State of New Mexico
Oil Conservation Division

Incident ID	nAB1922539866
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- ☑ Detailed description of proposed remediation technique
- ☑ Scaled sitemap with GPS coordinates showing delineation points
- ☑ Estimated volume of material to be remediated
- ☑ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☑ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

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: Ike Tavarez Title: Senior HSE Supervisor

Signature: _____ Date: 3/2/2021

email: itavarez@concho.com Telephone: (432)685-2573

OCD Only

Received by: Cristina Eads Date: 03/02/2021

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☑ Deferral Approved

Signature: _____ Date: 06/30/2021

Site Characterization Report & Deferral Request (Revised)

COG Operating, LLC
Wild Ride Federal #001H
Eddy County, New Mexico
Unit Letter E, Section 29, Township 26 South, Range 25 East
Latitude 32.01648 North, Longitude 104.42426 West
NMOCD Reference No. nAB1922539866

Prepared By:

Etech Environmental & Safety Solutions, Inc.
3100 Plains Highway
Lovington, New Mexico 88260

Ben J. Arguijo

Joel W. Lowry

TABLE OF CONTENTS

1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of COG Operating, LLC, has prepared this *Site Characterization Report & Deferral Request (Revised)* for the release site known as the Wild Ride Federal #001H (henceforth, "Site"). Details of the release are summarized below:

Location of Release Source

Latitude: 32.01648 Longitude: -104.42426

Provided GPS are in WGS84 format.

Site Name:	Wild Ride Federal #001H	Site Type:	Tank Battery
Date Release Discovered:	7/22/2019	API # (if applicable):	30-015-36678

Unit Letter	Section	Township	Range	County
E	29	26S	25E	Eddy

Surface Owner: [ ] State [X] Federal [ ] Tribal [ ] Private (Name _____)

Nature and Volume of Release

[ ] Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
[X] Produced Water	Volume Released (bbls) 33	Volume Recovered (bbls) 31
	Is the concentration of total dissolved solids (TDS) in the produced water > 10,000 mg/L?	[X] Yes [ ] No [ ] N/A
[ ] Condensate	Volume Released (bbls)	Volume Recovered (bbls)
[ ] Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
[ ] Other (describe)	Volume/Weight Released	Volume/Weight Recovered

Cause of Release:
The release was attributed to lightning striking the water tank. The release was confined within the lined containment.

Initial Response

- [X] The source of the release has been stopped.
- [X] The impacted area has been secured to protect human health and the environment.
- [X] Release materials have been contained via the use of berms or dikes, absorbent pad, or other containment devices
- [X] All free liquids and recoverable materials have been removed and managed appropriately.

Previously submitted portions of the NMOCD Form C-141 are available on the NMOCD Imaging System.

2.0 SITE CHARACTERIZATION

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) was conducted in an effort to determine the horizontal distance to known water sources within a half-mile radius of the Site.

Probable groundwater depth was determined using data generated by numeric models based on available water well data, published information, geology, and topography. The change in elevation between the Site and the nearest USGS well west of the Site (-187 feet) and the natural drainage north of the Site (-45.9 feet) where groundwater is not outcropping was considered to assist in the determination. Additionally, the Site is located within the Castille Formation. Drilling Logs from water wells in the vicinity suggest that they were completed within alluvial and bolson deposits. Depth to groundwater information is provided in Appendix A.

What is the shallowest depth to groundwater beneath the area affected by the release?	> 45'	
Did the 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 any 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 the 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 not on an exploration, development, production or storage site?	☒ Yes	☐ No

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted in Figures 1, 2, 4, and 5.

3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

Based on the volume and nature of the release, depth to groundwater, and NMOCD Siting Criteria, the NMOCD Closure Criteria and NMOCD Reclamation Standards for the Site are as follows:

Probable Depth to Groundwater	Constituent	Method	Closure Criteria	Reclamation Standard*
> 45'	Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg	600 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	100 mg/kg	100 mg/kg
	DRO + GRO	EPA SW-846 Method 8015M	-	-
	BTEX	EPA SW-846 Methods 8021b or 8260b	50 mg/kg	50 mg/kg
	Benzene	EPA SW-846 Methods 8021b or 8260b	10 mg/kg	10 mg/kg

* The NMOCD Reclamation Standard applies only to the top 4' of soil in non-production areas.

4.0 SITE INVESTIGATION

During initial response activities, the affected tank and impacted gravel was removed from within the lined tank battery containment area. Following removal of the affected gravel, a liner inspection was conducted. During the liner inspection it was determined that the liner was intact, with the exception of three (3) areas on the firewall inferred to have been melted by the subject fire above the high water mark.

On August 10, 2020, Etech revisited the Site. During the site visit, access holes were cut into the liner to allow for the advancement of hand-augered soil bores on the west and east sides of the lined tank battery containment. During the advancement of the hand-augered soil bores, four (4) soil samples (8.10 SP1 @ Surface, 8.10 SP1 @ 1', 8.10 SP2 @ Surface, and 8.10 SP2 @ 1') were collected. In addition, a hand-augered soil bore (8.10 SP3) was advanced within the lined containment in an area that was inferred to have been melted by the subject fire. During the advancement of the hand-augered soil bore, two (2) soil samples (8.10 SP3 @ Surface, and 8.10 SP3 @ 1') were collected. The collected soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH, and chloride concentrations. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples, with the exceptions of soil samples 8.10 SP1 @ Surface and 8.10 SP3 @ Surface, which exhibited chloride concentrations of 1,170 mg/kg and 1,450 mg/kg, respectively. Laboratory analytical results indicated soil was not impacted above the NMOCD Closure Criteria beyond one (1) foot below ground surface (bgs) in the areas characterized by sample points 8.10 SP1 and 8.10 SP2.

On September 16, 2020, based on laboratory analytical results and field observations, COG submitted a *Site Characterization Report & Deferral Request* to the NMOCD and BLM requesting approval to defer remediation of impacted soil affected above the NMOCD Closure Criteria beneath the lined tank battery facility. The request was subsequently denied by the NMOCD, with the mandate to perform a more thorough site investigation and collect additional soil samples from multiple locations at 1-foot intervals to a minimum depth of four (4) feet bgs.

On January 27, 2021, Etech revisited the Site. In accordance with NMOCD directives, three (3) hand-augered soil bores (SP1, SP2, and SP3) were advanced in the areas characterized by sample points 8.10 SP1, 8.10 SP2, and 8.10 SP3 to total depths of four (4) feet bgs each. During the advancement of the hand-augered soil bores, nine (9) soil samples (SP1 @ 2' through SP1 @ 4', SP2 @ 2' through SP2 @ 4', and SP3 @ 2' through SP3 @ 4') were collected and field-screened utilizing olfactory/ visual senses and a chloride test kit. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride concentrations. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples, with the exception of soil sample SP3 @ 3', which exhibited a chloride concentration of 953 mg/kg.

Review of laboratory analytical results indicated the vertical extent of impacted soil was adequately delineated and confirmed that soil impacts did not extend beyond one (1) foot bgs in the areas characterized by sample points 8.10 SP1 and 8.10 SP2. Soil impacts did not extend beyond three (3) feet bgs in the area characterized by sample point 8.10 SP3.

A "Site & Sample Location Map" is provided as Figure 3. A soil chemistry table is provided as Table 1. Field data and soil profile logs are provided in Appendix B. Laboratory analytical reports are provided in Appendix C. General photographs of the release site are provided in Appendix D.

5.0 DEFERRAL REQUEST

The chloride contamination in the areas characterized by sample points 8.10 SP-1 through 8.10 SP3 has been vertically delineated and does not extend beyond one (1) foot bgs in sample points 8.10 SP1 and 8.10 SP2 or beyond three (3) feet bgs in sample point 8.10 SP3. Etech utilized the Environmental Protection Agency's (EPA) Multimedia Exposure Assessment Model (MULTIMED) to determine if the contamination remaining in-situ poses a threat to groundwater quality. The most appropriate and conservative parameters possible for the Site and karst/limestone were used for the assessment model in regard to depth to groundwater (40 feet), contaminant concentration (1,450 mg/kg, the maximum observed), porosity (0.13), saturated hydraulic conductivity (1 m/day), etc. The model indicates that the peak concentration of chloride in the underlying groundwater contributed by the in-situ contamination under the lined containment area would be approximately 70.77 mg/L in 220 years, versus 481.9 mg/L in 65.6 years if the containment area was not lined (see Appendix E).

Since the estimated increase in chloride concentration is below the New Mexico Water Quality Control Commission (NMWQCC) standard of 250.0 mg/L specified in Section 20.6.2.3103 B.(1) of the New Mexico Administrative Code (NMAC), leaving the contamination in-situ "does not cause an imminent risk to human health, the environment, or ground water", pursuant to NMAC Section 19.15.29.12.C(3).

Based on the information presented above, Etech recommends COG Operating, LLC, provide copies of this *Site Characterization Report & Deferral Request (Revised)* to the appropriate agencies and cease remediation activities at the Site. Remediation of impacted soil affected above the NMOCD Closure Criteria remaining in-situ beneath the lined tank battery facility will be completed upon abandoning and decommissioning the facility.

6.0 RESTORATION, RECLAMATION & RE-VEGETATION PLAN

The release was limited to an active tank battery facility on a production pad. Final reclamation and re-vegetation will be conducted in accordance with NMAC Section 19.15.29.13 upon decommissioning the facility.

7.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this *Site Characterization Report & Deferral Request (Revised)* to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents reference in the report and on oral statements made by certain individuals. Basis has not conducted an independent examination of the facts contained in referenced materials and statements. Etech has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Etech has prepared the report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech 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 COG Operating, LLC. Use of the information contained in this report is prohibited within the consent of Etech and/or COG Operating, LLC.

8.0 DISTRIBUTION

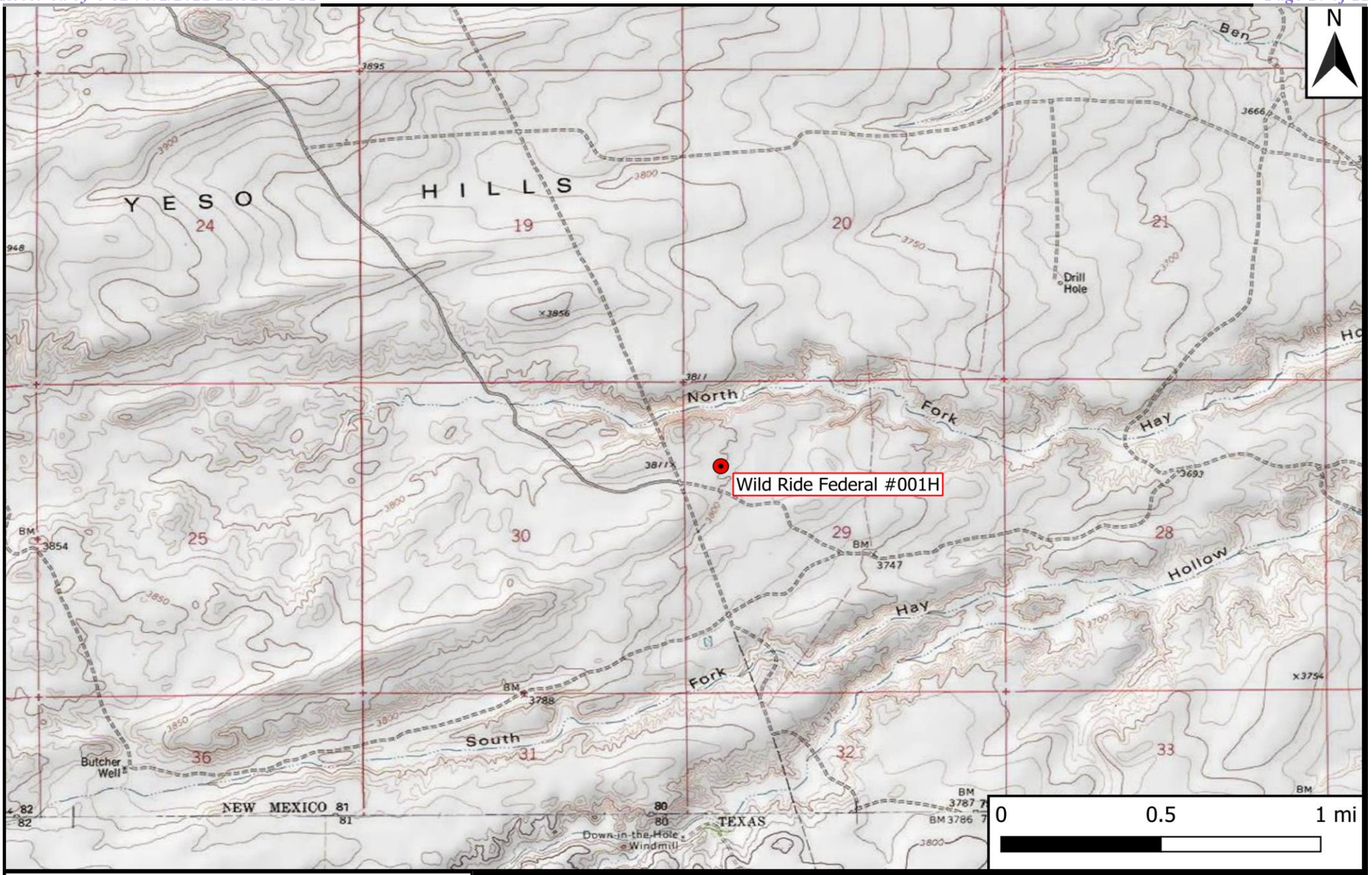
COG Operating, LLC
600 West Illinois Avenue
Midland, TX 79701

New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 2
811 S. First Street
Artesia, NM 88210

United States Department of the Interior
Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220

(Electronic Submission)

Figure 1
Topographic Map



Legend

- Site Location

Figure 1

Topographic Map

COG Operating, LLC

Wild Ride Federal #001H

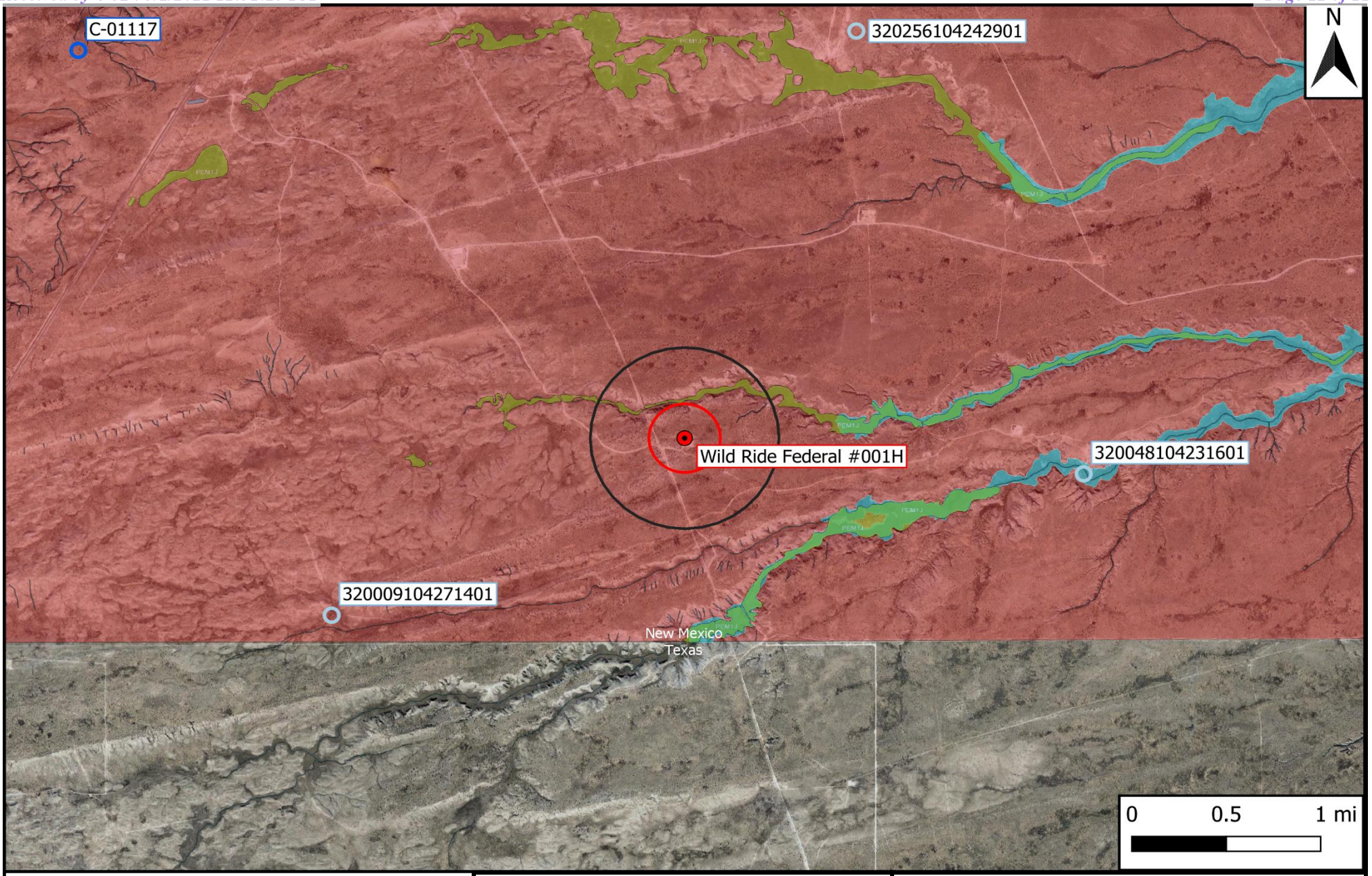
GPS: 32.01648, -104.42426

Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 2/2/21

Figure 2
Aerial Proximity Map



Legend

- Site Location
- Well - NMOSE
- Well - USGS
- Medium/High Karst
- Potash Mine Workings
- 1,000-Ft Radius
- 0.5-Mi Radius
- 1% Annual Flood Chance
- Emergent/Forested Wetlands
- Lake/Freshwater Pond
- Riverine

Figure 2
Aerial Proximity Map
COG Operating, LLC
Wild Ride Federal #001H
GPS: 32.01648, -104.42426
Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 2/2/21

Figure 3
Site & Sample Location Map

Legend:

- Sample Point
- Auger Hole

Figure 3

Site & Sample Location Map

COG Operating, LLC

Wild Ride Federal #001H

GPS: 32.01648, -104.42426

Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 2/9/21

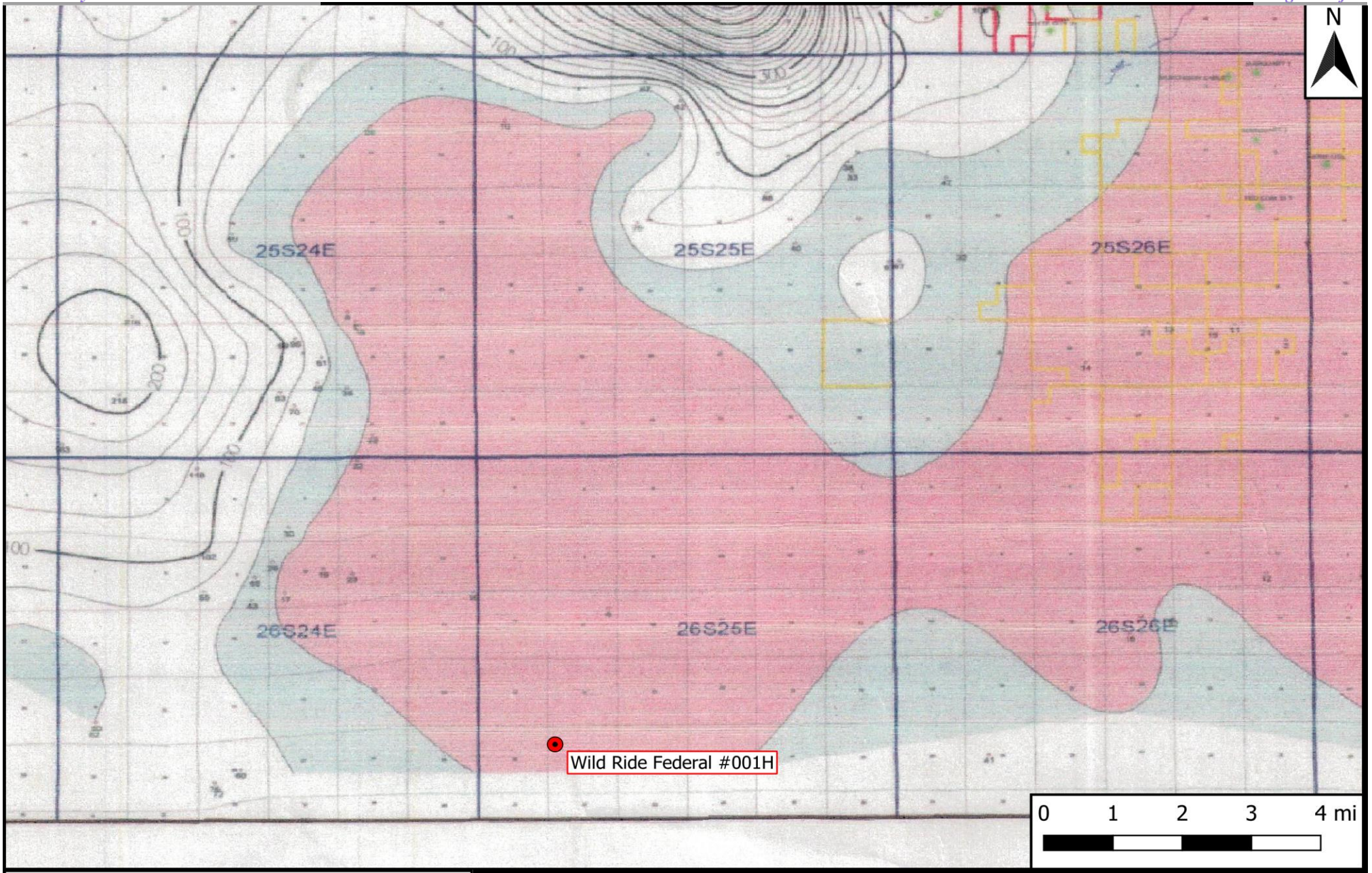
Table 1
Concentrations of BTEX, TPH & Chloride in Soil

TABLE 1
CONCENTRATIONS OF BTEX, TPH & CHLORIDE IN SOIL
COG Operating, LLC
Wild Ride Federal #001H
NMOCD Ref. #: nAB1922539866

NMOCD Closure Criteria				**10**	**50**	**-**	**-**	**-**	**-**	**100**	**600**
NMOCD Reclamation Standard				**10**	**50**	**-**	**-**	**-**	**-**	**100**	**600**
				SW 846 8021B		**SW 846 8015M Ext.**					**4500 Cl**
Sample ID	**Date**	**Depth**	**Soil Status**	**Benzene (mg/kg)**	**BTEX (mg/kg)**	**GRO C_6-C_{10} (mg/kg)**	**DRO C_{10}-C_{28} (mg/kg)**	**GRO + DRO C_6-C_{28} (mg/kg)**	**ORO C_{28}-C_{36} (mg/kg)**	**TPH C_6-C_{36} (mg/kg)**	**Chloride (mg/kg)**
8.10 SP1 @ Surface	8/10/2020	0'	In-Situ	<0.00202	0.00835	<49.8	<49.8	<49.8	<49.8	<49.8	**1,170**
8.10 SP1 @ 1'	8/10/2020	1'	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	581
8.10 SP2 @ Surface	8/10/2020	0'	In-Situ	<0.00198	0.00635	<50.0	<50.0	<50.0	<50.0	<50.0	13.1
8.10 SP2 @ 1'	8/10/2020	1'	In-Situ	0.00255	0.01040	<49.9	<49.9	<49.9	<49.9	<49.9	58.3
8.10 SP3 @ Surface	8/10/2020	0'	In-Situ	<0.00199	0.00529	<49.9	<49.9	<49.9	<49.9	<49.9	**1,450**
8.10 SP3 @ 1'	8/10/2020	1'	In-Situ	<0.00199	0.00479	<50.0	<50.0	<50.0	<50.0	<50.0	14.0
SP1 @ 2'	1/27/2021	2'	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	16.6
SP1 @ 3'	1/27/2021	3'	In-Situ	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	47.2
SP1 @ 4'	1/27/2021	4'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	53.5
SP2 @ 2'	1/27/2021	2'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	21.4
SP2 @ 3'	1/27/2021	3'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	53.6
SP2 @ 4'	1/27/2021	4'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	53.6
SP3 @ 2'	1/27/2021	2'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	523
SP3 @ 3'	1/27/2021	3'	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	**953**
SP3 @ 4'	1/27/2021	4'	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	56.9

NOTES:
- = Sample not analyzed for that constituent.
Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

Appendix A
Depth to Groundwater Information



Legend

- Site Location

Figure 4

Inferred Depth to Groundwater Trend Map

COG Operating, LLC

Wild Ride Federal #001H

GPS: 32.01648, -104.42426

Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 2/2/21

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
HU 00339 POD1		HU	DA	4	4	4	21	26S	05E	553806	3543254	1019	520	376	144

Average Depth to Water: **376 feet**

Minimum Depth: **376 feet**

Maximum Depth: **376 feet**

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 554372.39 **Northing (Y):** 3542407.21 **Radius:** 1610

8/19/20 1:16 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	HU 00339 POD1	4	4	4	21	26S	05E	553806	3543254

Driller License: **Driller Company:**

Driller Name: UNKNOWN

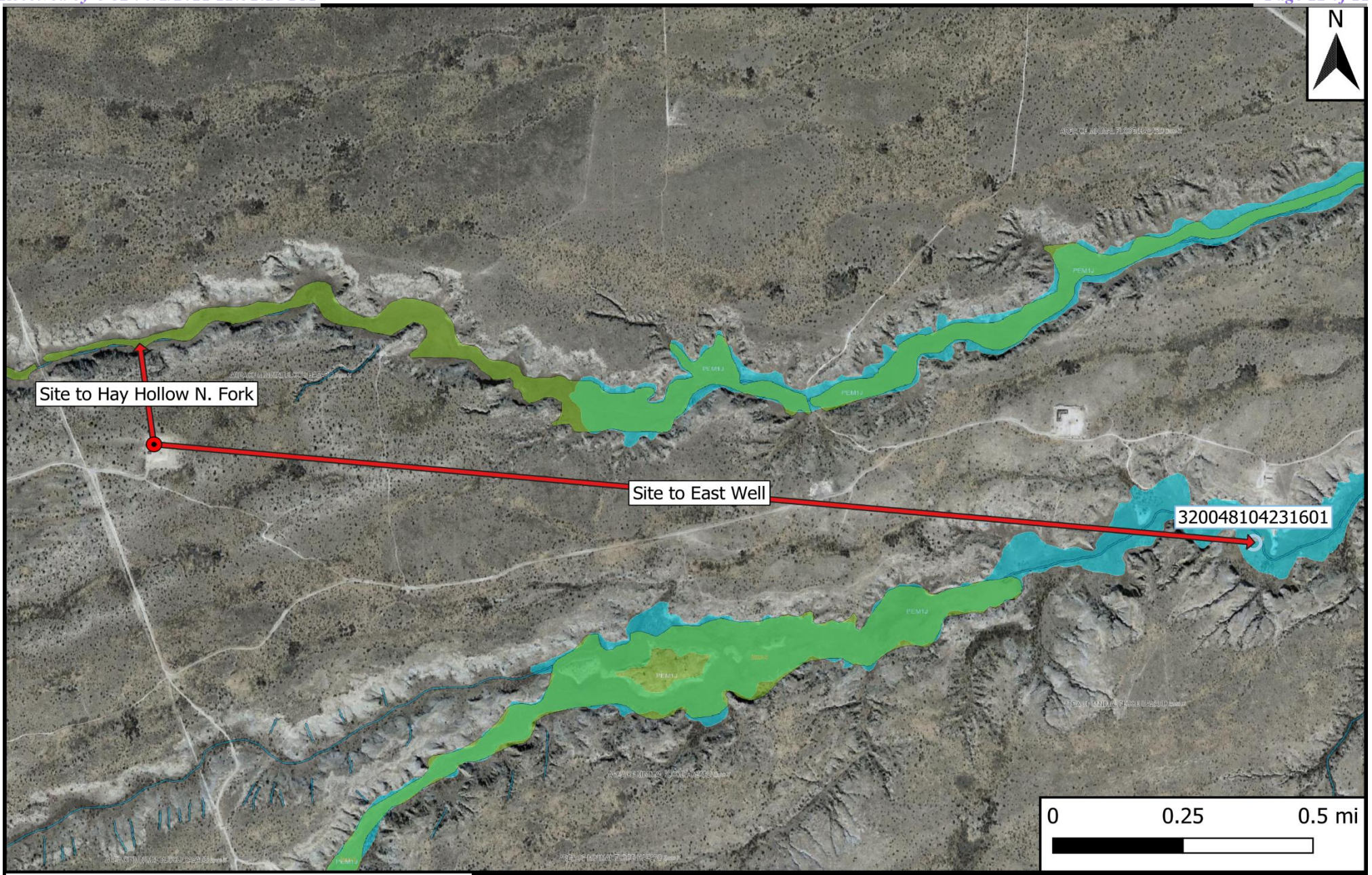
Drill Start Date:		**Drill Finish Date:**	12/31/1931	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	6.50	**Depth Well:**	520 feet	**Depth Water:**	376 feet

Legend
- Site Location
- Well - USGS
- 1,000-Ft Radius
- 0.5-Mi Radius

Figure 5
USGS Well Proximity Map
COG Operating, LLC
Wild Ride Federal #001H
GPS: 32.01648, -104.42426
Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 2/9/21



Legend

- Site Location
- Elevation Line
- Well - NMOSE
- Well - USGS
- 1% Annual Flood Chance
- Emergent/Forested Wetlands
- Lake/Freshwater Pond
- Riverine

Figure 6

Aerial Map - Elevation Profile

COG Operating, LLC

Wild Ride Federal #001H

GPS: 32.01648, -104.42426

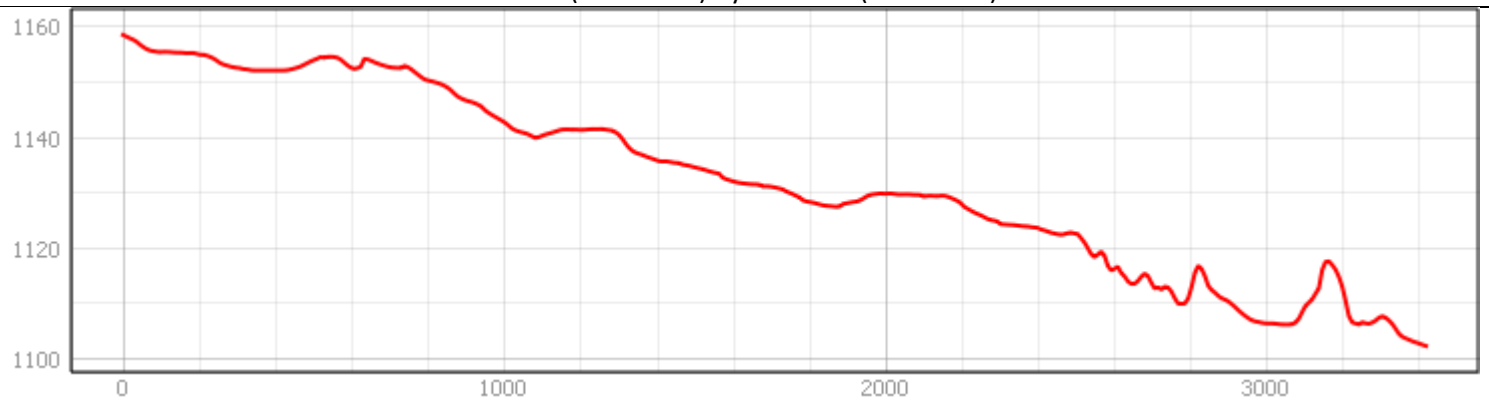
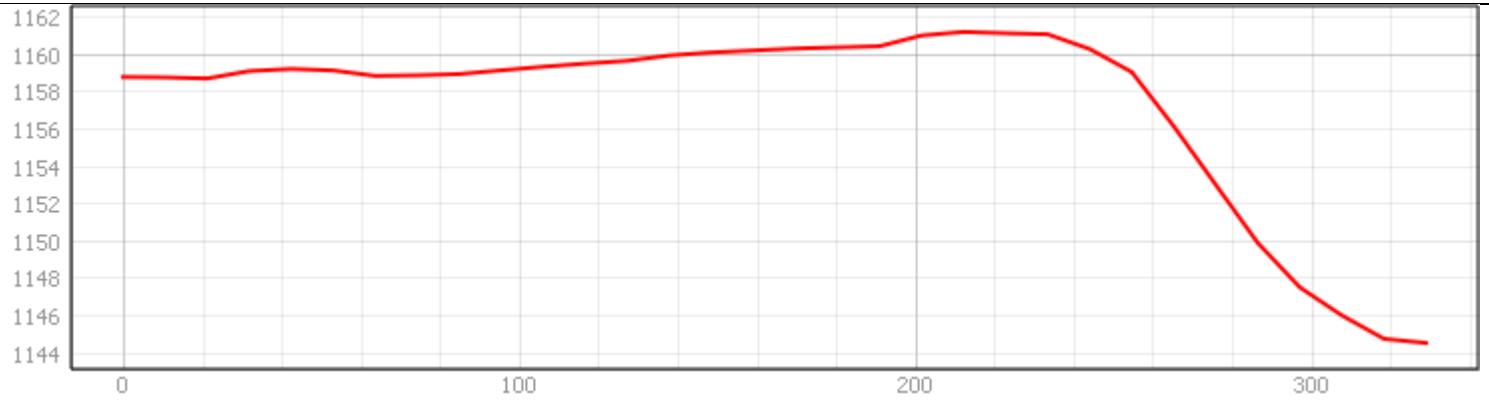
Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: bja Checked: jwl Date: 2/2/21

Wild Ride Federal #001H – Elevation Profile Graphs

Data Source: USGS National Map

Start	Elevation (Y - meters) by Distance (X - meters)	End	Delta
Site Location (1159 m)		East Well (1102 m)	-57 m (-187 ft)
Site Location (1159 m)		North Arroyo (1145 m)	-14 m (-45.9 ft)

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Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 320048104231601

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

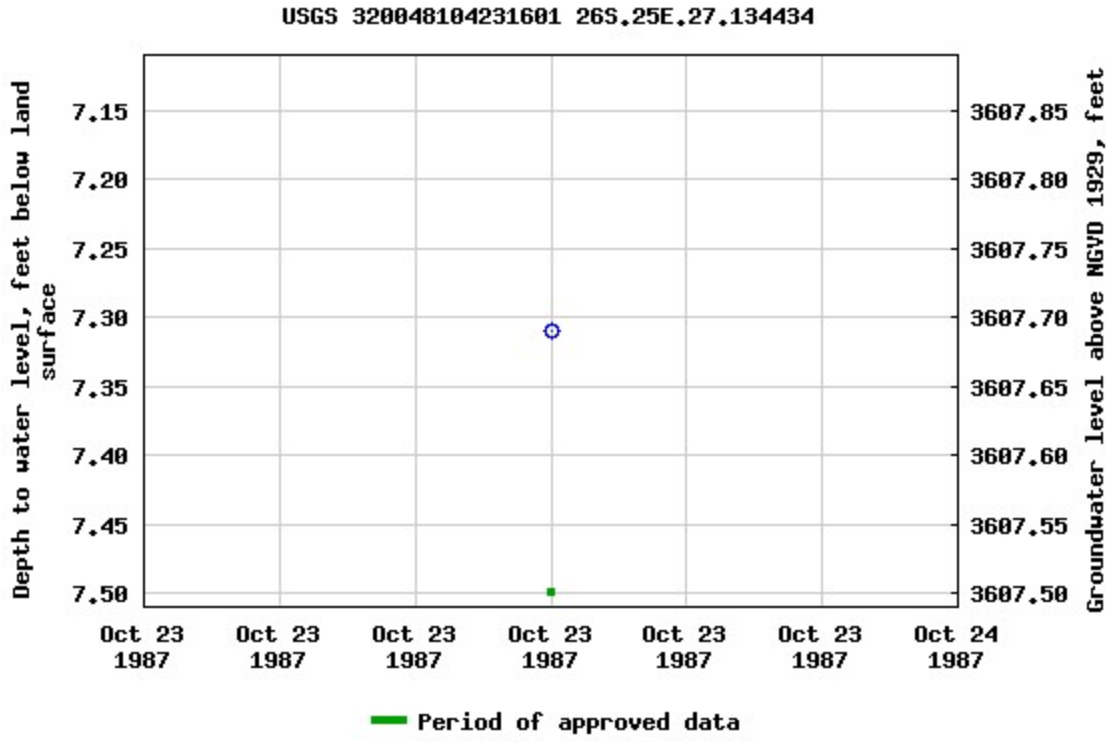
USGS 320048104231601 26S.25E.27.134434

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°00'48", Longitude 104°23'16" NAD27
Land-surface elevation 3,615.00 feet above NGVD29
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
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URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
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1.26 1.14 nadww02

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Search Results -- 1 sites found

site_no list =

- 320009104271401

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

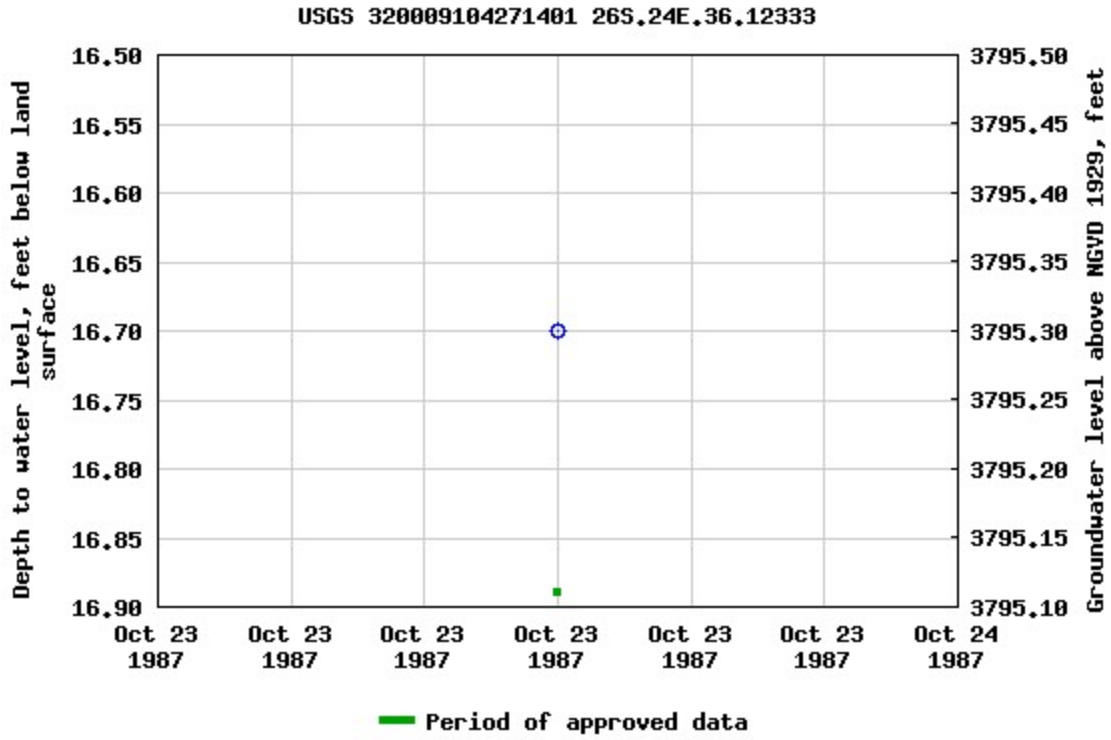
USGS 320009104271401 26S.24E.36.12333

Available data for this site Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°00'09", Longitude 104°27'14" NAD27
Land-surface elevation 3,812 feet above NGVD29
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

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U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2019-09-17 10:18:57 EDT
1.03 0.96 nadww02

Appendix B
Field Data & Soil Profile Logs

eTECH Environmental & Safety Solutions, Inc.

Sample Log

Date: 1/27/21

Project: Wild Ride Federal #001H

Project Number: 11245 Latitude: 32.01648 Longitude: -104.42426

Sample ID	PID/Odor	Chloride Conc.	GPS
SP3 @ 2'	None	1,016	
SP3 @ 3'	-	628	
SP3 @ 4'	-	120	
SP1 @ 2'	-	184	
SP1 @ 3'	-	<120	
SP1 @ 4'	-	<120	
SP2 @ 2'	-	<120	
SP2 @ 3'	-	<120	
SP2 @ 4'	-	<120	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples= SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

eTECH Environmental & Safety Solutions, Inc.

Soil Profile

Date: 8/10/20

Project: Wild Ride Federal #001H

Project Number: 0 Latitude: 32.01648 Longitude: -104.42426

Depth (ft. bgs)	Description
1	Imported Fill / Caliche
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
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Appendix C
Laboratory Analytical Reports

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Certificate of Analysis Summary 669782

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Wild Ride Federal #001H

Project Id: 11245
Contact: PM
Project Location: Eddy County, NM

Date Received in Lab: Wed 08.12.2020 11:20
Report Date: 08.17.2020 13:21
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	669782-001		669782-002		669782-003		669782-004					
	Field Id:	8.10 SP1 @ Surface		8.10 SP1 @ 1'		8.10 SP2 @ Surface		8.10 SP2 @ 1'					
	Depth:			1- ft				1- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	08.10.2020 00:00		08.10.2020 00:00		08.10.2020 00:00		08.10.2020 00:00					
BTEX by EPA 8021B	***Extracted:***	08.14.2020 08:00		08.14.2020 08:00		08.14.2020 08:00		08.14.2020 08:00					
	Analyzed:	08.14.2020 12:30		08.14.2020 12:50		08.14.2020 13:11		08.14.2020 13:31					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00202	0.00202	<0.00201	0.00201	<0.00198	0.00198	0.00255	0.00199				
Toluene		0.00835	0.00202	<0.00201	0.00201	0.00635	0.00198	0.00784	0.00199				
Ethylbenzene		<0.00202	0.00202	<0.00201	0.00201	<0.00198	0.00198	<0.00199	0.00199				
m,p-Xylenes		<0.00404	0.00404	<0.00402	0.00402	<0.00396	0.00396	<0.00398	0.00398				
o-Xylene		<0.00202	0.00202	<0.00201	0.00201	<0.00198	0.00198	<0.00199	0.00199				
Total Xylenes		<0.00202	0.00202	<0.00201	0.00201	<0.00198	0.00198	<0.00199	0.00199				
Total BTEX		0.00835	0.00202	<0.00201	0.00201	0.00635	0.00198	0.0104	0.00199				
Chloride by EPA 300	***Extracted:***	08.13.2020 10:25		08.13.2020 10:25		08.13.2020 10:25		08.13.2020 10:25					
	Analyzed:	08.13.2020 13:00		08.13.2020 13:06		08.14.2020 08:29		08.13.2020 13:32					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		1170	50.3	581	49.8	13.1	4.96	58.3	50.0				
TPH by SW8015 Mod	***Extracted:***	08.13.2020 17:00		08.13.2020 17:00		08.13.2020 17:00		08.13.2020 17:00					
	Analyzed:	08.14.2020 05:15		08.14.2020 05:36		08.14.2020 05:58		08.14.2020 06:19					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9				
Diesel Range Organics (DRO)		<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9				
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9				
Total TPH		<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9				

BRL - Below Reporting Limit

Jessica Kramer

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Analytical Report 669782

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Wild Ride Federal #001H

11245

08.17.2020

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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08.17.2020

Project Manager: **PM**
Etech Environmental & Safety Solution, Inc
P.O. Box 62228
Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **669782**
Wild Ride Federal #001H
Project Address: Eddy County, NM

PM :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 669782. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 669782 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Sample Cross Reference 669782

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
8.10 SP1 @ Surface	S	08.10.2020 00:00		669782-001
8.10 SP1 @ 1'	S	08.10.2020 00:00	1 ft	669782-002
8.10 SP2 @ Surface	S	08.10.2020 00:00		669782-003
8.10 SP2 @ 1'	S	08.10.2020 00:00	1 ft	669782-004

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CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Wild Ride Federal #001H

Project ID: *11245*
Work Order Number(s): *669782*

Report Date: *08.17.2020*
Date Received: *08.12.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 669782

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id:	**8.10 SP1 @ Surface**	Matrix:	Soil	Date Received:	08.12.2020 11:20
Lab Sample Id:	669782-001	Date Collected:	08.10.2020 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	08.13.2020 10:25	Basis:	Wet Weight
Seq Number:	3134516				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1170**	50.3	mg/kg	08.13.2020 13:00		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.13.2020 17:00	Basis:	Wet Weight
Seq Number:	3134554				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.14.2020 05:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.14.2020 05:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.14.2020 05:15	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.14.2020 05:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-130	08.14.2020 05:15	
o-Terphenyl	84-15-1	110	%	70-130	08.14.2020 05:15	

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Certificate of Analytical Results 669782

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id:	**8.10 SP1 @ Surface**	Matrix:	Soil	Date Received:	08.12.2020 11:20
Lab Sample Id:	669782-001	Date Collected:	08.10.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	08.14.2020 08:00	Basis:	Wet Weight
Seq Number:	3134669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.14.2020 12:30	U	1
Toluene	108-88-3	**0.00835**	0.00202	mg/kg	08.14.2020 12:30		1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.14.2020 12:30	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	08.14.2020 12:30	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.14.2020 12:30	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.14.2020 12:30	U	1
Total BTEX		**0.00835**	0.00202	mg/kg	08.14.2020 12:30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.14.2020 12:30	
1,4-Difluorobenzene	540-36-3	115	%	70-130	08.14.2020 12:30	

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Certificate of Analytical Results 669782

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id:	**8.10 SP1 @ 1'**	Matrix:	Soil	Date Received:	08.12.2020 11:20
Lab Sample Id:	669782-002	Date Collected:	08.10.2020 00:00	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	08.13.2020 10:25	Basis:	Wet Weight
Seq Number:	3134516				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**581**	49.8	mg/kg	08.13.2020 13:06		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.13.2020 17:00	Basis:	Wet Weight
Seq Number:	3134554				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.14.2020 05:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.14.2020 05:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.14.2020 05:36	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.14.2020 05:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-130	08.14.2020 05:36	
o-Terphenyl	84-15-1	113	%	70-130	08.14.2020 05:36	

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Certificate of Analytical Results 669782

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id:	**8.10 SP1 @ 1'**	Matrix:	Soil	Date Received:	08.12.2020 11:20
Lab Sample Id:	669782-002	Date Collected:	08.10.2020 00:00	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	08.14.2020 08:00	Basis:	Wet Weight
Seq Number:	3134669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.14.2020 12:50	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.14.2020 12:50	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.14.2020 12:50	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.14.2020 12:50	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.14.2020 12:50	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.14.2020 12:50	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.14.2020 12:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	120	%	70-130	08.14.2020 12:50	
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.14.2020 12:50	

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Certificate of Analytical Results 669782

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id: **8.10 SP2 @ Surface** Matrix: Soil Date Received:08.12.2020 11:20

Lab Sample Id: 669782-003 Date Collected: 08.10.2020 00:00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: SPC % Moisture:

Analyst: SPC Date Prep: 08.13.2020 10:25 Basis: Wet Weight

Seq Number: 3134516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13.1**	4.96	mg/kg	08.14.2020 08:29		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 08.13.2020 17:00 Basis: Wet Weight

Seq Number: 3134554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.14.2020 05:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.14.2020 05:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.14.2020 05:58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.14.2020 05:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	08.14.2020 05:58	
o-Terphenyl	84-15-1	110	%	70-130	08.14.2020 05:58	

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Certificate of Analytical Results 669782

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id:	**8.10 SP2 @ Surface**	Matrix:	Soil	Date Received:	08.12.2020 11:20
Lab Sample Id:	669782-003	Date Collected:	08.10.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	08.14.2020 08:00	Basis:	Wet Weight
Seq Number:	3134669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.14.2020 13:11	U	1
Toluene	108-88-3	**0.00635**	0.00198	mg/kg	08.14.2020 13:11		1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.14.2020 13:11	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.14.2020 13:11	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.14.2020 13:11	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.14.2020 13:11	U	1
Total BTEX		**0.00635**	0.00198	mg/kg	08.14.2020 13:11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	116	%	70-130	08.14.2020 13:11	
4-Bromofluorobenzene	460-00-4	99	%	70-130	08.14.2020 13:11	

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Certificate of Analytical Results 669782

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id:	**8.10 SP2 @ 1'**	Matrix:	Soil	Date Received:	08.12.2020 11:20
Lab Sample Id:	669782-004	Date Collected:	08.10.2020 00:00	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	08.13.2020 10:25	Basis:	Wet Weight
Seq Number:	3134516				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**58.3**	50.0	mg/kg	08.13.2020 13:32		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.13.2020 17:00	Basis:	Wet Weight
Seq Number:	3134554				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.14.2020 06:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.14.2020 06:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.14.2020 06:19	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.14.2020 06:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	08.14.2020 06:19	
o-Terphenyl	84-15-1	114	%	70-130	08.14.2020 06:19	

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Certificate of Analytical Results 669782

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id:	**8.10 SP2 @ 1'**	Matrix:	Soil	Date Received:	08.12.2020 11:20
Lab Sample Id:	669782-004	Date Collected:	08.10.2020 00:00	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	08.14.2020 08:00	Basis:	Wet Weight
Seq Number:	3134669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.00255**	0.00199	mg/kg	08.14.2020 13:31		1
Toluene	108-88-3	**0.00784**	0.00199	mg/kg	08.14.2020 13:31		1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.14.2020 13:31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.14.2020 13:31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.14.2020 13:31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.14.2020 13:31	U	1
Total BTEX		**0.0104**	0.00199	mg/kg	08.14.2020 13:31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.14.2020 13:31	
1,4-Difluorobenzene	540-36-3	119	%	70-130	08.14.2020 13:31	

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Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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QC Summary 669782

Etech Environmental & Safety Solution, Inc

Wild Ride Federal #001H

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3134516 — Matrix: Solid — Date Prep: 08.13.2020
MB Sample Id: 7709361-1-BLK — LCS Sample Id: 7709361-1-BKS — LCSD Sample Id: 7709361-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	265	106	265	106	90-110	0	20	mg/kg	08.13.2020 11:25	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3134516 — Matrix: Soil — Date Prep: 08.13.2020
Parent Sample Id: 669779-006 — MS Sample Id: 669779-006 S — MSD Sample Id: 669779-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.01	251	271	108	271	108	90-110	0	20	mg/kg	08.13.2020 11:44	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3134516 — Matrix: Soil — Date Prep: 08.13.2020
Parent Sample Id: 669782-002 — MS Sample Id: 669782-002 S — MSD Sample Id: 669782-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	581	2490	3310	110	3310	110	90-110	0	20	mg/kg	08.13.2020 13:12	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3134554 — Matrix: Solid — Date Prep: 08.13.2020
MB Sample Id: 7709436-1-BLK — LCS Sample Id: 7709436-1-BKS — LCSD Sample Id: 7709436-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	986	99	957	96	70-130	3	20	mg/kg	08.13.2020 21:46	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	1010	101	70-130	2	20	mg/kg	08.13.2020 21:46	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		115		115		70-130	%	08.13.2020 21:46
o-Terphenyl	115		109		112		70-130	%	08.13.2020 21:46

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3134554 — Matrix: Solid — Date Prep: 08.13.2020
MB Sample Id: 7709436-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.13.2020 21:24	

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

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QC Summary 669782

Etech Environmental & Safety Solution, Inc

Wild Ride Federal #001H

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3134554 Matrix: Soil Date Prep: 08.13.2020
Parent Sample Id: 669700-002 MS Sample Id: 669700-002 S MSD Sample Id: 669700-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	999	894	89	882	88	70-130	1	20	mg/kg	08.13.2020 22:50	
Diesel Range Organics (DRO)	<50.0	999	898	90	881	88	70-130	2	20	mg/kg	08.13.2020 22:50	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	109		107		70-130	%	08.13.2020 22:50
o-Terphenyl	109		104		70-130	%	08.13.2020 22:50

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3134669 Matrix: Solid Date Prep: 08.14.2020
MB Sample Id: 7709515-1-BLK LCS Sample Id: 7709515-1-BKS LCSD Sample Id: 7709515-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.102	102	0.106	106	70-130	4	35	mg/kg	08.14.2020 08:04	
Toluene	<0.00200	0.100	0.0960	96	0.100	100	70-130	4	35	mg/kg	08.14.2020 08:04	
Ethylbenzene	<0.00200	0.100	0.0942	94	0.0984	98	70-130	4	35	mg/kg	08.14.2020 08:04	
m,p-Xylenes	<0.00400	0.200	0.187	94	0.195	98	70-130	4	35	mg/kg	08.14.2020 08:04	
o-Xylene	<0.00200	0.100	0.0939	94	0.0988	99	70-130	5	35	mg/kg	08.14.2020 08:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		100		101		70-130	%	08.14.2020 08:04
4-Bromofluorobenzene	103		103		103		70-130	%	08.14.2020 08:04

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3134669 Matrix: Soil Date Prep: 08.14.2020
Parent Sample Id: 669700-011 MS Sample Id: 669700-011 S MSD Sample Id: 669700-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0930	93	0.0959	95	70-130	3	35	mg/kg	08.14.2020 08:44	
Toluene	<0.00200	0.100	0.0865	87	0.0893	88	70-130	3	35	mg/kg	08.14.2020 08:44	
Ethylbenzene	<0.00200	0.100	0.0838	84	0.0863	85	70-130	3	35	mg/kg	08.14.2020 08:44	
m,p-Xylenes	<0.00400	0.200	0.165	83	0.170	84	70-130	3	35	mg/kg	08.14.2020 08:44	
o-Xylene	<0.00200	0.100	0.0821	82	0.0848	84	70-130	3	35	mg/kg	08.14.2020 08:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		101		70-130	%	08.14.2020 08:44
4-Bromofluorobenzene	105		102		70-130	%	08.14.2020 08:44

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Chain of Custody

Work Order No: 669782

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800
www.xenco.com

Project Manager:	Joel Lowry	Bill to: (if different)	Dakota Neel
Company Name:	Etech Environmental & Safety	Company Name:	Concho
Address:	3100 Plains Highway	Address:	
City, State ZIP:	Lovington, NM, 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	Email Results to PM@etechenv.com + Client

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level I ☐ Level II ☐ PST/US ☐ TRR ☐ Level III ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Wild Ride Federal #001H	Turn Around	
Project Number:	11245	Routine:	☑
Project Location	Eddy County, NM	Rush:	☐
Sampler's Name:	Miguel Ramirez	Due Date:	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	0.4/0.2	Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	Chloride E300	BTEX 8021	TPH Modified Ext	TPH TX1005
8-10 SP1@surface	Soil	8-10-20		-	1	X	X	X	
8-10 SP1@1'	Soil	8-10-20		1'	1	X	X	X	
8-10 SP2@surface	Soil	8-10-20		-	1	X	X	X	
8-10 SP2@1'	Soil	8-10-20		1'	1	X	X	X	

Preservative Codes

HNO3: HN
H2S04: H2
HCL: HL
None: NO
NaOH: Na
MeOH: Me
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		8-11-20 13:27	2		8/12
3			4		
5			6		1120

Revised Date 10.1.19 Rev. 2019.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 08.12.2020 11.20.00 AM

Work Order #: 669782

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.2	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	BTEX was in bulk container
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**N/A**	
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 08.12.2020
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 08.12.2020
Jessica Kramer

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Certificate of Analysis Summary 669786

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Wild Ride Federal #001H

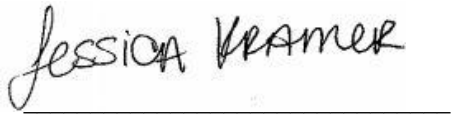
Project Id: 11245
Contact: PM
Project Location: Eddy County, NM

Date Received in Lab: Wed 08.12.2020 11:20
Report Date: 08.17.2020 13:22
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	669786-001		669786-002					
	Field Id:	8.10 SP3 @ Surface		8.10 SP3 @ 1'					
	Depth:			1- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	08.10.2020 00:00		08.10.2020 00:00					
BTEX by EPA 8021B	***Extracted:***	08.14.2020 08:00		08.14.2020 08:00					
	Analyzed:	08.14.2020 14:54		08.14.2020 15:14					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00199	0.00199	<0.00199	0.00199				
Toluene		0.00529	0.00199	0.00479	0.00199				
Ethylbenzene		<0.00199	0.00199	<0.00199	0.00199				
m,p-Xylenes		<0.00398	0.00398	<0.00398	0.00398				
o-Xylene		<0.00199	0.00199	<0.00199	0.00199				
Total Xylenes		<0.00199	0.00199	<0.00199	0.00199				
Total BTEX		0.00529	0.00199	0.00479	0.00199				
Chloride by EPA 300	***Extracted:***	08.12.2020 16:40		08.12.2020 16:40					
	Analyzed:	08.13.2020 08:35		08.13.2020 08:54					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		1450	50.5	14.0	4.99				
TPH by SW8015 Mod	***Extracted:***	08.12.2020 17:00		08.12.2020 17:00					
	Analyzed:	08.13.2020 05:34		08.13.2020 05:55					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.0	50.0				
Diesel Range Organics (DRO)		<49.9	49.9	<50.0	50.0				
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.0	50.0				
Total TPH		<49.9	49.9	<50.0	50.0				

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



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Analytical Report 669786

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Wild Ride Federal #001H

11245

08.17.2020

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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08.17.2020

Project Manager: **PM**
Etech Environmental & Safety Solution, Inc
P.O. Box 62228
Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **669786**
Wild Ride Federal #001H
Project Address: Eddy County, NM

PM :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 669786. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 669786 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Sample Cross Reference 669786

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
8.10 SP3 @ Surface	S	08.10.2020 00:00		669786-001
8.10 SP3 @ 1'	S	08.10.2020 00:00	1 ft	669786-002

CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Wild Ride Federal #001H

Project ID: *11245*
Work Order Number(s): *669786*

Report Date: *08.17.2020*
Date Received: *08.12.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 669786

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id: **8.10 SP3 @ Surface** Matrix: Soil Date Received:08.12.2020 11:20

Lab Sample Id: 669786-001 Date Collected: 08.10.2020 00:00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 08.12.2020 16:40 Basis: Wet Weight

Seq Number: 3134378

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1450**	50.5	mg/kg	08.13.2020 08:35		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 08.12.2020 17:00 Basis: Wet Weight

Seq Number: 3134439

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.13.2020 05:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.13.2020 05:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.13.2020 05:34	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.13.2020 05:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-130	08.13.2020 05:34	
o-Terphenyl	84-15-1	121	%	70-130	08.13.2020 05:34	

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Certificate of Analytical Results 669786

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id:	**8.10 SP3 @ Surface**	Matrix:	Soil	Date Received:	08.12.2020 11:20
Lab Sample Id:	669786-001	Date Collected:	08.10.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	08.14.2020 08:00	Basis:	Wet Weight
Seq Number:	3134669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.14.2020 14:54	U	1
Toluene	108-88-3	**0.00529**	0.00199	mg/kg	08.14.2020 14:54		1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.14.2020 14:54	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.14.2020 14:54	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.14.2020 14:54	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.14.2020 14:54	U	1
Total BTEX		**0.00529**	0.00199	mg/kg	08.14.2020 14:54		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	08.14.2020 14:54	
4-Bromofluorobenzene	460-00-4	99	%	70-130	08.14.2020 14:54	

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Certificate of Analytical Results 669786

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id:	**8.10 SP3 @ 1'**	Matrix:	Soil	Date Received:	08.12.2020 11:20
Lab Sample Id:	669786-002	Date Collected:	08.10.2020 00:00	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	08.12.2020 16:40	Basis:	Wet Weight
Seq Number:	3134378				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.0**	4.99	mg/kg	08.13.2020 08:54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	08.12.2020 17:00	Basis:	Wet Weight
Seq Number:	3134439				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.13.2020 05:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.13.2020 05:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.13.2020 05:55	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.13.2020 05:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	08.13.2020 05:55	
o-Terphenyl	84-15-1	105	%	70-130	08.13.2020 05:55	

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Certificate of Analytical Results 669786

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id:	**8.10 SP3 @ 1'**	Matrix:	Soil	Date Received:	08.12.2020 11:20
Lab Sample Id:	669786-002	Date Collected:	08.10.2020 00:00	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	08.14.2020 08:00	Basis:	Wet Weight
Seq Number:	3134669				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.14.2020 15:14	U	1
Toluene	108-88-3	**0.00479**	0.00199	mg/kg	08.14.2020 15:14		1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.14.2020 15:14	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.14.2020 15:14	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.14.2020 15:14	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.14.2020 15:14	U	1
Total BTEX		**0.00479**	0.00199	mg/kg	08.14.2020 15:14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	08.14.2020 15:14	
1,4-Difluorobenzene	540-36-3	115	%	70-130	08.14.2020 15:14	

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Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 669786

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Etech Environmental & Safety Solution, Inc

Wild Ride Federal #001H

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3134378 — Matrix: Solid — Date Prep: 08.12.2020
MB Sample Id: 7709299-1-BLK — LCS Sample Id: 7709299-1-BKS — LCSD Sample Id: 7709299-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	273	109	274	110	90-110	0	20	mg/kg	08.12.2020 16:47	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3134378 — Matrix: Soil — Date Prep: 08.12.2020
Parent Sample Id: 669777-001 — MS Sample Id: 669777-001 S — MSD Sample Id: 669777-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.96	248	282	114	280	113	90-110	1	20	mg/kg	08.12.2020 17:06	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3134378 — Matrix: Soil — Date Prep: 08.12.2020
Parent Sample Id: 669808-001 — MS Sample Id: 669808-001 S — MSD Sample Id: 669808-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2230	1240	3590	110	3590	110	90-110	0	20	mg/kg	08.12.2020 18:35	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3134439 — Matrix: Solid — Date Prep: 08.12.2020
MB Sample Id: 7709338-1-BLK — LCS Sample Id: 7709338-1-BKS — LCSD Sample Id: 7709338-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	997	100	939	94	70-130	6	20	mg/kg	08.12.2020 22:03	
Diesel Range Organics (DRO)	<50.0	1000	997	100	955	96	70-130	4	20	mg/kg	08.12.2020 22:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		127		121		70-130	%	08.12.2020 22:03
o-Terphenyl	116		120		115		70-130	%	08.12.2020 22:03

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3134439 — Matrix: Solid — Date Prep: 08.12.2020
MB Sample Id: 7709338-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.12.2020 21:42	

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Final 1.000

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QC Summary 669786

Etech Environmental & Safety Solution, Inc

Wild Ride Federal #001H

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3134439 Matrix: Soil Date Prep: 08.12.2020
Parent Sample Id: 669772-001 MS Sample Id: 669772-001 S MSD Sample Id: 669772-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	999	935	94	981	98	70-130	5	20	mg/kg	08.12.2020 23:08	
Diesel Range Organics (DRO)	<50.0	999	941	94	978	98	70-130	4	20	mg/kg	08.12.2020 23:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		120		70-130	%	08.12.2020 23:08
o-Terphenyl	106		110		70-130	%	08.12.2020 23:08

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3134669 Matrix: Solid Date Prep: 08.14.2020
MB Sample Id: 7709515-1-BLK LCS Sample Id: 7709515-1-BKS LCSD Sample Id: 7709515-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.102	102	0.106	106	70-130	4	35	mg/kg	08.14.2020 08:04	
Toluene	<0.00200	0.100	0.0960	96	0.100	100	70-130	4	35	mg/kg	08.14.2020 08:04	
Ethylbenzene	<0.00200	0.100	0.0942	94	0.0984	98	70-130	4	35	mg/kg	08.14.2020 08:04	
m,p-Xylenes	<0.00400	0.200	0.187	94	0.195	98	70-130	4	35	mg/kg	08.14.2020 08:04	
o-Xylene	<0.00200	0.100	0.0939	94	0.0988	99	70-130	5	35	mg/kg	08.14.2020 08:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		100		101		70-130	%	08.14.2020 08:04
4-Bromofluorobenzene	103		103		103		70-130	%	08.14.2020 08:04

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3134669 Matrix: Soil Date Prep: 08.14.2020
Parent Sample Id: 669700-011 MS Sample Id: 669700-011 S MSD Sample Id: 669700-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0930	93	0.0959	95	70-130	3	35	mg/kg	08.14.2020 08:44	
Toluene	<0.00200	0.100	0.0865	87	0.0893	88	70-130	3	35	mg/kg	08.14.2020 08:44	
Ethylbenzene	<0.00200	0.100	0.0838	84	0.0863	85	70-130	3	35	mg/kg	08.14.2020 08:44	
m,p-Xylenes	<0.00400	0.200	0.165	83	0.170	84	70-130	3	35	mg/kg	08.14.2020 08:44	
o-Xylene	<0.00200	0.100	0.0821	82	0.0848	84	70-130	3	35	mg/kg	08.14.2020 08:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		101		70-130	%	08.14.2020 08:44
4-Bromofluorobenzene	105		102		70-130	%	08.14.2020 08:44

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Chain of Custody

Work Order No: 469784

XENCO
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800
www.xenco.com Page 1 of 1

Project Manager:	Joel Lowry	Bill to: (if different)	Dakota Nuel
Company Name:	Etech Environmental & Safety	Company Name:	Concho
Address:	3100 Plains Highway	Address:	
City, State ZIP:	Lovington, NM, 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	Email Results to PM@etechenv.com + Client

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level I ☐ Level II ☐ PST/US ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Wild Ride Federal #001H	Turn Around	
Project Number:	11245	Routine:	☑
Project Location	Eddy County, NM	Rush:	☐
Sampler's Name:	Miguel Ramirez	Due Date:	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	0.0/0.2	Thermometer ID		
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:		
Sample Custody Seals:	Yes No (N/A)	Total Containers:		

Preservative Codes

HNO3: HN
H2S04: H2
HCL: HL
None: NO
NaOH: Na
MeOH: Me
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	Chloride E300	BTEX 8021	TPH Modified Ext	TPH TX1005	Sample Comments
8-10 SP3@ Surface	Soil	8-10-20		0'	1	X	X	X		
8-10 SP3@1'	Soil	8-10-20		1'	1	X	X	X		

ANALYSIS REQUEST

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		N R.	8-11-20 13:27	2		
3				4		
5				6		

Revised Date 10.14.19 Rev. 2019.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 08.12.2020 11.20.00 AM

Work Order #: 669786

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.2	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	BTEX was in bulk container
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**N/A**	
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 08.12.2020
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 08.12.2020
Jessica Kramer

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Certificate of Analysis Summary 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Wild Ride Federal # D01H

Project Id: 11245
Contact: PM
Project Location: Rural Eddy County

Date Received in Lab: Wed 01.27.2021 15:15
Report Date: 02.03.2021 16:11
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	686408-001		686408-002		686408-003		686408-004		686408-005		686408-006	
	Field Id:	SP 1 @ 2'		SP 1 @ 3'		SP 1 @ 4'		SP 2 @ 2'		SP 2 @ 3'		SP 2 @ 4'	
	Depth:	2- ft		3- ft		4- ft		2- ft		3- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	01.27.2021 00:00		01.27.2021 00:00		01.27.2021 00:00		01.27.2021 00:00		01.27.2021 00:00		01.27.2021 00:00	
BTEX by EPA 8021B	***Extracted:***	01.29.2021 15:08		01.29.2021 15:08		01.29.2021 15:08		01.29.2021 15:08		01.29.2021 15:08		01.29.2021 15:08	
	Analyzed:	01.29.2021 23:57		01.30.2021 00:20		01.30.2021 00:42		01.30.2021 01:05		01.30.2021 01:27		01.30.2021 01:50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00402	0.00402	<0.00402	0.00402	<0.00399	0.00399	<0.00399	0.00399	<0.00401	0.00401	<0.00401	0.00401
o-Xylene		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Total BTEX		<0.00201	0.00201	<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Inorganic Anions by EPA 300	***Extracted:***	01.29.2021 12:46		01.29.2021 12:46		01.29.2021 12:46		01.29.2021 12:46		01.29.2021 12:46		01.29.2021 12:46	
	Analyzed:	01.29.2021 15:34		01.29.2021 15:51		01.29.2021 15:56		01.29.2021 16:02		01.29.2021 16:08		01.29.2021 16:25	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		16.6	9.96	47.2	10.0	53.5	10.0	21.4	9.90	53.6	10.1	53.6	9.92
TPH by SW8015 Mod SUB: T104704400-20-21	***Extracted:***	02.02.2021 12:00		02.02.2021 12:00		02.02.2021 12:00		02.02.2021 12:00		02.02.2021 12:00		02.02.2021 12:00	
	Analyzed:	02.02.2021 16:44		02.02.2021 17:26		02.02.2021 17:47		02.02.2021 18:08		02.02.2021 18:29		02.02.2021 18:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0
Total TPH		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0

BRL - Below Reporting Limit

Jessica Kramer

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Certificate of Analysis Summary 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Wild Ride Federal # D01H

Project Id: 11245
Contact: PM
Project Location: Rural Eddy County

Date Received in Lab: Wed 01.27.2021 15:15
Report Date: 02.03.2021 16:11
Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	686408-007		686408-008		686408-009					
	Field Id:	SP 3 @ 2'		SP 3 @ 3'		SP 3 @ 4'					
	Depth:	2- ft		3- ft		4- ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	01.27.2021 00:00		01.27.2021 00:00		01.27.2021 00:00					
BTEX by EPA 8021B	***Extracted:***	01.29.2021 15:08		01.29.2021 15:08		01.29.2021 15:08					
	Analyzed:	01.30.2021 02:12		01.30.2021 02:34		01.30.2021 02:57					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
m,p-Xylenes		<0.00399	0.00399	<0.00398	0.00398	<0.00399	0.00399				
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200				
Inorganic Anions by EPA 300	***Extracted:***	01.29.2021 12:46		01.29.2021 12:46		01.29.2021 12:46					
	Analyzed:	01.29.2021 16:30		01.29.2021 16:36		01.29.2021 16:42					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		523	9.96	953	10.1	56.9	10.0				
TPH by SW8015 Mod SUB: T104704400-20-21	***Extracted:***	02.02.2021 12:00		02.02.2021 12:00		02.02.2021 12:00					
	Analyzed:	02.02.2021 19:10		02.02.2021 19:31		02.02.2021 19:52					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8				
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8				
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8				
Total TPH		<50.0	50.0	<49.9	49.9	<49.8	49.8				

BRL - Below Reporting Limit

Jessica Kramer

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Analytical Report 686408

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Wild Ride Federal # D01H

11245

02.03.2021

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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02.03.2021

Project Manager: **PM**
Etech Environmental & Safety Solution, Inc
P.O. Box 62228
Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **686408**
Wild Ride Federal # D01H
Project Address: Rural Eddy County

PM :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 686408. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 686408 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Sample Cross Reference 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP 1 @ 2'	S	01.27.2021 00:00	2 ft	686408-001
SP 1 @ 3'	S	01.27.2021 00:00	3 ft	686408-002
SP 1 @ 4'	S	01.27.2021 00:00	4 ft	686408-003
SP 2 @ 2'	S	01.27.2021 00:00	2 ft	686408-004
SP 2 @ 3'	S	01.27.2021 00:00	3 ft	686408-005
SP 2 @ 4'	S	01.27.2021 00:00	4 ft	686408-006
SP 3 @ 2'	S	01.27.2021 00:00	2 ft	686408-007
SP 3 @ 3'	S	01.27.2021 00:00	3 ft	686408-008
SP 3 @ 4'	S	01.27.2021 00:00	4 ft	686408-009

CASE NARRATIVE

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Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Wild Ride Federal # D01H

Project ID: *11245*
Work Order Number(s): *686408*

Report Date: *02.03.2021*
Date Received: *01.27.2021*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 1 @ 2'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-001	Date Collected:	01.27.2021 00:00	Sample Depth:	2 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB
Analyst: MAB
Seq Number: 3149461

Date Prep: 01.29.2021 12:46

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**16.6**	9.96	mg/kg	01.29.2021 15:34		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: DVM
Analyst: ARM
Seq Number: 3149862

Date Prep: 02.02.2021 12:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.02.2021 16:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.02.2021 16:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.02.2021 16:44	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.02.2021 16:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	02.02.2021 16:44	
o-Terphenyl	84-15-1	123	%	70-130	02.02.2021 16:44	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 1 @ 2'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-001	Date Collected:	01.27.2021 00:00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.29.2021 15:08	% Moisture:	
Seq Number:	3149458			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.29.2021 23:57	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.29.2021 23:57	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.29.2021 23:57	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.29.2021 23:57	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.29.2021 23:57	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.29.2021 23:57	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.29.2021 23:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.29.2021 23:57	
4-Bromofluorobenzene	460-00-4	101	%	70-130	01.29.2021 23:57	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 1 @ 3'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-002	Date Collected:	01.27.2021 00:00	Sample Depth:	3 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB
Analyst: MAB
Seq Number: 3149461

Date Prep: 01.29.2021 12:46

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**47.2**	10.0	mg/kg	01.29.2021 15:51		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: DVM
Analyst: ARM
Seq Number: 3149862

Date Prep: 02.02.2021 12:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.02.2021 17:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.02.2021 17:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.02.2021 17:26	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.02.2021 17:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	02.02.2021 17:26	
o-Terphenyl	84-15-1	111	%	70-130	02.02.2021 17:26	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 1 @ 3'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-002	Date Collected:	01.27.2021 00:00	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.29.2021 15:08	% Moisture:	
Seq Number:	3149458			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.30.2021 00:20	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.30.2021 00:20	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.30.2021 00:20	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.30.2021 00:20	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.30.2021 00:20	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.30.2021 00:20	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.30.2021 00:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.30.2021 00:20	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.30.2021 00:20	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 1 @ 4'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-003	Date Collected:	01.27.2021 00:00	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB
Analyst: MAB
Seq Number: 3149461

Date Prep: 01.29.2021 12:46

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**53.5**	10.0	mg/kg	01.29.2021 15:56		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: DVM
Analyst: ARM
Seq Number: 3149862

Date Prep: 02.02.2021 12:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.02.2021 17:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.02.2021 17:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.02.2021 17:47	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.02.2021 17:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	02.02.2021 17:47	
o-Terphenyl	84-15-1	106	%	70-130	02.02.2021 17:47	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 1 @ 4'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-003	Date Collected:	01.27.2021 00:00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.29.2021 15:08	% Moisture:	
Seq Number:	3149458			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 00:42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 00:42	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 00:42	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 00:42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 00:42	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 00:42	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 00:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.30.2021 00:42	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.30.2021 00:42	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 2 @ 2'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-004	Date Collected:	01.27.2021 00:00	Sample Depth:	2 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB
Analyst: MAB
Seq Number: 3149461

Date Prep: 01.29.2021 12:46

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**21.4**	9.90	mg/kg	01.29.2021 16:02		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: DVM
Analyst: ARM
Seq Number: 3149862

Date Prep: 02.02.2021 12:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.02.2021 18:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.02.2021 18:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.02.2021 18:08	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.02.2021 18:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	02.02.2021 18:08	
o-Terphenyl	84-15-1	105	%	70-130	02.02.2021 18:08	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 2 @ 2'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-004	Date Collected:	01.27.2021 00:00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.29.2021 15:08	% Moisture:	
Seq Number:	3149458			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 01:05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 01:05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 01:05	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 01:05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 01:05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 01:05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 01:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.30.2021 01:05	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.30.2021 01:05	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 2 @ 3'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-005	Date Collected:	01.27.2021 00:00	Sample Depth:	3 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB
Analyst: MAB
Seq Number: 3149461

Date Prep: 01.29.2021 12:46

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**53.6**	10.1	mg/kg	01.29.2021 16:08		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: DVM
Analyst: ARM
Seq Number: 3149862

Date Prep: 02.02.2021 12:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.02.2021 18:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.02.2021 18:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.02.2021 18:29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.02.2021 18:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-130	02.02.2021 18:29	
o-Terphenyl	84-15-1	100	%	70-130	02.02.2021 18:29	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 2 @ 3'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-005	Date Collected:	01.27.2021 00:00	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.29.2021 15:08	% Moisture:	
Seq Number:	3149458			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 01:27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 01:27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 01:27	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.30.2021 01:27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 01:27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 01:27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 01:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	117	%	70-130	01.30.2021 01:27	
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.30.2021 01:27	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 2 @ 4'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-006	Date Collected:	01.27.2021 00:00	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB
Analyst: MAB
Seq Number: 3149461

Date Prep: 01.29.2021 12:46

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**53.6**	9.92	mg/kg	01.29.2021 16:25		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: DVM
Analyst: ARM
Seq Number: 3149862

Date Prep: 02.02.2021 12:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.02.2021 18:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.02.2021 18:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.02.2021 18:49	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.02.2021 18:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	02.02.2021 18:49	
o-Terphenyl	84-15-1	106	%	70-130	02.02.2021 18:49	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 2 @ 4'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-006	Date Collected:	01.27.2021 00:00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.29.2021 15:08	% Moisture:	
Seq Number:	3149458			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 01:50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 01:50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 01:50	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.30.2021 01:50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 01:50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 01:50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 01:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.30.2021 01:50	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.30.2021 01:50	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 3 @ 2'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-007	Date Collected:	01.27.2021 00:00	Sample Depth:	2 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB
Analyst: MAB
Seq Number: 3149461

Date Prep: 01.29.2021 12:46

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**523**	9.96	mg/kg	01.29.2021 16:30		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: DVM
Analyst: ARM
Seq Number: 3149862

Date Prep: 02.02.2021 12:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.02.2021 19:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.02.2021 19:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.02.2021 19:10	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.02.2021 19:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	02.02.2021 19:10	
o-Terphenyl	84-15-1	106	%	70-130	02.02.2021 19:10	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 3 @ 2'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-007	Date Collected:	01.27.2021 00:00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.29.2021 15:08	% Moisture:	
Seq Number:	3149458			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 02:12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 02:12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 02:12	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 02:12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 02:12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 02:12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 02:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.30.2021 02:12	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.30.2021 02:12	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 3 @ 3'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-008	Date Collected:	01.27.2021 00:00	Sample Depth:	3 ft

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.29.2021 12:46	% Moisture:	
Seq Number:	3149461			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**953**	10.1	mg/kg	01.29.2021 16:36		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM				
Analyst:	ARM	Date Prep:	02.02.2021 12:00	% Moisture:	
Seq Number:	3149862			Basis:	Wet Weight
				SUB:	T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.02.2021 19:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.02.2021 19:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.02.2021 19:31	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.02.2021 19:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-130	02.02.2021 19:31	
o-Terphenyl	84-15-1	108	%	70-130	02.02.2021 19:31	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 3 @ 3'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-008	Date Collected:	01.27.2021 00:00	Sample Depth:	3 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.29.2021 15:08	% Moisture:	
Seq Number:	3149458			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.2021 02:34	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.30.2021 02:34	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.30.2021 02:34	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.30.2021 02:34	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.30.2021 02:34	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.30.2021 02:34	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.30.2021 02:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.30.2021 02:34	
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.30.2021 02:34	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 3 @ 4'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-009	Date Collected:	01.27.2021 00:00	Sample Depth:	4 ft

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P

Tech: MAB
Analyst: MAB
Seq Number: 3149461

Date Prep: 01.29.2021 12:46

% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**56.9**	10.0	mg/kg	01.29.2021 16:42		1

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P

Tech: DVM
Analyst: ARM
Seq Number: 3149862

Date Prep: 02.02.2021 12:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.02.2021 19:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.02.2021 19:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.02.2021 19:52	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.02.2021 19:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	02.02.2021 19:52	
o-Terphenyl	84-15-1	112	%	70-130	02.02.2021 19:52	

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Certificate of Analytical Results 686408

Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal # D01H

Sample Id:	**SP 3 @ 4'**	Matrix:	Soil	Date Received:	01.27.2021 15:15
Lab Sample Id:	686408-009	Date Collected:	01.27.2021 00:00	Sample Depth:	4 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.29.2021 15:08	% Moisture:	
Seq Number:	3149458			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 02:57	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 02:57	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 02:57	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 02:57	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 02:57	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 02:57	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 02:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.30.2021 02:57	
4-Bromofluorobenzene	460-00-4	114	%	70-130	01.30.2021 02:57	

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Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 686408

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Etech Environmental & Safety Solution, Inc

Wild Ride Federal # D01H

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3149461 — Matrix: Solid — Date Prep: 01.29.2021
MB Sample Id: 7720389-1-BLK — LCS Sample Id: 7720389-1-BKS — LCSD Sample Id: 7720389-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	200	209	105	206	103	90-110	1	20	mg/kg	01.29.2021 15:05	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3149461 — Matrix: Soil — Date Prep: 01.29.2021
Parent Sample Id: 686393-002 — MS Sample Id: 686393-002 S — MSD Sample Id: 686393-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	40.0	202	248	103	250	104	90-110	1	20	mg/kg	01.29.2021 16:59	

Analytical Method: Inorganic Anions by EPA 300 — Prep Method: E300P
Seq Number: 3149461 — Matrix: Soil — Date Prep: 01.29.2021
Parent Sample Id: 686408-001 — MS Sample Id: 686408-001 S — MSD Sample Id: 686408-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	16.6	202	222	102	219	101	90-110	1	20	mg/kg	01.29.2021 15:39	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3149862 — Matrix: Solid — Date Prep: 02.02.2021
MB Sample Id: 7720660-1-BLK — LCS Sample Id: 7720660-1-BKS — LCSD Sample Id: 7720660-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	843	84	870	87	70-130	3	20	mg/kg	02.02.2021 12:05	
Diesel Range Organics (DRO)	<50.0	1000	852	85	837	84	70-130	2	20	mg/kg	02.02.2021 12:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	82		83		76		70-130	%	02.02.2021 12:05
o-Terphenyl	111		101		92		70-130	%	02.02.2021 12:05

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3149862 — Matrix: Solid — Date Prep: 02.02.2021
MB Sample Id: 7720660-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.02.2021 11:45	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

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QC Summary 686408

Etech Environmental & Safety Solution, Inc

Wild Ride Federal # D01H

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3149862 Matrix: Soil Date Prep: 02.02.2021
Parent Sample Id: 686393-001 MS Sample Id: 686393-001 S MSD Sample Id: 686393-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	842	84	878	88	70-130	4	20	mg/kg	02.02.2021 13:08	
Diesel Range Organics (DRO)	<49.9	997	823	83	835	84	70-130	1	20	mg/kg	02.02.2021 13:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	84		87		70-130	%	02.02.2021 13:08
o-Terphenyl	101		100		70-130	%	02.02.2021 13:08

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3149458 Matrix: Solid Date Prep: 01.29.2021
MB Sample Id: 7720348-1-BLK LCS Sample Id: 7720348-1-BKS LCSD Sample Id: 7720348-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0892	89	0.0956	96	70-130	7	35	mg/kg	01.29.2021 21:53	
Toluene	<0.00200	0.100	0.0880	88	0.0909	91	70-130	3	35	mg/kg	01.29.2021 21:53	
Ethylbenzene	<0.00200	0.100	0.0893	89	0.0949	95	71-129	6	35	mg/kg	01.29.2021 21:53	
m,p-Xylenes	<0.00400	0.200	0.182	91	0.191	96	70-135	5	35	mg/kg	01.29.2021 21:53	
o-Xylene	<0.00200	0.100	0.0906	91	0.0972	97	71-133	7	35	mg/kg	01.29.2021 21:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		95		96		70-130	%	01.29.2021 21:53
4-Bromofluorobenzene	103		97		98		70-130	%	01.29.2021 21:53

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3149458 Matrix: Soil Date Prep: 01.29.2021
Parent Sample Id: 686408-001 MS Sample Id: 686408-001 S MSD Sample Id: 686408-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0994	99	0.0977	97	70-130	2	35	mg/kg	01.29.2021 22:38	
Toluene	<0.00200	0.100	0.101	101	0.0984	97	70-130	3	35	mg/kg	01.29.2021 22:38	
Ethylbenzene	<0.00200	0.100	0.104	104	0.0988	98	71-129	5	35	mg/kg	01.29.2021 22:38	
m,p-Xylenes	<0.00401	0.200	0.212	106	0.197	98	70-135	7	35	mg/kg	01.29.2021 22:38	
o-Xylene	<0.00200	0.100	0.106	106	0.101	100	71-133	5	35	mg/kg	01.29.2021 22:38	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		94		70-130	%	01.29.2021 22:38
4-Bromofluorobenzene	100		98		70-130	%	01.29.2021 22:38

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Chain of Custody

Work Order No: 6E864108

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasibad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
www.xenco.com

Project Manager:	Joel Lowry	Bill to: (if different)	
Company Name:	ETech Environmental & Safety	Company Name:	COG
Address:	3100 Plains Hwy	Address:	
City, State ZIP:	Lovington, NM 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	PM@etechenv.com + client

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Wild Ride Federal #001H	Turn Around	
Project Number:	11245	Routine	☒
Project Location	Rural Eddy county	Rush:	
Sampler's Name:	Miguel Ramirez	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	5.5/5.6	Thermometer ID	T-NM-007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	9

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides	BTEX	TPH	Sample Comments
	SP1@2'	S	1.27.21		2'	1	X	X	X	
	SP1@3'	S	1.27.21		3'	1	X	X	X	
	SP1@4'	S	1.27.21		4'	1	X	X	X	
	SP2@2'	S	1.27.21		2'	1	X	X	X	
	SP2@3'	S	1.27.21		3'	1	X	X	X	
	SP2@4'	S	1.27.21		4'	1	X	X	X	
	SP3@2'	S	1.27.21		2'	1	X	X	X	
	SP3@3'	S	1.27.21		3'	1	X	X	X	
	SP3@4'	S	1.27.21		4'	1	X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	Cloe Carpe	1.27.21 1515	2		
			4		
			6		

Revised Date 022619 Rev. 2019.1

Inter-Office Shipment

IOS Number : 77259

Date/Time:	01.28.2021	Created by:	Cloe Clifton	Please send report to:	Jessica Kramer
Lab# From:	**Carlsbad**	Delivery Priority:		Address:	1089 N Canal Street
Lab# To:	**Midland**	Air Bill No.:	772762019427	E-Mail:	jessica.kramer@eurofinset.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
686408-001	S	SP 1 @ 2'	01.27.2021 00:00	SW8015MOD_NM	TPH by SW8015 Mod	02.02.2021	02.10.2021	JKR	PHCC10C28 PHCC28C3	
686408-002	S	SP 1 @ 3'	01.27.2021 00:00	SW8015MOD_NM	TPH by SW8015 Mod	02.02.2021	02.10.2021	JKR	PHCC10C28 PHCC28C3	
686408-003	S	SP 1 @ 4'	01.27.2021 00:00	SW8015MOD_NM	TPH by SW8015 Mod	02.02.2021	02.10.2021	JKR	PHCC10C28 PHCC28C3	
686408-004	S	SP 2 @ 2'	01.27.2021 00:00	SW8015MOD_NM	TPH by SW8015 Mod	02.02.2021	02.10.2021	JKR	PHCC10C28 PHCC28C3	
686408-005	S	SP 2 @ 3'	01.27.2021 00:00	SW8015MOD_NM	TPH by SW8015 Mod	02.02.2021	02.10.2021	JKR	PHCC10C28 PHCC28C3	
686408-006	S	SP 2 @ 4'	01.27.2021 00:00	SW8015MOD_NM	TPH by SW8015 Mod	02.02.2021	02.10.2021	JKR	PHCC10C28 PHCC28C3	
686408-007	S	SP 3 @ 2'	01.27.2021 00:00	SW8015MOD_NM	TPH by SW8015 Mod	02.02.2021	02.10.2021	JKR	PHCC10C28 PHCC28C3	
686408-008	S	SP 3 @ 3'	01.27.2021 00:00	SW8015MOD_NM	TPH by SW8015 Mod	02.02.2021	02.10.2021	JKR	PHCC10C28 PHCC28C3	
686408-009	S	SP 3 @ 4'	01.27.2021 00:00	SW8015MOD_NM	TPH by SW8015 Mod	02.02.2021	02.10.2021	JKR	PHCC10C28 PHCC28C3	

Inter Office Shipment or Sample Comments:

Relinquished By: Cloe Clifton

Date Relinquished: 01.28.2021

Received By: Jessica Kramer

Date Received: 01.29.2021

Cooler Temperature: 0.3

Environment Testing Xenco

Eurofins Xenco, LLC

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 77259

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used :

Sent By: Cloe Clifton **Date Sent:** 01.28.2021 02.49 PM

Received By: Jessica Kramer **Date Received:** 01.29.2021 10.34 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	.3	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: Jessica Kramer Date: 01.29.2021

Jessica Kramer

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 01.27.2021 03.15.00 PM

Work Order #: 686408

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : t_nm_007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	Samples received in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	TPH sent to Midland.
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Cloe Clifton Date: 01.28.2021

Checklist reviewed by: Jessica Kramer Date: 01.28.2021

Jessica Kramer

Appendix D
Photographic Log

Photographic Log

Photo Number: 1	
Photo Direction: Birdseye	
Photo Description: Aerial view of facility prior to lightning strike and resulting fire.	

Photo Number: 2	
Photo Direction: Northwest	
Photo Description: View of facility following lightning strike and fire.	

Photographic Log

Photo Number: 3	
Photo Direction: North-Northwest	
Photo Description: View of facility following lightning strike and fire.	

Photo Number: 4	
Photo Direction: Southeast	
Photo Description: View of impermeable liner after tank and gravel removal.	

Photographic Log

Photo Number: 5	
Photo Direction: West	
Photo Description: View of impermeable liner after tank and gravel removal.	

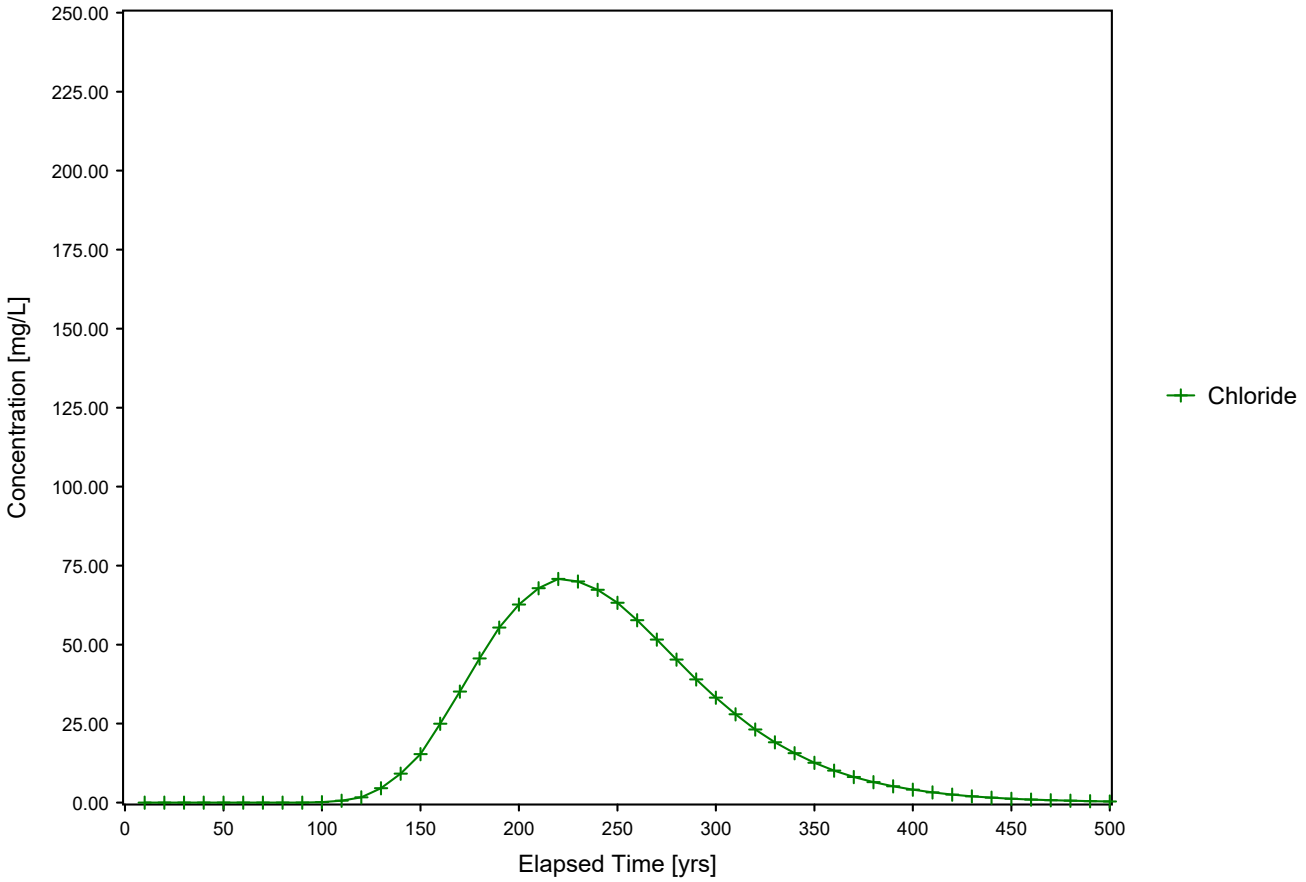
Photo Number: 6	
Photo Direction: Northeast	
Photo Description: View of melted portion of liner above high water mark.	

Appendix E
Multimedia Exposure Assessment Model (MULTIMED)

Chloride Concentration at the Receptor Well (w/ Liner)

COG Operating, LLC

Wild Ride Federal #001H



U. S. E N V I R O N M E N T A L P R O T E C T I O N A G E N C Y

E X P O S U R E A S S E S S M E N T

M U L T I M E D I A M O D E L

MULTIMED (Version 1.50, 2005)

1
Run options
--- -------

CEG Operating, LLC

Wild Ride Federal #001H
Chemical simulated is Chloride

Option Chosen Saturated and unsaturated zone models
Run was DETERMIN
Infiltration Specified By User: 7.620E-03 m/yr
Run was transient
Well Times: Find Maximium Concentration
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model
1
1
UNSATURATED ZONE FLOW MODEL PARAMETERS
(input parameter description and value)
NP - Total number of nodal points 240
NMAT - Number of different porous materials 1
KPROP - Van Genuchten or Brooks and Corey 1
IMSHGN - Spatial discretization option 1
NVFLAYR - Number of layers in flow model 1

OPTIONS CHOSEN
------- ------
Van Genuchten functional coefficients
User defined coordinate system
1

Layer information

LAYER NO.	LAYER THICKNESS	MATERIAL PROPERTY
1	12.19	1

DATA FOR MATERIAL 1

VADOSE ZONE MATERIAL VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Saturated hydraulic conductivity	cm/hr	CONSTANT	4.17	-999.	-999.	-999.
Unsaturated zone porosity	--	CONSTANT	0.130	-999.	-999.	-999.
Air entry pressure head	m	CONSTANT	0.700	-999.	-999.	-999.
Depth of the unsaturated zone	m	CONSTANT	12.2	0.000	0.000	0.000

DATA FOR MATERIAL 1

VADOSE ZONE FUNCTION VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Residual water content	--	CONSTANT	0.116	-999.	-999.	-999.
Brook and Corey exponent,EN	--	CONSTANT	-999.	-999.	-999.	-999.
ALFA coefficient	1/cm	CONSTANT	0.500E-02	-999.	-999.	-999.
Van Genuchten exponent, ENN	--	CONSTANT	1.09	-999.	-999.	-999.

1

UNSATURATED ZONE TRANSPORT MODEL PARAMETERS

NLAY	- Number of different layers used		1
NTSTPS	- Number of time values concentration calc		40
DUMMY	- Not presently used		1
ISOL	- Type of scheme used in unsaturated zone		2
N	- Stehfest terms or number of increments		18
NTEL	- Points in Lagrangian interpolation		3
NGPTS	- Number of Gauss points		104
NIT	- Convolution integral segments		2
IBOUND	- Type of boundary condition		3
ITSGEN	- Time values generated or input		1
TMAX	- Max simulation time	--	0.0
WTFUN	- Weighting factor	--	1.2

OPTIONS CHOSEN

Convolution integral approach
Exponentially decaying continuous source
Computer generated times for computing concentrations

1

DATA FOR LAYER 1

VADOSE TRANSPORT VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Thickness of layer	m	CONSTANT	12.2	-999.	-999.	-999.
Longitudinal dispersivity of layer	m	DERIVED	-999.	-999.	-999.	-999.
Percent organic matter	--	CONSTANT	0.000	-999.	-999.	-999.
Bulk density of soil for layer	g/cc	CONSTANT	1.99	-999.	-999.	-999.
Biological decay coefficient	1/yr	CONSTANT	0.000	-999.	-999.	-999.

1

CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	-999.	-999.
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	-999.	-999.
Overall chemical decay coefficient	1/yr	DERIVED	-999.	-999.	-999.	-999.
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000	-999.	-999.	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000	-999.	-999.	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000	-999.	-999.	-999.
Reference temperature	C	CONSTANT	25.0	-999.	-999.	-999.
Normalized distribution coefficient	ml/g	CONSTANT	0.000	-999.	-999.	-999.
Distribution coefficient	--	DERIVED	-999.	-999.	-999.	-999.
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	0.000	-999.	-999.	-999.
Air diffusion coefficient	cm2/s	CONSTANT	-999.	-999.	-999.	-999.
Reference temperature for air diffusion	C	CONSTANT	-999.	-999.	-999.	-999.
Molecular weight	g/M	CONSTANT	-999.	-999.	-999.	-999.
Mole fraction of solute	--	CONSTANT	-999.	-999.	-999.	-999.
Vapor pressure of solute	mm Hg	CONSTANT	-999.	-999.	-999.	-999.
Henry`s law constant	atm-m^3/M	CONSTANT	-999.	-999.	-999.	-999.
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000	0.000	0.000	1.00
Not currently used		CONSTANT	0.000	0.000	0.000	0.000
Not currently used		CONSTANT	0.000	0.000	0.000	0.000

1

SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Infiltration rate	m/yr	CONSTANT	0.762E-02	-999.	-999.	-999.
Area of waste disposal unit	m^2	CONSTANT	92.9	-999.	-999.	-999.
Duration of pulse	yr	DERIVED	0.100E-08	-999.	-999.	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	-999.	-999.
Recharge rate	m/yr	CONSTANT	0.000	-999.	-999.	-999.
Source decay constant	1/yr	CONSTANT	0.250E-01	0.000	0.000	0.000
Initial concentration at landfill	mg/l	CONSTANT	0.145E+04	-999.	-999.	-999.
Length scale of facility	m	DERIVED	-999.	-999.	-999.	-999.
Width scale of facility	m	DERIVED	-999.	-999.	-999.	-999.
Near field dilution		DERIVED	1.00	0.000	0.000	1.00

AQUIFER SPECIFIC VARIABLES

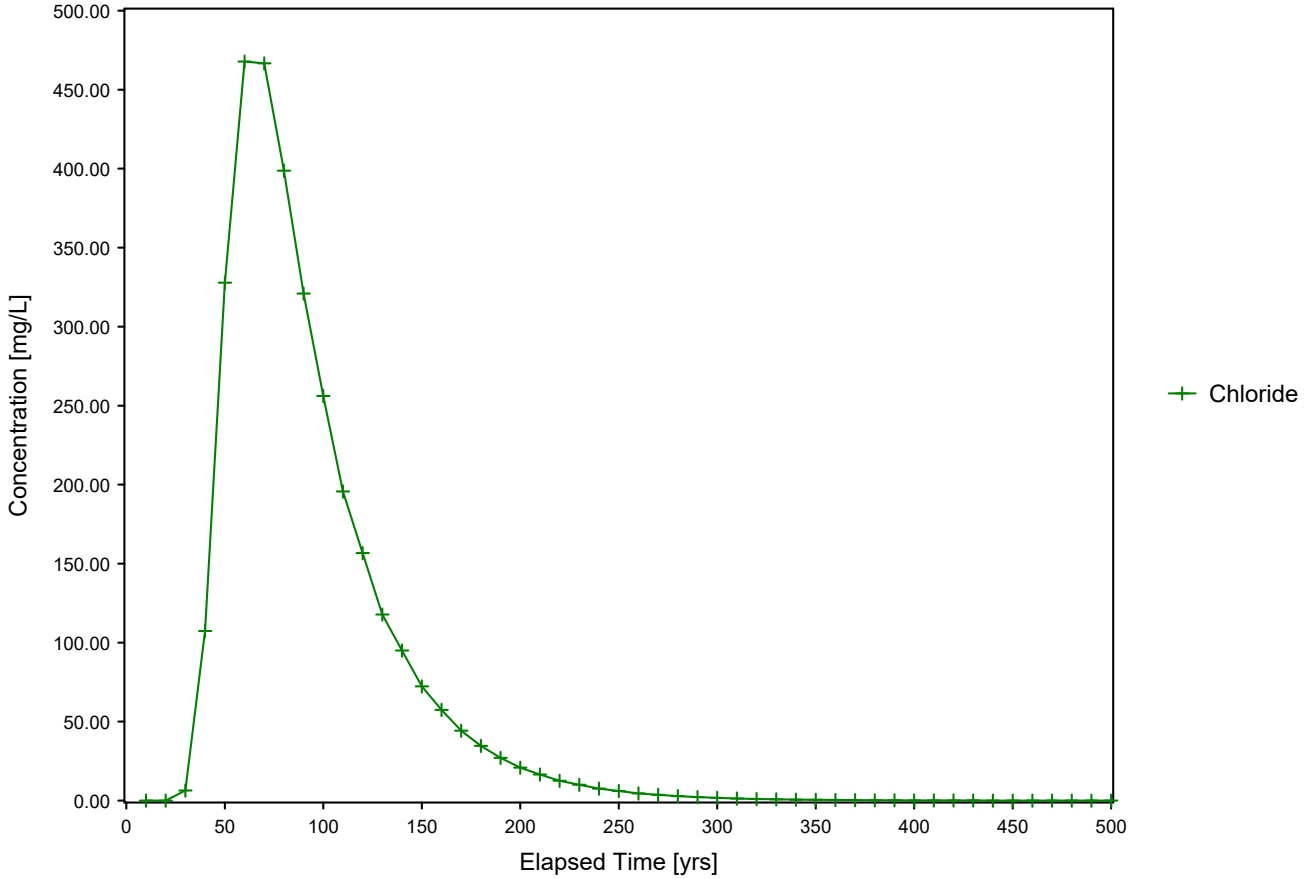
VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS		LIMITS	
			MEAN	STD DEV	MIN	MAX
Particle diameter	cm	CONSTANT	-999.	-999.	-999.	-999.
Aquifer porosity	--	CONSTANT	0.300	-999.	-999.	-999.
Bulk density	g/cc	CONSTANT	1.86	-999.	-999.	-999.
Aquifer thickness	m	CONSTANT	6.10	-999.	-999.	-999.
Source thickness (mixing zone depth)	m	DERIVED	-999.	-999.	-999.	-999.
Conductivity (hydraulic)	m/yr	CONSTANT	315.	-999.	-999.	-999.
Gradient (hydraulic)		CONSTANT	0.300E-02	-999.	-999.	-999.
Groundwater seepage velocity	m/yr	DERIVED	-999.	-999.	-999.	-999.
Retardation coefficient	--	DERIVED	-999.	-999.	-999.	-999.
Longitudinal dispersivity	m	FUNCTION OF X	-999.	-999.	-999.	-999.
Transverse dispersivity	m	FUNCTION OF X	-999.	-999.	-999.	-999.
Vertical dispersivity	m	FUNCTION OF X	-999.	-999.	-999.	-999.
Temperature of aquifer	C	CONSTANT	20.0	-999.	-999.	-999.
pH	--	CONSTANT	7.00	-999.	-999.	-999.
Organic carbon content (fraction)		CONSTANT	0.000	-999.	-999.	-999.
Well distance from site	m	CONSTANT	1.00	-999.	-999.	-999.
Angle off center	degree	CONSTANT	0.000	-999.	-999.	-999.
Well vertical distance	m	CONSTANT	0.000	-999.	-999.	-999.

MAXIMUM WELL CONCENTRATION IS 70.77 AT 220 YEARS

Chloride Concentration at the Receptor Well (No Liner)

COG Operating, LLC

Wild Ride Federal #001H



U. S. E N V I R O N M E N T A L P R O T E C T I O N A G E N C Y

E X P O S U R E A S S E S S M E N T

M U L T I M E D I A M O D E L

MULTIMED (Version 1.50, 2005)

1
Run options
--- -------

CRG Operating, LLC

Wild Ride Federal #001H
Chemical simulated is Chloride

Option Chosen Saturated and unsaturated zone models
Run was DETERMIN
Infiltration Specified By User: 3.048E-02 m/yr
Run was transient
Well Times: Find Maximium Concentration
Reject runs if Y coordinate outside plume
Reject runs if Z coordinate outside plume
Gaussian source used in saturated zone model
1
1
UNSATURATED ZONE FLOW MODEL PARAMETERS
(input parameter description and value)
NP - Total number of nodal points 240
NMAT - Number of different porous materials 1
KPROP - Van Genuchten or Brooks and Corey 1
IMSHGN - Spatial discretization option 1
NVFLAYR - Number of layers in flow model 1

OPTIONS CHOSEN
------- ------
Van Genuchten functional coefficients
User defined coordinate system
1

Layer information

LAYER NO.	LAYER THICKNESS	MATERIAL PROPERTY
1	12.19	1

DATA FOR MATERIAL 1

DATA FOR MATERIAL 1

VADOSE ZONE MATERIAL VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Saturated hydraulic conductivity	cm/hr	CONSTANT	4.17	-999.	-999.	-999.
Unsaturated zone porosity	--	CONSTANT	0.130	-999.	-999.	-999.
Air entry pressure head	m	CONSTANT	0.700	-999.	-999.	-999.
Depth of the unsaturated zone	m	CONSTANT	12.2	0.000	0.000	0.000

DATA FOR MATERIAL 1

VADOSE ZONE FUNCTION VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS MEAN	PARAMETERS STD DEV	LIMITS MIN	LIMITS MAX
Residual water content	--	CONSTANT	0.116	-999.	-999.	-999.
Brook and Corey exponent,EN	--	CONSTANT	-999.	-999.	-999.	-999.
ALFA coefficient	1/cm	CONSTANT	0.500E-02	-999.	-999.	-999.
Van Genuchten exponent, ENN	--	CONSTANT	1.09	-999.	-999.	-999.

1

UNSATURATED ZONE TRANSPORT MODEL PARAMETERS

NLAY	- Number of different layers used		1
NTSTPS	- Number of time values concentration calc		40
DUMMY	- Not presently used		1
ISOL	- Type of scheme used in unsaturated zone		2
N	- Stehfest terms or number of increments		18
NTEL	- Points in Lagrangian interpolation		3
NGPTS	- Number of Gauss points		104
NIT	- Convolution integral segments		2
IBOUND	- Type of boundary condition		3
ITSGEN	- Time values generated or input		1
TMAX	- Max simulation time	--	0.0
WTFUN	- Weighting factor	--	1.2

OPTIONS CHOSEN

Convolution integral approach
Exponentially decaying continuous source
Computer generated times for computing concentrations

1

DATA FOR LAYER 1

VADOSE TRANSPORT VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS		LIMITS	
			MEAN	STD DEV	MIN	MAX
Thickness of layer	m	CONSTANT	12.2	-999.	-999.	-999.
Longitudinal dispersivity of layer	m	DERIVED	-999.	-999.	-999.	-999.
Percent organic matter	--	CONSTANT	0.000	-999.	-999.	-999.
Bulk density of soil for layer	g/cc	CONSTANT	1.99	-999.	-999.	-999.
Biological decay coefficient	1/yr	CONSTANT	0.000	-999.	-999.	-999.

1

CHEMICAL SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS		LIMITS	
			MEAN	STD DEV	MIN	MAX
Solid phase decay coefficient	1/yr	DERIVED	-999.	-999.	-999.	-999.
Dissolved phase decay coefficient	1/yr	DERIVED	-999.	-999.	-999.	-999.
Overall chemical decay coefficient	1/yr	DERIVED	-999.	-999.	-999.	-999.
Acid catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000	-999.	-999.	-999.
Neutral hydrolysis rate constant	1/yr	CONSTANT	0.000	-999.	-999.	-999.
Base catalyzed hydrolysis rate	l/M-yr	CONSTANT	0.000	-999.	-999.	-999.
Reference temperature	C	CONSTANT	25.0	-999.	-999.	-999.
Normalized distribution coefficient	ml/g	CONSTANT	0.000	-999.	-999.	-999.
Distribution coefficient	--	DERIVED	-999.	-999.	-999.	-999.
Biodegradation coefficient (sat. zone)	1/yr	CONSTANT	0.000	-999.	-999.	-999.
Air diffusion coefficient	cm2/s	CONSTANT	-999.	-999.	-999.	-999.
Reference temperature for air diffusion	C	CONSTANT	-999.	-999.	-999.	-999.
Molecular weight	g/M	CONSTANT	-999.	-999.	-999.	-999.
Mole fraction of solute	--	CONSTANT	-999.	-999.	-999.	-999.
Vapor pressure of solute	mm Hg	CONSTANT	-999.	-999.	-999.	-999.
Henry`s law constant	atm-m^3/M	CONSTANT	-999.	-999.	-999.	-999.
Overall 1st order decay sat. zone	1/yr	DERIVED	0.000	0.000	0.000	1.00
Not currently used		CONSTANT	0.000	0.000	0.000	0.000
Not currently used		CONSTANT	0.000	0.000	0.000	0.000

1

SOURCE SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS		LIMITS	
			MEAN	STD DEV	MIN	MAX
Infiltration rate	m/yr	CONSTANT	0.305E-01	-999.	-999.	-999.
Area of waste disposal unit	m^2	CONSTANT	92.9	-999.	-999.	-999.
Duration of pulse	yr	DERIVED	0.100E-08	-999.	-999.	-999.
Spread of contaminant source	m	DERIVED	-999.	-999.	-999.	-999.
Recharge rate	m/yr	CONSTANT	0.000	-999.	-999.	-999.
Source decay constant	1/yr	CONSTANT	0.250E-01	0.000	0.000	0.000
Initial concentration at landfill	mg/l	CONSTANT	0.145E+04	-999.	-999.	-999.
Length scale of facility	m	DERIVED	-999.	-999.	-999.	-999.
Width scale of facility	m	DERIVED	-999.	-999.	-999.	-999.
Near field dilution		DERIVED	1.00	0.000	0.000	1.00

AQUIFER SPECIFIC VARIABLES

VARIABLE NAME	UNITS	DISTRIBUTION	PARAMETERS		LIMITS	
			MEAN	STD DEV	MIN	MAX
Particle diameter	cm	CONSTANT	-999.	-999.	-999.	-999.
Aquifer porosity	--	CONSTANT	0.300	-999.	-999.	-999.
Bulk density	g/cc	CONSTANT	1.86	-999.	-999.	-999.
Aquifer thickness	m	CONSTANT	6.10	-999.	-999.	-999.
Source thickness (mixing zone depth)	m	DERIVED	-999.	-999.	-999.	-999.
Conductivity (hydraulic)	m/yr	CONSTANT	315.	-999.	-999.	-999.
Gradient (hydraulic)		CONSTANT	0.300E-02	-999.	-999.	-999.
Groundwater seepage velocity	m/yr	DERIVED	-999.	-999.	-999.	-999.
Retardation coefficient	--	DERIVED	-999.	-999.	-999.	-999.
Longitudinal dispersivity	m	FUNCTION OF X	-999.	-999.	-999.	-999.
Transverse dispersivity	m	FUNCTION OF X	-999.	-999.	-999.	-999.
Vertical dispersivity	m	FUNCTION OF X	-999.	-999.	-999.	-999.
Temperature of aquifer	C	CONSTANT	20.0	-999.	-999.	-999.
pH	--	CONSTANT	7.00	-999.	-999.	-999.
Organic carbon content (fraction)		CONSTANT	0.000	-999.	-999.	-999.
Well distance from site	m	CONSTANT	1.00	-999.	-999.	-999.
Angle off center	degree	CONSTANT	0.000	-999.	-999.	-999.
Well vertical distance	m	CONSTANT	0.000	-999.	-999.	-999.

MAXIMUM WELL CONCENTRATION IS 481.9 AT 65.6 YEARS

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
District IV
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 19473

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 19473
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
ceads	In the event another release occurs within this containment area and deficiencies in the liner are observed, the impacted areas will be remediated to meet Table I Closure Criteria.	6/30/2021