09	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 00:09	calc	

13000 West County Road 100

Odessa TX, 79765

Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### Bottom Hole 5 @ 1' 1F24002-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		D	ermian R	acin Envi	ronmental L	•	<u> </u>		
			Ci illian D	asın Envi	ommental L	au, L.1.			
BTEX by 8021B									
Benzene	ND	0.00114	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:52	EPA 8021B	
Toluene	ND	0.00114	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:52	EPA 8021B	
Ethylbenzene	ND	0.00114	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:52	EPA 8021B	
Xylene (p/m)	ND	0.00227	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:52	EPA 8021B	
Xylene (o)	ND	0.00114	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 18:52	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		95.6 %	80-120		P1F2403	06/24/21 12:04	06/24/21 18:52	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		86.5 %	80-120		P1F2403	06/24/21 12:04	06/24/21 18:52	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Metl	hods						
Chloride	494	1.14	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 17:27	EPA 300.0	
% Moisture	12.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EPA	A Method	8015M						
C6-C12	ND	28.4	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 00:31	TPH 8015M	
>C12-C28	ND	28.4	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 00:31	TPH 8015M	
>C28-C35	ND	28.4	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 00:31	TPH 8015M	
Surrogate: 1-Chlorooctane		127 %	70-130		P1F2404	06/24/21 12:30	06/25/21 00:31	TPH 8015M	
Surrogate: o-Terphenyl		133 %	70-130		P1F2404	06/24/21 12:30	06/25/21 00:31	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	ND	28.4	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 00:31	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### Bottom Hole 6 @ 1' 1F24002-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:14	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:14	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:14	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:14	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:14	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		97.1 %	80-120		P1F2403	06/24/21 12:04	06/24/21 19:14	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		88.1 %	80-120		P1F2403	06/24/21 12:04	06/24/21 19:14	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	dard Met	hods						
Chloride	128	1.08	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 17:42	EPA 300.0	
% Moisture	7.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EP	A Method	8015M						
C6-C12	ND	26.9	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 00:53	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 00:53	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 00:53	TPH 8015M	
Surrogate: 1-Chlorooctane		118 %	70-130		P1F2404	06/24/21 12:30	06/25/21 00:53	TPH 8015M	
Surrogate: o-Terphenyl		125 %	70-130		P1F2404	06/24/21 12:30	06/25/21 00:53	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 00:53	calc	

13000 West County Road 100

Project Number: 14229 Odessa TX, 79765 Project Manager: Tim McMinn

> Bottom Hole 7 @ 6" 1F24002-07 (Soil)

Project: Chorizo 12 CTB

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
<del>-</del>	Result	Lillin	Omis	Dilution	Daten	Терагеи	7 mary 200	menod	11010
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00104	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:35	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:35	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:35	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:35	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:35	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		95.7 %	80-120		P1F2403	06/24/21 12:04	06/24/21 19:35	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		87.3 %	80-120		P1F2403	06/24/21 12:04	06/24/21 19:35	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Metl	hods						
Chloride	86.7	1.04	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 17:57	EPA 300.0	
% Moisture	4.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EPA	A Method	8015M						
C6-C12	ND	26.0	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 01:15	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 01:15	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 01:15	TPH 8015M	
Surrogate: 1-Chlorooctane		119 %	70-130		P1F2404	06/24/21 12:30	06/25/21 01:15	TPH 8015M	
Surrogate: o-Terphenyl		125 %	70-130		P1F2404	06/24/21 12:30	06/25/21 01:15	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 01:15	calc	

13000 West County Road 100

Odessa TX, 79765

Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### Bottom Hole 8 @ 3" 1F24002-08 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		P	ermian B	asin Envi	ronmental L	Lab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:56	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:56	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:56	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:56	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 19:56	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		93.3 %	80-120		P1F2403	06/24/21 12:04	06/24/21 19:56	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		84.3 %	80-120		P1F2403	06/24/21 12:04	06/24/21 19:56	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Met	hods						
Chloride	125	1.03	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 18:43	EPA 300.0	
% Moisture	3.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EPA	Method	8015M						
C6-C12	ND	25.8	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 01:37	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 01:37	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 01:37	TPH 8015M	
Surrogate: 1-Chlorooctane		120 %	70-130		P1F2404	06/24/21 12:30	06/25/21 01:37	TPH 8015M	
Surrogate: o-Terphenyl		127 %	70-130		P1F2404	06/24/21 12:30	06/25/21 01:37	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 01:37	cale	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

13000 West County Road 100 Odessa TX, 79765

Project Number: 14229

Project: Chorizo 12 CTB

Project Manager: Tim McMinn

#### Bottom Hole 9 @ 3" 1F24002-09 (Soil)

Analyte	D 1	Reporting	TT '4	Dil di	D 4 1	D 1	Amalyzad	Method	Ma4-
, may to	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00106	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 20:17	EPA 8021B	
Toluene	ND	0.00106	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 20:17	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 20:17	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 20:17	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 20:17	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		84.2 %	80-120		P1F2403	06/24/21 12:04	06/24/21 20:17	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		94.9 %	80-120		P1F2403	06/24/21 12:04	06/24/21 20:17	EPA 8021B	
General Chemistry Parameters by	FDA / Stone	lard Matl	hode						
Chloride	53.9	1.06	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 19:29	EPA 300.0	
% Moisture	6.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EPA	A Method	8015M						
C6-C12	ND	26.6	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 01:59	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 01:59	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 01:59	TPH 8015M	
Surrogate: 1-Chlorooctane		119 %	70-130		P1F2404	06/24/21 12:30	06/25/21 01:59	TPH 8015M	
Surrogate: o-Terphenyl		125 %	70-130		P1F2404	06/24/21 12:30	06/25/21 01:59	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 01:59	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

> Bottom Hole 10 @ 3" 1F24002-10 (Soil)

Analyte	ъ.	Reporting	** ·	D.11	D . 1	D 1	A	Mada d	N1. 4
Anaryte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00102	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 20:38	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 20:38	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 20:38	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 20:38	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 20:38	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		95.8 %	80-120		P1F2403	06/24/21 12:04	06/24/21 20:38	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		85.2 %	80-120		P1F2403	06/24/21 12:04	06/24/21 20:38	EPA 8021B	
General Chemistry Parameters by	EDA / Stone	land Mati	hada						
Chloride	98.3	1.02	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 19:45	EPA 300.0	
% Moisture	2.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EPA	Method	8015M						
C6-C12	ND	25.5	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 02:21	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 02:21	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 02:21	TPH 8015M	
Surrogate: 1-Chlorooctane		121 %	70-130		P1F2404	06/24/21 12:30	06/25/21 02:21	TPH 8015M	
Surrogate: o-Terphenyl		128 %	70-130		P1F2404	06/24/21 12:30	06/25/21 02:21	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 02:21	calc	

13000 West County Road 100

Project Number: 14229

Odessa TX, 79765

Project Manager: Tim McMinn

#### Bottom Hole 11 @ 3" 1F24002-11 (Soil)

Project: Chorizo 12 CTB

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Kesuit	Lillit	Omis	Dilution	Datell	ricpared	7 maryzed	Method	
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 21:41	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 21:41	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 21:41	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 21:41	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 21:41	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		94.1 %	80-120		P1F2403	06/24/21 12:04	06/24/21 21:41	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		84.0 %	80-120		P1F2403	06/24/21 12:04	06/24/21 21:41	EPA 8021B	
General Chemistry Parameters by 1	EPA / Stand	lard Met	hods						
Chloride	372	1.03	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 20:00	EPA 300.0	
% Moisture	3.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6-	C35 by EPA	Method	8015M						
C6-C12	ND	25.8	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 03:27	TPH 8015M	
>C12-C28	43.2	25.8	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 03:27	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 03:27	TPH 8015M	
Surrogate: 1-Chlorooctane		122 %	70-130		P1F2404	06/24/21 12:30	06/25/21 03:27	TPH 8015M	
Surrogate: o-Terphenyl		128 %	70-130		P1F2404	06/24/21 12:30	06/25/21 03:27	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	43.2	25.8	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 03:27	cale	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

> Bottom Hole 12 @ 3" 1F24002-12 (Soil)

Analyte		Reporting Limit	Units	Dilution	D-4-h	D J	Analyzed	Method	Notes
	Result	Limit	Units	Dilution	Batch	Prepared	Analyzeu	Meniod	Notes
		P	ermian B	asin Envii	onmental L	Lab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:02	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:02	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:02	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:02	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:02	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		95.0 %	80-120		P1F2403	06/24/21 12:04	06/24/21 22:02	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		85.7 %	80-120		P1F2403	06/24/21 12:04	06/24/21 22:02	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Metl	hods						
Chloride	127	1.08	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 20:15	EPA 300.0	
% Moisture	7.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EPA	Method	8015M						
C6-C12	ND	26.9	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 03:49	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 03:49	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 03:49	TPH 8015M	
Surrogate: 1-Chlorooctane		124 %	70-130		P1F2404	06/24/21 12:30	06/25/21 03:49	TPH 8015M	
Surrogate: o-Terphenyl		132 %	70-130		P1F2404	06/24/21 12:30	06/25/21 03:49	TPH 8015M	S-G
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 03:49	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### Bottom Hole 13 @ 3" 1F24002-13 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00101	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:23	EPA 8021B	
Toluene	ND	0.00101	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:23	EPA 8021B	
Ethylbenzene	ND	0.00101	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:23	EPA 8021B	
Xylene (p/m)	ND	0.00202	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:23	EPA 8021B	
Xylene (o)	ND	0.00101	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:23	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		84.0 %	80-120		P1F2403	06/24/21 12:04	06/24/21 22:23	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		93.8 %	80-120		P1F2403	06/24/21 12:04	06/24/21 22:23	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Metl	hods						
Chloride	116	1.01	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 20:31	EPA 300.0	
% Moisture	1.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EPA	Method	8015M						
C6-C12	ND	25.3	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 04:11	TPH 8015M	
>C12-C28	ND	25.3	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 04:11	TPH 8015M	
>C28-C35	ND	25.3	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 04:11	TPH 8015M	
Surrogate: 1-Chlorooctane		122 %	70-130		P1F2404	06/24/21 12:30	06/25/21 04:11	TPH 8015M	
Surrogate: o-Terphenyl		132 %	70-130		P1F2404	06/24/21 12:30	06/25/21 04:11	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	ND	25.3	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 04:11	calc	

13000 West County Road 100

Odessa TX, 79765

Project: Chorizo 12 CTB

Project Number: 14229

Project Manager: Tim McMinn

### Bottom Hole 14 @ 3" 1F24002-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
L	resuit	2	J		2444	Tropulou	,		
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:44	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:44	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:44	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:44	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 22:44	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		94.5 %	80-120		P1F2403	06/24/21 12:04	06/24/21 22:44	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		82.9 %	80-120		P1F2403	06/24/21 12:04	06/24/21 22:44	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	dard Met	hods						
Chloride	124	1.05	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 20:46	EPA 300.0	
% Moisture	5.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EP	A Method	18015M						
C6-C12	ND	26.3	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 04:33	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 04:33	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 04:33	TPH 8015M	
Surrogate: 1-Chlorooctane		129 %	70-130		P1F2404	06/24/21 12:30	06/25/21 04:33	TPH 8015M	
Surrogate: o-Terphenyl		139 %	70-130		P1F2404	06/24/21 12:30	06/25/21 04:33	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 04:33	calc	

13000 West County Road 100

Project Number: 14229

Odessa TX, 79765

Project Manager: Tim McMinn

### Bottom Hole 15 @ 3" 1F24002-15 (Soil)

Project: Chorizo 12 CTB

Amalysta		Reporting						36.4.4	
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:05	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:05	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:05	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:05	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:05	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		88.3 %	80-120		P1F2403	06/24/21 12:04	06/24/21 23:05	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		96.7 %	80-120		P1F2403	06/24/21 12:04	06/24/21 23:05	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Metl	hods						
Chloride	545	1.05	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 21:01	EPA 300.0	
% Moisture	5.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	5-C35 by EPA	A Method	8015M						
C6-C12	ND	26.3	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 04:55	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 04:55	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 04:55	TPH 8015M	
Surrogate: 1-Chlorooctane		124 %	70-130		P1F2404	06/24/21 12:30	06/25/21 04:55	TPH 8015M	
Surrogate: o-Terphenyl		132 %	70-130		P1F2404	06/24/21 12:30	06/25/21 04:55	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 04:55	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### Bottom Hole 16 @ 3" 1F24002-16 (Soil)

Analyte	D 1	Reporting	TT '4	D.1 .:	D 4 1	D 1	Amalugad	Mathad	Ma4-
z mary to	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		P	ermian B	asin Envii	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00106	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:26	EPA 8021B	
Toluene	ND	0.00106	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:26	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:26	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:26	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:26	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		94.4 %	80-120		P1F2403	06/24/21 12:04	06/24/21 23:26	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		85.3 %	80-120		P1F2403	06/24/21 12:04	06/24/21 23:26	EPA 8021B	
General Chemistry Parameters by	EDA / Stand	land Mati	hads						
Chloride	566	1.06	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 21:17	EPA 300.0	
% Moisture	6.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EPA	Method	8015M						
C6-C12	ND	26.6	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 05:17	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 05:17	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 05:17	TPH 8015M	
Surrogate: 1-Chlorooctane		119 %	70-130		P1F2404	06/24/21 12:30	06/25/21 05:17	TPH 8015M	
Surrogate: o-Terphenyl		126 %	70-130		P1F2404	06/24/21 12:30	06/25/21 05:17	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 05:17	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB Project Number: 14229

Project Number: 14229
Project Manager: Tim McMinn

### North Wall Composite @ 8" 1F24002-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
						•			
		P	ermian B	asın Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00111	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:47	EPA 8021B	
Toluene	ND	0.00111	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:47	EPA 8021B	
Ethylbenzene	ND	0.00111	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:47	EPA 8021B	
Xylene (p/m)	ND	0.00222	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:47	EPA 8021B	
Xylene (o)	ND	0.00111	mg/kg dry	1	P1F2403	06/24/21 12:04	06/24/21 23:47	EPA 8021B	
Gurrogate: 1,4-Difluorobenzene		93.8 %	80-120	· <u></u>	P1F2403	06/24/21 12:04	06/24/21 23:47	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		82.5 %	80-120		P1F2403	06/24/21 12:04	06/24/21 23:47	EPA 8021B	
Canaval Chamistury Davamatan- L 1	FDA / Ctor-1	land Ma4	ands						
General Chemistry Parameters by I Chloride	<u>EPA / Stand</u> 454	<u>iara Meti</u> 1.11	mg/kg dry	1	P1F3004	06/30/21 10:30	06/30/21 21:32	EPA 300.0	
% Moisture	10.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
				•					
otal Petroleum Hydrocarbons C6-	C35 by EPA	<b>Method</b>	8015M						
C6-C12	ND	27.8	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 05:39	TPH 8015M	
>C12-C28	51.3	27.8	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 05:39	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 05:39	TPH 8015M	
Surrogate: 1-Chlorooctane		115 %	70-130		P1F2404	06/24/21 12:30	06/25/21 05:39	TPH 8015M	
Surrogate: o-Terphenyl		122 %	70-130		P1F2404	06/24/21 12:30	06/25/21 05:39	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	51.3	27.8	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 05:39	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### South Wall @ 6" 1F24002-18 (Soil)

Analyte	<b>5</b>	Reporting	TT ''	Dil et	D 4 1	D 1	A mc 1 J	Moth - J	NI-2
Anaryte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P1F2403	06/24/21 12:04	06/25/21 00:07	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P1F2403	06/24/21 12:04	06/25/21 00:07	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P1F2403	06/24/21 12:04	06/25/21 00:07	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P1F2403	06/24/21 12:04	06/25/21 00:07	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P1F2403	06/24/21 12:04	06/25/21 00:07	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		96.8 %	80-120		P1F2403	06/24/21 12:04	06/25/21 00:07	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		87.7 %	80-120		P1F2403	06/24/21 12:04	06/25/21 00:07	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	dard Metl	hods						
Chloride	2250	10.8	mg/kg dry	10	P1F3005	06/30/21 10:35	06/30/21 23:04	EPA 300.0	
% Moisture	7.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EP	A Method	8015M						
C6-C12	ND	26.9	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 06:01	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 06:01	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 06:01	TPH 8015M	
Surrogate: 1-Chlorooctane		118 %	70-130		P1F2404	06/24/21 12:30	06/25/21 06:01	TPH 8015M	
Surrogate: o-Terphenyl		124 %	70-130		P1F2404	06/24/21 12:30	06/25/21 06:01	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 06:01	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### Stockpile 1F24002-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
·	resuit	2	0	2tion	Daten	rioparou	,		
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00103	mg/kg dry	1	P1F2403	06/24/21 12:04	06/25/21 00:28	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P1F2403	06/24/21 12:04	06/25/21 00:28	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P1F2403	06/24/21 12:04	06/25/21 00:28	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P1F2403	06/24/21 12:04	06/25/21 00:28	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P1F2403	06/24/21 12:04	06/25/21 00:28	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		95.3 %	80-120		P1F2403	06/24/21 12:04	06/25/21 00:28	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	•	84.1 %	80-120		P1F2403	06/24/21 12:04	06/25/21 00:28	EPA 8021B	
General Chemistry Parameters by 1	EPA / Stand	ard Met	hods						
Chloride	1750	10.3	mg/kg dry	10	P1F3005	06/30/21 10:35	06/30/21 23:51	EPA 300.0	
% Moisture	3.0	0.1	%	1	P1F2504	06/25/21 11:01	06/25/21 11:10	ASTM D2216	
Total Petroleum Hydrocarbons C6-	C35 by EPA	Method	8015M						
C6-C12	30.1	25.8	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 06:23	TPH 8015M	
>C12-C28	1580	25.8	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 06:23	TPH 8015M	
>C28-C35	270	25.8	mg/kg dry	1	P1F2404	06/24/21 12:30	06/25/21 06:23	TPH 8015M	
Surrogate: 1-Chlorooctane	·	124 %	70-130		P1F2404	06/24/21 12:30	06/25/21 06:23	TPH 8015M	
Surrogate: o-Terphenyl		133 %	70-130		P1F2404	06/24/21 12:30	06/25/21 06:23	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	1880	25.8	mg/kg dry	1	[CALC]	06/24/21 12:30	06/25/21 06:23	calc	

RPD

E Tech Environmental & Safety Solutions, Inc. [1]

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### BTEX by 8021B - Quality Control Permian Basin Environmental Lab, L.P.

Spike

Source

%REC

Reporting

0.00

0.00

0.00

0.00

0.00

0.115

0.104

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1F2403 - *** DEFAULT PREP	***									
Blank (P1F2403-BLK1)				Prepared &	Analyzed:	06/24/21				
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.112		"	0.120		93.5	80-120			
Surrogate: 4-Bromofluorobenzene	0.0991		"	0.120		82.6	80-120			
LCS (P1F2403-BS1)				Prepared &	: Analyzed:	06/24/21				
Benzene	0.104	0.00100	mg/kg wet	0.100		104	70-130			
Toluene	0.105	0.00100	"	0.100		105	70-130			
Ethylbenzene	0.111	0.00100	"	0.100		111	70-130			
Xylene (p/m)	0.192	0.00200	"	0.200		96.0	70-130			
Xylene (o)	0.104	0.00100	"	0.100		104	70-130			
Surrogate: 4-Bromofluorobenzene	0.106		"	0.120		88.3	80-120			
Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		94.3	80-120			
LCS Dup (P1F2403-BSD1)				Prepared &	: Analyzed:	06/24/21				
Benzene	0.112	0.00100	mg/kg wet	0.100		112	70-130	7.28	20	
Toluene	0.113	0.00100	"	0.100		113	70-130	7.30	20	
Ethylbenzene	0.119	0.00100	"	0.100		119	70-130	7.05	20	
Xylene (p/m)	0.204	0.00200	"	0.200		102	70-130	6.16	20	
Xylene (o)	0.111	0.00100	"	0.100		111	70-130	6.95	20	
Surrogate: 1,4-Difluorobenzene	0.115		"	0.120		95.4	80-120			
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120		88.9	80-120			
Calibration Blank (P1F2403-CCB1)				Prepared &	: Analyzed:	06/24/21				

mg/kg wet

0.120

0.120

Permian Basin Environmental Lab, L.P.

Benzene

Toluene

Ethylbenzene

Xylene (p/m)

Surrogate: 1,4-Difluorobenzene

Surrogate: 4-Bromofluorobenzene

Xylene (o)

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

95.4

86.4

80-120

80-120

13000 West County Road 100 Odessa TX, 79765

Project Number: 14229

Project Manager: Tim McMinn

### BTEX by 8021B - Quality Control Permian Basin Environmental Lab, L.P.

Project: Chorizo 12 CTB

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	Resuit	Limit	UIIIIS	Level	Kesuit	70KEC	Lillits	KrD	LIIIII	notes
Batch P1F2403 - *** DEFAULT PREP ***										
Calibration Blank (P1F2403-CCB2)				Prepared &	Analyzed:	06/24/21				
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.112		"	0.120		93.1	80-120			
Surrogate: 4-Bromofluorobenzene	0.0960		"	0.120		80.0	80-120			
Calibration Blank (P1F2403-CCB3)				Prepared: (	06/24/21 A	nalyzed: 06	5/25/21			
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.112		"	0.120		93.1	80-120			
Surrogate: 4-Bromofluorobenzene	0.0976		"	0.120		81.4	80-120			
Calibration Check (P1F2403-CCV1)				Prepared &	Analyzed:	06/24/21				
Benzene	0.0953	0.00100	mg/kg wet	0.100		95.3	80-120			
Toluene	0.0954	0.00100	"	0.100		95.4	80-120			
Ethylbenzene	0.0982	0.00100	"	0.100		98.2	80-120			
Xylene (p/m)	0.174	0.00200	"	0.200		87.2	80-120			
Xylene (o)	0.0949	0.00100	"	0.100		94.9	80-120			
Surrogate: 1,4-Difluorobenzene	0.113		"	0.120		94.3	75-125			
Surrogate: 4-Bromofluorobenzene	0.104		"	0.120		86.4	75-125			
Calibration Check (P1F2403-CCV2)				Prepared &	Analyzed:	06/24/21				
Benzene	0.0996	0.00100	mg/kg wet	0.100		99.6	80-120			
Toluene	0.0991	0.00100	"	0.100		99.1	80-120			
Ethylbenzene	0.100	0.00100	"	0.100		100	80-120			
Xylene (p/m)	0.180	0.00200	"	0.200		89.8	80-120			
Xylene (o)	0.0997	0.00100	"	0.100		99.7	80-120			
Surrogate: 4-Bromofluorobenzene	0.104		"	0.120		86.4	75-125			

Permian Basin Environmental Lab, L.P.

Surrogate: 1,4-Difluorobenzene

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

94.1

75-125

0.120

0.113

13000 West County Road 100

Project Number: 14229 Project Manager: Tim McMinn

Project: Chorizo 12 CTB

Odessa TX, 79765

# BTEX by 8021B - Quality Control

Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1F2403 - *** DEFAULT PREP ***										
Calibration Check (P1F2403-CCV3)				Prepared: (	06/24/21 A	nalyzed: 06	5/25/21			
Benzene	0.104	0.00100	mg/kg wet	0.100		104	80-120			
Toluene	0.104	0.00100	"	0.100		104	80-120			
Ethylbenzene	0.104	0.00100	"	0.100		104	80-120			
Xylene (p/m)	0.185	0.00200	"	0.200		92.5	80-120			
Xylene (o)	0.104	0.00100	"	0.100		104	80-120			
Surrogate: 1,4-Difluorobenzene	0.112		"	0.120		93.5	75-125			
Surrogate: 4-Bromofluorobenzene	0.101		"	0.120		83.8	75-125			
Matrix Spike (P1F2403-MS1)	Sou	rce: 1F24002	-01	Prepared: (	06/24/21 A	nalyzed: 06	5/25/21			
Benzene	0.0899	0.00106	mg/kg dry	0.106	ND	84.5	80-120			
Toluene	0.0700	0.00106	"	0.106	ND	65.8	80-120			QM-0
Ethylbenzene	0.0607	0.00106	"	0.106	ND	57.1	80-120			QM-0
Xylene (p/m)	0.128	0.00213	"	0.213	ND	60.2	80-120			QM-0
Xylene (o)	0.0790	0.00106	"	0.106	ND	74.2	80-120			QM-07
Surrogate: 1,4-Difluorobenzene	0.121		"	0.128		94.8	80-120			
Surrogate: 4-Bromofluorobenzene	0.112		"	0.128		87.4	80-120			
Matrix Spike Dup (P1F2403-MSD1)	Sou	rce: 1F24002	-01	Prepared: (	06/24/21 A	nalyzed: 06	5/25/21			
Benzene	0.0992	0.00106	mg/kg dry	0.106	ND	93.2	80-120	9.84	20	
Toluene	0.0758	0.00106	"	0.106	ND	71.2	80-120	7.88	20	QM-0
Ethylbenzene	0.0661	0.00106	"	0.106	ND	62.2	80-120	8.57	20	QM-0
Xylene (p/m)	0.139	0.00213	"	0.213	ND	65.5	80-120	8.40	20	QM-07
Xylene (o)	0.0868	0.00106	"	0.106	ND	81.6	80-120	9.50	20	
Surrogate: 1,4-Difluorobenzene	0.127		"	0.128		99.3	80-120			
Surrogate: 4-Bromofluorobenzene	0.121		"	0.128		94.8	80-120			

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1F2504 - *** DEFAULT PREP ***										
Blank (P1F2504-BLK1)				Prepared &	Analyzed:	06/25/21				
% Moisture	ND	0.1	%							
Blank (P1F2504-BLK2)				Prepared &	: Analyzed:	06/25/21				
% Moisture	ND	0.1	%							
Duplicate (P1F2504-DUP1)	Sou	rce: 1F24003-	01	Prepared &	: Analyzed:	06/25/21				
% Moisture	2.0	0.1	%		10.0			133	20	MS-1
Duplicate (P1F2504-DUP2)	Sou	rce: 1F24002-	10	Prepared &	: Analyzed:	06/25/21				
% Moisture	10.0	0.1	%		2.0			133	20	MS-1
Duplicate (P1F2504-DUP3)	Sou	rce: 1F24004-	12	Prepared &	: Analyzed:	06/25/21				
% Moisture	16.0	0.1	%		16.0			0.00	20	
Duplicate (P1F2504-DUP4)	Sou	rce: 1F24004-	22	Prepared &	: Analyzed:	06/25/21				
% Moisture	9.0	0.1	%		11.0			20.0	20	
Duplicate (P1F2504-DUP5)	Sou	rce: 1F24005-	15	Prepared &	: Analyzed:	06/25/21				
% Moisture	8.0	0.1	%	•	8.0			0.00	20	
Duplicate (P1F2504-DUP6)	Sou	rce: 1F24005-	25	Prepared &	: Analyzed:	06/25/21				
% Moisture	10.0	0.1	%	*	11.0			9.52	20	
Duplicate (P1F2504-DUP7)	Sou	rce: 1F24005-	40	Prepared &	: Analyzed:	06/25/21				
% Moisture	16.0	0.1	%	*	17.0			6.06	20	
Duplicate (P1F2504-DUP8)	Sou	rce: 1F24005-	50	Prepared &	: Analyzed:	06/25/21				
% Moisture	16.0	0.1	%	1	16.0			0.00	20	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

		Reporting	•	Spike	Source	•	%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1F3004 - *** DEFAULT PREP ***										
Blank (P1F3004-BLK1)				Prepared &	Analyzed:	06/30/21				
Chloride	ND	1.00	mg/kg wet							
LCS (P1F3004-BS1)				Prepared &	Analyzed:	06/30/21				
Chloride	407	1.00	mg/kg wet	400		102	90-110			
LCS Dup (P1F3004-BSD1)				Prepared &	Analyzed:	06/30/21				
Chloride	408	1.00	mg/kg wet	400		102	90-110	0.452	20	
Calibration Check (P1F3004-CCV1)				Prepared &	Analyzed:	06/30/21				
Chloride	19.3		mg/kg	20.0		96.5	90-110			
Calibration Check (P1F3004-CCV2)				Prepared &	Analyzed:	06/30/21				
Chloride	19.3		mg/kg	20.0		96.7	90-110			
Calibration Check (P1F3004-CCV3)				Prepared &	Analyzed:	06/30/21				
Chloride	19.4		mg/kg	20.0		97.2	90-110			
Matrix Spike (P1F3004-MS1)	Sou	rce: 1F23010	)-25	Prepared &	Analyzed:	06/30/21				
Chloride	3790	11.1	mg/kg dry	1110	2680	100	80-120			
Matrix Spike (P1F3004-MS2)	Sou	rce: 1F24002	-08	Prepared &	Analyzed:	06/30/21				
Chloride	649	1.03	mg/kg dry	515	125	102	80-120			
Matrix Spike Dup (P1F3004-MSD1)	Sou	rce: 1F23010	-25	Prepared &	Analyzed:	06/30/21				
Chloride	3730	11.1	mg/kg dry	1110	2680	94.6	80-120	1.71	20	
Matrix Spike Dup (P1F3004-MSD2)	Sou	rce: 1F24002	-08	Prepared &	Analyzed:	06/30/21				
Chloride	666	1.03	mg/kg dry	515	125	105	80-120	2.55	20	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

Analida	D14	Reporting	I I:4-	Spike	Source	0/DEC	%REC	DDD	RPD	N-4
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1F3005 - *** DEFAULT PREP ***										
Blank (P1F3005-BLK1)				Prepared &	Analyzed:	06/30/21				
Chloride	ND	1.00	mg/kg wet							
LCS (P1F3005-BS1)				Prepared &	Analyzed:	06/30/21				
Chloride	409	1.00	mg/kg wet	400		102	90-110			
LCS Dup (P1F3005-BSD1)				Prepared &	Analyzed:	06/30/21				
Chloride	405	1.00	mg/kg wet	400		101	90-110	0.944	20	
Calibration Check (P1F3005-CCV1)				Prepared &	Analyzed:	06/30/21				
Chloride	19.4		mg/kg	20.0		97.2	90-110			
Calibration Check (P1F3005-CCV2)				Prepared: 0	6/30/21 Aı	nalyzed: 07	/01/21			
Chloride	19.8		mg/kg	20.0		99.2	90-110			
Calibration Check (P1F3005-CCV3)				Prepared: 0	6/30/21 Aı	nalyzed: 07	/01/21			
Chloride	19.5		mg/kg	20.0		97.3	90-110			
Matrix Spike (P1F3005-MS1)	Sour	ce: 1F24002	-18	Prepared &	Analyzed:	06/30/21				
Chloride	3470	10.8	mg/kg dry	1080	2250	113	80-120			
Matrix Spike (P1F3005-MS2)	Sour	rce: 1F25008	-03	Prepared: 0	6/30/21 Aı	nalyzed: 07	/01/21			
Chloride	507	1.03	mg/kg dry	515	ND	98.3	80-120			
Matrix Spike Dup (P1F3005-MSD1)	Sour	rce: 1F24002	-18	Prepared &	Analyzed:	06/30/21				
Chloride	3500	10.8	mg/kg dry	1080	2250	116	80-120	0.988	20	
Matrix Spike Dup (P1F3005-MSD2)	Sour	rce: 1F25008	-03	Prepared: 0	6/30/21 Aı	nalyzed: 07	/01/21			
Chloride	506	1.03	mg/kg dry	515	ND	98.2	80-120	0.0957	20	

Project: Chorizo 12 CTB

13000 West County Road 100 Odessa TX, 79765 Project Number: 14229 Project Manager: Tim McMinn

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1F2404 - TX 1005										
Blank (P1F2404-BLK1)				Prepared &	ኔ Analyzed:	06/24/21				
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	115		"	100		115	70-130			
Surrogate: o-Terphenyl	59.9		"	50.0		120	70-130			
LCS (P1F2404-BS1)				Prepared &	ኔ Analyzed:	06/24/21				
C6-C12	1110	25.0	mg/kg wet	1000		111	75-125			
>C12-C28	872	25.0	"	1000		87.2	75-125			
Surrogate: 1-Chlorooctane	120		"	100		120	70-130			
Surrogate: o-Terphenyl	61.5		"	50.0		123	70-130			
LCS Dup (P1F2404-BSD1)				Prepared &	ኔ Analyzed:	06/24/21				
C6-C12	1130	25.0	mg/kg wet	1000		113	75-125	1.21	20	
>C12-C28	881	25.0	"	1000		88.1	75-125	1.05	20	
Surrogate: 1-Chlorooctane	117		"	100		117	70-130			
Surrogate: o-Terphenyl	60.1		"	50.0		120	70-130			
Calibration Check (P1F2404-CCV1)				Prepared &	ኔ Analyzed:	06/24/21				
C6-C12	547	25.0	mg/kg wet	500		109	85-115			
>C12-C28	488	25.0	"	500		97.6	85-115			
Surrogate: 1-Chlorooctane	118		"	100		118	70-130			
Surrogate: o-Terphenyl	61.6		"	50.0		123	70-130			
Calibration Check (P1F2404-CCV2)				Prepared: (	06/24/21 Aı	nalyzed: 06	/25/21			
C6-C12	565	25.0	mg/kg wet	500		113	85-115			
>C12-C28	489	25.0	"	500		97.8	85-115			
Surrogate: 1-Chlorooctane	121		"	100		121	70-130			
Surrogate: o-Terphenyl	63.1		"	50.0		126	70-130			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

# Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1F2404 - TX 1005										
Calibration Check (P1F2404-CCV3)				Prepared:	06/24/21 A	nalyzed: 06	5/25/21			
C6-C12	562	25.0	mg/kg wet	500		112	85-115			
>C12-C28	471	25.0	"	500		94.2	85-115			
Surrogate: 1-Chlorooctane	123		"	100		123	70-130			
Surrogate: o-Terphenyl	63.6		"	50.0		127	70-130			
Matrix Spike (P1F2404-MS1)	Sou	rce: 1F24002	-19	Prepared:	06/24/21 A	nalyzed: 06	5/25/21			
C6-C12	1140	25.8	mg/kg dry	1030	30.1	108	75-125			
>C12-C28	2130	25.8	"	1030	1580	53.7	75-125			QM-05
Surrogate: 1-Chlorooctane	119		"	103		115	70-130			
Surrogate: o-Terphenyl	62.6		"	51.5		121	70-130			
Matrix Spike Dup (P1F2404-MSD1)	Sou	rce: 1F24002	-19	Prepared:	06/24/21 A	nalyzed: 06	5/25/21			
C6-C12	1110	25.8	mg/kg dry	1030	30.1	105	75-125	2.41	20	
>C12-C28	2100	25.8	"	1030	1580	50.9	75-125	5.39	20	QM-05
Surrogate: 1-Chlorooctane	116		"	103		112	70-130			
Surrogate: o-Terphenyl	60.8		"	51.5		118	70-130			

13000 West County Road 100

Odessa TX, 79765

Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### **Notes and Definitions**

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

ROI Received on Ice

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were

within acceptance limits showing that the laboratory is in control and the data is acceptable.

MS-1 Recovery of sample outside of historical limits due to matrix interference.

BULK Samples received in Bulk soil containers

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By: Date: 7/1/2021

Brent Barron, Laboratory Director/Technical Director

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

E Tech Environmental & Safety Solutions, Inc. [1] Project: Chorizo 12 CTB

13000 West County Road 100Project Number: 14229Odessa TX, 79765Project Manager: Tim McMinn

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

City/State/Zip:

Midland, Texas 79711

email: tim@etechenv.com

Company Address: P.O. Box 62228

Company Name: Project Manager:

**Etech Environmental & Safety Solutions, Inc.** 

Tim McMinn

1	Page	54	of	13	3

# Environmental & Safety Solutions, Inc.

	CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST	アーご	- 11-
	ECORD AND ANALY:		マン ハ ア

Relinquished by:	Relinquished by:	MRA	Relinquished by:		- JV	13	ادا	H	Ю	9	8	7	6	g	ψ	3	4		LAB # (lab use only)			lab use only)	-
			and the same and the same of t		Better Holo	Bather Hole	Butter Alde	Button Hill	Ι,	Batter Able	Batter 164	Fotte Mell	L.	Batter 160	1	Barrer Hille	Sutten state	Botton Hile			150007		
A STALL OUT A SERVICE MANAGEMENT OF A STALL OF A STALL OF		6-	WANTED AND AND AND ADDRESS OF THE AD		0 14	1/3		"	10	ı	8	7	Nou b	15	4	(3	2	, (	FIELD CODE				
Date Ti	Date	2) 4:	Date																				
Time	me	-0	Time							_									Start Depth				<u>_</u>
<b>M</b>	Kece		Recen		30	CZ,	12	13,	7 ×	7	<u>س</u>	61	-	=	6,1	Ę	7	61	End Depth	Pr			matt
Im Blu	Received by:		Received by:				\	15-21-21	,	\ 	15-17-21	-	_	\  -			\	6-16-21	Date Sampled	Preservation & # of Containers			matt@etechenv.com
do	The second second second second second				06.1	8.56	9.39	8.30	2.00	1:45	1:35	2:40	1:25	13.00	9:45	9:00	8:25	7:30	Time Sampled	f Containers			com
					1	Ь	Н	ъ	Ъ	Ь	Ъ	Н	Н	1	H	Ъ	'n	1	No. of Containers				
			١.		×	×	×	×	×	×	×	×	×	×	×	<del> </del>	×	<u> </u>	lce HNO₃				
					措	냠		믐	片	片		片	片	H	H			片	HCI				
					占	恄	恄	F	H	后			占	占		旨		盲	H₂SO₄				
			1																NaOH				
																			Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>				
4		]											口			口			None				
Date	Late	1	Date																Other ( Specify)	_			
					s	s	s	s	S	s	s	s	S		s	S	s	S	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-PotableSpecify Dther	Matrix	· ·		·· 
	me		æ		18	因	45	4	四	-K	-[2]	42	乜	Æ.	4	团	X	Z	TPH: 418.1 8015M 1005 10	06	.		
19	လ္က လူ	ဖွဲ့ ဝ	Ω	<u>&lt;                                    </u>															Cations (Ca, Mg, Na, K)	.:		-	
mpe	Sar by Sampler/Client Rep. Sar by Courier? UFS	Custody seals on cooler(s) Sample Hand Delivered	Stoc	Sample Containers Intact? VOCs Free of Headspace?															Anions (Cl, SO4, CO3, HCO3)		TOTAL	ᇷ	-
ratu	San San	ly se	y se	F 8															SAR / ESP / CEC		₽	CLP.	
re ∪	npler	nd D	als	ntain of I															Metals: As Ag Ba Cd Cr Pb Hg S	e.			
on .	Čle	elive	on c	lers leac															Volatiles				<b>▶</b>
Temperature Upon Receipt	53	red cole	onta	Intac Ispa															Semi volatiles			ᅵ	naly
Į į	် လူမှ	(S)	Custody seals on container(s	8,5	'[ <u>/</u> □	134	Z	Ø	K	<b>Æ</b> (	¥	<b>-</b> Ø		包	<b>4</b> C)	X	又	X	BTEX 8021B 5030 or BTEX 826	0			Analyze For:
in	呈		(s)																RCI				9
$ \tilde{v} $																			N.O.R.M.			ightharpoonup	
	<u>~</u>	lant.			⊠	42	K	₽.	X	<b>₽</b> ₹Į	Ø	*	A	<u>P</u>	<b>-€</b>	B	X	×	Chlorides	$\Box$		_	
	٧	\ <u></u>	_3	لائخ																_		4	
12	<u></u>			. <u>.                                   </u>	H					므							무		n de la companya de La companya de la co	ا			
lo Z	Şta	Z Z	1	ZZ			므		닏										RUSH TAT(Pre-Schedule) 24, 48	3, 72	hrs	4	
																			STANDARD TAT				╝.

	ct #:	ct Name:
	#	2
	~	Ĭ .
	4	e.
	22	_
	2	0
		10
	P۲	horizo
	oje	20
	čt	
	Project Loc:	1
-	Ω.	~
		1
İ		

□Bill	]	Area:
Etech		
		٠.
		P0#:

Area: Project #:

Report Format: STANDARD:□ TRRP: NPDES:

City/State/Zip:

Midland, Texas 79711

Company Name: Project Manager:

**Etech Environmental & Safety Solutions, Inc.** 

Tim McMinn

Company Address: P.O. Box 62228

Environmental & Safety Solutions, Inc.

					٠					
						•				
		•								
ì										
			i							
							•	9	7	١
									۲	
							٠	ī	:	
							٠		-	
								5		
							;		;	
									2	
									2	
									2	
									2	
							100			
							1000		こつつこう	
									こっていて	
						-	0. 000.00			
							0.00.00.			
							0.00.00			
									IN OF CHISTON BECOME	
								TO CONTRACT OF LOCATION	N OF CHISTORY BECOME AND	
									OF CHISTODY BECOME AND	
									OF CHISTORY BECCOM AND AND	
									OF CHISTORY BECOME AND ANA	
									OF CHISTODY BECCORD AND ANALY	
									OF CHISTORY BECCORD AND ANALYS	
										the second secon
									CE CE ISTODY BECORD AND ANALYSIS	
									IN OF CHISTODY BECORD AND ANALYSIS F	
									IN OF CHICTORY BECOME AND ANALYSIS OF	
									IN OF CHISTODY BECOME AND ANALYSIS BE	
									IN OF CUSTODY BECORD AND ANALYSIS BEC	
									IN OF CHISTORY BECORD AND ANALYSIS BECH	
									IN OF CHISTODY BECORD AND ANALYSIS BECH	
									IN OF CHISTORY BECORD AND ANALYSIS BECHE	
									IN OF CHISTORY BECOME AND ANALYSIS BECHES	

Relinquished by:	Relinquished by:	4/1	Relinquished by:	and the state of t	Special Instructions:										bl	18		ار	2	LAB#(lab use only)		ORDER#	(lab use only)	
	en per sentante de l'action de la companya de la persona de l'action de l'acti		The second secon		tions:									•	Stateile	1 16/4/1	Wall C	<b>1</b>	Bathen Hole 15	FIELD CODE		アンサロコ		
Date	Date	623	Date														15.1e			ODE .				
Time	lime	41314	Time																	Start Depth				
	7	-	Rec		-	+								-				3"	<u>پر</u>	End Donth				mat
The Bu	Received by:		Received by:												1-22-01	6-16-21	8~ >	<i>"</i>	1 6-2+2)	End Depth  Date Sampled	Preservation & # of Containers			matt@etechenv.com
Jose														,	1.25	7.05	8.52	2.10	7.50	Time Sampled	Containers			Com
	-				I	ы	1	1	1	Н	1	Н	Н	Н	н	Н	Н	1	Н	No. of Containers				
						×	×	×	×	×	×	×	×	×	×	×	×	×	×	lce				
					L	믜			<u> </u>											HNO₃				
	and the second				ŀ	뷔							H			무				HCI H₂SO <sub>4</sub>				
		1			H	귀							H		H			i	H	NaOH		٠.		
					f															Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>				
<u> </u>					Ţ	司														None	-			
	Date		Date		Ī															Other ( Specify)	١			
8						S	S	S	S	S	S	S	S	S	S	S	S	S	S	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-PotableSpecify Other	Matrix		-	-
16:3/	7		Time												Ŗ	团	風		Ø	TPH: 418.1 (015) 1005 100	)6		.	
		o co c	າ ດ	< 0	l Ne															Cations (Ca, Mg, Na, K)				. 1
l ∰	Sar by Courier? UPS	Sample Hand Delivered	Custody seals on container(s)	Sample Containers Intact? VOCs Free of Headspace?	Laboratory Comments:													. 🗆		Anions (Cl, SO4, CO3, HCO3)	7	0.	ᅴ	
eratu	δ.8 8.0	E E	dy's	F Q																SAR / ESP / CEC	٦	TOTAL	CLP	
Te C	rrier		eals	ntai e of	캀															Metals: As Ag Ba Cd Cr Pb Hg Se	,		固	
pon			3 9	hers Head	<u>\$</u>															Volatiles				<u> </u>
Rec	Ę	yred .	onte	Inta Ispa																Semi volatiles				Analyze
eipt	<u>.</u>	. 0	) in er	8,5	<u>s</u>										丞	A	J.	Ø	K	BTEX 8021B 5030 or BTEX 8260	5			ze F
Temperature Upon Receipt: 455	<b>~</b>		(S		L			· 🗆 ·					□					□		RCI				For:
100	<b>7</b> 4				Ĺ							П								N.O.R.M.				
	<u> </u>	4			${f L}$										<b>B</b>	€2	Z	函	K	Chlorides	$ \bot $		_	
	<b>%</b> ~	₩	<u>'</u>	<u>خځ</u>	∕	믜															_	1	$\Box$	
2	<b>አ</b> ፪ _																							
No.	Z85 _	2 Z Z	2 Z	zz	· :-											尸				RUSH TAT(Pre-Schedule) 24, 48,	, 72	hrs		
11	1	100		E.A.	14.1 1449															STANDARD TAT				Ш

Area:

□Bill Etech

Project #:

19229 Project Loc:

PO#:

Report Format: STANDARD:□ TRRP:□

NPDES:

# PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



# Analytical Report

### **Prepared for:**

Tim McMinn
E Tech Environmental & Safety Solutions, Inc. [1]
13000 West County Road 100
Odessa, TX 79765

Project: Chorizo 12 CTB Project Number: 14229 Location: New Mexico

Lab Order Number: 1G30003



**Current Certification** 

Report Date: 08/11/21

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Bottom Hole 2 @ 24"	1G30003-01	Soil	07/26/21 11:00	07-29-2021 15:40
South Wall @ 24"	1G30003-02	Soil	07/26/21 11:15	07-29-2021 15:40
Stockpile	1G30003-03	Soil	07/26/21 14:00	07-29-2021 15:40

13000 West County Road 100

% Moisture

Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

Odessa TX, 79765

10.0

0.1

### Bottom Hole 2 @ 24" 1G30003-01 (Soil)

Analyte	I Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		P	ermian B	asin Envi	ronmental I	Lab, L.P.			
General Chemistry Parame	ters by EPA / Standa	ard Met	hods						
Chloride	2.84	1.11	mg/kg dry	1	P1H1003	08/10/21 09:34	08/10/21 15:22	EPA 300.0	

P1H0903

08/09/21 15:00

08/09/21 15:05

ASTM D2216

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

> South Wall @ 24" 1G30003-02 (Soil)

	]	Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

### Permian Basin Environmental Lab, L.P.

### **General Chemistry Parameters by EPA / Standard Methods**

Chloride	5.27	1.12	mg/kg dry	1	P1H1003	08/10/21 09:34	08/10/21 15:40	EPA 300.0
% Moisture	11.0	0.1	%	1	P1H0903	08/09/21 15:00	08/09/21 15:05	ASTM D2216

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### Stockpile 1G30003-03 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
General Chemistry Parameters by 1	EPA / Stand	lard Metl	nods						
Chloride	2300	11.2	mg/kg dry	10	P1H1003	08/10/21 09:34	08/10/21 15:59	EPA 300.0	
% Moisture	11.0	0.1	%	1	P1H0903	08/09/21 15:00	08/09/21 15:05	ASTM D2216	
Total Petroleum Hydrocarbons C6-	C35 by EPA	A Method	8015M						
C6-C12	42.8	28.1	mg/kg dry	1	P1H0510	08/05/21 12:00	08/07/21 08:26	TPH 8015M	
>C12-C28	3120	28.1	mg/kg dry	1	P1H0510	08/05/21 12:00	08/07/21 08:26	TPH 8015M	
>C28-C35	698	28.1	mg/kg dry	1	P1H0510	08/05/21 12:00	08/07/21 08:26	TPH 8015M	
Surrogate: 1-Chlorooctane		121 %	70-130		P1H0510	08/05/21 12:00	08/07/21 08:26	TPH 8015M	
Surrogate: o-Terphenyl		121 %	70-130		P1H0510	08/05/21 12:00	08/07/21 08:26	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	3860	28.1	mg/kg dry	1	[CALC]	08/05/21 12:00	08/07/21 08:26	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1H0903 - *** DEFAULT PREP ***										
Blank (P1H0903-BLK1)				Prepared &	Analyzed:	08/09/21				
% Moisture	ND	0.1	%							
Blank (P1H0903-BLK2)				Prepared &	: Analyzed:	08/09/21				
% Moisture	ND	0.1	%							
Duplicate (P1H0903-DUP1)	Sour	ce: 1H04008-	-02	Prepared &	: Analyzed:	08/09/21				
% Moisture	2.0	0.1	%		2.0			0.00	20	
Duplicate (P1H0903-DUP2)	Sour	ce: 1H05003-	01	Prepared &	: Analyzed:	08/09/21				
% Moisture	5.0	0.1	%	-	4.0			22.2	20	R2
Duplicate (P1H0903-DUP3)	Sour	ce: 1H06010-	-04	Prepared &	: Analyzed:	08/09/21				
% Moisture	4.0	0.1	%		5.0			22.2	20	R2
Duplicate (P1H0903-DUP4)	Sour	ce: 1H06019-	02	Prepared &	: Analyzed:	08/09/21				
% Moisture	ND	0.1	%		ND				20	
Batch P1H1003 - *** DEFAULT PREP ***										
Blank (P1H1003-BLK1)				Prepared &	: Analyzed:	08/10/21				
Chloride	ND	1.00	mg/kg wet							
LCS (P1H1003-BS1)				Prepared &	: Analyzed:	08/10/21				
Chloride	414	1.00	mg/kg wet	400		104	90-110			
LCS Dup (P1H1003-BSD1)				Prepared &	: Analyzed:	08/10/21				
Chloride	416	1.00	mg/kg wet	400		104	90-110	0.301	20	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1 mary to	resuit	Limit	Cinto	Level	resuit	7 UICEC	Limits	ПОВ	Liiiit	110103
Batch P1H1003 - *** DEFAULT PREP ***										
Calibration Blank (P1H1003-CCB1)				Prepared &	Analyzed:	08/10/21				
Chloride	-0.215		mg/kg wet							
Calibration Check (P1H1003-CCV1)				Prepared &	Analyzed:	08/10/21				
Chloride	19.9		mg/kg	20.0		99.5	90-110			
Matrix Spike (P1H1003-MS1)	Sour	ce: 1G30002	2-03	Prepared &	Analyzed:	08/10/21				
Chloride	3780	28.1	mg/kg dry	2810	872	104	80-120			
Matrix Spike Dup (P1H1003-MSD1)	Sour	ce: 1G30002	2-03	Prepared &	Analyzed:	08/10/21				
Chloride	3790	28.1	mg/kg dry	2810	872	104	80-120	0.0742	20	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

# Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source	0/275	%REC	222	RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1H0510 - TX 1005										
Blank (P1H0510-BLK1)				Prepared: (	08/05/21 Aı	nalyzed: 08	/07/21			
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	114		"	100		114	70-130			
Surrogate: o-Terphenyl	59.7		"	50.0		119	70-130			
LCS (P1H0510-BS1)				Prepared: (	08/05/21 Aı	nalyzed: 08	3/07/21			
C6-C12	1100	25.0	mg/kg wet	1000		110	75-125			
>C12-C28	1110	25.0	"	1000		111	75-125			
Surrogate: 1-Chlorooctane	120		"	100		120	70-130			
Surrogate: o-Terphenyl	61.0		"	50.0		122	70-130			
LCS Dup (P1H0510-BSD1)				Prepared: (	08/05/21 Aı	nalyzed: 08	/07/21			
C6-C12	1100	25.0	mg/kg wet	1000		110	75-125	0.851	20	
>C12-C28	1100	25.0	"	1000		110	75-125	0.953	20	
Surrogate: 1-Chlorooctane	119		"	100		119	70-130			
Surrogate: o-Terphenyl	60.5		"	50.0		121	70-130			
Calibration Check (P1H0510-CCV1)				Prepared: (	08/05/21 Aı	nalyzed: 08	3/06/21			
C6-C12	549	25.0	mg/kg wet	500		110	85-115			
>C12-C28	566	25.0	"	500		113	85-115			
Surrogate: 1-Chlorooctane	114		"	100		114	70-130			
Surrogate: o-Terphenyl	59.5		"	50.0		119	70-130			
Calibration Check (P1H0510-CCV2)				Prepared: (	08/05/21 Aı	nalyzed: 08	/07/21			
C6-C12	547	25.0	mg/kg wet	500		109	85-115			
>C12-C28	554	25.0	"	500		111	85-115			
Surrogate: 1-Chlorooctane	112		"	100		112	70-130			
Surrogate: o-Terphenyl										

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

# Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
,	Result	Limit	Units	LEVEI	Kesuit	/OKEC	Lillins	KFD	Liiiit	Notes
Batch P1H0510 - TX 1005										
Calibration Check (P1H0510-CCV3)				Prepared:	08/05/21 A	nalyzed: 08	3/07/21			
C6-C12	511	25.0	mg/kg wet	500		102	85-115			
>C12-C28	516	25.0	"	500		103	85-115			
Surrogate: 1-Chlorooctane	128		"	100		128	70-130			
Surrogate: o-Terphenyl	56.4		"	50.0		113	70-130			
Matrix Spike (P1H0510-MS1)	Sou	<b>Source: 1G30004-03</b> Prepared: 08/05/21 Analyzed: 08/07/21								
C6-C12	964	25.3	mg/kg dry	1010	117	83.8	75-125			
>C12-C28	2800	25.3	"	1010	5540	NR	75-125			QM-05
Surrogate: 1-Chlorooctane	94.3		"	101		93.4	70-130			
Surrogate: o-Terphenyl	59.9		"	50.5		119	70-130			
Matrix Spike Dup (P1H0510-MSD1)	Sou	rce: 1G30004	1-03	Prepared:	08/05/21 A	nalyzed: 08	3/07/21			
C6-C12	972	25.3	mg/kg dry	1010	117	84.6	75-125	0.972	20	
>C12-C28	2990	25.3	"	1010	5540	NR	75-125	NR	20	QM-05
Surrogate: 1-Chlorooctane	97.3		"	101		96.3	70-130			
Surrogate: o-Terphenyl	61.4		"	50.5		122	70-130			

13000 West County Road 100

Odessa TX, 79765

Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### **Notes and Definitions**

ROI Received on Ice

R2 The RPD exceeded the acceptance limit.

The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were QM-05

within acceptance limits showing that the laboratory is in control and the data is acceptable.

BULK Samples received in Bulk soil containers may be biased low in the nC6-C12 TPH Range

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

Sample results reported on a dry weight basis dry

Relative Percent Difference RPD

LCS Laboratory Control Spike

MS Matrix Spike Duplicate

Dup

	Brew	Sarron		
Report Approved By:			Date:	8/11/2021

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

13000 West County Road 100

Odessa TX, 79765

Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

N.O.R.M.

Chlorides E 300

Standard TAT

RUSH TAT (Pra-Schadula) 24, 48, 72 hrs

Lea

county

Page 12 of 12

☐ NPDES

6~6~(<)

Z Z Z Z Z Z Z

# PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



# Analytical Report

### **Prepared for:**

Tim McMinn
E Tech Environmental & Safety Solutions, Inc. [1]
13000 West County Road 100
Odessa, TX 79765

Project: Chorizo 12 CTB Project Number: 14229 Location: New Mexico

Lab Order Number: 1H17009



**Current Certification** 

Report Date: 08/26/21

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Bottom Hole 17 @ 1'	1H17009-01	Soil	08/11/21 08:45	08-16-2021 12:44
South Wall 2 @ 1'	1H17009-02	Soil	08/11/21 08:30	08-16-2021 12:44

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### Bottom Hole 17 @ 1' 1H17009-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	result	Dillit	Jinto	Dilution	Duton	Tropulou			500
		P	ermian B	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00111	mg/kg dry	1	P1H2301	08/23/21 11:23	08/23/21 16:57	EPA 8021B	
Toluene	ND	0.0111	mg/kg dry	1	P1H2301	08/23/21 11:23	08/23/21 16:57	EPA 8021B	O-09
Ethylbenzene	ND	0.00111	mg/kg dry	1	P1H2301	08/23/21 11:23	08/23/21 16:57	EPA 8021B	
Xylene (p/m)	ND	0.00222	mg/kg dry	1	P1H2301	08/23/21 11:23	08/23/21 16:57	EPA 8021B	
Xylene (o)	ND	0.00111	mg/kg dry	1	P1H2301	08/23/21 11:23	08/23/21 16:57	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		97.8 %	80-120		P1H2301	08/23/21 11:23	08/23/21 16:57	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		107 %	80-120		P1H2301	08/23/21 11:23	08/23/21 16:57	EPA 8021B	
General Chemistry Parameters by 1	EPA / Stand	ard Metl	hods						
Chloride	28.8	1.11	mg/kg dry	1	P1H2413	08/24/21 16:23	08/25/21 10:04	EPA 300.0	
% Moisture	10.0	0.1	%	1	P1H2302	08/23/21 11:53	08/23/21 11:59	ASTM D2216	
Total Petroleum Hydrocarbons C6-	C35 by EPA	Method	8015M						
C6-C12	ND	27.8	mg/kg dry	1	P1H2006	08/20/21 09:45	08/22/21 14:58	TPH 8015M	
>C12-C28	37.2	27.8	mg/kg dry	1	P1H2006	08/20/21 09:45	08/22/21 14:58	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P1H2006	08/20/21 09:45	08/22/21 14:58	TPH 8015M	
Surrogate: 1-Chlorooctane	ļ	94.3 %	70-130		P1H2006	08/20/21 09:45	08/22/21 14:58	TPH 8015M	
Surrogate: o-Terphenyl		104 %	70-130		P1H2006	08/20/21 09:45	08/22/21 14:58	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	37.2	27.8	mg/kg dry	1	[CALC]	08/20/21 09:45	08/22/21 14:58	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### South Wall 2 @ 1' 1H17009-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
						<u> </u>			
		Р	ermian Ba	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00112	mg/kg dry	1	P1H2301	08/23/21 11:23	08/23/21 17:18	EPA 8021B	
Toluene	ND	0.0112	mg/kg dry	1	P1H2301	08/23/21 11:23	08/23/21 17:18	EPA 8021B	O-0
Ethylbenzene	ND	0.00112	mg/kg dry	1	P1H2301	08/23/21 11:23	08/23/21 17:18	EPA 8021B	
Xylene (p/m)	ND	0.00225	mg/kg dry	1	P1H2301	08/23/21 11:23	08/23/21 17:18	EPA 8021B	
Xylene (o)	ND	0.00112	mg/kg dry	1	P1H2301	08/23/21 11:23	08/23/21 17:18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		103 %	80-120		P1H2301	08/23/21 11:23	08/23/21 17:18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		111 %	80-120		P1H2301	08/23/21 11:23	08/23/21 17:18	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Metl	hods						
Chloride	10.7	1.12	mg/kg dry	1	P1H2413	08/24/21 16:23	08/25/21 10:24	EPA 300.0	
% Moisture	11.0	0.1	%	1	P1H2302	08/23/21 11:53	08/23/21 11:59	ASTM D2216	
Total Petroleum Hydrocarbons C6	5-C35 by EPA	A Method	8015M						
C6-C12	ND	28.1	mg/kg dry	1	P1H2006	08/20/21 09:45	08/22/21 15:21	TPH 8015M	
>C12-C28	ND	28.1	mg/kg dry	1	P1H2006	08/20/21 09:45	08/22/21 15:21	TPH 8015M	
>C28-C35	ND	28.1	mg/kg dry	1	P1H2006	08/20/21 09:45	08/22/21 15:21	TPH 8015M	
Surrogate: 1-Chlorooctane		92.1 %	70-130		P1H2006	08/20/21 09:45	08/22/21 15:21	TPH 8015M	
Surrogate: o-Terphenyl		103 %	70-130		P1H2006	08/20/21 09:45	08/22/21 15:21	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.1	mg/kg dry	1	[CALC]	08/20/21 09:45	08/22/21 15:21	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### BTEX by 8021B - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (P1H2301-BLK1)				Prepared & Analyzed: 08/23/21					
Benzene	ND	0.00100	mg/kg wet	1 Tepared & Allan	yzcu. 00/23/21				
Toluene	0.00269	0.00100	"						O-0
Ethylbenzene	ND	0.00100	"						
Xylene (p/m)	ND	0.00200	"						
Xylene (o)	ND	0.00100	"						
Surrogate: 1,4-Difluorobenzene	0.126		"	0.120	105	80-120			
Surrogate: 4-Bromofluorobenzene	0.119		"	0.120	99.2	80-120			
LCS (P1H2301-BS1)				Prepared & Anal	yzed: 08/23/21				
Benzene	0.107	0.00100	mg/kg wet	0.100	107	70-130			
Toluene	0.113	0.00100	"	0.100	113	70-130			
Ethylbenzene	0.108	0.00100	"	0.100	108	70-130			
Xylene (p/m)	0.222	0.00200	"	0.200	111	70-130			
Xylene (o)	0.0932	0.00100	"	0.100	93.2	70-130			
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120	99.4	80-120			
Surrogate: 4-Bromofluorobenzene	0.112		"	0.120	93.1	80-120			
LCS Dup (P1H2301-BSD1)				Prepared & Anal	yzed: 08/23/21				
Benzene	0.0899	0.00100	mg/kg wet	0.100	89.9	70-130	17.4	20	
Toluene	0.0942	0.00100	"	0.100	94.2	70-130	18.1	20	
Ethylbenzene	0.0909	0.00100	"	0.100	90.9	70-130	17.6	20	
Xylene (p/m)	0.188	0.00200	"	0.200	93.9	70-130	16.7	20	
Xylene (o)	0.0810	0.00100	"	0.100	81.0	70-130	14.0	20	
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120	89.2	80-120			
Surrogate: 1,4-Difluorobenzene	0.116		"	0.120	96.3	80-120			
Calibration Check (P1H2301-CCV1)	Prepared & Analyzed: 08/23/21								
Benzene	0.100	0.00100	mg/kg wet	0.100	100	80-120			
Toluene	0.104	0.00100	"	0.100	104	80-120			
Ethylbenzene	0.0986	0.00100	"	0.100	98.6	80-120			
Xylene (p/m)	0.204	0.00200	"	0.200	102	80-120			
Xylene (o)	0.0873	0.00100	"	0.100	87.3	80-120			
Surrogate: 4-Bromofluorobenzene	0.115		"	0.120	95.7	75-125			
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120	99.0	75-125			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### BTEX by 8021B - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1H2301 - *** DEFAULT PREP ***										
Calibration Check (P1H2301-CCV2)				Prepared &	Analyzed:	08/23/21				
Benzene	0.102	0.00100	mg/kg wet	0.100	•	102	80-120			
Toluene	0.103	0.00100	"	0.100		103	80-120			
Ethylbenzene	0.0948	0.00100	"	0.100		94.8	80-120			
Xylene (p/m)	0.193	0.00200	"	0.200		96.4	80-120			
Xylene (o)	0.0846	0.00100	"	0.100		84.6	80-120			
Surrogate: 4-Bromofluorobenzene	0.114		"	0.120		94.8	75-125			
Surrogate: 1,4-Difluorobenzene	0.120		"	0.120		100	75-125			
Calibration Check (P1H2301-CCV3)				Prepared &	Analyzed:	08/23/21				
Benzene	0.0974	0.00100	mg/kg wet	0.100		97.4	80-120			
Toluene	0.0977	0.00100	"	0.100		97.7	80-120			
Ethylbenzene	0.0876	0.00100	"	0.100		87.6	80-120			
Xylene (p/m)	0.183	0.00200	"	0.200		91.5	80-120			
Xylene (o)	0.0809	0.00100	"	0.100		80.9	80-120			
Surrogate: 4-Bromofluorobenzene	0.107		"	0.120		88.9	75-125			
Surrogate: 1,4-Difluorobenzene	0.117		"	0.120		97.8	75-125			
Matrix Spike (P1H2301-MS1)	Sou	rce: 1H20001	1-01	Prepared &	Analyzed:	08/23/21				
Benzene	0.0879	0.00116	mg/kg dry	0.116	ND	75.6	80-120			QM-05
Toluene	0.0775	0.00116	"	0.116	ND	66.7	80-120			O-09, QM-05
Ethylbenzene	0.0696	0.00116	"	0.116	ND	59.8	80-120			QM-05
Xylene (p/m)	0.141	0.00233	"	0.233	ND	60.8	80-120			QM-05
Xylene (o)	0.0613	0.00116	"	0.116	ND	52.7	80-120			QM-05
Surrogate: 1,4-Difluorobenzene	0.140		"	0.140		101	80-120			
Surrogate: 4-Bromofluorobenzene	0.135		"	0.140		96.8	80-120			
Matrix Spike Dup (P1H2301-MSD1)	Sou	rce: 1H20001	1-01	Prepared &	Analyzed:	08/23/21				
Benzene	0.0876	0.00116	mg/kg dry	0.116	ND	75.3	80-120	0.384	20	QM-05
Toluene	0.0810	0.00116	"	0.116	ND	69.7	80-120	4.43	20	O-09, QM-05
Ethylbenzene	0.0764	0.00116	"	0.116	ND	65.7	80-120	9.38	20	QM-05
Xylene (p/m)	0.157	0.00233	"	0.233	ND	67.3	80-120	10.2	20	QM-05
Xylene (o)	0.0675	0.00116	"	0.116	ND	58.0	80-120	9.53	20	QM-05
Surrogate: 4-Bromofluorobenzene	0.137		"	0.140		97.8	80-120			
Surrogate: 1,4-Difluorobenzene	0.141		"	0.140		101	80-120			

Permian Basin Environmental Lab, L.P.

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

		Reporting		Spike	Source	.v.p.p.g	%REC	222	RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1H2302 - *** DEFAULT PREP ***										
Blank (P1H2302-BLK1)				Prepared &	: Analyzed:	08/23/21				
% Moisture	ND	0.1	%							
Blank (P1H2302-BLK2)				Prepared &	Analyzed:	08/23/21				
% Moisture	ND	0.1	%							
Blank (P1H2302-BLK3)				Prepared &	: Analyzed:	08/23/21				
% Moisture	ND	0.1	%							
Blank (P1H2302-BLK4)				Prepared &	Analyzed:	08/23/21				
% Moisture	ND	0.1	%							
Duplicate (P1H2302-DUP1)	Sour	ce: 1H17008-	05	Prepared &	Analyzed:	08/23/21				
% Moisture	14.0	0.1	%		14.0			0.00	20	
Duplicate (P1H2302-DUP2)	Sour	ce: 1H17008-	15	Prepared &	Analyzed:	08/23/21				
% Moisture	16.0	0.1	%		16.0			0.00	20	
Duplicate (P1H2302-DUP3)	Sour	ce: 1H17010-	10	Prepared &	Analyzed:	08/23/21				
% Moisture	7.0	0.1	%		7.0			0.00	20	
Duplicate (P1H2302-DUP4)	Sour	ce: 1H17010-	20	Prepared &	Analyzed:	08/23/21				
% Moisture	6.0	0.1	%		6.0			0.00	20	
Duplicate (P1H2302-DUP5)	Soui	ce: 1H17010-	35	Prepared &	: Analyzed:	08/23/21				
% Moisture	5.0	0.1	%		5.0			0.00	20	
Duplicate (P1H2302-DUP6)	Sour	ce: 1H17010-	45	Prepared &	: Analyzed:	08/23/21				
% Moisture	5.0	0.1	%	-	5.0			0.00	20	

13000 West County Road 100

Project: Chorizo 12 CTB

Odessa TX, 79765

Project Number: 14229 Project Manager: Tim McMinn

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1H2302 - *** DEFAULT PREP ***										
Duplicate (P1H2302-DUP7)	Sou	rce: 1H17011	-08	Prepared &	Analyzed	: 08/23/21				
% Moisture	29.0	0.1	%		29.0			0.00	20	
Duplicate (P1H2302-DUP8)	Sou	rce: 1H17011	-18	Prepared &	Analyzed	: 08/23/21				
% Moisture	14.0	0.1	%		14.0			0.00	20	
Batch P1H2413 - *** DEFAULT PREP ***										
Blank (P1H2413-BLK1)				Prepared: (	08/24/21 A	Analyzed: 08	3/25/21			
Chloride	ND	1.00	mg/kg wet							
LCS (P1H2413-BS1)				Prepared: (	08/24/21 A	Analyzed: 08	3/25/21			
Chloride	423	1.00	mg/kg wet	400		106	90-110			
LCS Dup (P1H2413-BSD1)				Prepared: (	08/24/21 A	Analyzed: 08	3/25/21			
Chloride	422	1.00	mg/kg wet	400		105	90-110	0.350	20	
Calibration Blank (P1H2413-CCB1)				Prepared: (	08/24/21 A	Analyzed: 08	3/25/21			
Chloride	0.00		mg/kg wet			-				
Calibration Blank (P1H2413-CCB2)				Prepared: (	)8/24/21 <i>A</i>	Analyzed: 08	3/25/21			
Chloride	0.00		mg/kg wet	*						
Calibration Check (P1H2413-CCV1)				Prepared: (	08/24/21 A	Analyzed: 08	/25/21			
Chloride	21.0		mg/kg	20.0		105	90-110			
Calibration Check (P1H2413-CCV2)				Prepared: (	08/24/21 A	Analyzed: 08	3/25/21			
Chloride	21.2		mg/kg	20.0		106	90-110			

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

		Reporting		Spike	Source	e	%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1H2413 - *** DEFAULT PREP ***										
Calibration Check (P1H2413-CCV3)				Prepared: (	08/24/21	Analyzed: 08	8/25/21			
Chloride	20.9		mg/kg	20.0		105	90-110			
Matrix Spike (P1H2413-MS1)	Sour	ce: 1H18001	1-03	Prepared: (	08/24/21	Analyzed: 08	8/25/21			
Chloride	4870	10.4	mg/kg dry	1040	3820	100	80-120			
Matrix Spike (P1H2413-MS2)	Sour	ce: 1H17009	0-02	Prepared: (	08/24/21	Analyzed: 08	8/25/21			
Chloride	570	1.12	mg/kg dry	562	10.7	99.6	80-120			
Matrix Spike Dup (P1H2413-MSD1)	Sour	ce: 1H18001	1-03	Prepared: (	08/24/21	Analyzed: 08	8/25/21			
Chloride	4870	10.4	mg/kg dry	1040	3820	100	80-120	0.0364	20	
Matrix Spike Dup (P1H2413-MSD2)	Sour	ce: 1H17009	0-02	Prepared: (	08/24/21	Analyzed: 08	8/25/21			
Chloride	578	1.12	mg/kg dry	562	10.7	101	80-120	1.42	20	

Project: Chorizo 12 CTB

13000 West County Road 100 Odessa TX, 79765 Project Number: 14229
Project Manager: Tim McMinn

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control Permian Basin Environmental Lab, L.P.

Analysis	D1	Reporting	I I:4-	Spike	Source	0/DEC	%REC	DDD	RPD	N-4
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1H2006 - TX 1005										
Blank (P1H2006-BLK1)				Prepared: 0	08/20/21 Aı	nalyzed: 08	3/22/21			
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	117		"	100		117	70-130			
Surrogate: o-Terphenyl	63.5		"	50.0		127	70-130			
LCS (P1H2006-BS1)				Prepared: 0	08/20/21 Aı	nalyzed: 08	3/22/21			
C6-C12	1060	25.0	mg/kg wet	1000		106	75-125			
>C12-C28	1130	25.0	"	1000		113	75-125			
Surrogate: 1-Chlorooctane	120		"	100		120	70-130			
Surrogate: o-Terphenyl	63.0		"	50.0		126	70-130			
LCS Dup (P1H2006-BSD1)				Prepared: (	08/20/21 Aı	nalyzed: 08	3/22/21			
C6-C12	1070	25.0	mg/kg wet	1000		107	75-125	0.843	20	
>C12-C28	1150	25.0	"	1000		115	75-125	1.27	20	
Surrogate: 1-Chlorooctane	119		"	100		119	70-130			
Surrogate: o-Terphenyl	62.1		"	50.0		124	70-130			
Calibration Check (P1H2006-CCV1)				Prepared: (	08/20/21 Aı	nalyzed: 08	3/22/21			
C6-C12	546	25.0	mg/kg wet	500		109	85-115			
>C12-C28	562	25.0	"	500		112	85-115			
Surrogate: 1-Chlorooctane	119		"	100		119	70-130			
Surrogate: o-Terphenyl	64.9		"	50.0		130	70-130			
Calibration Check (P1H2006-CCV2)				Prepared: (	08/20/21 Aı	nalyzed: 08	3/22/21			
C6-C12	542	25.0	mg/kg wet	500		108	85-115			
>C12-C28	528	25.0	"	500		106	85-115			
Surrogate: 1-Chlorooctane	118		"	100		118	70-130			
Surrogate: o-Terphenyl	63.3		"	50.0		127	70-130			

Permian Basin Environmental Lab, L.P.

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

# Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1H2006 - TX 1005										
Calibration Check (P1H2006-CCV3)				Prepared:	08/20/21 A	nalyzed: 08	3/23/21			
C6-C12	533	25.0	mg/kg wet	500		107	85-115			
>C12-C28	564	25.0	"	500		113	85-115			
Surrogate: 1-Chlorooctane	117		"	100		117	70-130			
Surrogate: o-Terphenyl	65.0		"	50.0		130	70-130			
Matrix Spike (P1H2006-MS1)	Sou	rce: 1H19005	5-01	Prepared:	08/20/21 A	nalyzed: 08	3/22/21			
C6-C12	912	28.1	mg/kg dry	1120	17.6	79.6	75-125			
>C12-C28	898	28.1	"	1120	345	49.2	75-125			S-GC
Surrogate: 1-Chlorooctane	137		"	112		122	70-130			
Surrogate: o-Terphenyl	54.7		"	56.2		97.4	70-130			
Matrix Spike Dup (P1H2006-MSD1)	Sou	rce: 1H19005	5-01	Prepared:	08/20/21 A	nalyzed: 08	3/22/21			
C6-C12	931	28.1	mg/kg dry	1120	17.6	81.3	75-125	2.12	20	
>C12-C28	935	28.1	"	1120	345	52.5	75-125	6.58	20	S-GC
Surrogate: 1-Chlorooctane	124		"	112		111	70-130			
Surrogate: o-Terphenyl	57.2		"	56.2		102	70-130			

13000 West County Road 100

Odessa TX, 79765

Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### **Notes and Definitions**

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

ROI Received on Ice

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were

within acceptance limits showing that the laboratory is in control and the data is acceptable.

O-09 This compound is a common laboratory contaminant. Compound also present in method blank.

BULK Samples received in Bulk soil containers may be biased low in the nC6-C12 TPH Range

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By: Date: 8/26/2021

Brent Barron, Laboratory Director/Technical Director

Permian Basin Environmental Lab, L.P.

E Tech Environmental & Safety Solutions, Inc. [1] Project: Chorizo 12 CTB

13000 West County Road 100Project Number: 14229Odessa TX, 79765Project Manager: Tim McMinn

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

Relinquished by:		Relinquished by:  State Time  Relinquished by:  State  Time	Special Instructions: Bill to Centennial Resource							'2 South Wall L & I	Sottom Hole 17	D 1/ 1/20/	AB # (lan use only)  THELD CODE  Beginning Depth	ORDER #: 14 17009	(lab use only)		Sampler Signature:	Telephone No: (432)230-3763	City/State/Zip: Odessa, Texas 79765	Company Address: 13000 W CR 100	Company Name Etech Environmental and Safety Solutions, Inc.	Project Manager: Tim McMinn		CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST
The Marin Hat	Received by:	Place lines by:								19/11/8		8/11/21	Ending Depth  Date Sampled			i	V    				lutions, Inc.		menten en e	)DY RECORD AN
E M		,								000	070	208	Time Sampled				e-mail:	Fax No:					3 4	D ANAL YSIS
20			<u> </u> 	-		_			$\vdash$	+		l v 3 v gad Poo	Field Filtered Fotal #. of Containers	$\left\{ \right.$		m(a	Matt@eteche					Midland, lexas	Permian Basin Environmental Lab, LP 10014 S. County Road 1213	ZE O
			ļ	AVECURED TO SERVICE		_		-		$\overline{}$	<b>(</b>	~	Ice			pete	3				1	, a	S C	, j
J.													HNO <sub>3</sub>	Preservation		ech	att(				1	exa	OUI	S
2	<b>]</b>												HCI	vatio		env	@e	ļ			-		֓֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	1
1							_				_		H₂SO₄	л & #		8	ec					79706	\oa	•
\											_		NaOH	of C		ΙĔ	cheny		1			"	12 me	· ·
ļ	ļ <b>.</b>				$\vdash$			-		- -	_ _		Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	ontai			J VI				1	]	သီ ရွိ	
-00C					$\vdash$	_	}				_		None	ners			com	1	}			1	ag S	
3	) ) )	Date		Name and Address of the Owner, where		-		-			-		Other ( Specify)  DW=Drinking Water SL=Sludge				ندا	1	1	1	1	1	Ę	BCH
21							1	1	1			_	GW = Groundwater S=Soil/Soild	Μa				æ						Ö
	<b></b>				1	- 1		-			1		NP=Non-Potable Specify Other	×				por				Ž		Ŧ
8	777.6	Time		POTAPH CHEM		十				$\overline{}$	<b>〈</b>  >	く	Marian Colombia Colom	15B		П		Report Format:		Project Loc:	Ď	Project Name:		
7		0				1					1	_	TPH: TX 1005 Ext TX 10	006				ma	פ	Ę Ž	Project #:	2 <u>8</u>	3	
70 0	မ်ာ	585	√S La										Catlons (Ca, Mg, Na, K)					T.	PO #	00	类	me:	4	()
Serve Serve	Sample Hand Delivered by Sampler/Client Res by Courier? UFS	Labels on container(s) Custody seals on container Custody seals on cook	Tiple Tiple							I			Anions (Ci, SO4, Alkalinity)		ᇗ			$\boxtimes$					22	CF
7,00 E	Hall Hall	y sex	β 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8										SAR / ESP / CEC		TATOTAL:			Star	1	Len		2	ē' _	9
W ~ m	THE STATE OF		의 하 요										Metals: As Ag Ba Cd Cr Pb Hg	Se		3		X Standard	2	8	14	20	7 20	<del>;</del> !
Mode	Hen		nm lead										Volatiles		$\perp$	Analyze		α	90	Se	0	Chorizo	0	
S/IW/21 12:44 Received 2-3	mple Hand Delivered by Sampler/Client Red by Courser? UPS	Labels on container(s) Custody seals on container(s) Custody seals on cooler(s)	Laboratory Comments: Sample Containers Intact? VOCs Free of Headspace?								_		Semivolaliles		$\perp$	e For			48064	County	b22h1		Phone: 432-661-4184 (m/trnnia/	3 3
		ner(	H						$\sqcup$	_>	$\langle r \rangle$		BTEX 8021B)5030 or BTEX 82	60	$\perp$	ĭ			14	1	"	12	ģ	
	I	(s)						-	$\sqcup$	_	_		RCI					☐ TRRP		2			<u>ا</u>	
+	7.		_			$\dashv$			$\vdash \vdash$	+	+	!	N.O.R.M.			-		טר		NM		CTB	Ş	ţ
,		つつ	D			_	_	-	<del>                                     </del>	-	4	$\leq$	Chlorides E 300	<del></del>		-				12	İ	100		
r	1 \ )	00	M,			+	$\dashv$	-	╁		+-	-				-		Z	1					
, ,	S Z Z Z	zz	zz		<del>                                     </del>	_		-		-	-		RUSH TAT (Pre-Schedule) 24,	42 7	72 hre			NPDES			1		a policie	
:	e.			$\vdash$		$\dashv$		+-		-	大		Standard TAT	-0, /	_ ((15			S						
Release	dto I-		- A IE IO	022	0.25	-50	434		LL		\_	7		1					j	1	Pa	ige 1	4 of	14
Acieuse	u w 1M	aging	. 4/3/2	044	U.4J	.00.	CILIVI																; -	•

### PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



### Analytical Report

#### **Prepared for:**

Tim McMinn
E Tech Environmental & Safety Solutions, Inc. [1]
13000 West County Road 100
Odessa, TX 79765

Project: Chorizo 12 CTB Project Number: 14229 Location: New Mexico

Lab Order Number: 1I15014



**Current Certification** 

Report Date: 09/29/21

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Perimeter #1	1115014-01	Soil	09/15/21 08:15	09-15-2021 14:31
Perimeter #2	1115014-02	Soil	09/15/21 08:20	09-15-2021 14:31
Perimeter #3	1115014-03	Soil	09/15/21 08:50	09-15-2021 14:31
Perimeter #4	1115014-04	Soil	09/15/21 08:30	09-15-2021 14:31
Perimeter #5	1115014-05	Soil	09/15/21 08:58	09-15-2021 14:31
Perimeter #6	1115014-06	Soil	09/15/21 09:00	09-15-2021 14:31
Perimeter #7	1115014-07	Soil	09/15/21 09:20	09-15-2021 14:31
Perimeter #8	1115014-08	Soil	09/15/21 09:15	09-15-2021 14:31
Perimeter #9	1115014-09	Soil	09/15/21 09:28	09-15-2021 14:31
Perimeter #10	1115014-10	Soil	09/15/21 09:40	09-15-2021 14:31
Perimeter #11	1115014-11	Soil	09/15/21 09:35	09-15-2021 14:31

13000 West County Road 100

Odessa TX, 79765

Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

## Perimeter #1 1115014-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		P	ermian Ba	asin Envi	ronmental l		<u> </u>		
BTEX by 8021B		_							
Benzene	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:00	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:00	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:00	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:00	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:00	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		111 %	80-120		P111702	09/17/21 09:47	09/17/21 14:00	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		109 %	80-120		P111702	09/17/21 09:47	09/17/21 14:00	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Metl	hods						
Chloride	10.0	1.08	mg/kg dry	1	P1I1606	09/16/21 14:28	09/16/21 16:21	EPA 300.0	
% Moisture	7.0	0.1	%	1	P1I1707	09/17/21 11:26	09/17/21 11:34	ASTM D2216	
Total Petroleum Hydrocarbons C6-	C35 by EP	A Method	8015M						
C6-C12	ND	26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 19:25	TPH 8015M	
>C12-C28	47.0	26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 19:25	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 19:25	TPH 8015M	
Surrogate: 1-Chlorooctane		94.1 %	70-130		P111708	09/17/21 13:01	09/17/21 19:25	TPH 8015M	
Surrogate: o-Terphenyl		105 %	70-130		P111708	09/17/21 13:01	09/17/21 19:25	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	47.0	26.9	mg/kg dry	1	[CALC]	09/17/21 13:01	09/17/21 19:25	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### Perimeter #2 1115014-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		P	ermian Ba	asin Envi	ronmental I	Lab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00106	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:22	EPA 8021B	
Toluene	ND	0.00106	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:22	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:22	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:22	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:22	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		118 %	80-120		P111702	09/17/21 09:47	09/17/21 14:22	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		112 %	80-120		P111702	09/17/21 09:47	09/17/21 14:22	EPA 8021B	
General Chemistry Parameters by 1	EPA / Stand	lard Metl	hods						
Chloride	5.22	1.06	mg/kg dry	1	P1I1606	09/16/21 14:28	09/16/21 17:54	EPA 300.0	
% Moisture	6.0	0.1	%	1	P1I1707	09/17/21 11:26	09/17/21 11:34	ASTM D2216	
Total Petroleum Hydrocarbons C6-	C35 by EPA	Method	8015M						
C6-C12	ND	26.6	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 19:48	TPH 8015M	
>C12-C28	35.4	26.6	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 19:48	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 19:48	TPH 8015M	
Surrogate: 1-Chlorooctane		99.4 %	70-130		P111708	09/17/21 13:01	09/17/21 19:48	TPH 8015M	
Surrogate: o-Terphenyl		110 %	70-130		P111708	09/17/21 13:01	09/17/21 19:48	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	35.4	26.6	mg/kg dry	1	[CALC]	09/17/21 13:01	09/17/21 19:48	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### Perimeter #3 1115014-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
	Kesuit	Lillit	Omis	Dilution	Datell	1 repared	2 mary zect	memod	11010
		P	ermian Ba	sin Envi	ronmental I	Lab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:43	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:43	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:43	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:43	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 14:43	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		106 %	80-120		P111702	09/17/21 09:47	09/17/21 14:43	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		107 %	80-120		P111702	09/17/21 09:47	09/17/21 14:43	EPA 8021B	
General Chemistry Parameters by	EDA / Stand	land Mati	hada						
Chloride	12.8	1.08	mg/kg dry	1	P1I1606	09/16/21 14:28	09/16/21 18:13	EPA 300.0	
% Moisture	7.0	0.1	%	1	P1I1707	09/17/21 11:26	09/17/21 11:34	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EPA	Method	8015M						
C6-C12	ND	26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 20:55	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 20:55	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 20:55	TPH 8015M	
Surrogate: 1-Chlorooctane		94.6 %	70-130		P111708	09/17/21 13:01	09/17/21 20:55	TPH 8015M	
Surrogate: o-Terphenyl		105 %	70-130		P111708	09/17/21 13:01	09/17/21 20:55	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	09/17/21 13:01	09/17/21 20:55	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### Perimeter #4 1115014-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Result	Lillit	Omis	Dilution	Batch	repared	- mary zea	1.1241104	
		P	ermian Ba	asin Envi	ronmental I	Lab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00106	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:04	EPA 8021B	
Toluene	ND	0.00106	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:04	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:04	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:04	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:04	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		107 %	80-120		P111702	09/17/21 09:47	09/17/21 15:04	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		109 %	80-120		P111702	09/17/21 09:47	09/17/21 15:04	EPA 8021B	
General Chemistry Parameters by	EDA / Stand	land Matt	ands						
Chloride	28.3	1.06	mg/kg dry	1	P1I1606	09/16/21 14:28	09/16/21 18:31	EPA 300.0	
% Moisture	6.0	0.1	%	1	P1I1707	09/17/21 11:26	09/17/21 11:34	ASTM D2216	
Total Petroleum Hydrocarbons C6	-C35 by EPA	Method	8015M						
C6-C12	ND	26.6	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 21:17	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 21:17	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 21:17	TPH 8015M	
Surrogate: 1-Chlorooctane		97.9 %	70-130		P111708	09/17/21 13:01	09/17/21 21:17	TPH 8015M	
Surrogate: o-Terphenyl		109 %	70-130		P111708	09/17/21 13:01	09/17/21 21:17	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	09/17/21 13:01	09/17/21 21:17	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### Perimeter #5 1115014-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
	Result	Lillit	Omis	Dilution	DatCII	Fichaied	7 maryzeu	Method	Note
		P	ermian Ba	sin Envi	ronmental I	Lab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00110	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:26	EPA 8021B	
Toluene	ND	0.00110	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:26	EPA 8021B	
Ethylbenzene	ND	0.00110	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:26	EPA 8021B	
Xylene (p/m)	ND	0.00220	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:26	EPA 8021B	
Xylene (o)	ND	0.00110	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:26	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		109 %	80-120		P111702	09/17/21 09:47	09/17/21 15:26	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		113 %	80-120		P111702	09/17/21 09:47	09/17/21 15:26	EPA 8021B	
Commel Charrieton Description has	EDA / 64 d	I J M - 41	L - J -						
General Chemistry Parameters by Chloride	<u>EPA / Stano</u> 427	<u>1.10</u>	mg/kg dry	1	P1I1606	09/16/21 14:28	09/16/21 18:50	EPA 300.0	
% Moisture	9.0	0.1	%	1	P1I1707	09/17/21 11:26	09/17/21 11:34	ASTM D2216	
/u iviolsture	7.0	0.1							
<u> Total Petroleum Hydrocarbons C6</u>	5-C35 by EPA	<b>Method</b>	8015M						
C6-C12	ND	27.5	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 21:39	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 21:39	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 21:39	TPH 8015M	
Surrogate: 1-Chlorooctane		94.9 %	70-130		P111708	09/17/21 13:01	09/17/21 21:39	TPH 8015M	
Surrogate: o-Terphenyl		106 %	70-130		P111708	09/17/21 13:01	09/17/21 21:39	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	09/17/21 13:01	09/17/21 21:39	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### Perimeter #6 1115014-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		P	ermian Ba	asin Envi	ronmental I	Lab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:47	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:47	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:47	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:47	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 15:47	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		110 %	80-120		P111702	09/17/21 09:47	09/17/21 15:47	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		113 %	80-120		P111702	09/17/21 09:47	09/17/21 15:47	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Metl	hods						
Chloride	46.2	1.08	mg/kg dry	1	P1I1606	09/16/21 14:28	09/16/21 19:08	EPA 300.0	
% Moisture	7.0	0.1	%	1	P1I1707	09/17/21 11:26	09/17/21 11:34	ASTM D2216	
Total Petroleum Hydrocarbons C6	5-C35 by EPA	A Method	8015M						
C6-C12	ND	26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 22:01	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 22:01	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 22:01	TPH 8015M	
Surrogate: 1-Chlorooctane		96.8 %	70-130		P111708	09/17/21 13:01	09/17/21 22:01	TPH 8015M	
Surrogate: o-Terphenyl		108 %	70-130		P111708	09/17/21 13:01	09/17/21 22:01	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	09/17/21 13:01	09/17/21 22:01	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### Perimeter #7 1115014-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
•	Result	Lillit	Omis	Dilution	Daten	Терагец	7 mary 200	Method	1,010
		P	ermian Ba	asin Envi	ronmental L	ab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 16:09	EPA 8021B	
Toluene	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 16:09	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 16:09	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 16:09	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 16:09	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	·	108 %	80-120		P111702	09/17/21 09:47	09/17/21 16:09	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		107 %	80-120		P111702	09/17/21 09:47	09/17/21 16:09	EPA 8021B	
Cananal Chamistur Davamataus by	EDA / Stand	land Mati	hada						
General Chemistry Parameters by Definition Chloride	<u>EPA / Stanc</u> 402	<u>1.08</u>	mg/kg dry	1	P1I1606	09/16/21 14:28	09/16/21 19:27	EPA 300.0	
% Moisture	7.0	0.1	%	1	P1I1707	09/17/21 11:26	09/17/21 11:34	ASTM D2216	
Fotal Datuslaum Hydrosowhous CC	C25 has ED	Mothod	001 <i>EM</i>						
Total Petroleum Hydrocarbons C6- C6-C12	ND	<u>x Mietnou</u> 26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 22:24	TPH 8015M	
>C12-C28	29.1	26.9	mg/kg dry	_	P1I1708	09/17/21 13:01	09/17/21 22:24	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 22:24	TPH 8015M	
Surrogate: I-Chlorooctane		98.1 %	70-130		P111708	09/17/21 13:01	09/17/21 22:24	TPH 8015M	
Surrogate: o-Terphenyl		110 %	70-130		P111708	09/17/21 13:01	09/17/21 22:24	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	29.1	26.9	mg/kg dry	1	[CALC]	09/17/21 13:01	09/17/21 22:24	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### Perimeter #8 1115014-08 (Soil)

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		P	ermian Ba	asin Envi	ronmental I	Lab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00108	mg/kg dry	1	P1I2804	09/28/21 15:50	09/28/21 18:49	EPA 8021B	
Toluene	0.00156	0.00108	mg/kg dry	1	P1I2804	09/28/21 15:50	09/28/21 18:49	EPA 8021B	
Ethylbenzene	ND	0.00108	mg/kg dry	1	P1I2804	09/28/21 15:50	09/28/21 18:49	EPA 8021B	
Xylene (p/m)	ND	0.00215	mg/kg dry	1	P1I2804	09/28/21 15:50	09/28/21 18:49	EPA 8021B	
Xylene (o)	ND	0.00108	mg/kg dry	1	P1I2804	09/28/21 15:50	09/28/21 18:49	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		112 %	80-120		P112804	09/28/21 15:50	09/28/21 18:49	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		107 %	80-120		P112804	09/28/21 15:50	09/28/21 18:49	EPA 8021B	
General Chemistry Parameters b	ov EPA / Stand	lard Metl	hods						
Chloride	127	1.08	mg/kg dry	1	P1I1606	09/16/21 14:28	09/16/21 19:45	EPA 300.0	
% Moisture	7.0	0.1	%	1	P1I1707	09/17/21 11:26	09/17/21 11:34	ASTM D2216	
Total Petroleum Hydrocarbons C	C6-C35 by EPA	A Method	8015M						
C6-C12	ND	26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 22:46	TPH 8015M	
>C12-C28	ND	26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 22:46	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 22:46	TPH 8015M	
Surrogate: 1-Chlorooctane		97.1 %	70-130		P111708	09/17/21 13:01	09/17/21 22:46	TPH 8015M	
Surrogate: o-Terphenyl		109 %	70-130		P111708	09/17/21 13:01	09/17/21 22:46	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	09/17/21 13:01	09/17/21 22:46	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### Perimeter #9 1115014-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Result	Diiiit	Jino	Zilutioil	Duton	Tieparea	,		2.30
		P	ermian Ba	sin Envi	ronmental I	Lab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 17:46	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 17:46	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 17:46	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 17:46	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 17:46	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		121 %	80-120		P111702	09/17/21 09:47	09/17/21 17:46	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		114 %	80-120		P111702	09/17/21 09:47	09/17/21 17:46	EPA 8021B	
Cananal Chamistur Danamatana ha	EDA / Stone	land Mati	hada						
General Chemistry Parameters by Chloride	<u>/ EPA / Stant</u> 179	1.05	mg/kg dry	1	P1I1606	09/16/21 14:28	09/16/21 20:04	EPA 300.0	
% Moisture	5.0	0.1	%	1	P111707	09/17/21 11:26	09/17/21 11:34	ASTM D2216	
T ( ID ( I I I I I C	COSI ED	. 3.7.41 1	001534						
Total Petroleum Hydrocarbons C6 C6-C12	ND	26.3	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 23:08	TPH 8015M	
>C12-C28	ND ND	26.3	mg/kg dry	-	P1I1708	09/17/21 13:01	09/17/21 23:08	TPH 8015M	
>C12-C28 >C28-C35	ND ND	26.3	mg/kg dry	-	P1I1708	09/17/21 13:01	09/17/21 23:08	TPH 8015M	
				-	P111708	09/17/21 13:01	09/17/21 23:08	TPH 8015M	
Surrogate: 1-Chlorooctane		97.3 %	70-130						
Surrogate: o-Terphenyl		109 %	70-130		P111708	09/17/21 13:01	09/17/21 23:08	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	09/17/21 13:01	09/17/21 23:08	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### Perimeter #10 1115014-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Dranamad	Analyzed	Method	Note
	Result	Limit	Units	Dilution	Баісп	Prepared	Anaryzeu	ivictilod	Note
		P	ermian Ba	asin Envi	ronmental l	Lab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00105	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 18:07	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 18:07	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 18:07	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 18:07	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 18:07	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		110 %	80-120		P111702	09/17/21 09:47	09/17/21 18:07	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		109 %	80-120		P111702	09/17/21 09:47	09/17/21 18:07	EPA 8021B	
General Chemistry Parameters by	EPA / Stand	lard Metl	hods						
Chloride	2050	10.5	mg/kg dry	10	P1I1606	09/16/21 14:28	09/16/21 20:22	EPA 300.0	
% Moisture	5.0	0.1	%	1	P1I1707	09/17/21 11:26	09/17/21 11:34	ASTM D2216	
Total Petroleum Hydrocarbons C6	5-C35 by EPA	A Method	8015M						
C6-C12	ND	26.3	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 23:31	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 23:31	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 23:31	TPH 8015M	
Surrogate: 1-Chlorooctane		101 %	70-130		P111708	09/17/21 13:01	09/17/21 23:31	TPH 8015M	
Surrogate: o-Terphenyl		112 %	70-130		P111708	09/17/21 13:01	09/17/21 23:31	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	09/17/21 13:01	09/17/21 23:31	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### Perimeter #11 1115014-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
	Result	Lillit	Omis	Dilution	DatCII	Frepared	7 maryzeu	wichiod	Note
		P	ermian Ba	sin Envi	ronmental I	Lab, L.P.			
BTEX by 8021B									
Benzene	ND	0.00106	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 19:11	EPA 8021B	
Toluene	ND	0.00106	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 19:11	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 19:11	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 19:11	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P1I1702	09/17/21 09:47	09/17/21 19:11	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		116 %	80-120		P111702	09/17/21 09:47	09/17/21 19:11	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		111 %	80-120		P111702	09/17/21 09:47	09/17/21 19:11	EPA 8021B	
Commel Chambeton Description has	- EDA / 64	I J M - 41							
General Chemistry Parameters by Chloride	<u>/ EPA / Stand</u> 118	<u>1.06</u>	mg/kg dry	1	P1I1608	09/16/21 16:58	09/16/21 19:44	EPA 300.0	
% Moisture	6.0	0.1	%	1	P1I1707	09/17/21 11:26	09/17/21 11:34	ASTM D2216	
/o Moisture	0.0	0.1		•	1111,0,	0,717,2111.20	0,717,721 1110 1	110111111111111111111111111111111111111	
<u> Total Petroleum Hydrocarbons C6</u>	5-C35 by EPA	<b>Method</b>	8015M						
C6-C12	ND	26.6	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 23:53	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 23:53	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P1I1708	09/17/21 13:01	09/17/21 23:53	TPH 8015M	
Surrogate: 1-Chlorooctane		94.2 %	70-130		P111708	09/17/21 13:01	09/17/21 23:53	TPH 8015M	
Surrogate: o-Terphenyl		106 %	70-130		P111708	09/17/21 13:01	09/17/21 23:53	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	09/17/21 13:01	09/17/21 23:53	calc	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### BTEX by 8021B - Quality Control Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	Result	Lillit	Omis	Level	Result	70KEC	Lillits	KI D	Lillit	Notes
Batch P1I1702 - *** DEFAULT PREP ***										
Blank (P1I1702-BLK1)				Prepared &	ե Analyzed:	09/17/21				
Benzene	ND	0.00100	mg/kg wet							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.131		"	0.120		109	80-120			
Surrogate: 4-Bromofluorobenzene	0.134		"	0.120		112	80-120			
LCS (P1I1702-BS1)				Prepared &	k Analyzed:	09/17/21				
Benzene	0.0971	0.00100	mg/kg wet	0.100		97.1	70-130			
Toluene	0.0971	0.00100	"	0.100		97.1	70-130			
Ethylbenzene	0.0930	0.00100	"	0.100		93.0	70-130			
Xylene (p/m)	0.188	0.00200	"	0.200		93.9	70-130			
Xylene (o)	0.0972	0.00100	"	0.100		97.2	70-130			
Surrogate: 1,4-Difluorobenzene	0.130		"	0.120		108	80-120			
Surrogate: 4-Bromofluorobenzene	0.131		"	0.120		109	80-120			
LCS Dup (P1I1702-BSD1)				Prepared &	k Analyzed:	09/17/21				
Benzene	0.0959	0.00100	mg/kg wet	0.100		95.9	70-130	1.23	20	
Toluene	0.0957	0.00100	"	0.100		95.7	70-130	1.54	20	
Ethylbenzene	0.0910	0.00100	"	0.100		91.0	70-130	2.18	20	
Xylene (p/m)	0.182	0.00200	"	0.200		91.0	70-130	3.08	20	
Xylene (o)	0.0952	0.00100	"	0.100		95.2	70-130	2.09	20	
Surrogate: 1,4-Difluorobenzene	0.123		"	0.120		103	80-120			
Surrogate: 4-Bromofluorobenzene	0.122		"	0.120		102	80-120			
Calibration Blank (P111702-CCB1)				Prepared &	k Analyzed:	09/17/21				
Benzene	0.00		mg/kg wet	-	•					
Toluene	2.23		"							
Ethylbenzene	0.270		"							
Xylene (p/m)	0.520		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.124		"	0.120		103	80-120			

Permian Basin Environmental Lab, L.P.

Surrogate: 4-Bromofluorobenzene

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

103

80-120

0.120

0.124

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### BTEX by 8021B - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1I1702 - *** DEFAULT PREP ***										
Calibration Blank (P111702-CCB2)				Prepared &	Analyzed:	09/17/21				
Benzene	0.00		mg/kg wet							
Toluene	4.64		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.130		"	0.120		109	80-120			
Surrogate: 4-Bromofluorobenzene	0.135		"	0.120		113	80-120			
Calibration Blank (P111702-CCB3)				Prepared &	Analyzed:	09/17/21				
Benzene	0.00		mg/kg wet							
Toluene	2.87		"							
Ethylbenzene	0.00		"							
Xylene (p/m)	0.00		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.128		"	0.120		107	80-120			
Surrogate: 4-Bromofluorobenzene	0.134		"	0.120		112	80-120			
Calibration Check (P1I1702-CCV1)				Prepared &	Analyzed:	09/17/21				
Benzene	0.106	0.00100	mg/kg wet	0.100		106	80-120			
Toluene	0.108	0.00100	"	0.100		108	80-120			
Ethylbenzene	0.108	0.00100	"	0.100		108	80-120			
Xylene (p/m)	0.213	0.00200	"	0.200		107	80-120			
Xylene (o)	0.108	0.00100	"	0.100		108	80-120			
Surrogate: 4-Bromofluorobenzene	0.122		"	0.120		102	75-125			
Surrogate: 1,4-Difluorobenzene	0.122		"	0.120		102	75-125			
Calibration Check (P1I1702-CCV2)				Prepared &	Analyzed:	09/17/21				
Benzene	0.102	0.00100	mg/kg wet	0.100		102	80-120			
Toluene	0.103	0.00100	"	0.100		103	80-120			
Ethylbenzene	0.103	0.00100	"	0.100		103	80-120			
Xylene (p/m)	0.200	0.00200	"	0.200		100	80-120			
Xylene (o)	0.105	0.00100	"	0.100		105	80-120			
Surrogate: 4-Bromofluorobenzene	0.122		"	0.120		102	75-125			

Permian Basin Environmental Lab, L.P.

Surrogate: 1,4-Difluorobenzene

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

99.6

75-125

0.120

0.119

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### BTEX by 8021B - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source	a · -	%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1I1702 - *** DEFAULT PREP ***										
Calibration Check (P1I1702-CCV3)				Prepared &	Analyzed:	09/17/21				
Benzene	0.106	0.00100	mg/kg wet	0.100		106	80-120			
Toluene	0.107	0.00100	"	0.100		107	80-120			
Ethylbenzene	0.105	0.00100	"	0.100		105	80-120			
Xylene (p/m)	0.210	0.00200	"	0.200		105	80-120			
Xylene (o)	0.113	0.00100	"	0.100		113	80-120			
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120		99.0	75-125			
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		102	75-125			
Matrix Spike (P1I1702-MS1)	Sou	ırce: 1I15014-	02	Prepared &	Analyzed:	09/17/21				
Benzene	0.0959	0.00106	mg/kg dry	0.106	ND	90.1	80-120			
Toluene	0.0674	0.00106	"	0.106	ND	63.3	80-120			QM-0
Ethylbenzene	0.0701	0.00106	"	0.106	ND	65.9	80-120			QM-0
Xylene (p/m)	0.135	0.00213	"	0.213	ND	63.4	80-120			QM-0
Xylene (o)	0.0911	0.00106	"	0.106	ND	85.7	80-120			
Surrogate: 4-Bromofluorobenzene	0.145		"	0.128		114	80-120			
Surrogate: 1,4-Difluorobenzene	0.137		"	0.128		107	80-120			
Matrix Spike Dup (P111702-MSD1)	Sou	ırce: 1I15014-	.02	Prepared &	: Analyzed:	09/17/21				
Benzene	0.0925	0.00106	mg/kg dry	0.106	ND	86.9	80-120	3.59	20	
Toluene	0.0662	0.00106	"	0.106	ND	62.2	80-120	1.80	20	QM-0
Ethylbenzene	0.0668	0.00106	"	0.106	ND	62.8	80-120	4.85	20	QM-0
Xylene (p/m)	0.130	0.00213	"	0.213	ND	61.1	80-120	3.70	20	QM-0
Xylene (o)	0.0865	0.00106	"	0.106	ND	81.3	80-120	5.24	20	
Surrogate: 1,4-Difluorobenzene	0.132		"	0.128		103	80-120			
Surrogate: 4-Bromofluorobenzene	0.136		"	0.128		107	80-120			
Batch P1I2804 - *** DEFAULT PREP ***										
Blank (P112804-BLK1)			_	Prepared &	: Analyzed:	09/28/21		_	_	
Benzene	ND	0.00100	mg/kg wet		-					
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.132		"	0.120		110	80-120			
Surrogate: 4-Bromofluorobenzene	0.125		"	0.120		104	80-120			

Permian Basin Environmental Lab, L.P.

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### BTEX by 8021B - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1I2804 - *** DEFAULT PREP ***										
LCS (P1I2804-BS1)				Prepared &	Analyzed:	09/28/21				
Benzene	0.0930	0.00100	mg/kg wet	0.100		93.0	70-130			
Toluene	0.0896	0.00100	"	0.100		89.6	70-130			
Ethylbenzene	0.0852	0.00100	"	0.100		85.2	70-130			
Xylene (p/m)	0.171	0.00200	"	0.200		85.5	70-130			
Xylene (o)	0.0864	0.00100	"	0.100		86.4	70-130			
Surrogate: 4-Bromofluorobenzene	0.113		"	0.120		94.4	80-120			
Surrogate: 1,4-Difluorobenzene	0.121		"	0.120		101	80-120			
LCS Dup (P1I2804-BSD1)				Prepared &	Analyzed:	09/28/21				
Benzene	0.0997	0.00100	mg/kg wet	0.100		99.7	70-130	6.96	20	
Toluene	0.0960	0.00100	"	0.100		96.0	70-130	6.99	20	
Ethylbenzene	0.0906	0.00100	"	0.100		90.6	70-130	6.11	20	
Xylene (p/m)	0.180	0.00200	"	0.200		90.1	70-130	5.17	20	
Xylene (o)	0.0923	0.00100	"	0.100		92.3	70-130	6.64	20	
Surrogate: 1,4-Difluorobenzene	0.121		"	0.120		101	80-120			
Surrogate: 4-Bromofluorobenzene	0.112		"	0.120		93.3	80-120			
Calibration Blank (P1I2804-CCB1)				Prepared &	: Analyzed:	09/28/21				
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.190		"							
Xylene (p/m)	0.420		"							
Xylene (o)	0.00		"							
Surrogate: 1,4-Difluorobenzene	0.130		"	0.120		109	80-120			
Surrogate: 4-Bromofluorobenzene	0.128		"	0.120		106	80-120			
Calibration Blank (P1I2804-CCB2)				Prepared &	Analyzed:	09/28/21				
Benzene	0.00		mg/kg wet							
Toluene	0.00		"							
Ethylbenzene	0.190		"							
Xylene (p/m)	0.420		"							
Xylene (o)	0.00		"							
Surrogate: 4-Bromofluorobenzene	0.128		"	0.120		106	80-120			
Surrogate: 1,4-Difluorobenzene	0.130		"	0.120		109	80-120			

Permian Basin Environmental Lab, L.P.

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### BTEX by 8021B - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1I2804 - *** DEFAULT PREP ***										

Calibration Blank (P1I2804-CCB3)				Prepared: 09/28/2	21 Analyzed: 09	/29/21
Benzene	0.00		mg/kg wet			
Toluene	0.00		"			
Ethylbenzene	0.00		"			
Xylene (p/m)	0.430		"			
Kylene (o)	0.00		"			
Surrogate: 1,4-Difluorobenzene	0.130		"	0.120	108	80-120
Surrogate: 4-Bromofluorobenzene	0.124		"	0.120	104	80-120
Calibration Check (P1I2804-CCV1)				Prepared & Anal	yzed: 09/28/21	
Benzene	0.112	0.00100	mg/kg wet	0.100	112	80-120
Toluene	0.107	0.00100	"	0.100	107	80-120
Ethylbenzene	0.109	0.00100	"	0.100	109	80-120
Xylene (p/m)	0.212	0.00200	"	0.200	106	80-120
(ylene (o)	0.109	0.00100	"	0.100	109	80-120
urrogate: 4-Bromofluorobenzene	0.118		"	0.120	98.1	75-125
urrogate: 1,4-Difluorobenzene	0.122		"	0.120	102	75-125
Calibration Check (P1I2804-CCV2)				Prepared & Anal	yzed: 09/28/21	
Benzene	0.112	0.00100	mg/kg wet	0.100	112	80-120
oluene	0.107	0.00100	"	0.100	107	80-120
thylbenzene	0.109	0.00100	"	0.100	109	80-120
ylene (p/m)	0.212	0.00200	"	0.200	106	80-120
(ylene (o)	0.109	0.00100	"	0.100	109	80-120
urrogate: 4-Bromofluorobenzene	0.118		"	0.120	98.1	75-125
urrogate: 1,4-Difluorobenzene	0.122		"	0.120	102	75-125
Calibration Check (P1I2804-CCV3)				Prepared: 09/28/2	21 Analyzed: 09	/29/21
Benzene	0.112	0.00100	mg/kg wet	0.100	112	80-120
Coluene	0.107	0.00100	"	0.100	107	80-120
thylbenzene	0.107	0.00100	"	0.100	107	80-120
Kylene (p/m)	0.209	0.00200	"	0.200	104	80-120
ylene (o)	0.109	0.00100	"	0.100	109	80-120
Surrogate: 1,4-Difluorobenzene	0.122		"	0.120	101	75-125
Surrogate: 4-Bromofluorobenzene	0.116		"	0.120	96.7	75-125

Permian Basin Environmental Lab, L.P.

13000 West County Road 100

Odessa TX, 79765

Surrogate: 4-Bromofluorobenzene

Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

### BTEX by 8021B - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

#### Batch P1I2804 - \*\*\* DEFAULT PREP \*\*\*

Matrix Spike (P1I2804-MS1)	Sour	ce: 1I24011-	-14	Prepared: 0	9/28/21 A	nalyzed: 09	9/29/21			
Benzene	0.101	0.00103	mg/kg dry	0.103	ND	98.4	80-120			
Toluene	0.0928	0.00103	"	0.103	ND	90.1	80-120			
Ethylbenzene	0.0787	0.00103	"	0.103	ND	76.3	80-120			QM-07
Xylene (p/m)	0.161	0.00206	"	0.206	ND	77.9	80-120			QM-07
Xylene (o)	0.0882	0.00103	"	0.103	ND	85.5	80-120			
Surrogate: 4-Bromofluorobenzene	0.118		"	0.124		95.7	80-120			
Surrogate: 1,4-Difluorobenzene	0.126		"	0.124		101	80-120			
Matrix Spike Dup (P1I2804-MSD1)	Sour	rce: 1I24011-	-14	Prepared: 0	9/28/21 A	nalyzed: 09	9/29/21			
Benzene	0.100	0.00103	mg/kg dry	0.103	ND	97.3	80-120	1.13	20	
Toluene	0.0937	0.00103	"	0.103	ND	90.9	80-120	0.961	20	
Ethylbenzene	0.0817	0.00103	"	0.103	ND	79.2	80-120	3.74	20	QM-07
Xylene (p/m)	0.159	0.00206	"	0.206	ND	77.4	80-120	0.709	20	QM-07
Xylene (o)	0.0893	0.00103	"	0.103	ND	86.6	80-120	1.28	20	
Surrogate: 1,4-Difluorobenzene	0.124		"	0.124		100	80-120			

0.124

93.9

80-120

0.116

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1I1606 - *** DEFAULT PREP ***										
Blank (P1I1606-BLK1)				Prepared &	Analyzed:	09/16/21				
Chloride	ND	1.00	mg/kg wet							
LCS (P1I1606-BS1)				Prepared &	Analyzed:	09/16/21				
Chloride	410	1.00	mg/kg wet	400		103	90-110			
LCS Dup (P1I1606-BSD1)				Prepared &	Analyzed:	09/16/21				
Chloride	408	1.00	mg/kg wet	400		102	90-110	0.430	10	
Calibration Blank (P1I1606-CCB1)				Prepared &	Analyzed:	09/16/21				
Chloride	-0.0290		mg/kg wet							
Calibration Check (P1I1606-CCV1)				Prepared &	Analyzed:	09/16/21				
Chloride	20.9		mg/kg	20.0		104	90-110			
Calibration Check (P1I1606-CCV2)				Prepared &	Analyzed:	09/16/21				
Chloride	20.9		mg/kg	20.0		104	90-110			
Matrix Spike (P1I1606-MS1)	Sou	rce: 1I15014-	-01	Prepared &	Analyzed:	09/16/21				
Chloride	545	1.08	mg/kg dry	538	10.0	99.6	80-120			
Matrix Spike Dup (P1I1606-MSD1)	Sou	rce: 1115014-	-01	Prepared &	Analyzed:	09/16/21				
Chloride	536	1.08	mg/kg dry	538	10.0	97.9	80-120	1.66	20	
Batch P1I1608 - *** DEFAULT PREP ***										
Blank (P1I1608-BLK1)				Prepared &	Analyzed:	09/16/21				
Chloride	ND	1.00	mg/kg wet		-					

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1I1608 - *** DEFAULT PREP ***										
LCS (P1I1608-BS1)				Prepared &	Analyzed:	09/16/21				
Chloride	406	1.00	mg/kg wet	400		101	90-110			
LCS Dup (P1I1608-BSD1)				Prepared &	z Analyzed:	09/16/21				
Chloride	415	1.00	mg/kg wet	400		104	90-110	2.15	10	
Calibration Blank (P1I1608-CCB1)				Prepared &	. Analyzed:	09/16/21				
Chloride	0.00		mg/kg wet							
Calibration Blank (P1I1608-CCB2)				Prepared &	Analyzed:	09/16/21				
Chloride	-0.128		mg/kg wet							
Calibration Check (P1I1608-CCV1)				Prepared &	Analyzed:	09/16/21				
Chloride	20.5		mg/kg	20.0		103	90-110			
Calibration Check (P1I1608-CCV2)				Prepared: (	09/16/21 A	nalyzed: 09	/17/21			
Chloride	20.1		mg/kg	20.0		100	90-110			
Calibration Check (P1I1608-CCV3)				Prepared: (	09/16/21 A	nalyzed: 09	/17/21			
Chloride	20.0		mg/kg	20.0		100	90-110			
Matrix Spike (P1I1608-MS1)	Sou	rce: 1115014	-11	Prepared &	z Analyzed:	09/16/21				
Chloride	669	1.06	mg/kg dry	532	118	104	80-120			
Matrix Spike (P1I1608-MS2)	Sou	rce: 1I15017-	-02	Prepared &	Analyzed:	09/16/21				
Chloride	20600	57.5	mg/kg dry	5750	12700	137	80-120			
Matrix Spike Dup (P1I1608-MSD1)	Sou	rce: 1I15014	-11	Prepared &	z Analyzed:	09/16/21				
Chloride	631	1.06	mg/kg dry	532	118	96.5	80-120	5.79	20	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1I1608 - *** DEFAULT PREP ***										
Matrix Spike Dup (P1I1608-MSD2)	Sou	rce: 1I15017-0	02	Prepared &	Analyzed:	09/16/21				
Chloride	16800	57.5	mg/kg dry	5750	12700	72.0	80-120	19.9	20	
Batch P1I1707 - *** DEFAULT PREP ***										
Blank (P1I1707-BLK1)				Prepared &	Analyzed:	09/17/21				
% Moisture	ND	0.1	%							
Blank (P111707-BLK2)				Prepared &	Analyzed:	: 09/17/21				
% Moisture	ND	0.1	%							
Duplicate (P1I1707-DUP1)	Sou	rce: 1I15014-1	10	Prepared &	Analyzed:	09/17/21				
% Moisture	5.0	0.1	%		5.0			0.00	20	
Duplicate (P1I1707-DUP2)	Sou	rce: 1I15015-0	07	Prepared &	Analyzed:	09/17/21				
% Moisture	11.0	0.1	%		10.0			9.52	20	
Duplicate (P1I1707-DUP3)	Sou	rce: 1I15015-2	24	Prepared &	Analyzed:	: 09/17/21				
% Moisture	13.0	0.1	%		13.0			0.00	20	
Duplicate (P1I1707-DUP4)	Sou	rce: 1I15016-0	03	Prepared &	Analyzed:	09/17/21				
% Moisture	13.0	0.1	%		13.0			0.00	20	
Duplicate (P1I1707-DUP5)	Sou	rce: 1I15017-0	02	Prepared &	Analyzed:	: 09/17/21				
% Moisture	13.0	0.1	%		13.0			0.00	20	
Duplicate (P1I1707-DUP6)	Sou	rce: 1I15017-	12	Prepared &	Analyzed:	: 09/17/21				
% Moisture	10.0	0.1	%		10.0			0.00	20	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P111707 - *** DEFAULT PREP **	*									
Duplicate (P111707-DUP7)	Sour	ce: 1I15018-1	2	Prepared &	Analyzed:	09/17/21				
% Moisture	6.0	0.1	%		6.0			0.00	20	
Duplicate (P1I1707-DUP8)	Sour	ce: 1I15018-2	2	Prepared &	Analyzed:	09/17/21				
% Moisture	4.0	0.1	%		4.0			0.00	20	
Duplicate (P1I1707-DUP9)	Sour	ce: 1I15023-0	3	Prepared &	Analyzed:	09/17/21				
% Moisture	1.0	0.1	%		1.0			0.00	20	
Duplicate (P1I1707-DUPA)	Sour	ce: 1I15023-1	3	Prepared &	Analyzed:	09/17/21				
% Moisture	3.0	0.1	%		3.0			0.00	20	
Duplicate (P1I1707-DUPB)	Sour	ce: 1I16005-0	5	Prepared &	Analyzed:	09/17/21				
% Moisture	4.0	0.1	%		6.0			40.0	20	R.
Duplicate (P1I1707-DUPC)	Sour	ce: 1I16007-0	6	Prepared &	Analyzed:	09/17/21				
% Moisture	16.0	0.1	%		16.0			0.00	20	
Duplicate (P1I1707-DUPD)	Sour	ce: 1I16007-2	1	Prepared &	. Analyzed:	09/17/21				
% Moisture	13.0	0.1	%		13.0			0.00	20	
Duplicate (P1I1707-DUPE)	Sour	ce: 1I16008-0	3	Prepared &	. Analyzed:	09/17/21				
% Moisture	6.0	0.1	%	<del>-</del>	3.0			66.7	20	R.

Project: Chorizo 12 CTB 13000 West County Road 100 Project Number: 14229

Odessa TX, 79765 Project Manager: Tim McMinn

### Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P111708 - *** DEFAULT PREP ***										
LCS (P111708-BS1)				Prepared &	λ nalvzed:	09/17/21				
C6-C12	838	25.0	mg/kg wet	1000	c mary zea.	83.8	75-125			
>C12-C28	812	25.0	"	1000		81.2	75-125			
Surrogate: 1-Chlorooctane	91.8		"	100		91.8	70-130			
Surrogate: o-Terphenyl	55.0		"	50.0		110	70-130			
LCS Dup (P1I1708-BSD1)				Prepared &	Analyzed:	09/17/21				
C6-C12	841	25.0	mg/kg wet	1000		84.1	75-125	0.320	20	
>C12-C28	824	25.0	"	1000		82.4	75-125	1.41	20	
Surrogate: 1-Chlorooctane	91.3		"	100		91.3	70-130			
Surrogate: o-Terphenyl	54.8		"	50.0		110	70-130			
Calibration Check (P1I1708-CCV1)				Prepared &	Analyzed:	09/17/21				
C6-C12	438	25.0	mg/kg wet	500		87.7	85-115			
>C12-C28	433	25.0	"	500		86.6	85-115			
Surrogate: 1-Chlorooctane	106		"	100		106	70-130			
Surrogate: o-Terphenyl	51.3		"	50.0		103	70-130			
Calibration Check (P1I1708-CCV2)				Prepared &	Analyzed:	09/17/21				
C6-C12	432	25.0	mg/kg wet	500		86.3	85-115			
>C12-C28	435	25.0	"	500		87.0	85-115			
Surrogate: 1-Chlorooctane	109		"	100		109	70-130			
Surrogate: o-Terphenyl	52.1		"	50.0		104	70-130			
Matrix Spike (P111708-MS1)	Sou	rce: 1I15014-	-11	Prepared: (	09/17/21 A	nalyzed: 09	/18/21			
C6-C12	853	26.6	mg/kg dry	1060	ND	80.2	75-125			
>C12-C28	859	26.6	"	1060	11.1	79.7	75-125			
Surrogate: 1-Chlorooctane	130		"	106		122	70-130			
Surrogate: o-Terphenyl	49.8		"	53.2		93.6	70-130			

Permian Basin Environmental Lab, L.P.

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

# Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

#### Batch P1I1708 - \*\*\* DEFAULT PREP \*\*\*

Matrix Spike Dup (P1I1708-MSD1)	Source	e: 1115014-11	Prepared: (	09/17/21 A	9/18/21			
C6-C12	846	26.6 mg/kg dry	1060	ND	79.5	75-125	0.816	20
>C12-C28	862	26.6 "	1060	11.1	79.9	75-125	0.328	20
Surrogate: 1-Chlorooctane	131	"	106		123	70-130		
Surrogate: o-Terphenyl	48.6	"	53.2		91.4	70-130		

13000 West County Road 100

Odessa TX, 79765

Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### **Notes and Definitions**

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

ROI Received on Ice

R3 The RPD exceeded the acceptance limit due to sample matrix effects.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

BULK Samples received in Bulk soil containers may be biased low in the nC6-C12 TPH Range

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By: \_\_\_\_\_\_ Date: \_\_\_\_\_\_ 9/29/2021

Brent Barron, Laboratory Director/Technical Director

Permian Basin Environmental Lab, L.P.

E Tech Environmental & Safety Solutions, Inc. [1] Project: Chorizo 12 CTB

13000 West County Road 100Project Number: 14229Odessa TX, 79765Project Manager: Tim McMinn

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

	eu by	OCD.	3/14/20	, , ,	0.37	1:4/	AM	Į.														Pa	ige 109 o
Remotished by	Ke incusope	Reinculse	Special Instructions: Bill to Centennial Re	10	0	8	7	e	S	c	ω	7		A security i		S	-	0	C	ć	<b>)</b>	ס	
0.00	g av.	C by	Special Instructions: Bill to Centennial Resource	permeter	perimeter	perimeter	per miles	aer) meter	per meder	perimeter	per rester	perimeter	Perimeter	7. Table 1.	1715014	Sampler Signature	Telephone No:	City/State/Zip:	Company Address:	Collipany realise	omnany Name	Project Manager:	
				# 10		# 8	し弁	#6	2#	と様々	2.#X		ナギィ	FIELD CODE		e	(432)230-3763	Odessa, T	s: 13000 W CR 100		Etech En	Tim McMinn	
U) Na W	∪a:e	2   NS   P								-						W. C.	3763	Odessa, Texas 79765	CR 100		Etech Environmental and Safety Solutions, Inc.	25	CHAIR OF COSTODY RECORD AND ANALTSIS REQUEST Permian Basi 10014 S. Cot Midland, Tex
: .1		ትገ									,			Beginning Depth							d Safety S		בר קיניטיי
												<u>.</u> .		Ending Depth							Solutions		Ş
\$ 184 E	76 e 97	Sere en by:		4			-					 	915/2	Date Sampled							<u> </u>		
The Bold no				Ohb	928	915	920	900	858	830	850	820	8:1500	Time Sampled		e-mail:	Fax No:						
					<u> </u>				_		<u> </u>		<u>                                   </u>	Field Filtered  Fotal #, of Containers	]	im)(							Permian Basin En 10014 S. County Midland, Texas 7
				<		-	-		_		-		<b>\</b>	lce		Matti <u>@etecheny.com</u> mootecheny.com							ian B
								ļ	ļ				ļ	HNO <sub>3</sub>	raser								asin l
	]					-	<del> </del>	-	<del> </del> -	-	<del> </del>	-		HCI H₂SO₄	- Ation	PHP (				- 1		1	Environa ty Road ; 79706
-1	i	į		arr dr. q. q 1 a. a									-  • · · J	NaOH	## OF				- [				vironmental Lab, LP Road 1213 79706
					<u> </u>	ļ	ļ		ļ				7	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Contai	2				-			ental 213
2				-		_	├-	-	-	_	<u> </u>		-	None Other ( Specify)	- srac	1.00							1.25 1.25
<u>7</u>	)a'a	Date		gent outside of	-		-	-	MORTHWAND O		-	-	Trace	DW=Drinking Water SL=Sludge			t	1	ı	l		ı	2
				<	<del>                                     </del>	-	<del> </del>	-		_	╁	-	S	GW = Groundwater S=Soil/Soild	XITIE!		Repo					701	
				-		-	<u> </u>	eseroes.	ļ	CONTRACTOR OF THE PARTY OF THE	-			NP=Non-Potable Specify Other	015B		ă		P <sub>O</sub>		50	roje	
<u>۔</u> ا د		ੜ		-		<del>                                     </del>		-	and the latest		-			TPH: 418.1 (8015M) 8	0 10DI 1		_					2.5	
<u>۔</u> کو		Time		~											1006		orma	7	50		oje O	200	
َ كُو	ļļļ	0.00	Sam Sam	-										TPH: TX 1005 Ext TX Cattons (Ca, Mg, Na, K)	1006		Report Format:	PO #	Project Loc:		Project #:	Project Name:	
<u>گ</u> ر		0.00	Laborato Sample C											TPH: TX 1005 Ext TX Cations (Ca, Mg, Na, K) Anions (Cl, SO4, Alkalinity)	1006	170.1		1	ect Loc:				
	ļļļ	0.00	Laboratory Contains Sample Contains / OCa Free of											TPH: TX 1005 Ext TX Cattons (Ca, Mg, Na, K)	1006 TOTAL:	ICLP:		1	1				원
		Custody seats on Container	Laboratory Comm Sample Containers / CCa Fise of Head											TPH: TX 1005 Ext TX Cations (Ca, Mg, Na, K) Anions (Cl, SO4, Alkalinity) SAR / ESP / CEC	1006 TOTAL:		ormat: 🔯 Standard	1	1				Phone:
		Custody seats on Container	Laboratory Comments Sample Containers Inta /OCs Fise of Headspai											TPH: TX 1005 Ext TX Cations (Ca, Mg, Na, K) Anions (Cl, SO4, Alkalinity) SAR / ESP / CEC Metals: As Ag Ba Cd Cr Pb H Volatties Semivoiatiles	1006 107AL: g Se	Analyze		1	90	Lea		Name: Chorizo	Phone: 432
		Custody seats on Container	Laboratory Comments: Sample Containers Intact? /CGs Fise of Headspace?										\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	TPH: TX 1005 Ext TX Cattons (Ca, Mg, Na, K) Anions (Cl, SO4, Alkalinity) SAR / ESP / CEC Metals: As Ag Ba Cd Cr Pb H Volatiles Semivolatiles BTEX 8021B 5030 or BTEX 8	1006 107AL: g Se		X Standard	1/0	90	Lea			Phone: 432-561
		0.00	Laboratory Comments: Sample Containers intact? Costance of Headspace?											TPH: TX 1005 Ext TX Cations (Ca, Mg, Na, K) Anions (Cl, SO4, Alkalinity) SAR / ESP / CEC Metals: As Ag Ba Cd Cr Pb H Volatities Semivolatiles BTEX 0218 5030 or BTEX 8 RCI	1006 107AL: g Se	Analyze	X Standard	1/0	90			Charizo 12	Phone: 432-561-418
		Custody seats on Container	Laboratory Comments: Sample Containers Intact? / CCa Fise of Headspece?										\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	TPH: TX 1005 Ext TX Cattons (Ca, Mg, Na, K) Anions (Cl, SO4, Alkalinity) SAR / ESP / CEC Metals: As Ag Ba Cd Cr Pb H Volatiles Semivolatiles BTEX 8021B 5030 or BTEX 8	1006 107AL: g Se	Analyze		1/0	49007	Lea County		Charizo 12	Phone: 432-561-4184
		Custody seats on Container	Laboratory Comments:  Sample Containers Intact?  Cos Fise of Headspace?										\ <u>X</u>	TPH: TX 1005 Ext TX Cations (Ca, Mg, Na, K) Anions (Cl, SO4, Alkalinity) SAR / ESP / CEC Metals: As Ag Ba Cd Cr Pb H Volatities Semivolatiles BTEX 8021B 5030 or BTEX 8 RCI N.O.R.M.	1006 107AL: g Se	Analyze	X Standard TRRP	11000	49007	Lea County			Phone: 432-561-4184
91521 HW 100 15th		Custody seats on Container											\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	TPH: TX 1005 Ext TX Cations (Ca, Mg, Na, K) Anions (Cl, SO4, Alkalinity) SAR / ESP / CEC Metals: As Ag Ba Cd Cr Pb H Volatities Semivolatiles BTEX 8021B 5030 or BTEX 8 RCI N.O.R.M.	TOTAL:	Analyze For:	X Standard	11000	49007	Lea		Charizo 12	Phone: 432-561-4184

Receive	ed by OCD: 3/14/20	022 6:39:47 AM						Page 110 of 1.
20	Special Instructions: Bill to Centennial Resource				Samp	Telep	Comp City/S	Proje: Comp
	tions: ial Resource			Perimeter	Sampler Signature: \(\lambda\)  #: \( \lambda			Project Manager: T.
, ,	ي م			1 # 1	CODE	(432)230-3763	13000 W CR 100 Odessa, Texas 79765	CHAI Tim McMinn Etech Environments
Sa W	Oate				Beginning Depth  Ending Depth		56	CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST Permian Basi 10014 S. Cou Midland, Tex Etech Environmental and Safety Solutions, Inc.
Juna	7 (C = 2 ) (			9/15/21	Date Sampled			Y RECORD ANI
Juna Blodne				935	Time Sampled P. Sai:	Fax No:		) ANAL YSIS R Pe 10
1				-   X 	Field Filtered  Fotal #. of Containers  Ice  HNO <sub>3</sub> HCI  H <sub>2</sub> SO <sub>4</sub> NaOH  Na-SO <sub>6</sub>			REQUEST Permian Basin Em 10014 S. County I Midland, Texas 7
ी वीडिया					None egg			REQUEST Permian Basin Environmental Lab, LP 10014 S. County Road 1213 Midland, Texas 79706
वि.भा १५७	Date lima			7 \s	DW=Drinking Water SL=Sludge  GW = Groundwater S=Scil/Solid  NP=Non-Potable Specify Other  TPH: 418.1 8015M 8015B	Report Format:	Proje	?ro.
	1 2 2 CO F				TPH: TX 1005 Ext TX 1006  Cations (Ca, Mg, Na, K)  Anions (Cl, SO4, Alkalinity)  SAR / ESP / CEC  Metals: As Ag Ba Cd Cr Pb Hg Se	mat: 🗵 Standard	Project Loc:	
10.0 10.0	aboratory Comments:  jample Containers Intact?  OCG Free of Headspace?  abols on container(s)  Instocy seals on container  Justicity seals on conteins  Justicity seals on conteins			X	Volatiles  Semivolatiles  BTEX 6021B) 5030 or BTEX 8260	ard   TRRP	48064	Phone: 432-561-4184  [ horizo   14229
CTA TA				X	N.O.R.M. Chlorides E 300  RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	RP   NPDES	the NM	9 /2 CZ
Release	ed to Imaging: 4/5/.	2022 8:25:58 A	M	X	Standard TAT	iii	2	Page 29 of 29

# PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



# Analytical Report

#### **Prepared for:**

Tim McMinn
E Tech Environmental & Safety Solutions, Inc. [1]
13000 West County Road 100
Odessa, TX 79765

Project: Chorizo 12 CTB Project Number: 14229 Location: New Mexico

Lab Order Number: 1J28010



**Current Certification** 

Report Date: 11/02/21

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Perimeter #10A	1J28010-01	Soil	10/21/21 11:00	10-28-2021 16:00

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

, c

#### Perimeter #10A 1J28010-01 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
									•

#### Permian Basin Environmental Lab, L.P.

#### **General Chemistry Parameters by EPA / Standard Methods**

Chloride	247	1.04	mg/kg dry	1	P1K0102	11/01/21 10:15	11/01/21 16:47	EPA 300.0
% Moisture	4.0	0.1	%	1	P1K0104	11/01/21 10:38	11/01/21 10:55	ASTM D2216

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P1K0102 - *** DEFAULT PREP ***										
Blank (P1K0102-BLK1)				Prepared &	Analyzed:	11/01/21				
Chloride	ND	1.00	mg/kg wet							
LCS (P1K0102-BS1)				Prepared &	Analyzed:	11/01/21				
Chloride	391	1.00	mg/kg wet	400		97.7	90-110			
LCS Dup (P1K0102-BSD1)				Prepared &	Analyzed:	11/01/21				
Chloride	390	1.00	mg/kg wet	400		97.6	90-110	0.141	10	
Calibration Blank (P1K0102-CCB1)				Prepared &	Analyzed:	11/01/21				
Chloride	-0.0720		mg/kg wet							
Calibration Blank (P1K0102-CCB2)				Prepared &	Analyzed:	11/01/21				
Chloride	-0.0800		mg/kg wet							
Calibration Check (P1K0102-CCV1)				Prepared &	Analyzed:	11/01/21				
Chloride	19.8		mg/kg	20.0		98.9	90-110			
Calibration Check (P1K0102-CCV2)				Prepared &	Analyzed:	11/01/21				
Chloride	20.3		mg/kg	20.0		102	90-110			
Matrix Spike (P1K0102-MS1)	Sou	rce: 1J28004	-02	Prepared &	Analyzed:	11/01/21				
Chloride	1140	5.56	mg/kg dry	556	599	97.8	80-120			
Matrix Spike (P1K0102-MS2)	Sou	rce: 1J28004	-12	Prepared &	Analyzed:	11/01/21				
Chloride	727	1.09	mg/kg dry	543	234	90.8	80-120			
Matrix Spike Dup (P1K0102-MSD1)	Sou	rce: 1J28004	-02	Prepared &	Analyzed:	11/01/21				
Chloride	1130	5.56	mg/kg dry	556	599	95.1	80-120	1.32	20	

13000 West County Road 100 Odessa TX, 79765 Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P1K0102 - *** DEFAULT PREP ***										
Matrix Spike Dup (P1K0102-MSD2)	Sour	ce: 1J28004	-12	Prepared &	& Analyzed:	11/01/21				
Chloride	721	1.09	mg/kg dry	543	234	89.6	80-120	0.867	20	
Batch P1K0104 - *** DEFAULT PREP *** Blank (P1K0104-BLK1)				Prepared &	k Analyzed:	11/01/21				
% Moisture	ND	0.1	%							
Duplicate (P1K0104-DUP1)	Sour	ce: 1J28009	-06	Prepared &	& Analyzed:	11/01/21				
% Moisture	8.0	0.1	%		8.0			0.00	20	
Duplicate (P1K0104-DUP2)	Sour	ce: 1J29004-	01	Prepared &	& Analyzed:	11/01/21				
% Moisture	5.0	0.1	%		5.0			0.00	20	

13000 West County Road 100

Odessa TX, 79765

Project: Chorizo 12 CTB

Project Number: 14229 Project Manager: Tim McMinn

#### **Notes and Definitions**

ROI Received on Ice

NPBEL CO Chain of Custody was not generated at PBELAB

BULK Samples received in Bulk soil containers may be biased low in the nC6-C12 TPH Range

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

	Drew	Devolor C		
Report Approved By:			Date:	11/2/2021

0 0

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

I	Page 1	17 of 12
Project Manager:	I 100 Raukin Hwy	
Tim McMinn  Etech Environmental & Safety Solutions, Inc.	Midland Texas 79701	AB Permian Basin Environmen

Environmental Lab, LP

Phone: 432-686-7235

回回 ANALYSIS REQUEST

entunia!	AIN OF COSTODY RECORD AIND AINALISIS
2.0	USIO
(	טץ אנ
	:כטאו
	DAN
	UAN
	AL YO
	Ū

Area:	Project	Project	Continue!
	Project #: 14229	Name: Ch	n.ce!
PO#:		Project Name: Chorizo 12 CTC	
48087	Project Loc: Lea Courty, NIN	C78	
	i, Rin		

		**	
TCLP:   [ ] [ ] [ ] [ ] [ ] [ ] [ ]	Analyze For:	Report Format: STANDARD:□ TRRP:□ NPDES:□	□Bill Etech

City/State/Zip:

Midland, Texas 79711

email:

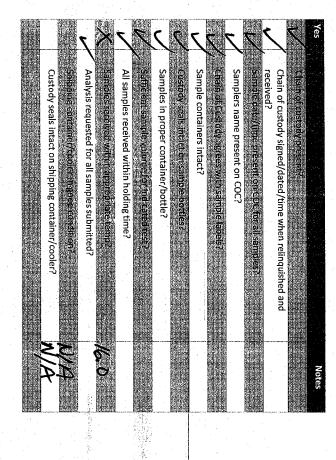
Company Address: P.O. Box 62228

	Relinquished by:	Relinquished by:	7.13	Selinguished by:	Special Instructions:														Persy	LAB # (lab use only)		ORDER#: 1028015	(lab use only)		
	Date Time	Date Time	- Wall llaw															- 1	Perimuter #10 A	FIELD CODE					
	20.0																			Start Depth					:
	Received by	Receiv		Viene Viene								manage on you or as as as								End Depth	P				
	ed by:	Received by:	and the second s	Received by:													·		10/21/21	Date Sampled	Preservation & # of Containers			•	wishing @ etachow. Com
7		,																	1100	Time Sampled	Containers				ternonu
																			7	No. of Containers	**				ě
						믜	믜										믜		X	lce					*
	6,975. 15,524		1.			믜	믜									믜	믜	믜		HNO <sub>3</sub>					
						무	믜	믜		믜	므		므	므	믜		믜	믜	믜	HCI					
						붜	<u>무</u>							븝	믬	믬	믬	믬	믬	H₂SO₄ NaOH					
		940				붜	퓜	붜		믬	] [		$\vdash$	믐			붜	뭐	무	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>					
•	3	+		1		븲	늶		븜	븲							붜	片	뷤	None					
	$\widetilde{\mathfrak{A}}$	ő	Ş	<u> </u>		H											귀							į	R eg
ļ		Date		Ď				-	-	-	_			ᆜ		<u> </u>	_			Other ( Specify)  DW=Drinking Water SL=Sludge	_				H T
	3474.15	-		4															S	GW = Groundwater S=Soil/Solid	Matrix				orma
	<u></u>	T		ⅎ								and the second								NP=Non-PotableSpecify Dther	×				<del>!</del> S]
	J	Time		ime		Ш											Ш		믜	TPH: 418.1 8015M <b>1005</b> 10	06				AND
	Te	တ္ဆ တ္ဆ	85	5 ≷	င္အမ				므											Cations (Ca, Mg, Na, K)		١.			Report Format: STANDARD:⊡
	Temperature Upon Receipt	Sar by Sampler/Client Rep. Sar by Courier? UPS	Custody seals on cooler(s) Sample Hand Delivered	VOCs Free of Headspace?  Custody seals on container(s	Laboratory Comments: Sample Containers Intact?															Anions (Cl, SO4, CO3, HCO3)		TOTAL :	TCLP:		Ö
$\overline{Z}$	atur	Sam	y se	Free V se	Cor Cor								旦							SAR / ESP / CEC		<u> </u>	P		≓
77	e Ç	ier?	als c	ag of T	y Cc Itain								旦							Metals: As Ag Ba Cd Cr Pb Hg S	Se		口		TRRP.
_ 	ion F	Qie	¥Ve Ω	ead on co	omn ers i															Volatiles					
_	чесе	동	red o	spac ontai	nent ntac															Semi volatiles				Analyze For:	
$\supset$	βt	∵ •ა	(S	ner(	さ:															BTEX 8021B/5030 or BTEX 826	i0			ē	NP.
_		7		8)																RCI			_	3	NPDES:□
$II_{n}D$												口								N.O.R.M.			_	,	
$\supset$		₽ 9. /	<del>_</del> _ 7	=	$\leftarrow$														R	Chlorides		<u> </u>	$\dashv$		
\		(ネパ⊀	C	ぐ	<u>ک</u>				므													<u> </u>			
7		Lone N				믜																		ı	
	١ď	″ Z	ZZ	<u> </u>																RUSH TAT(Pre-Schedule) 24, 4	8, 72	hrs		.	
6	Ľ	Star			100			_	I —	1 —	_		$\Box$			_	1 —	1 —	×	STANDARD TAT			1	, ,	1

toz Jars

1328010

# Sample Receipt Checklist



SAMPLE VARIANCE/NON-CONFORMANCE

temp 16.0 on lae

Date/Time: Name: Client Contacted NC Initiated by: Resolution: 5 Approved by:

PBEL\_SAMPLE\_CHECKLIST\_2021\_1

Page 8 of 8

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAPP2114445036
District RP	
Facility ID	
Application ID	

# **Release Notification**

### **Responsible Party**

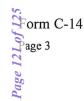
[ B									
	•	ennial Resource P	roduction, Inc		OGRID: 3	72165			
Contact Nan	ne: Jamon H	Iohensee			Contact Telephone: 432-241-4283				
Contact ema	iil: jamon.ho	hensee@cdevinc.	com		Incident # nAPP2114445036				
Contact mai Texas 79705		: 500 W. Illinois A	ve, Suite 500, M	lidland					
			Location	n of Re	lease So	ource			
Latitude 32.4	13520			L	ongitude -	103.42912			
	-		(NAD 83 in de						
Site Name: C	Chorizo 12 S	C 503H		5	Site Type:	Production Faci	ility		
Date Release	Discovered	: 5/21/21		F	API# (if applicable)				
Unit Letter	ter Section Township Range				Coun	]			
Е	36	21S 34E Lea							
							J		
Surface Owne	r: 🔀 State	Federal T	ribal  Private (	(Name:			)		
			Nature an	d Volu	me of F	Release			
	Mataria	1(a) Palagged (Salagt a	11 that	-b111					
Crude Oi	l	Volume Release		in calculation	is or specific	Volume Reco	volumes provided below) vered (bbls)5		
☐ Produced	Produced Water Volume Released (bbls)				Volume Recovered (bbls)		vered (bbls)		
Is the concentration of disso			tion of dissolved			Yes No			
		produced water					-		
Condensa	ite	Volume Release	ed (bbls)			Volume Recovered (bbls)			
☐ Natural G	as	Volume Release	d (Mcf)			Volume Recovered (Mcf)			
Other (de	scribe)	Volume/Weight	Released (provid	de units)		Volume/Weight Recovered (provide units)			

#### Cause of Release:

An open choke to the facility allowed the gun barrel to overfill and release oil into containment and mist the location. A vacuum truck was called to the site and a reported 5bbls were recovered from the containment. An estimated 532 cubic feet were impacted from the oil on the pad. The cubic feet along with porosity and saturation % were used to estimate that 2bbls of oil impacted the surface.

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the responsible party consider this a major release?					
19.15.29.7(A) NMAC?						
☐ Yes ⊠ No						
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?					
	Initial Response					
The responsible p	arty must undertake the following actions immediately unless they could create a safety hazard that would result in injury					
The source of the rele	ase has been stopped.					
The impacted area has	s been secured to protect human health and the environment.					
Released materials ha	ve been contained via the use of berms or dikes, absorbent pads, or other containment devices.					
All free liquids and re	coverable materials have been removed and managed appropriately.					
If all the actions described	above have not been undertaken, explain why:					
has begun, please attach a	AC the responsible party may commence remediation immediately after discovery of a release. If remediation a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred that area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.					
I hereby certify that the information regulations all operators are r	mation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and equired to report and/or file certain release notifications and perform corrective actions for releases which may endanger					
public health or the environm	ent. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have te and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In					
addition, OCD acceptance of and/or regulations.	a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws					
Printed Name: Jamon Hoh	ensee Title: Sr. Environmental Analyst					
Signature:	-11-b- Date: 6-2-21					
/						
cman, jamon, nonensee@c	devinc.com Telephone: 432-241-4283					
OCD Only						
Received by:	Date:					



Incident ID	nAPP2114445036
District RP	
Facility ID	
Application ID	

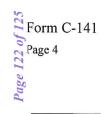
## **Site Assessment/Characterization**

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?				
Did this release impact groundwater or surface water?	☐ Yes ⊠ No			
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No			
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No			
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No			
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No			
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No			
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No			
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No			
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No			
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No			
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No			
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site? ☐ Yes ☒ No				
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.				
Characterization Report Checklist: Each of the following items must be included in the report.				
	I I			

Ch	aracterization Report Checklist: Each of the following items must be included in the report.
	Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
	Field data  Data table of soil contaminant concentration data
	Depth to water determination
	Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
	Boring or excavation logs
	Photographs including date and GIS information Topographic/Aerial maps
	Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation an. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 9.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.



Incident ID	nAPP2114445036
District RP	
Facility ID	
Application ID	

Released to Imaging: 4/5/2022 8:25:58 AM

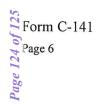
regulations all operators are required to report and/or file certain release notific public health or the environment. The acceptance of a C-141 report by the OC failed to adequately investigate and remediate contamination that pose a threat addition, OCD acceptance of a C-141 report does not relieve the operator of resand/or regulations.	ations and perform corrective actions for releases which may endanger D does not relieve the operator of liability should their operations have to groundwater, surface water, human health or the environment. In
Printed Name: Nikki Mishler Title: Sr. E	Environmental Representative
Signature: MULL MUSHUL I	Date: 3/8/2002
email: Nikki.Mishler@cdevinc.com Te	elephone:432-315-0134
OCD O I	
OCD Only	
Received by:	Date:

Form	C-141
Page 5	

Incident ID	nAPP2114445036	200
District RP		276
Facility ID		- 2
Application ID		

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan.					
<ul> <li>☑ Detailed description of proposed remediation technique</li> <li>☑ Scaled sitemap with GPS coordinates showing delineation points</li> <li>☑ Estimated volume of material to be remediated</li> <li>☑ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>☑ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> </ul>					
Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.					
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.					
Extents of contamination must be fully delineated.					
Contamination does not cause an imminent risk to human health, the environment, or groundwater.					
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.  Printed Name: Nikki Mishler Title: Sr. Environmental Representative  Signature: Date: 3/8/2022  Email: Nikki.Mishler@cdevinc.com Telephone: 432-315-0134					
OCD Only					
Received by: Date:					
Approved					
Signature: Date:					



Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

Incident ID	nAPP2114445036
District RP	
Facility ID	
Application ID	

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office

must be notified 2 days prior to liner inspection)		
☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)		
Description of remediation activities		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.  Printed Name: Nikki Mishler Title: Sr. Environmental Representative  Date: 3   3   3   3   3   3   3   3   3   3		
OCD Only		
Received by: Date:		
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and emediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.  Closure Approved by:  Date:  Title:		
Closure Approved by: Date:		
Printed Name: Title:		

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

CONDITIONS

Action 89865

#### **CONDITIONS**

Operator:	OGRID:
CENTENNIAL RESOURCE PRODUCTION, LLC	372165
1001 17th Street, Suite 1800	Action Number:
Denver, CO 80202	89865
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	Condition	Condition Date
chensley	Closure approved.	4/5/2022