Topographic/Aerial maps

X Laboratory data including chain of custody

nAB1922539866

Incident ID District RP 2RP-5581 Facility ID Application ID

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>45 Ft. (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes X No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes 🛛 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes 🛛 No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes X No
Are the lateral extents of the release overlying an unstable area such as karst geology?	X Yes No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes X No
Did the release impact areas not on an exploration, development, production, or storage site?	X Yes No
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil
Characterization Report Checklist: Each of the following items must be included in the report.	
 \[\] Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well Field data \[\] Data table of soil contaminant concentration data \[\] Depth to water determination \[\] Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release \[\] Boring or excavation logs \[\] Photographs including date and GIS information \[\] 	ls.

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Received by OCD: 9/16/2020 10:52:47 AM Form C-141 State of New Mexico Page 4 Oil Conservation Division

Dance	~	-4	1
rage	4	o_I	0/
- 0	_		

	1 180 2 0
Incident ID	NAB1922539866
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release noti public health or the environment. The acceptance of a C-141 report by the C failed to adequately investigate and remediate contamination that pose a thre addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	fications and perform corrective actions for releases which may endanger DCD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In
Printed Name: Dakota Neel	Title: HSE Coordinator
Signature: Signature:	Date:09/15/2020
email:dneel2@concho.com	Telephone: 575-746-2010
OCD Only	
Received by: Cristina Eads	Date:09/16/2020

Received by OCD: 9/16/2020 10:52:47 AM Form C-141 State of New Mexico Page 5 Oil Conservation Division

	r uge 3 0j
Incident ID	
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.
X 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: Dakota Neel Title: HSE Coordinator
Signature:
email:dneel2@concho.com Telephone: _575-746-2010
OCD Only
Received by: Cristina Eads Date: 09/16/2020
☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Deferral Approved
Signature: Date: 11/20/2020

Site Characterization Report and Deferral Request

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

Lance Crenshaw

Joel W. Lowry



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Figure 2 - Aerial Proximity Map

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APPENDICES

Appendix A - Depth to Groundwater Information

Appendix B - Field Data and Soil Profile Logs

Appendix C - Laboratory Analytical Reports

Appendix D - Photographic Log

1.0 PROJECT INFORMATION

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

Location of Release Source							
Latitude: 32.01648 Longitude: -104.42426							
		Provide	d GPS are in WGS84 fo				
Site Name:		e Federal #001H	Site Type:		Tank Battery		
Date Release Dis	covered:	7/22/2019	API # (if app)	licable):	30-015-36678		
Unit Letter	Section	Township	Range	County			
Е	29	26S	25E	Eddy			
Surface Owner:	State X		Private (N	Jame Release)		
Crude Oil	Volum	ne Released (bbls)		Volume R	Recovered (bbls)		
X Produced W	/ater Volum	ne Released (bbls)	33	Volume R	Recovered (bbls) 31		
Is the concentration of total dissolved solids (TDS) in the produced water > 10,000 mg/L?							
Condensate Volume Released (bbls) Volume Recovered (bbls)							
Natural Gas Volume Released (Mcf) Volume Recovered (Mcf)					decovered (Mcf)		
Other (describe) Volume/Weight Released Volume/Weight Recovered							
Cause of Releas The release was containment.		ightning striking the w	rater tank. The re	lease was confir	ned to within the lined		
		In	nitial Response	9			
X The source of	of the release ha	as 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 liqui	ds and recovera	able materials have been	n removed and ma	inaged appropriat	tely.		

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 Release 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 and the natural drainage north of the Site where groundwater is not outcropping was considered to assist in the determination. Additionally, the Site is located within the Castille Formation; logs from water wells in the vicinity suggest that they were completed within alluvial deposits. Depth to groundwater information is provided as Appendix A.

What is the shallowest depth to groundwater beneath the area affected by the release?	> 45 Ft.	
Did the release impact groundwater or surface water?	Yes X No	0
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	Yes X No	o
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 X No	0
Are the lateral extents of the release within 300 feet of any occupied permanent residence, school, hospital, institution or church?	Yes X No	0
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 X No	0
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	Yes X No	o
Are the lateral extents of the release within the incorporated municipal boundaries or within a defined municipal fresh water well field?	Yes X No	o
Are the lateral extents of the release within 300 feet of a wetland?	Yes X No	o
Are the lateral extents of the release overlying a subsurface mine?	Yes X No	o
Are the lateral extents of the release overlying an unstable area such as karst geology?	X Yes No	o
Are the lateral extents of the release within a 100-year floodplain?	Yes X No	o
Did the release impact areas not on an exploration, development, production or storage site?	Yes X No	o

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 on Figures 1 & 2.

3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

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

	Closure Criteria for Soil Impacted by a Release							
Probable Depth to Groundwater	Constituent	Method	Limit					
	Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg					
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	100 mg/kg					
> 45 Ft.	DRO + GRO	EPA SW-846 Method 8015M	N/A mg/kg					
	BTEX	EPA SW-846 Methods 8021b or 8260b	50 mg/kg					
	Benzene	EPA SW-846 Methods 8021b or 8260b	10 mg/kg					

4.0 INITIAL INVESTIGATION

During initial response activities the affected tank and impacted gravel was removed from within the lined tank battery containment. Upon removing 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 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 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 for chloride beyond 1 Ft. bgs in the areas characterized by sample points 8.10 SP1 and 8.10 SP3.

A "Site & Sample Location Map" is provided as Figure 3. A "Soil Chemistry Table" is provided as Table 1. Laboratory Analytical Reports are provided in Appendix C. Field data and soil profile logs, if applicable, are provided as Appendix B.

5.0 DEFERRAL REQUEST

Based on laboratory analytical results and field observations, COG requests NMOCD approval to defer remediation of impacted soil affected above the NMOCD Closure Criteria beneath the lined tank battery facility. COG maintains remediation of impacted soil affected above the NMOCD Closure Criteria beneath the lined tank battery facility may pose a risk to human health and safety and would result in a major facility deconstruction. 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 AND 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 19.15.29.13 upon decommissioning the facility.

7.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this Site Characterization Report and Deferral Request 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

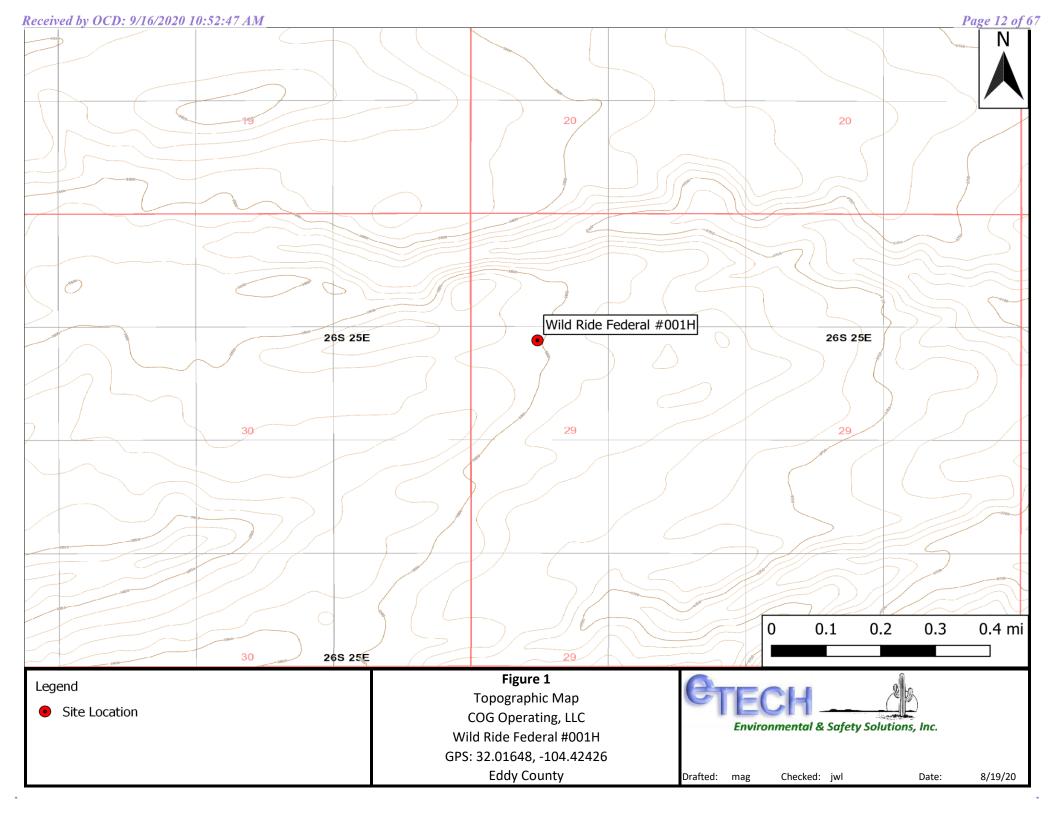


Figure 2 Aerial Proximity Map

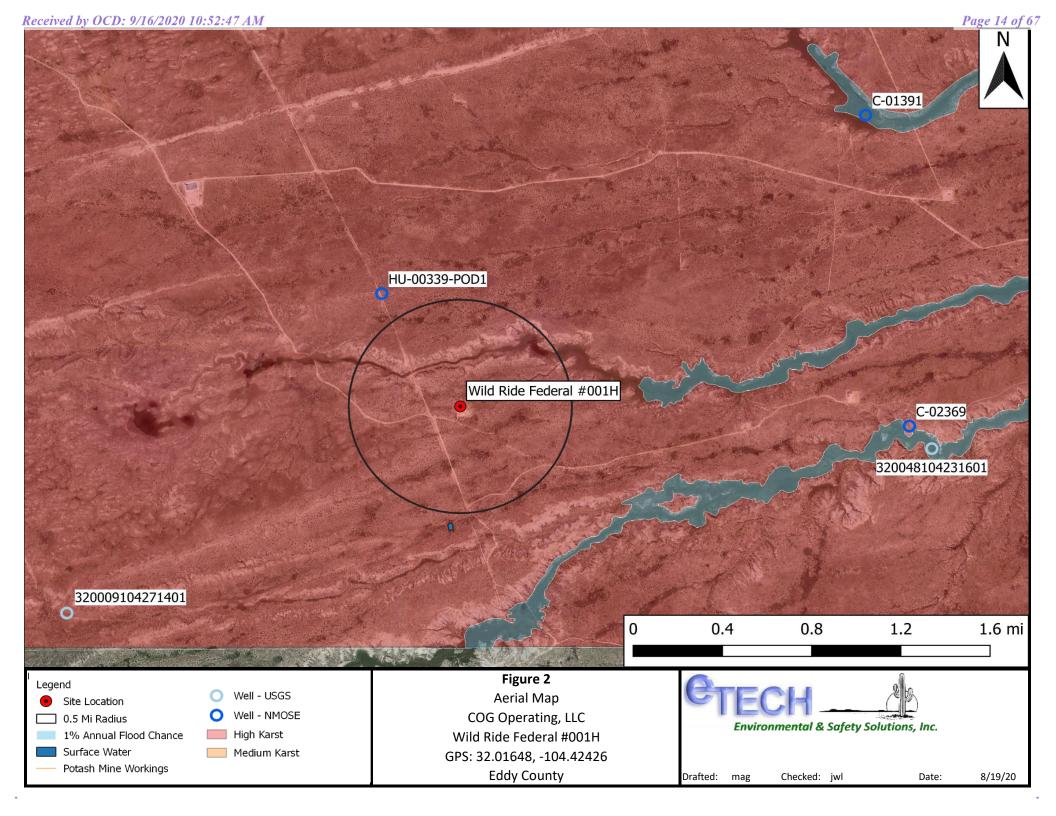


Figure 3 Site and Sample Location Map



Sample Point

Figure 3

Site and Sample Location Map COG Operating, LLC Wild Ride Federal #001H GPS: 32.01648, -104.42426 **Eddy County**



Drafted:

Checked: jwl

Date:

8/28/20

Table 1 Concentrations of BTEX, TPH, and/or Chloride in Soil

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX TPH AND CHLORIDE IN SOIL

COG Operating, LLC Wild Ride Federal #001H

NMOCD Ref. #: nAB1922539866

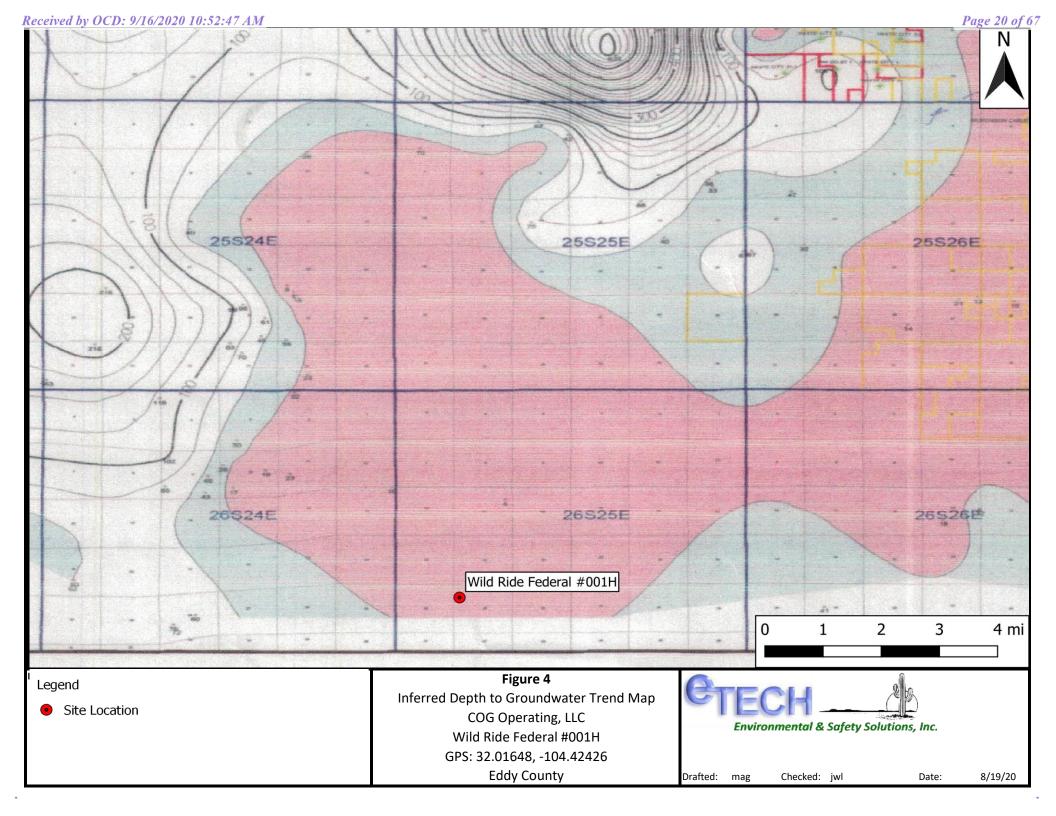
1(1/10 CD 100) #1 M1D1/2200/000											
				SW 840	6 8021B		SW 846 8015M Ext.				4500 Cl
Sample ID	Date	Depth	Soil Status	Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
8.10 SP1 @ Surface	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	<.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
Clo	sure Crite	ria	·	10	50	-	-	N/A	-	100	600

NOTES:

_ =

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

Appendix A Depth to Groundwater Information





New Mexico Office of the State Engineer

Water Column/Average Depth to Water

X

553806

(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)

4 4 4 21 26S 05E

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD

QQQ Subbasin County 64 16 4 Sec Tws Rng Code

3543254

Water DistanceDepthWellDepthWater Column 1019 520

Average Depth to Water:

376 feet

Minimum Depth:

376 feet

Maximum Depth:

376 feet

Record Count: 1

POD Number

HU 00339 POD1

UTMNAD83 Radius Search (in meters):

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

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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)
Q64 Q16 Q4 Sec Tws Rng

(NAD83 UTM in meters)

POD Number HU 00339 POD1

4 4 21 26S 05E

X

553806 3543254

Driller License:

Driller Company:

Driller Name:

Well Tag

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: Depth Water:

Casing Size:

6.50

Depth Well:

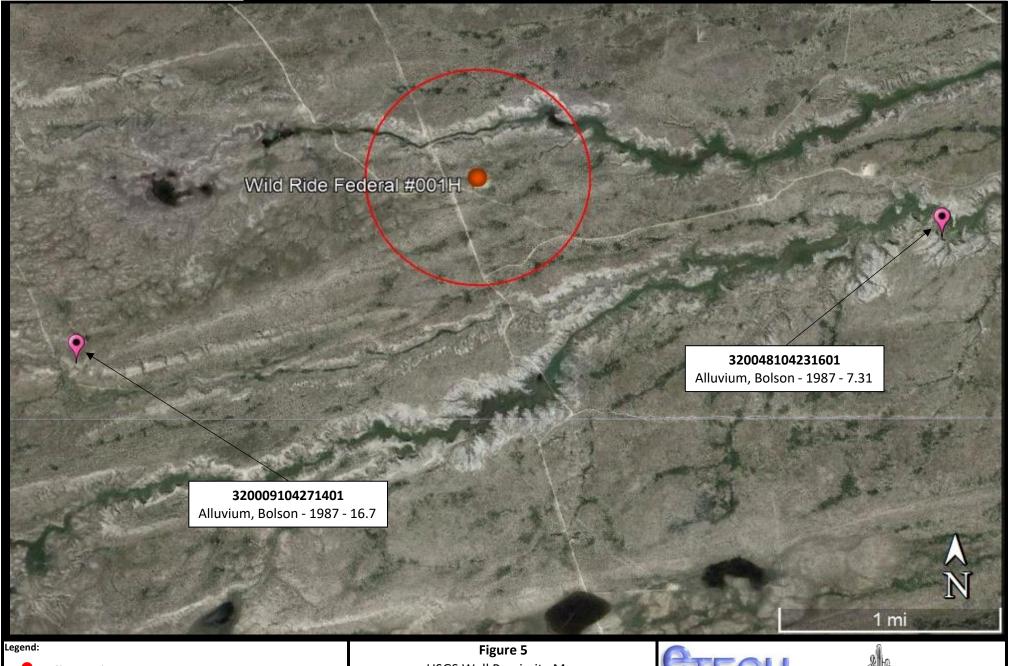
520 feet

376 feet

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

8/19/20 1:17 PM

POINT OF DIVERSION SUMMARY





Site Location



USGS Water Well

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





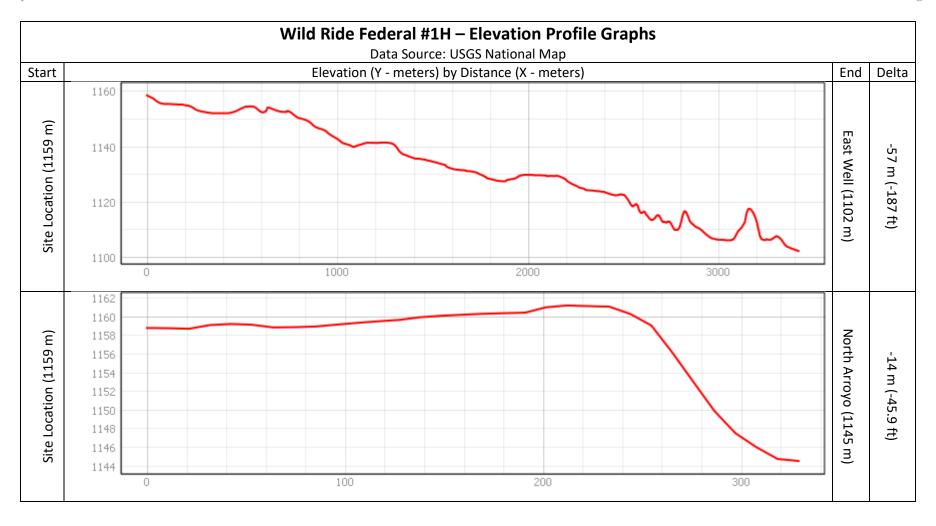
Environmental & Safety Solutions, Inc.

Drafted: Ic

Checked: jwl

Date:

8/19/20





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National Water Information System: Web Interface

USGS Water Resources

Data Category:	Geographic Area:		
Groundwater	✓ United States	~	GO

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Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

• 320048104231601

Minimum number of levels = 1

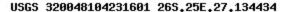
Save file of selected sites to local disk for future upload

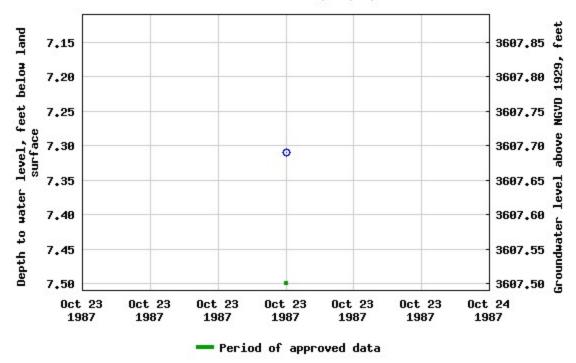
USGS 320048104231601 26S.25E.27.134434

Available data for this site	Groundwater: Field measurements ∨ GO
Eddy County, New Mexico	
Hydrologic Unit Code 13060	0011
Latitude 32°00'48", Longit	ude 104°23'16" NAD27
Land-surface elevation 3,6:	15.00 feet above NGVD29
This well is completed in th	e Alluvium, Bolson Deposits and Other Surface
Deposits (110AVMB) local a	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.

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Title: Groundwater for USA: Water Levels

URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u>

Page Last Modified: 2019-09-17 10:15:43 EDT

1.26 1.14 nadww02





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USGS Water Resources

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Groundwater	✓ United States	✓ GO

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site_no list =

• 320009104271401

Minimum number of levels = 1

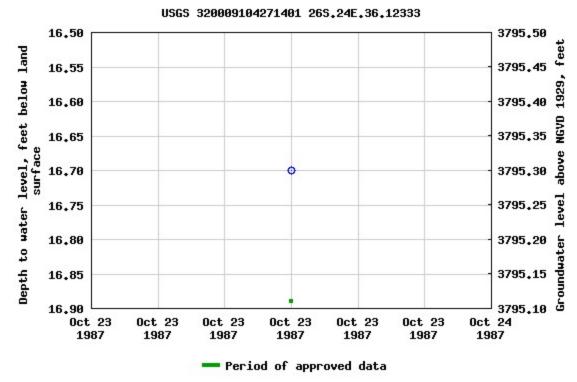
Save file of selected sites to local disk for future upload

USGS 320009104271401 26S.24E.36.12333

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 aguifer.	Available data for this site	Groundwater: Field measurements ∨ GO
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	Eddy County, New Mexico	
Land-surface elevation 3,812 feet above NGVD29 This well is completed in the Alluvium, Bolson Deposits and Other Surface	Hydrologic Unit Code 13060	0011
This well is completed in the Alluvium, Bolson Deposits and Other Surface	Latitude 32°00'09", Longit	ude 104°27'14" NAD27
·	Land-surface elevation 3,83	L2 feet above NGVD29
Deposits (110AVMB) local aquifer.	This well is completed in th	e Alluvium, Bolson Deposits and Other Surface
	Deposits (110AVMB) local a	quifer.

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.

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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: <u>USGS Water Data Support Team</u>

Page Last Modified: 2019-09-17 10:18:57 EDT

1.03 0.96 nadww02



Appendix B Field Data and Soil Profile Logs





Soil Profile

Project:	Wild D	1ida Fada 1 #00411			Date:	8/10/20
		lide Federal #001H				
Project Numb	er:	0	Latitude:	32.01648	Longitude: _	-104.42426
Depth (ft. bgs)				De:	scription	
1	9	Inc	ported Fill /	Calicha		
2	~~~~~			<u>cacive ya</u>		
3						
4						
7						
3		*******				
6						
7						
8						
9						
10		1500 S				
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32						
33						
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38		*********				
39				,		
40						

Appendix C Laboratory Analytical Reports

Certificate of Analysis Summary 669782

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Wild Ride Federal #001H

Project Id:

11245

Date Received in Lab: Wed 08.12.2020 11:20

Contact:

PM

Report Date: 08.17.2020 13:21

Project Location:

Eddy County, NM

Project Manager: Jessica Kramer

	Lab Id:	669782-0	001	669782-0	002	669782-0	003	669782-	004	
Analysis Requested	Field Id:	8.10 SP1 @ Surface		8.10 SP1 @ 1'		8.10 SP2 @ Surface		8.10 SP2 @ 1'		
Anaiysis Requesiea	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

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

Jessica Vramer

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)



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 Vramer

Project Manager

A Small Business and Minority Company

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

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

Xenco

Environment Testing

CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Wild Ride Federal #001H

 Project ID:
 11245
 Report Date:
 08.17.2020

 Work Order Number(s):
 669782
 Date Received:
 08.12.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Etech Environmental & Safety Solution, Inc, Midland, TX

Wild Ride Federal #001H

Sample Id: 8.10 SP1 @ Surface Matrix:

Date Received:08.12.2020 11:20

Lab Sample Id: 669782-001

Soil Date Collected: 08.10.2020 00:00

Prep Method: E300P

% Moisture:

Tech:

Analyst:

SPC

Analytical Method: Chloride by EPA 300

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

% Moisture:

Tech: Analyst: DVM ARM

Date Prep:

08.13.2020 17:00

Basis:

Wet Weight

Parameter	Cas Numbe	er Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	3 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	3 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		

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

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		



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:

SPC Analyst:

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 Wet Weight

Basis:

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		

Environment Testing

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

08.14.2020 12:50

Tech:

KTL

% Moisture:

Analyst: KTL

Date Prep:

460-00-4

08.14.2020 08:00

%

70-130

Basis:

Wet Weight

Seq Number: 3134669

4-Bromofluorobenzene

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		

101



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

Parameter	Cas Numbe	r 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		



Xenco

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: Analyst: KTL

KTL

% Moisture:

Seq Number: 3134669

Date Prep: 08.14.2020 08:00 Basis:

Wet Weight

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	C	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

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	

Environment Testing

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

SPC

% Moisture:

Tech: 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

% Moisture:

Tech: Analyst: DVM ARM

Date Prep:

08.13.2020 17:00

Basis:

Wet Weight

Parameter	Cas Number	r 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		

Xenco

Environment Testing

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

08.14.2020 13:31

Tech: K

Analyst:

KTL

% Moisture:

Tech: KII

KTL

Date Prep: 08.14.2020 08:00

Basis:

Wet Weight

Seq Number: 3134669

1,4-Difluorobenzene

Parameter	Cas Number	Result	\mathbf{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		

119

%

70-130

540-36-3

Page 46 of 67



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.
- RPD exceeded lab control limits.
- The target analyte was positively identified below the quantitation limit and above the detection limit.
- Analyte was not detected.
- 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.

BRL Below Reporting Limit.

ND Not Detected.

RLReporting 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

DLMethod Detection Limit

NC Non-Calculable

SMP Client Sample

BLK

Method Blank

Matrix Spike

BKS/LCS Blank Spike/Laboratory Control Sample

BKSD/LCSD Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate MS

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

^{**} Surrogate recovered outside laboratory control limit.

669782 **QC Summary**

Etech Environmental & Safety Solution, Inc

Wild Ride Federal #001H

Analytical Method: Chloride by EPA 300

Seq Number: 3134516

Matrix: Solid

Spike

250

Spike

251

Amount

E300P Prep Method:

Date Prep:

08.13.2020

MB Sample Id:

7709361-1-BLK

LCS Sample Id: 7709361-1-BKS

LCSD Sample Id: 7709361-1-BSD

Parameter

Chloride

MB Result Amount

LCS LCS Result %Rec

LCSD %Rec

RPD Limits %RPD Limit Units Analysis Date

Flag

< 5.00

106 265

Result 265

LCSD

90-110 106

0

mg/kg

08.13.2020 11:25

Analytical Method: Chloride by EPA 300

Seq Number:

3134516

Matrix: Soil

Prep Method: Date Prep:

RPD

20

20

E300P 08.13.2020

Parent Sample Id:

669779-006

669779-006 S MS Sample Id:

MSD Sample Id: 669779-006 SD

08.13.2020 11:44

Parameter

Chloride

Parent Result

< 5.01

MS MS Result %Rec

271

MSD Result 271

MSD Limits %Rec

90-110

108

MSD

%RPD Limit 0

%RPD

0

Units

Analysis Flag Date

Analytical Method: Chloride by EPA 300

3134516

108

Prep Method:

E300P

mg/kg

Units

Spike

Matrix: Soil

Date Prep:

08.13.2020

Parent Sample Id:

Seq Number:

Parameter

669782-002

MS Sample Id: 669782-002 S MSD Sample Id: 669782-002 SD **RPD**

Analysis

Chloride

Parent Result Amount 581 2490

MS MS Result %Rec 3310 110

MSD Result 3310

%Rec 110 90-110

Limits

Limit 20

mg/kg

Flag Date 08.13.2020 13:12

Analytical Method: TPH by SW8015 Mod

Seq Number:

3134554

Matrix: Solid

Prep Method:

SW8015P

08.13.2020

MB Sample Id:

7709436-1-BLK

Date Prep:

LCSD Sample Id: 7709436-1-BSD

Parameter

MB

LCS Sample Id: 7709436-1-BKS

Gasoline Range Hydrocarbons (GRO)

Result Amount < 50.0 1000

Spike LCS Result %Rec 986

LCS

LCSD LCSD Limits %Rec Result

%Rec

115

112

%RPD **RPD** Limit

Limits

70-130

70-130

Units

Analysis Flag

Diesel Range Organics (DRO)

Motor Oil Range Hydrocarbons (MRO)

< 50.0 1000 MBMB

Flag

99 1030 103 LCS

957 1010

70-130 96

3

mg/kg

%

%

Date

08.13.2020 21:46

Surrogate

o-Terphenyl

1-Chlorooctane

%Rec 116 115

%Rec 115 109

LCS LCSD

70-130 101

2

LCSD

Flag

20 20 mg/kg

08.13.2020 21:46 Units

Analysis Date 08.13.2020 21:46

08.13.2020 21:46

Analytical Method: TPH by SW8015 Mod 3134554

< 50.0

Matrix: Solid

MB Sample Id: 7709436-1-BLK

Flag

Prep Method:

Date Prep:

SW8015P

08.13.2020

Flag

Parameter

Seq Number:

MBResult

Units mg/kg

Analysis Date 08.13.2020 21:24

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / BRPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B] Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result = MS/LCS Result = MSD/LCSD Result

MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec

Flag

Flag

Flag



QC Summary 669782

Etech Environmental & Safety Solution, Inc

Wild Ride Federal #001H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3134554

Matrix: Soil

SW8015P Prep Method:

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	
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

Seq Number: 3134669 Matrix: Solid

Prep Method:

SW5035A

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
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

Seq Number: 3134669 Parent Sample Id:

669700-011

Matrix: Soil

MS Sample Id: 669700-011 S

Prep Method: Date Prep:

SW5035A 08.14.2020

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
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



Project Manager:

Joel Lowry

Chain of Custody

Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701 Housion, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 980-3199, Phoenix, AZ (480) 355-0900 Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296

Allanta, GA (770) 449-8800

Work Order No: WIGTES

	Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni Notes: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco. No 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. Received by: (Signature) Received by: (Signature)	2010 20 11 1 X	Date Time Depth Sampled Sampled Depth 8:0:20	of Containers/Preservativ	Eddy Lovaly, AM Rush:	Project Name: Wild Pide Federal # Will Turn Around Email: Ema	City, State ZIP: Lovington, NM, 88260 Phone: 575-396-2378 Address: City, State ZIP: City, State ZIP:
6	RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K (STCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U a valid punchase order from client company to Xenco, its affiliates and subconfractors. It assigns standard terms and conditions have any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control by: (Signature) Date/Time Relinquished by: (Signature) Relinquished by: (Signature)		BTEX 802 TPH Modification of the transfer of	1 Ted Ext	PINAL JUD REQUEST	ANALYSIS FFOUR	
	Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn J 1631 / 245.1 / 7470 / 7471 : Hg trol ceived by: (Signature) Qate/Time		Sample Comments	H2S04: H2 H2S04: H2 HCL: HL None: NO NaOH: Na MeOH: Ne Zn Acetate+ NaOH: Zn	Preservative Codes	Deliverables: EDD ADaPT Other:	Program: UST/PST PRP Brownfield RRC Superfund State of Project:

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

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

Work Order #: 669782

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 contain	iner/ 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 relinquish	ned/ received?	Yes	
#10 Chain of Custody agrees with sample la	abels/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 headsp	pace?	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

Checklist reviewed by: Jessica Warner

Date: 08.12.2020

eurofins Environment Testing

Certificate of Analysis Summary 669786

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Wild Ride Federal #001H

Project Id:

11245

Date Received in Lab: Wed 08.12.2020 11:20

Project Manager: Jessica Kramer

Contact:

PM

Report Date: 08.17.2020 13:22

Project Location:

Eddy County, NM

Lab Id: 669786-001 669786-002	
Analysis Requested Field Id: 8.10 SP3 @ Surface 8.10 SP3 @ 1'	
Analysis Requested Depth: 1- ft	
Matrix: SOIL SOIL	
Sampled: 08.10.2020 00:00 08.10.2020 00:00	
BTEX by EPA 8021B	
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	
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	
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

Jessica Weamer



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)



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 Vramer

Project Manager

A Small Business and Minority Company

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



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

Xenco

Environment Testing

CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Wild Ride Federal #001H

 Project ID:
 11245
 Report Date:
 08.17.2020

 Work Order Number(s):
 669786
 Date Received:
 08.12.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



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

08.12.2020 16:40

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

CHE

% Moisture:

Analyst:

CHE

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

Date Prep:

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

% Moisture:

Tech: Analyst: DVM ARM

Date Prep: 08.12.2020 17:00 Basis:

Wet Weight

Parameter	Cas Numbe	r 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		



Xenco

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 Prep:

Date Received:08.12.2020 11:20

Lab Sample Id: 669786-001

Date Collected: 08.10.2020 00:00

08.14.2020 08:00

%

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

08.14.2020 14:54

Tech:

KTL

% Moisture:

Analyst:

KTL

70-130

Basis: Wet Weight

Seq Number: 3134669

4-Bromofluorobenzene

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	4	540-36-3	112	%	70-130	08.14.2020 14:54		

99

460-00-4

Environment Testing

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

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		

Environment Testing

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

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 D CI 1		160 00 1	114	0/	70 120	00 14 2020 15 14		

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	



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.

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

^{**} Surrogate recovered outside laboratory control limit.

Flag

Flag



669786 **QC Summary**

Etech Environmental & Safety Solution, Inc

Wild Ride Federal #001H

Analytical Method: Chloride by EPA 300

Seq Number: 3134378

Matrix: Solid

E300P Prep Method:

Date Prep:

08.12.2020 7709299-1-BLK LCS Sample Id: 7709299-1-BKS LCSD Sample Id: 7709299-1-BSD MB Sample Id:

LCS MB Spike LCS Limits %RPD Units Analysis LCSD LCSD **Parameter** Result Amount Result %Rec Result %Rec Limit Date

Chloride < 5.00 250 273 109 274 90-110 0 20 08.12.2020 16:47 110 mg/kg

Analytical Method: Chloride by EPA 300

Seq Number:

3134378

Matrix: Soil

Prep Method:

RPD

E300P

Date Prep: 08.12.2020

669777-001 S 669777-001 MS Sample Id: Parent Sample Id:

MSD Sample Id: 669777-001 SD

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

Analytical Method: Chloride by EPA 300

Seq Number:

3134378

Prep Method:

E300P

Matrix: Soil MS Sample Id: 669808-001 S Parent Sample Id: 669808-001

Date Prep: 08.12.2020 MSD Sample Id: 669808-001 SD

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

Analytical Method: TPH by SW8015 Mod

Seq Number:

3134439

Matrix: Solid

SW8015P Prep Method:

08.12.2020 Date Prep:

MB Sample Id: 7709338-1-BLK LCS Sample Id: 7709338-1-BKS LCSD Sample Id: 7709338-1-BSD

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

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

Analytical Method: TPH by SW8015 Mod

Seq Number:

3134439

Matrix: Solid

Prep Method: Date Prep: SW8015P 08.12.2020

MB Sample Id: 7709338-1-BLK

Parameter

MBResult

Units

Analysis Date

Flag

Motor Oil Range Hydrocarbons (MRO)

< 50.0

mg/kg

08.12.2020 21:42

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / BRPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result = MS/LCS Result

= MSD/LCSD Result

MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec

Flag

Flag

Flag



Parent Sample Id:

Diesel Range Organics (DRO)

669786 **QC Summary**

Etech Environmental & Safety Solution, Inc

Wild Ride Federal #001H

669772-001 S

98

Analytical Method: TPH by SW8015 Mod

Seq Number: 3134439

669772-001

< 50.0

999

Matrix: Soil

MS Sample Id:

941

SW8015P Prep Method:

Date Prep: 08.12.2020 MSD Sample Id:

4

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

94

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

Analytical Method: BTEX by EPA 8021B

3134669 Seq Number:

Matrix: Solid

Prep Method:

SW5035A

669772-001 SD

Date Prep: 08.14.2020

mg/kg

7709515-1-BLK LCS Sample Id: 7709515-1-BKS LCSD Sample Id: 7709515-1-BSD MB Sample Id:

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
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

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

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134669 Parent Sample Id:

669700-011

Prep Method:

SW5035A

Date Prep: 08.14.2020 MSD Sample Id: 669700-011 SD

MS Sample Id: 669700-011 S RPD Parent Spike MS MS MSD MSD Limits %RPD Units Analysis **Parameter** Limit Date Result Amount Result %Rec %Rec Result 08.14.2020 08:44 < 0.00200 0.100 0.0930 93 0.0959 95 70-130 3 35 Benzene mg/kg 08.14.2020 08:44 87 70-130 35 Toluene < 0.00200 0.100 0.08650.0893 88 3 mg/kg

Matrix: Soil

08.14.2020 08:44 Ethylbenzene < 0.00200 0.100 0.0838 84 0.0863 85 70-130 3 35 mg/kg 83 3 35 08.14.2020 08:44 m,p-Xylenes < 0.00400 0.200 0.165 0.170 84 70-130 mg/kg < 0.00200 0.100 0.0821 82 0.0848 70-130 3 35 mg/kg 08.14.2020 08:44 o-Xylene 84

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

LCS = Laboratory Control Sample A = Parent Result

= MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec



Chain of Custody

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, Cerisbad, 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

Work Order No: WWG784

Work Order Comments Program: UST/PST PRP Brownfields RRC Superfund State of Project: Reporting:Level i PST/US TRR Level i ADaPT Other: HO3: HN H2S04: H2 HCL: HL None: NO NaOH: Na MeOH: N
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Work Order #: 669786

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

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

Date/ Time Received: 08.12.2020 11.20.00 AM

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 conta	ner/ 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 relinquish	ned/ received?	Yes	
#10 Chain of Custody agrees with sample I	abels/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 headsp	pace?	N/A	

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

PH Device/Lot#:

Checklist completed by:

Brian

Date: 08.12.2020

Checklist reviewed by: Jessica Vramer

Date: 08.12.2020

Appendix D Photographic Log

Photographic Log

Photo Number:

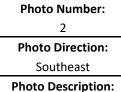
1

Photo Direction:

Birdseye

Photo Description: Aerial view of facility prior to lightning strike and resulting fire.





View of impermeable liner after tank and gravel removal.



Photographic Log

Photo Number:

3

Photo Direction: Northwest

Photo Description: View of impermeable liner after tank and gravel removal.



Photo Number:

4

Photo Direction: Northeast

Photo Description: View of melted portion of liner above high water mark.

