Thistle 22 CTB 2

2/12/2024

OCD incident nAPP2404353463

Spill Volume(Bbls) Calculator									
Inputs in blue, Outputs in red									
Con	taminated S	Soil measurement							
Area (sq	feet)	Depth (in)							
<u>900.0</u>	<u>00</u>	<u>0.08</u>							
Cubic Feet of So	oil Impacted	<u>6.23</u>							
Barrels of Soil	Impacted	<u>1.11</u>							
Soil Ty	pe	Sand							
Barrels of Oil 100% Satu	•	<u>0.22</u>							
Saturation	Fluid pre	esent with shovel/backhoe							
Estimated Bar Releas		0.22							
	Free Stand	ing Fluid Only							
Area (sq	feet)	Depth (inches))							
<u>900.0</u>	<u>)0</u>	<u>0.083</u>							
Standing	fluid	<u>1.11</u>							
<u>Total fluids</u>	spilled	<u>1.33</u>							

Spills In Lined Containment								
Measurements Of Standing Fluid								
Length(Ft)	200							
Width(Ft)	60.00							
Depth(in.)	0.14							
Total Capacity without tank displacements (bbls)	24.93							
No. of 500 bbl Tanks In Standing Fluid	12							
No. of Other Tanks In Standing Fluid	0							
OD Of Other Tanks In Standing Fluid(feet)	0							
Total Volume of standing fluid accounting for tank displacement.	20.23							
Fluids spilled in containment (bbls)	20.23							
Impacted surface soils (bbls)	1.33							
Total Fluids Spilled (bbls)	21.56							



209 W. McKay Street Carlsbad, New Mexico 88220 Tel. 432-701-2159 www.ntgenvironmental.com

May 22, 2024

Mike Bratcher District Supervisor Oil Conservation Division, District 2 811 S. First Street Artesia, New Mexico 88210

Re: Deferral Request Thistle Unit 22 CTB 2 Unit A, S22, T23S, R33E Site Coordinates: 32.295136, -103.554495 Lea County, New Mexico Incident IDs: nAPP2327226475, nAPP2404051181, nAPP2404353463, nAPP2404672954

Mr. Bratcher:

On behalf of Devon Energy Production Company (Devon), New Tech Global Environmental, LLC (NTGE) has prepared this Deferral Request report to document site assessment and remedial action activities at the Thistle 22 CTB 2 (Site). The Site is in Lea County, New Mexico (Figures 1 and 2).

#### Background

This report details the remediation process for four (4) different incidents (i.e., nAPP2327226475, nAPP2404051181, nAPP2404353463, nAPP2404672954).

Based on the initial C-141 for nAPP2327226475 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on September 28th, 2023. The release was caused by the water dump hanging open causing the gun barrel to be over pressured resulting in the release of approximately 15 barrels (bbls) of crude oil of which 15 bbls were recovered for a net loss of 0 bbls of crude oil. As well as 27 bbls of produced water of which 25 bbls were recovered resulting in a net loss of two barrels of produced water. Upon discovery, the equipment was shut-in, and the area secured.

Based on the initial C-141 for nAPP2404051181 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on February 8th, 2024. The release was caused by a leak in the gun barrel resulting in the release of approximately 22 barrels (bbls) of produced water of which 12 bbls were recovered for a net loss of 10 bbls of produced water. Upon discovery, the equipment was shut-in, and the area secured.

Based on the initial C-141 for nAPP2404353463 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on February 12th, 2024. The release was caused by a leak in the gun barrel resulting in the release of approximately 22 barrels (bbls) of produced water of which 20 bbls were recovered for a net loss of 2 bbls of produced water. Upon discovery, the equipment was shut-in, and the area secured.

Mr. Mike Bratcher May 22, 2024 Page 2 of 4

Based on the initial C-141 for nAPP2404672954 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on February 15th, 2024. The release was caused by a leak in the gun barrel resulting in the release of approximately 22 barrels (bbls) of produced water of which 20 bbls were recovered for a net loss of 2 bbls of produced water. Upon discovery, the equipment was shut-in, and the area secured.

The release areas are shown in Figure 3.

#### Site Characterization

The site is located within a low karst area. Based on a review of the New Mexico Office of State Engineers (NMOSE) and USGS databases, there is one known water source (C-04664-POD1) within a <sup>1</sup>/<sub>2</sub>-mile radius of the Site. No other receptors (playas, wetlands, waterways, lakebeds, or ordinance boundaries) are located within each specific boundary or distance from the Site. A copy of the site characterization information and the associated NMOSE summary report is attached.

#### **Regulatory Criteria**

NTGE characterized the Site according to Table I, Closure Criteria for Soils Impacted by a Release, from the New Mexico Administrative Code (NMCA) Title 19, Chapter 15, Part 29, Section 12 (NMAC 19.15.29.12).

From surface to 4 ft below ground surface:

- Benzene: 10 milligrams per kilogram (mg/kg).
- Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX): 50mg/kg.
- TPH: 100 mg/kg (GRO + DRO + MRO).
- Chloride: 600 mg/kg

Below 4 ft below ground surface:

- Benzene: 10 milligrams per kilogram (mg/kg).
- Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX): 50mg/kg.
- GRO + DRO: 1,000 mg/kg
- TPH: 2,500 mg/kg (GRO + DRO + MRO).
- Chloride: 10,000 mg/kg

#### Site Assessment

On November 14<sup>th</sup>, 2023, NTGE conducted site assessment activities to assess the vertical extent of impacts at the Site. A total of three (3) vertical sample points (i.e., TP-1 through TP-3) and five (5) horizontal sample points (i.e., H-1 through H-5) were installed within the release area to characterize the impacts. Soil samples were collected in 0.5-to-1-foot (ft) intervals from depths ranging from 0 - 4 feet below ground surface (ft bgs) with backhoe. Sample locations are shown in Figure 3.

On January 9<sup>th</sup>, 2024, NTGE conducted additional site assessments activities to further delineate the horizontal extent of impacts at the Site. A total of four (4) additional horizontal sample points (i.e., H-1A through H-5A) were installed adjacent to the release area to characterize impacts. Soil samples were collected in 0.5 ft intervals from depths ranging from 0 - 0.5 ft bgs. Sample locations are shown in Figure 3.

On February 15<sup>th</sup>, 2024, NTGE conducted additional site assessment activities to delineate additional releases impact at the Site. A total of three (3) additional vertical sample points (i.e., V-1 through V-3) and five (5) additional horizontal sample points (i.e., H-6 through H-10) were installed within the release



Mr. Mike Bratcher May 22, 2024 Page 3 of 4

area to characterize the impacts. Soil samples were collected in 0.5 ft intervals from depths ranging from 0-0.5 ft bgs with a geotechnical hand-auger. Sample locations are shown in Figure 3.

Soil samples were placed directly into laboratory provided samples containers, placed on ice, and transported under proper chain-of-custody protocol. Soil samples were collected and analyzed for TPH (EPA method 8015 modified), BTEX (EPA Method 8021B), and chloride (method SM4500Cl-B). Laboratory reports containing analytical methods and chain-of-custody documents are attached.

#### **Remedial Action Activities and Confirmation Sampling**

Based on the analytical results, Devon proceeded with the remedial actions at the Site to include the excavation and disposal of impacted soils above the regulatory limits. The release area was excavated to a depth of one (1) ft bgs in the following areas: TP-1 through TP-3, V-2, H-1 through H-5, H-8, and H-9.

On May 6<sup>th</sup>, 2024, a total of twenty (20) composite confirmation samples were collected from the excavation base (i.e., CS-1 through CS-20) and ten (10) composite confirmation samples were collected from the excavation sidewalls (SW-1 through SW-10) to ensure impacted soil was removed.

Analytical results, analytical results indicated that multiple composite confirmation excavation base and side wall samples (i.e., CS-10 through CS-12, CS-14 through CS-20, and SW-6 through SW-8) were above NMOCD regulatory criterion for chloride and/or TPH concentrations.

As a result, the impacted areas of CS-17, SW-7 and SW-8 were excavated further. On May 15<sup>th</sup>, NTGE collected a total of two (2) additional confirmation samples were collected from the excavation base (i.e., CS-17 and CS-21) and three (3) additional confirmation samples were collected from the excavation sidewalls (i.e., SW-7A, SW-8A, and SW-10) to ensure impacted soil was removed.

Analytical results indicated all samples, except the following: CS-10 through CS-12, CS-13 through CS-16, CS-18 through CS-20, SW-6, and SW-7, were below NMOCD regulatory criterion for the Site. The final excavation extent and confirmation sample locations are shown in Figure 4. Analytical results of the confirmation samples are included in Table 2.

Soil samples were placed directly into laboratory provided sample containers, placed on ice, and transported under proper chain-of-custody protocol to the lab. The confirmation samples were collected every 200 square feet and analyzed for TPH (EPA method 8015 modified), BTEX (EPA Method 8021B), and chloride (method SM4500Cl-B). Laboratory reports containing analytical methods and chain-of-custody documents are attached.

#### **Deferral Sampling**

On May 15<sup>th</sup>, 2024, NTGE installed one (1) vertical deferral sample point (i.e., DS-1) in 1 ft depth intervals from depths ranging from 2 - 4 ft bgs with a geotechnical hand auger to characterize the impacts that couldn't be reached due to facility infrastructure. Laboratory results of these samples are presented in Table 2 and their locations are shown in Figure 5.

Soil samples were placed directly into laboratory provided sample containers, placed on ice, and transported under proper chain-of-custody protocol to the lab. The confirmation samples were collected every 200 square feet and analyzed for TPH (EPA method 8015 modified), BTEX (EPA Method 8021B), and chloride (method SM4500Cl-B). Laboratory reports containing analytical methods and chain-of-custody documents are attached.

NTGE Project No.: 237334

Mr. Mike Bratcher May 22, 2024 Page 4 of 4

#### **Deferral Request**

Devon personnel have expressed that the following excavation areas: CS-10 through CS-12, CS-13 through CS-16, CS-18 through CS-20, SW-6, and SW-7 cannot be expanded vertically or horizontally due to the presence of facility infrastructure (i.e., liner, tank batteries, separators, adjacent flowlines and electrical lines, etc.) around the excavation and the associated safety concerns in further encroaching the infrastructure. The infrastructure in and around the excavation is shown on Figure 5.

On behalf of Devon, NTG Environmental formally requests a deferral to address the remaining soil impacts) at the time of facility decommissioning or in the event infrastructure modifications are made in the area that would alleviate the safety concerns, whichever is sooner. Should the deferral request be granted, a remedial action report documenting excavation expansion and confirmation sampling activities will be prepared and filed following completion of the further actions to be completed at a future date. The release notification, site assessment/characterization, remediation plan, and closure/deferral portion of form C-141 are attached to the front of this report.

If you have any questions regarding this report or need additional information, please contact us at 432-701-2159.

Sincerely, **NTG Environmental** 

aplus.

Ethan Sessums Project Manager

Attachments:

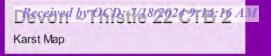
Site Characterization Information Tables Figures Photographic Log Laboratory Reports and Chain-of-Custody

Ziller furth

Kellan Smith Project Scientist



## SITE CHARACTERIZATION INFORMATION









## Google Earth

Image © 2023 Maxar Technologies Image Landsat / Copernicus A N

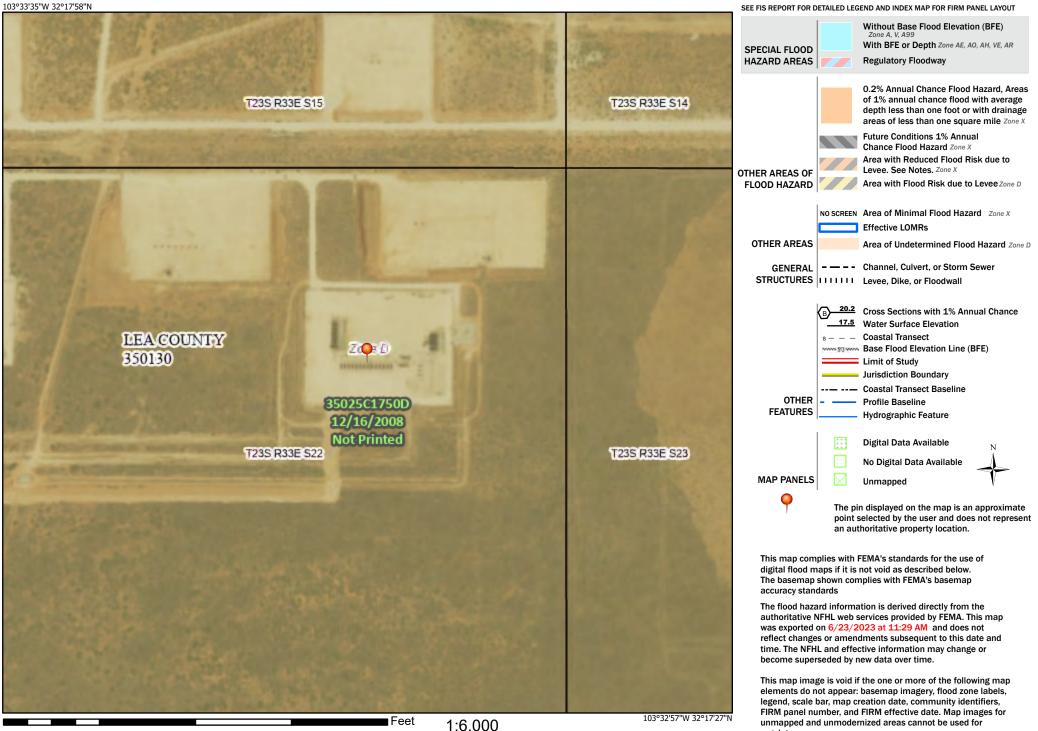
# Received by OCD: 7/18/2024 9:14:16 AM National Flood Hazard Layer FIRMette



### Legend

regulatory purposes.

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1,500 Releasea to Imaging: 8/26/2024 90.03:22 AM

2.000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

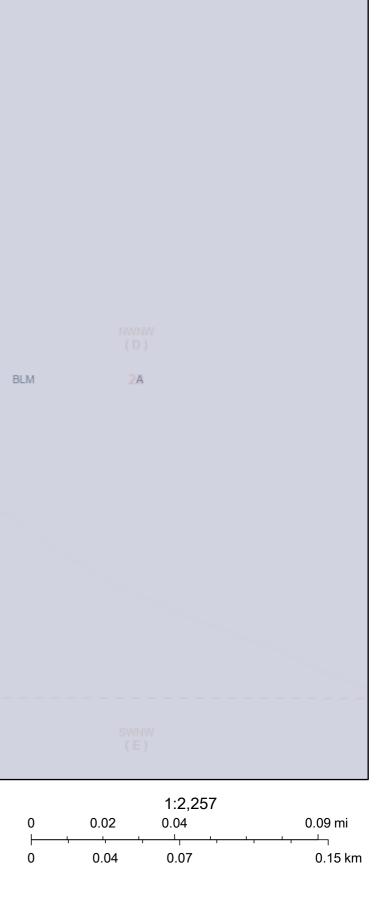
# **OCD Well Locations**

30-025-49427		30-025-42786 <sup>30-025-44418</sup> 30-025-42786 <sup>30-025-42</sup>		
30-025-44417 • 30-025-44420				
	State			
6/23/2023, 9:33:14 AM				
Wells - Large Scale Kars	st Occurrence Potential	Mineral Ownership	S	
• Oil, Active	Low	A-All minerals are owned by U.S.	L PLSS Second Division	

Land Ownership

BLM

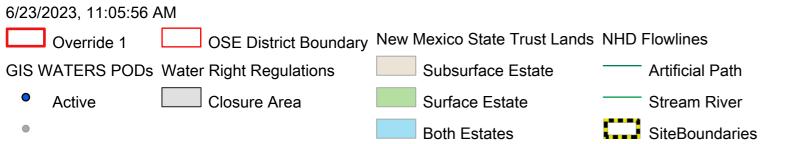
- Oil, Cancelled W Oil and Gas Leasing Restrictions
   N-No minerals are owned by the U.S.
   PLSS First Division
- Oil, New Zara Oil and Gas Leases
- Oil, Plugged

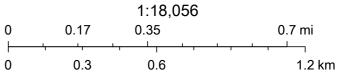


U.S. BLM, BLM, OCD, New Mexico Tech, Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., USGS, Bureau of Land Management, Texas Parks & Wildlife,

# OSE POD Locations Map







Esri, HERE, iPC, U.S. Department of Energy Office of Legacy Management, Esri, HERE, Garmin, iPC, Maxar



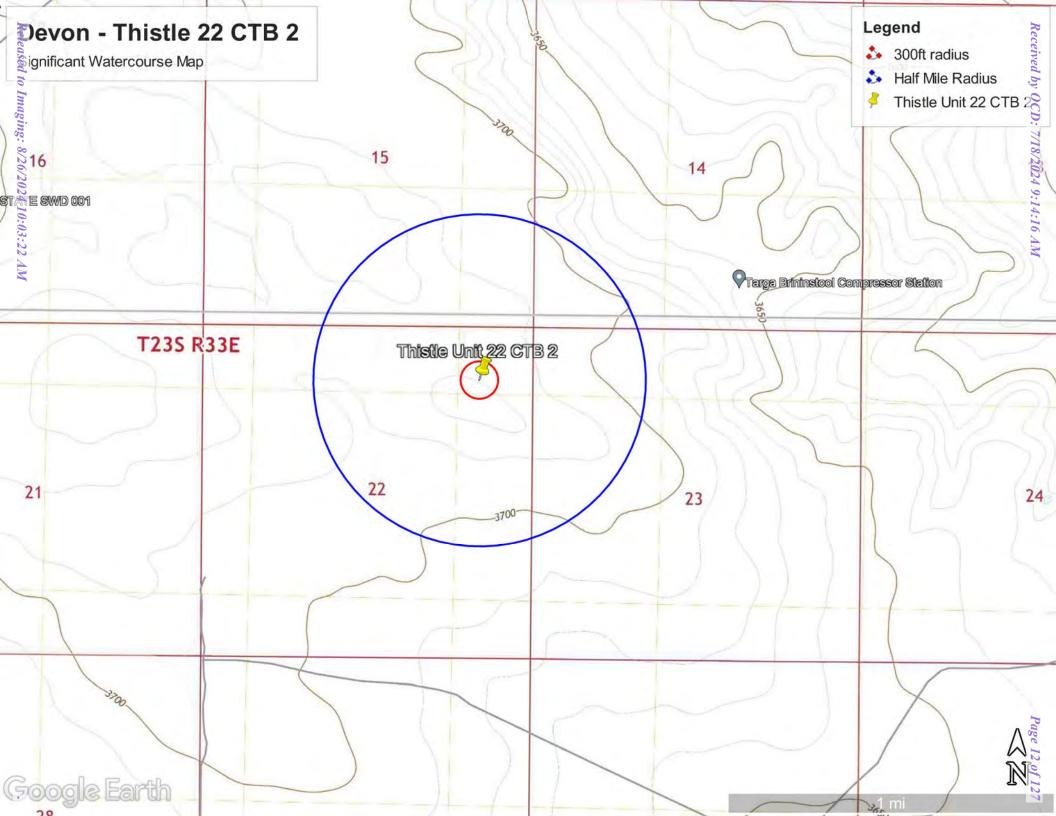
# New Mexico Office of the State Engineer Point of Diversion Summary

		inters a	re sma	llest to	largest	)	(NAD83 UTM in meters)		
Well Tag POD Number	Q64	Q16	Q4	Sec	Tws	Rng	Х	Y	
NA C 04664 POD1	4	1	4	15	23S	33E	635784	3574818	
x     Driller License:     1249     Driller Company:     ATKINS ENGINEERING ASSOC. INC.									
<b>Driller Name:</b> JACKIE D ATKINS									
<b>Drill Start Date:</b> 09/07/2022	Drill I	Finisł	n Dat	e:	0	9/07/202	22 Plu	ig Date:	09/13/2022
<b>Log File Date:</b> 09/26/2022	PCW	Rcv I	Date:	:			Sou	arce:	
Pump Type:		Discha	arge	Size:		Es		Estimated Yield:	
Casing Size:	Depth	Well	:		5	5 feet	De	pth Water:	

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, or suitability for any particular purpose of the data.

6/23/23 10:47 AM

POINT OF DIVERSION SUMMARY



### **U.S. Fish and Wildlife Service** National Wetlands Inventory

## Thistle 22 CTB 2



June 23, 2023

#### Wetlands\_Alaska

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- **Freshwater Pond**

Lake Other Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

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#### Released to Imaging: 8/26/2024 10:03:22 AM

National Wetlands Inventory (NWI) This page was produced by the NWI mapper

## TABLES

Table 1 Summary of Soil Analytical Data - Initial Assesment Samples Thistle 22 CTB 2 Devon Energy Production Company Lea County, NM

									TPH			
		Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	GRO	DRO	GRO + DRO	MRO	Total GRO/DRO/MRO	Chloride
Comula Data	Depth						(C6-C10)	(C10-C28)	(C6-C28)	(C28-C35)	(C6-C35)	
Sample Date	(ft bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
					Tabl	e I Closure Crite	eria for Soil ≤ 50 f	eet Depth to Gro	undwater 19.15.29 M	MAC		
		10 mg/kg				50 mg/kg			1,000 mg/kg		2,500 mg/kg	10,000 mg/kg
Vertical Delineation Samples												
	0.5'	<0.200	2.56	1.95	53.1	57.6	547	2490	3037	446	3483	2200
	1'								33.4		33.4	304
									<10.0			96
	3'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48
	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
	0.5'	<0.050	<0.050		<0.150	<0.300	<10.0		32.8		32.8	784
11/14/23	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
11/14/23	2'	< 0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
11/14/23	3'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
11/14/23	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	114	114	<10.0	114	96
11/14/23	0.5'	< 0.050	<0.050	<0.050	<0.150	< 0.300	<50.0	15700	15700	3020	18720	352
11/14/23	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	320
11/14/23	2'	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	320
11/14/23	3'	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	61.9	61.9	<10.0	61.9	640
11/14/23	3-3.5'	0.051	0.192	0.062	<0.150	0.423	<10.0	188	188	22	210	368
02/15/24	0-0.5'	<0.050	0.097	<0.050	<0.150	0.097	<10.0	39.4	39.4	17.9	57.3	240
02/15/24	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	124	124	35.3	159.3	208
02/15/24	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64
					Horizo	ontal Delineatio	n Samples					
11/14/23	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2880
01/09/24	0-0.5'	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	<4.96
11/14/23	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<50.0	56.5	56.5	<10	56.5	32
02/15/24	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48
11/14/23	0-0.5'	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	1040	1040	433	1473	16
01/09/24	0-0.5'	<0.00198	< 0.00198	<0.00198	< 0.00397	< 0.00397	<49.7	<49.7	<49.7	<49.7	<49.7	<4.99
	0-0.5'						-	-			-	48
												<5.04
												240
	0-0.5'	<0.00198				<0.00397						7.62
02/15/24	0-0.5'	< 0.050	< 0.050	< 0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	320
												416
												112
02/15/24	0-0.5'	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
	11/14/23 11/14/23 11/14/23 11/14/23 11/14/23 11/14/23 11/14/23 02/15/24 02/15/24 02/15/24 02/15/24 02/15/24 11/14/23 01/09/24	Sample Date         (ft bgs)           11/14/23         0.5'           11/14/23         1'           11/14/23         2'           11/14/23         3'           11/14/23         3'           11/14/23         3'           11/14/23         1'           11/14/23         1'           11/14/23         1'           11/14/23         3'           11/14/23         3'           11/14/23         1'           11/14/23         1'           11/14/23         1'           11/14/23         1'           11/14/23         3'           11/14/23         3'           11/14/23         3'           11/14/23         3'           11/14/23         3'           11/14/23         0-0.5'           02/15/24         0-0.5'           02/15/24         0-0.5'           11/14/23         0-0.5'           11/14/23         0-0.5'           11/14/23         0-0.5'           11/14/23         0-0.5'           11/14/23         0-0.5'           11/14/23         0-0.5'           01/09/24	Depth (ft bgs)         (mg/kg)           11/14/23         0.5'         <0.200	Depth (ft bgs)         (mg/kg)         (mg/kg)           11/14/23         0.5'         <0.200	Depth (ft bgs)         Depth (mg/kg)         (mg/kg)         (mg/kg)           11/14/23         0.5'         <0.200	Depth (ft bgs)         Depth (ft bgs)         Depth (mg/kg)         (mg/kg)         (mg/kg)         (mg/kg)           10 mg/kg             Table           11/14/23         0.5'         <0.200	Sample Date         Depth (ft bgs)         (mg/kg)         (mg/kg)         (mg/kg)         (mg/kg)         (mg/kg)           10 mg/kg          50 mg/kg           11/14/23         0.5'         <0.200	Depth (ft bgs)         Depth (ff bgs)         Image (mg/kg)         (mg	Sample Date         Depth (ft bgs)         (mg/kg)         (mg/kg) <td>Sample Date         Depth (ft bgs)         Benzene (mg/kg)         Toluene (mg/kg)         Ethylbenzene (mg/kg)         Xylenes (mg/kg)         BTEX         GRO (C6-C10)         ORO (C10-C28)         GRO (C6-C28)           10         (mg/kg)         <t< td=""><td>Sample Date         Depth (ft bgs)         Benzene (mg/kg)         Toluene (mg/kg)         Ethylbenzene (mg/kg)         Xylenes (mg/kg)         BTEX (mg/kg)         GRO         DRO         GRO+0.RO         MRO           Sample Date         (mg/kg)         (mg/kg)&lt;</td><td>Sample Date         Bencene         Toluene         Bthylenzene         Nylenes         BTEX         (ng/kg)         (ng/kg)</td></t<></td>	Sample Date         Depth (ft bgs)         Benzene (mg/kg)         Toluene (mg/kg)         Ethylbenzene (mg/kg)         Xylenes (mg/kg)         BTEX         GRO (C6-C10)         ORO (C10-C28)         GRO (C6-C28)           10         (mg/kg)         (mg/kg) <t< td=""><td>Sample Date         Depth (ft bgs)         Benzene (mg/kg)         Toluene (mg/kg)         Ethylbenzene (mg/kg)         Xylenes (mg/kg)         BTEX (mg/kg)         GRO         DRO         GRO+0.RO         MRO           Sample Date         (mg/kg)         (mg/kg)&lt;</td><td>Sample Date         Bencene         Toluene         Bthylenzene         Nylenes         BTEX         (ng/kg)         (ng/kg)</td></t<>	Sample Date         Depth (ft bgs)         Benzene (mg/kg)         Toluene (mg/kg)         Ethylbenzene (mg/kg)         Xylenes (mg/kg)         BTEX (mg/kg)         GRO         DRO         GRO+0.RO         MRO           Sample Date         (mg/kg)         (mg/kg)<	Sample Date         Bencene         Toluene         Bthylenzene         Nylenes         BTEX         (ng/kg)         (ng/kg)

Notes:

Values reported in mg/kg
 < = Value Less Than Reporting Limit (RL)</li>
 Bold indicates Analyte Detected

5. TPH analyses by EPA Method SW 8015 Mod.

6. GRO/DRO/MRO - Gasoline/Diesel/Motor Oil

7. Yellow shaded cells indicate analytical samples that exceed the NMAC 19.15.29.12 Table I Closure Criteria for the site.

8. Peach shaded cells indicate analytical samples that exceed the NMAC 19.15.29.13 Table I Closure Criteria for the site (Surface to 4 Feet Below Grade).

4. BTEX analyses by EPA Method SW 8021B

9. --- Not Analyzed

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 Table 2

 Summary of Soil Analytical Data - Confirmation Samples/Deferral Samples

 Thistle 22 CTB 2

 Devon Energy Production Company

 Lea County, NM

										ТРН			
			Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	GRO	DRO	GRO + DRO	MRO	Total GRO/DRO/MRO	Chloride
Sample ID	Comula Data	Depth						(C6-C10)	(C10-C28)	(C6-C28)	(C28-C35)	(C6-C35)	
Sample ID	Sample Date	(ft bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
						Tab	le I Closure Crite	ria for Soil ≤ 50 f	eet Depth to Gro	undwater 19.15.29 I	NMAC		
			10 mg/kg				50 mg/kg			1,000 mg/kg		2,500 mg/kg	10,000 mg/kg
	-						Base Sample						
CS-1	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
CS-2	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
CS-3	05/06/24	1'	< 0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
CS-4	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
CS-5	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
CS-6	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48
CS-7	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
CS-8	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
CS-9	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
CS-10	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	517	517	103	620	128
CS-11	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	15.3	1,500	1513.3	270	1783.3	816
CS-12	05/06/24	1'	< 0.050	<0.050	<0.050	<0.150	<0.300	<10.0	505	505	105	610	2,080
CS-13	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
CS-14	05/06/24	1'	<0.050	<0.050	0.12	<0.150	<0.300	<10.0	1,000	1,000	282	1282	1,230
CS-15	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	843	843	148	991	1,170
CS-16	05/06/24	1'	0.275	6.04	3.47	22.5	32.3	427	4,050	4,477	583	5060	1,640
CS-17	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,000
	05/15/24	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,480
CS-18	05/06/24	1'	1.18	11.4	2.48	41.6	56.7	1,040	5,830	6,870	925	7795	2,000
CS-19	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	2,340	2,340	480	2820	2,600
CS-20	05/06/24	1'	<0.050	1.95	3.53	34.8	40.2	801	6,350	7,151	909	8060	2,080
CS-21	05/15/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	65.5	65.5	12.2	77.7	80
							Sidewall Samp				-		
SW-1	05/06/24	0-1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48
SW-2	05/06/24	0-1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	12.8	12.8	<10.0	12.8	48
SW-3	05/06/24	0-1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64
SW-4	05/06/24	0-1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	41.8	41.8	<10.0	41.8	48
SW-5	05/06/24	0-1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	14.6	14.6	<10.0	14.6	48
SW-6	05/06/24	0-1'	<0.050	0.19	<0.050	<0.150	0.321	<10.0	117	117	<10.0	117	1,040
SW-7	<del>05/06/24</del>	<del>0 1'</del>	<u>2.3</u>	<del>79.6</del>	32.5	240	335	4,760	14,600	<del>19,360</del>	<del>2,060</del>	<u>21,420</u>	<del>2,640</del>
	05/15/24	0-4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,180
SW-8	05/06/24	0-1'	<0.050	<del>≺0.050</del>	<del>≺0.050</del>	<del>&lt;0.150</del>	<u> </u>	<del>&lt;10.0</del>	<del>871</del>	<del>871</del>	<del>199</del>	<del>1,070</del>	<del>7,200</del>
5000	05/15/24	0-1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16
SW-9	05/06/24	0-1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	51.7	51.7	<10.0	51.7	128
SW-10	05/15/24	1-4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	592

										ТРН			
			Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	GRO	DRO	GRO + DRO	MRO	Total GRO/DRO/MRO	Chloride
Sample ID	Sample Date	Depth						(C6-C10)	(C10-C28)	(C6-C28)	(C28-C35)	(C6-C35)	
Sample ib	Sample Date	(ft bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
				Table I Closure Criteria for Soil ≤ 50 feet Depth to Groundwater 19.15.29 NMAC									
			10 mg/kg				50 mg/kg			1,000 mg/kg		2,500 mg/kg	10,000 mg/kg
	Deferral Samples												
	05/15/24	2'	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	16	16	<10.0	16	368
DS-1	05/15/24	3'	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	33.7	33.7	<10.0	33.7	64
03-1	05/15/24	4'	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
	05/15/24	5'	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
DS-2	05/20/24	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16
DS-3	05/20/24	0-0.5'	<0.050	<0.050	<0.050	<0.150	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
DS-4	05/20/24	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	19.1	19.1	<10.0	19.1	48

Notes:

1. Values reported in mg/kg

2.< = Value Less Than Reporting Limit (RL)

3. Bold indicates Analyte Detected 4. BTEX analyses by EPA Method SW 8021B 5. TPH analyses by EPA Method SW 8015 Mod.

6. GRO/DRO/MRO - Gasoline/Diesel/Motor Oil

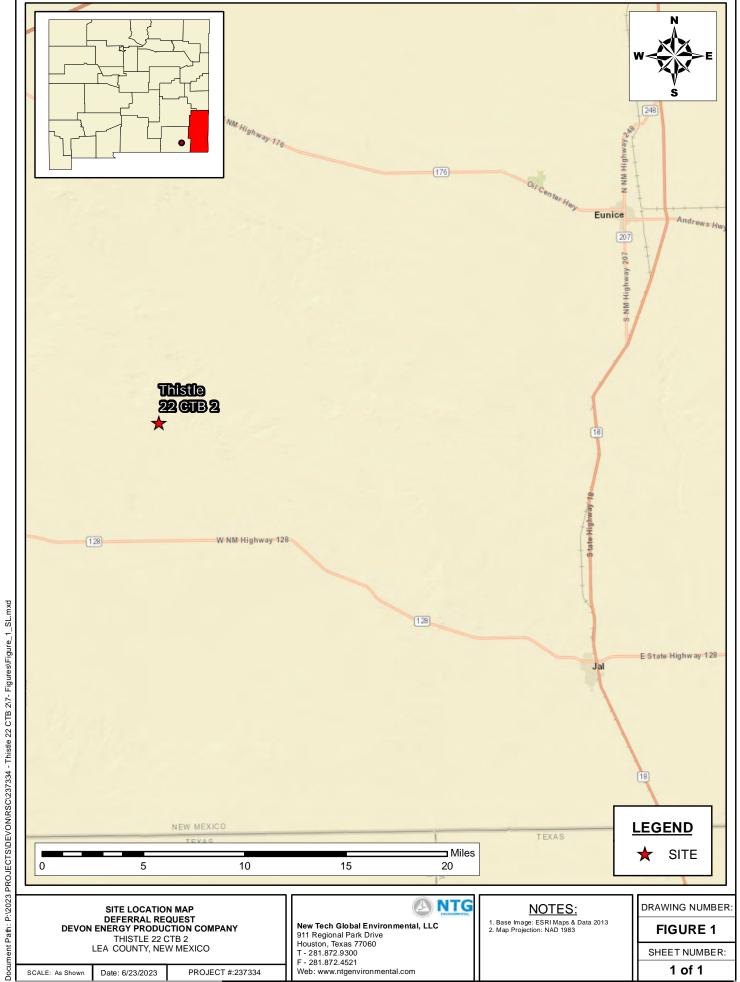
7. Yellow shaded cells indicate analytical samples that exceed the NMAC 19.15.29.12 Table I Closure Criteria for the site.

8. Peach shaded cells indicate analytical samples that exceed the NMAC 19.15.29.13 Table I Closure Criteria for the site (Surface to 4 Feet Below Grade).

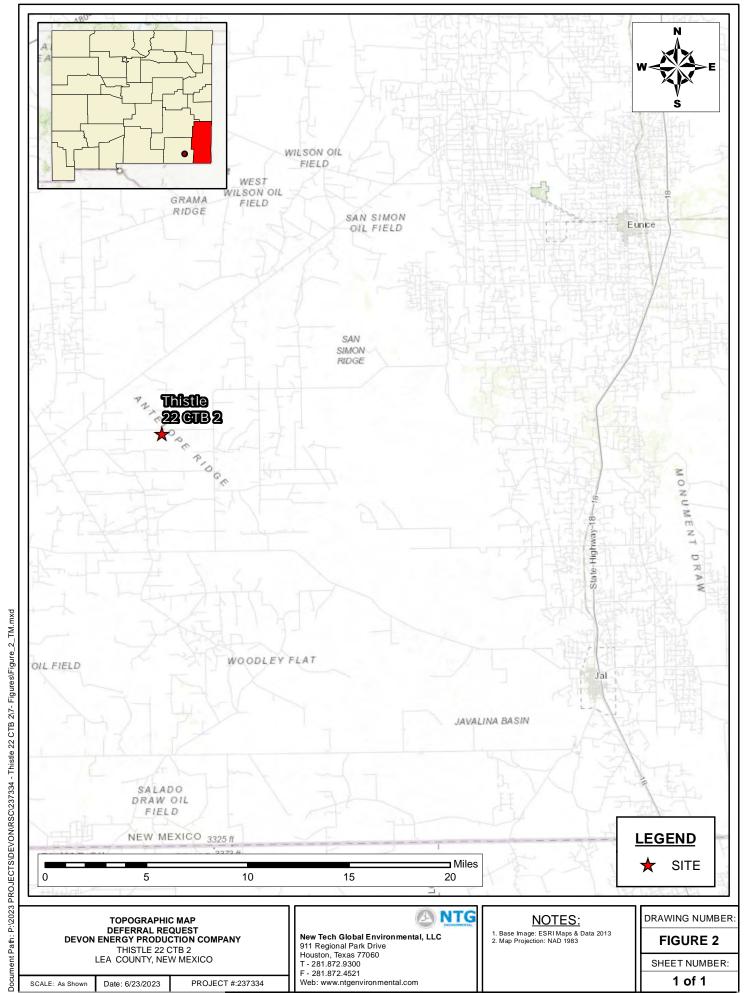
SP-1 Sample Point Excavated

9. --- Not Analyzed

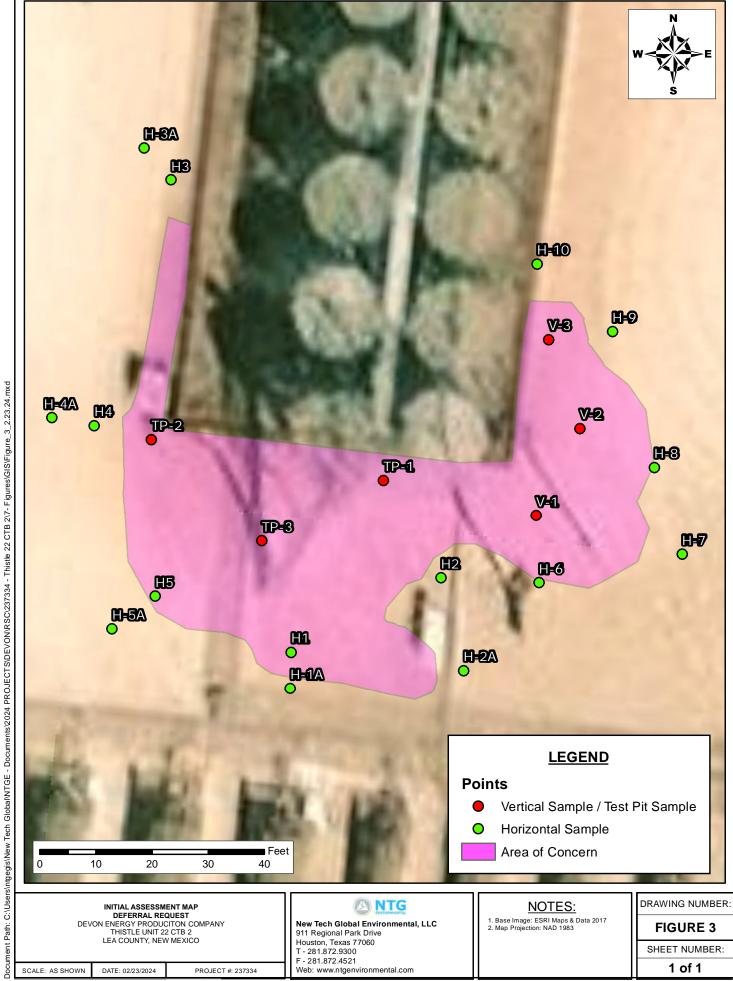
## FIGURES



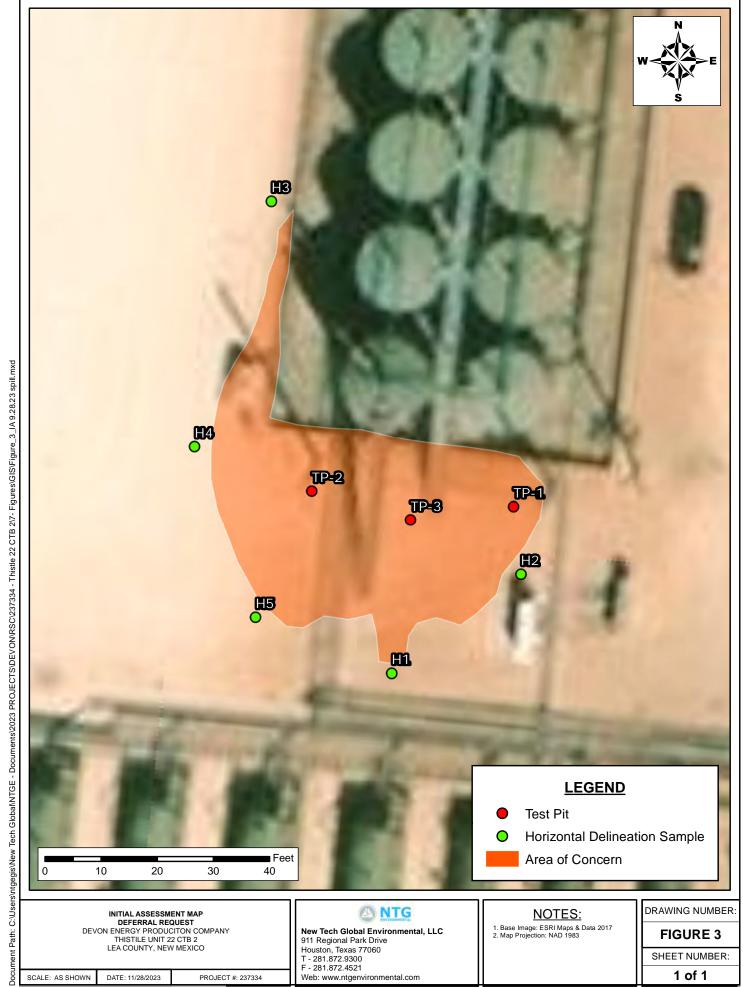
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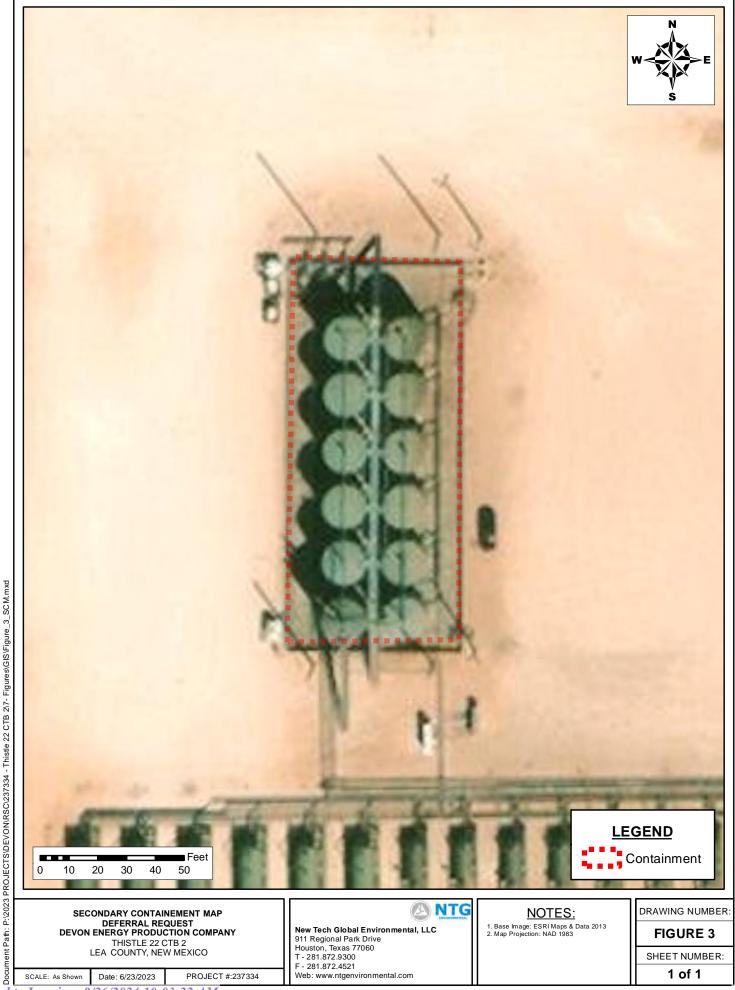
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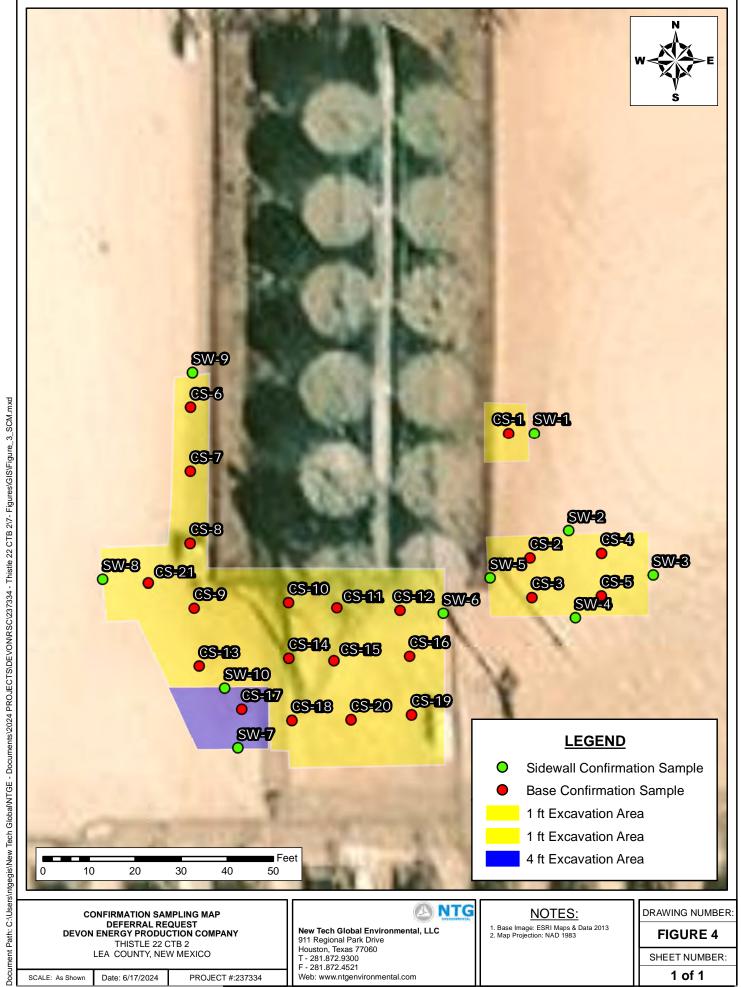
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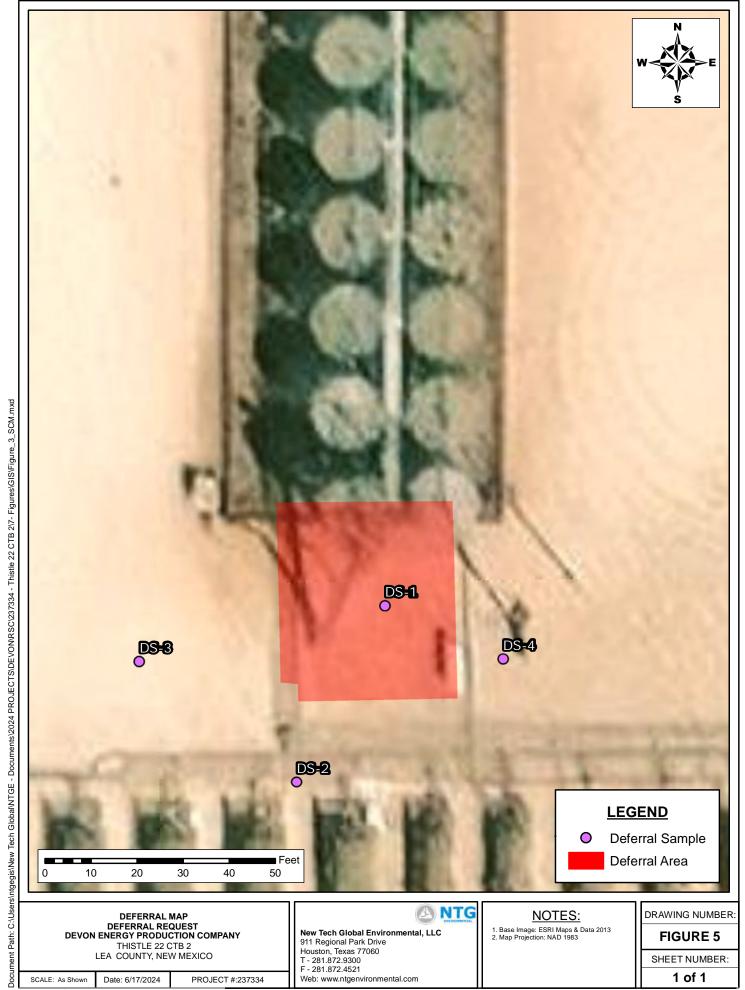
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Released to Imaging: 8/26/2024 10:03:22 AM



Released to Imaging: 8/26/2024 10:03:22 AM



Released to Imaging: 8/26/2024 10:03:22 AM

## PHOTOGRAPHIC LOG

## PHOTOGRAPHIC LOG

#### Thistle Unit 22 CTB 2

#### Photograph No. 1

Facility:Thistle Unit 22 CTB 2

County: Lea County, New Mexico

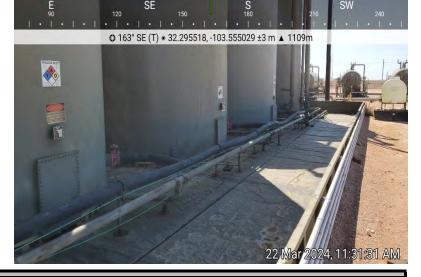
**Description:** View of Liner.



#### Photograph No. 2

- Facility: Thistle Unit 22 CTB 2
- County: Lea County, New Mexico

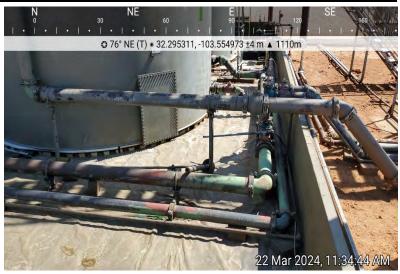
**Description:** View of Liner.



#### Photograph No. 3

- Facility:Thistle Unit 22 CTB 2
- County: Lea County, New Mexico

**Description:** View of Liner.



NTGE Project No. 237334

## PHOTOGRAPHIC LOG

Thistle Unit 22 CTB 2

#### Photograph No. 4

Facility:Thistle Unit 22 CTB 2

County: Lea County, New Mexico

**Description:** View of Liner.



#### Photograph No. 5

- Facility:Thistle Unit 22 CTB 2
- County: Lea County, New Mexico

**Description:** View of Liner



#### Photograph No. 6

- Facility:Thistle Unit 22 CTB 2
- County: Lea County, New Mexico

**Description:** View of Liner.





## PHOTOGRAPHIC LOG

#### Thistle Unit 22 CTB 2

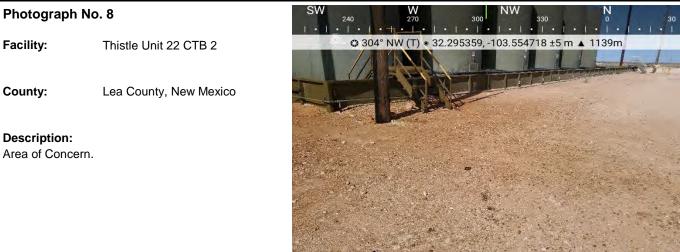
#### Photograph No. 7

Facility:Thistle Unit 22 CTB 2

County: Lea County, New Mexico

#### **Description:** Area of Concern.





#### Photograph No. 9

Facility:Thistle Unit 22 CTB 2

County: Lea County, New Mexico

**Description:** Area of Concern.



08 Feb 2024, 11:20:29 AM



Photograph No. 10

## **PHOTOGRAPHIC LOG**

#### Thistle Unit 22 CTB 2

Facility:	Thistle Unit 22 CTB 2
County:	Lea County, New Mexico
Description: Area of Excavatio	n.



#### Photograph No. 11

Facility: Thistle Unit 22 CTB 2

County: Lea County, New Mexico

**Description:** Area of Excavation.



#### Photograph No. 12

Facility: Thistle Unit 22 CTB 2

Lea County, New Mexico County:

**Description:** Area of Excavation.





NTGE Project No. 237334

## PHOTOGRAPHIC LOG

#### Thistle Unit 22 CTB 2

#### Photograph No. 10

Facility:Thistle Unit 22 CTB 2

County: Lea County, New Mexico

**Description:** Area of Excavation.



#### Photograph No. 11

Facility: Thistle Unit 22 CTB 2

County: Lea County, New Mexico

**Description:** Area of Excavation.



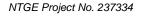
#### Photograph No. 12

Facility: Thistle Unit 22 CTB 2

County: Lea County, New Mexico

**Description:** Area of Excavation.







## LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTS



November 17, 2023

ETHAN SESSUMS NTG ENVIRONMENTAL 701 TRADEWINDS BLVD. SUITE C MIDLAND, TX 79706

RE: THISTLE 22 CTB 2

Enclosed are the results of analyses for samples received by the laboratory on 11/14/23 14:08.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



DEVON - LEA CO., NM

#### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

#### Sample ID: H - 1 0-6" (H236226-01)

Project Location:

BTEX 8021B	mg/	kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824	
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	116 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2880	16.0	11/15/2023	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	78.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	72.7	% 49.1-14	0						

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#### \*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. S MIDLAND TX, 79706 Fax To:	SUITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - LEA CO., M	M		

#### Sample ID: H - 2 0-6" (H236226-02)

BTEX 8021B	mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824	
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	120	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/15/2023	ND	432	108	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	56.5	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	78.7 % 48.2-13		4						
Surrogate: 1-Chlorooctadecane	74.8	% 49.1-14	8						

#### Cardinal Laboratories

\*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



DEVON - LEA CO., NM

#### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	is Ids BLVD. Suite C				
Received:	11/14/2023		Sampling Date:		11/14/2023		
Reported:	11/17/2023		Sampling Type:		Soil		
Project Name:	THISTLE 22 CTB 2		Sampling Condition:		Cool & Intact		
Project Number:	237334		Sample Received By:		Shalyn Rodriguez		

#### Sample ID: H - 3 0-6" (H236226-03)

Project Location:

BTEX 8021B	mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824	
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	118 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/15/2023	ND	432	108	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	1040	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	433	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	72.4 % 48.2-13		4						
Surrogate: 1-Chlorooctadecane	104	% 49.1-14	8						

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\*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. S MIDLAND TX, 79706 Fax To:	SUITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - LEA CO., M	M		

## Sample ID: H - 4 0-6" (H236226-04)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824	
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	117	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/15/2023	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	214	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	95.4	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	78.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	86.4	% 49.1-14							

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: H - 5 0-6" (H236226-05)

Project Location:

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824	
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	117 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	11/15/2023	ND	448	112	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	8960	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	2780	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	73.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	561	% 49.1-14	8						

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\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



## **Notes and Definitions**

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## **Chain of Custody**

Work Order No: 1730 226-1-

Dage 8 of 8

Address: 20		IS			Bill to: (i	Bill to: (if different) Company Name:			Dale Woodall				Page1 of1_ Work Order Comments Program: UST/PST PRP Prownfields RC perfund									
	<b>ITG Environm</b>	nental			Compar				Company Name: Devon													
City, State ZIP: Ca	09 W McKay	St			Address:											itate of			JEKE	Dire	willields	RC Dipertund
	arlsbad, NM	88220			City, Sta						4 1						RP Level IV					
hone: 43	32-766-1918			Email				-								eliverat					_	ther:
Project Name:	This	tle 22 CTB 2	-	Tur	n Around	1			1			A		SIS R		FST		-	-		Dress	mather Co. Inc.
Project Number:		237334	-	I Routine	C Rush		Pres. Code		T	T								T	-	T		ervative Codes
roject Location	L	ea Co, NM		Due Date:	T		code	1	1	-			+	+	+	-	+	+	+	+	None: NO	DI Water: H
ampler's Name:		ry Nikanorov		TAT starts the	dav receiv	ed by the			MRO)												Cool: Cool	MeOH: Me
0#:		21233012			eived by 4:		0		¥												HCL: HC H <sub>2</sub> S0 <sub>4</sub> : H <sub>2</sub>	HNO3: HN NaOH: Na
AMPLE RECEIPT	T Ten	p Blank:	Yes No	Wet Ice:	Yes	No	Parameters		SR 0	8											H <sub>3</sub> PO <sub>4</sub> : HP	NaOH. Na
eceived Intact:	Ye	No No	Thermom	eter ID:	ांपट	5	ram	8021	BTEX 8021B											4		ARIS
ooler Custody Seals:	Yes	No N/A	Correction	Correction Factor:		2	Pa	EX	GRO	Chloride 4500										HOLD	Na2S2O3: N	
ample Custody Seals:	and the second sec		a.3	2.32		1	Chi SM (												Zn Acetate			
otal Containers:			Gupt Apple Chloride 4500												orbic Acid: SAPC							
Sample D Identification	Depth (ft bgs)	Date	Time	Soil	Water	Grab/ Comp	# of Cont	1	HeT												Samp	le Comments
H-1	0-6"	11/14/2023		Х		Grab/	1	X	X	X	-	-	+	+	+	-	+	+	+	+	1	
H-2	0-6"	11/14/2023		Х		Grab/	1	X	X	x		-	+	+	+	+	+	+	+	+	2	
H-3	0-6"	11/14/2023		Х		Grab/	1	X	x	x	-	-	+	+	+	+	+	+	+	+	2	
H-4	0-6"	11/14/2023		Х		Grab/	1	x	x	x	+	-	+	+	+	+	+	+	+	+		
H-5	0-6"	11/14/2023		Х		Grab/	1	x	X	X			+	+	+	+	+	+	+	+	4	
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	I Comments							_	_			_	_	_	_	_	-	-	_	1		



November 17, 2023

ETHAN SESSUMS NTG ENVIRONMENTAL 701 TRADEWINDS BLVD. SUITE C MIDLAND, TX 79706

RE: THISTLE 22 CTB 2

Enclosed are the results of analyses for samples received by the laboratory on 11/14/23 14:08.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 1 6" (H236227-01)

Project Location:

BTEX 8021B	mg	/kg	Analyze	d By: JH					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	11/15/2023	ND	1.96	98.0	2.00	0.824	
Toluene*	2.56	0.200	11/15/2023	ND	2.08	104	2.00	1.04	
Ethylbenzene*	1.95	0.200	11/15/2023	ND	2.11	105	2.00	0.619	
Total Xylenes*	53.1	0.600	11/15/2023	ND	6.40	107	6.00	0.286	
Total BTEX	57.6	1.20	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	178	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	11/15/2023	ND	432	108	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	547	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	2490	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	446	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	123	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	144	% 49.1-14	8						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 1 1' (H236227-02)

Project Location:

BTEX 8021B	mg,	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824	
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	120	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	11/15/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/16/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	33.4	10.0	11/16/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	11/16/2023	ND					
Surrogate: 1-Chlorooctane	92.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	89.1	% 49.1-14	8						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 1 2' (H236227-03)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824	
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	119 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	mg/kg Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/15/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	70.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	64.6	% 49.1-14	8						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 1 3' (H236227-04)

Project Location:

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824	
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	118 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	mg/kg Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/15/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	82.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	76.6	% 49.1-14	8						

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#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 1 4' (H236227-05)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824	
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	118 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/15/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	81.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	74.8	% 49.1-14	8						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 2 6" (H236227-06)

Project Location:

BTEX 8021B	mg,	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824	
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	118 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	mg/kg Ar		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	11/15/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	32.8	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	83.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	78.5	% 49.1-14	8						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 2 1' (H236227-07)

Project Location:

BTEX 8021B	mg/	'kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824	
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	119 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/15/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	71.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	64.7	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 2 2' (H236227-08)

Project Location:

BTEX 8021B	mg,	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824	
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	118 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/15/2023	ND	432	108	400	3.64	
TPH 8015M	mg,	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	194	96.8	200	3.13	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	185	92.3	200	8.12	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	94.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	<i>89.3</i>	% 49.1-14	8						

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## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 2 3' (H236227-09)

Project Location:

BTEX 8021B	mg,	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	2.15	107	2.00	2.64	
Toluene*	<0.050	0.050	11/15/2023	ND	2.17	108	2.00	2.70	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.17	108	2.00	2.88	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.77	113	6.00	2.83	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	′kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/15/2023	ND	432	108	400	3.64	
TPH 8015M	mg,	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	194	96.8	200	3.13	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	185	92.3	200	8.12	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	97.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	91.2	% 49.1-14	8						

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## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 2 4' (H236227-10)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	2.15	107	2.00	2.64	
Toluene*	<0.050	0.050	11/15/2023	ND	2.17	108	2.00	2.70	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.17	108	2.00	2.88	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.77	113	6.00	2.83	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	mg/kg Analyzed By: HM		d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/15/2023	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	194	96.8	200	3.13	
DRO >C10-C28*	114	10.0	11/15/2023	ND	185	92.3	200	8.12	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	92.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	90.9	% 49.1-14	8						

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## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. S MIDLAND TX, 79706 Fax To:	UITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 3 6" (H236227-11)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	2.15	107	2.00	2.64	
Toluene*	<0.050	0.050	11/15/2023	ND	2.17	108	2.00	2.70	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.17	108	2.00	2.88	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.77	113	6.00	2.83	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	mg/kg Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	11/15/2023	ND	448	112	400	0.00	QM-07
TPH 8015M	mg/	/kg	Analyze	d By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	11/15/2023	ND	194	96.8	200	3.13	
DRO >C10-C28*	15700	50.0	11/15/2023	ND	185	92.3	200	8.12	
EXT DRO >C28-C36	3020	50.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	105 9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	458 9	% 49.1-14	8						

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## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 3 1' (H236227-12)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	2.15	107	2.00	2.64	
Toluene*	<0.050	0.050	11/15/2023	ND	2.17	108	2.00	2.70	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.17	108	2.00	2.88	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.77	113	6.00	2.83	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	mg/kg Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	11/15/2023	ND	448	112	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	194	96.8	200	3.13	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	185	92.3	200	8.12	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	90.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	86.1	% 49.1-14	8						

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## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 3 2' (H236227-13)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	2.15	107	2.00	2.64	
Toluene*	<0.050	0.050	11/15/2023	ND	2.17	108	2.00	2.70	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.17	108	2.00	2.88	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.77	113	6.00	2.83	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	mg/kg Analyzed By: AC		d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	11/15/2023	ND	448	112	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	194	96.8	200	3.13	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	185	92.3	200	8.12	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	89.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	84.7	% 49.1-14	8						

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## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 3 3' (H236227-14)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	2.15	107	2.00	2.64	
Toluene*	<0.050	0.050	11/15/2023	ND	2.17	108	2.00	2.70	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.17	108	2.00	2.88	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.77	113	6.00	2.83	
Total BTEX	<0.300	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	mg/kg Analyzed By: AC		d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	11/15/2023	ND	448	112	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	194	96.8	200	3.13	
DRO >C10-C28*	61.9	10.0	11/15/2023	ND	185	92.3	200	8.12	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	89.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	88.0	% 49.1-14	8						

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## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	11/14/2023		Sampling Date:	11/14/2023
Reported:	11/17/2023		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

## Sample ID: TP - 3 3-3.5' (H236227-15)

Project Location:

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.051	0.050	11/15/2023	ND	2.15	107	2.00	2.64	
Toluene*	0.192	0.050	11/15/2023	ND	2.17	108	2.00	2.70	
Ethylbenzene*	0.062	0.050	11/15/2023	ND	2.17	108	2.00	2.88	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.77	113	6.00	2.83	
Total BTEX	0.423	0.300	11/15/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	11/15/2023	ND	448	112	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	194	96.8	200	3.13	
DRO >C10-C28*	188	10.0	11/15/2023	ND	185	92.3	200	8.12	
EXT DRO >C28-C36	22.0	10.0	11/15/2023	ND					
Surrogate: 1-Chlorooctane	94.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	97.4	% 49.1-14	8						

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## **Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager



# Chain of Custody

Work Order No: H23L227

Project Manager:	Ethan Sessums				Bill to: (if d	different)		Dale V	Nooda						Work Order Comments													
	NTG Environme				Company	Name:		Devor	1						Pro	Program: UST/PST PRP rownfields RC perfund						uperfund						
Company Name:	209 W McKay S				Address				State of Project:																			
Address:	Carlsbad, NM 8			_	City, State	e ZIP:								-	Reporting:Level II Level III ST/UST RRP Level				Level IV									
City, State ZIP:		0220		Email:	City, Ciut										De	iverable	es: ED		A	ADaP	T D Othe	r:						
Phone:	432-766-1918		_		-			_							EQUE	CT.				-	Presen	ative Codes						
Project Name:	Thist	le 22 CTB 2			Around	-	Pres.		-			AN	ALTS	SIS RI	EQUE		T	TT	1		None: NO	DI Water: H <sub>2</sub> O						
Project Number:		237334		Routine	□ Rush	-	Code	-	-		+	-	+	+	+	+	+	+ +	-	-		MeOH: Me						
Project Location	Le	a Co, NM		Due Date:					6												Cool: Cool HCL: HC	HNO3: HN						
Sampler's Name:	Dmitr	y Nikanorov	-	TAT starts the					MRO)					11							H2S04: H2	NaOH: Na						
PO #:	2	1233012		tab, if rece	lived by 4.5	ved by 4:30pm		red by 4:30pm		red by 4:30pm		/ed by 4:30pm			+					1							H <sub>3</sub> PO <sub>4</sub> : HP	
SAMPLE RECE	IPT Tem	p Blank:	Yes	Wet Ice:	(Yes) No								Parameters	218	8015M ( GRO + DRO	4500										9	NaHSO4: NAE	IS
Received Intact:	Yes	the second secon	Thermom										140		140		ara	BTEX 8021B	S.	ride								
Cooler Custody Sea		-	Correction		52			BTE	0)	Chloride		-	-								Zn Acetate+N							
Sample Custody Se	als: Yes	No N/A		ture Reading:	2.3	L			0151													bic Acid: SAPC						
Total Containers:			Corrected	d Temperature:			010	-	TPH 8																			
Sample Identification	Depth (ft bgs)	Date	Time	Soil	Water	Grab/ Comp	# of Cont								_		1			_		Comments						
TP-1	6"	11/14/2023		X		Grab/	1	X	X	X				_	-	-	-			-	5							
TP-1	1'	11/14/2023		Х		Grab/	1	X	X	X						_	-	-		-	2							
TP-1	2'	11/14/2023		X		Grab/	1	X	X	X				_	_	-	-	-		<u> </u>	3							
TP-1	3'	11/14/2023		Х		Grab/	1	X	X	X				_	_	_	-	-		-	4							
TP-1	4'	11/14/2023		X		Grab/	1	X	X	X						_	-			-	5							
TP-2	6"	11/14/2023		Х		Grab/	1	X	X	X	1.1					-					4							
TP-2	1'	11/14/2023		Х		Grab/	1	X	X	X	1.1							-			2							
TP-2	2'	11/14/2023		Х		Grab/	1	X	X	X				_			-	-			8							
TP-2	3'	11/14/2023		X		Grab/	1	X	X	X											9							
TP-2	4'	11/14/2023		X		Grab/	1	X	X	X										1	10							
	tional Comment	1																										
Notice: Signature of thi of service. Xenco will I of Xenco. A minimum																												
	by: (Signature)			ed by: (Signat	S			Date/					quished by: (Signature) Received by: (Signature)			Date/Time												
· DL		Solo	de	que	S		1114	23	14	68	2					-				_								
3		010		11	0						4					-												

Revised Date 05012020 Rev. 2020,1

Received by OCD: 7/18/2024 9:14:16 AM



## Chain of Custody

Work Order No: 4230227

Project Manager:	Ethan Sessums	5			Bill to: (if	different)		Dale	Wooda	all					Work Order Comments											
Company Name:	NTG Environm	ental			Company	Company Name:		ompany Name:			npany Name: Devon						P				Program: UST/PST PRP rownfields RC perfun					perfund
Address:	209 W McKay	St			Address:						s	State of Project:														
City, State ZIP:	Carlsbad, NM 8	100 A			City, Stat	te ZIP:								F	Reporting:Level II Level III ST/US											
hone:	432-766-1918			Email						_					Deliverables: EDD ADaPT Other:			ir:								
roject Name:	This	le 22 CTB 2		Tur	n Around							ANA	LYSIS	REQU	JEST Pres					Preserv	ative Codes					
roject Number.		237334		Routine	C Rush		Pres. Code													None: NO	DI Water: H					
roject Location	Le	a Co, NM		Due Date:																Cool: Cool						
ampler's Name:		y Nikanorov		TAT starts the o		ed by the			l Q											HCL: HC	HNO3: HN					
0 #:	2	1233012		lab, if rece	eived by 4:3	Opm	æ		N +				1 1							H2S04: H2	NaOH: Na					
AMPLE RECE	IPT Jem	p Blank:	Yes	Wet Ice:	Yes	No	leter	8	8015M ( GRO + DRO + MRO)	00									H <sub>3</sub> PO <sub>4</sub> : HP							
eceived Intact:	Ye	No	Thermom	eter ID:	Yes No 140		Iran	BTEX 8021B	+	Chloride 4500									НОГР	NaHSO4: NAB	IS					
ooler Custody Seal	s: Yes (	No N/A	Correction	Factor:	1		đ	TEX	GR	lorid									Ξ	Na2S2O3; NaS	O3					
ample Custody Sea	als: Yes	No N/A	Temperat	ure Reading:	2.3	٤			15M	ō										Zn Acetate+Na						
otal Containers:		~	Corrected	Temperature:	-	-			H 80											NaOH+Ascort	bic Acid: SAPC					
Sample Identification	Depth (ft bgs)	Date	Time	Soil	Water	Grab/ Comp	# of Cont		HdT						Sa		Sample	Comments								
TP-3	6"	11/14/2023		Х		Grab/	1	X	X	X										11						
TP-3	1'	11/14/2023		х		Grab/	1	X	X	X										12						
TP-3	2'	11/14/2023		Х		Grab/	1	X	X	X										13						
TP-3	3'	11/14/2023		х		Grab/	1	X	X	X										14						
TP-3	3-3.5'	11/14/2023		х		Grab/	1	X	Х	Х										15						
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Additi	onal Comments	:																								
							_					-														
tice: Signature of this	document and relingu	ishment of sample	es constitute	s a valid purchase	order from	client comp	any to Xen	co, its a	ffiliates	and sub	ontractors	. It assign	s standard	i terms	and con	ditions										
service. Xenco will be Xenco. A minimum ch	liable only for the cost arge of \$85.00 will be	t of samples and applied to each pr	shall not ass oject and a d	ume any responsi harge of \$5 for ea	bility for any ich sample s	losses or e ubmitted to	xpenses in Xenco, bu	t not and	by the c alyzed.	lient if s These te	ms will be	are due to enforced u	circumsta inless prev	nces bey viously n	yond the negotiate	e control ed.										
Relinguished by				d by: (Signati			_	Date/1				quished		-	- 1	_	ceived I	by: (Si	ignatu	ure)	Date/Time					
		Salad	12000	1011			1-14	33	10	X	2							-	-							
	/	(VIII)	VXVI	/ VAA				20	1.1	VA				_	-	_										



February 20, 2024

ETHAN SESSUMS NTG ENVIRONMENTAL 701 TRADEWINDS BLVD. SUITE C MIDLAND, TX 79706

RE: THISTLE 22 CTB 2

Enclosed are the results of analyses for samples received by the laboratory on 02/15/24 14:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	02/15/2024		Sampling Date:	02/15/2024
Reported:	02/20/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Dionica Hinojos

## Sample ID: V - 1 0 - .5 (H240741-01)

Project Location:

BTEX 8021B	mg/	kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2024	ND	1.89	94.7	2.00	13.0	
Toluene*	0.097	0.050	02/16/2024	ND	1.79	89.4	2.00	17.1	
Ethylbenzene*	<0.050	0.050	02/16/2024	ND	1.81	90.5	2.00	18.4	
Total Xylenes*	<0.150	0.150	02/16/2024	ND	5.33	88.9	6.00	18.4	
Total BTEX	<0.300	0.300	02/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	02/16/2024	ND	448	112	400	3.64	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/16/2024	ND	226	113	200	0.351	
DRO >C10-C28*	39.4	10.0	02/16/2024	ND	222	111	200	0.446	
EXT DRO >C28-C36	17.9	10.0	02/16/2024	ND					
Surrogate: 1-Chlorooctane	80.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	89.6	% 49.1-14	0						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	02/15/2024		Sampling Date:	02/15/2024
Reported:	02/20/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Dionica Hinojos

## Sample ID: V - 2 0 - .5 (H240741-02)

Project Location:

BTEX 8021B	mg/	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2024	ND	1.89	94.7	2.00	13.0	
Toluene*	<0.050	0.050	02/16/2024	ND	1.79	89.4	2.00	17.1	
Ethylbenzene*	<0.050	0.050	02/16/2024	ND	1.81	90.5	2.00	18.4	
Total Xylenes*	<0.150	0.150	02/16/2024	ND	5.33	88.9	6.00	18.4	
Total BTEX	<0.300	0.300	02/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	02/16/2024	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/16/2024	ND	226	113	200	0.351	
DRO >C10-C28*	124	10.0	02/16/2024	ND	222	111	200	0.446	
EXT DRO >C28-C36	35.3	10.0	02/16/2024	ND					
Surrogate: 1-Chlorooctane	77.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	92.2	% 49.1-14	8						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	02/15/2024		Sampling Date:	02/15/2024
Reported:	02/20/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Dionica Hinojos

## Sample ID: V - 3 0 - .5 (H240741-03)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2024	ND	1.89	94.7	2.00	13.0	
Toluene*	<0.050	0.050	02/16/2024	ND	1.79	89.4	2.00	17.1	
Ethylbenzene*	<0.050	0.050	02/16/2024	ND	1.81	90.5	2.00	18.4	
Total Xylenes*	<0.150	0.150	02/16/2024	ND	5.33	88.9	6.00	18.4	
Total BTEX	<0.300	0.300	02/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/16/2024	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/16/2024	ND	226	113	200	0.351	
DRO >C10-C28*	<10.0	10.0	02/16/2024	ND	222	111	200	0.446	
EXT DRO >C28-C36	<10.0	10.0	02/16/2024	ND					
Surrogate: 1-Chlorooctane	75.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	84.7	% 49.1-14	8						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SL MIDLAND TX, 79706 Fax To:	JITE C	
Received:	02/15/2024		Sampling Date:	02/15/2024
Reported:	02/20/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Dionica Hinojos

### Sample ID: H - 2A 0 - .5 (H240741-04)

Project Location:

BTEX 8021B	mg/	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2024	ND	1.89	94.7	2.00	13.0	
Toluene*	<0.050	0.050	02/16/2024	ND	1.79	89.4	2.00	17.1	
Ethylbenzene*	<0.050	0.050	02/16/2024	ND	1.81	90.5	2.00	18.4	
Total Xylenes*	<0.150	0.150	02/16/2024	ND	5.33	88.9	6.00	18.4	
Total BTEX	<0.300	0.300	02/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/16/2024	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/16/2024	ND	226	113	200	0.351	
DRO >C10-C28*	<10.0	10.0	02/16/2024	ND	222	111	200	0.446	
EXT DRO >C28-C36	<10.0	10.0	02/16/2024	ND					
Surrogate: 1-Chlorooctane	77.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	84.7	% 49.1-14	8						

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\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	02/15/2024		Sampling Date:	02/15/2024
Reported:	02/20/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Dionica Hinojos

## Sample ID: H - 6 0 - .5 (H240741-05)

Project Location:

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2024	ND	1.89	94.7	2.00	13.0	
Toluene*	<0.050	0.050	02/16/2024	ND	1.79	89.4	2.00	17.1	
Ethylbenzene*	<0.050	0.050	02/16/2024	ND	1.81	90.5	2.00	18.4	
Total Xylenes*	<0.150	0.150	02/16/2024	ND	5.33	88.9	6.00	18.4	
Total BTEX	<0.300	0.300	02/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	02/16/2024	ND	432	108	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/16/2024	ND	226	113	200	0.351	
DRO >C10-C28*	<10.0	10.0	02/16/2024	ND	222	111	200	0.446	
EXT DRO >C28-C36	<10.0	10.0	02/16/2024	ND					
Surrogate: 1-Chlorooctane	77.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	86.4	% 49.1-14	8						

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\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	02/15/2024		Sampling Date:	02/15/2024
Reported:	02/20/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Dionica Hinojos

## Sample ID: H - 7 0 - .5 (H240741-06)

Project Location:

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2024	ND	1.89	94.7	2.00	13.0	
Toluene*	<0.050	0.050	02/16/2024	ND	1.79	89.4	2.00	17.1	
Ethylbenzene*	<0.050	0.050	02/16/2024	ND	1.81	90.5	2.00	18.4	
Total Xylenes*	<0.150	0.150	02/16/2024	ND	5.33	88.9	6.00	18.4	
Total BTEX	<0.300	0.300	02/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	02/16/2024	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/16/2024	ND	226	113	200	0.351	
DRO >C10-C28*	<10.0	10.0	02/16/2024	ND	222	111	200	0.446	
EXT DRO >C28-C36	<10.0	10.0	02/16/2024	ND					
Surrogate: 1-Chlorooctane	75.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	84.2	% 49.1-14	8						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	02/15/2024		Sampling Date:	02/15/2024
Reported:	02/20/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Dionica Hinojos

## Sample ID: H - 8 0 - .5 (H240741-07)

Project Location:

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2024	ND	1.89	94.7	2.00	13.0	
Toluene*	<0.050	0.050	02/16/2024	ND	1.79	89.4	2.00	17.1	
Ethylbenzene*	<0.050	0.050	02/16/2024	ND	1.81	90.5	2.00	18.4	
Total Xylenes*	<0.150	0.150	02/16/2024	ND	5.33	88.9	6.00	18.4	
Total BTEX	<0.300	0.300	02/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	02/16/2024	ND	432	108	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/16/2024	ND	226	113	200	0.351	
DRO >C10-C28*	336	10.0	02/16/2024	ND	222	111	200	0.446	
EXT DRO >C28-C36	58.0	10.0	02/16/2024	ND					
Surrogate: 1-Chlorooctane	75.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	96.2	% 49.1-14	8						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	02/15/2024		Sampling Date:	02/15/2024
Reported:	02/20/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Dionica Hinojos

## Sample ID: H - 9 0 - .5 (H240741-08)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2024	ND	1.89	94.7	2.00	13.0	
Toluene*	<0.050	0.050	02/16/2024	ND	1.79	89.4	2.00	17.1	
Ethylbenzene*	<0.050	0.050	02/16/2024	ND	1.81	90.5	2.00	18.4	
Total Xylenes*	<0.150	0.150	02/16/2024	ND	5.33	88.9	6.00	18.4	
Total BTEX	<0.300	0.300	02/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	02/16/2024	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/16/2024	ND	226	113	200	0.351	
DRO >C10-C28*	<10.0	10.0	02/16/2024	ND	222	111	200	0.446	
EXT DRO >C28-C36	<10.0	10.0	02/16/2024	ND					
Surrogate: 1-Chlorooctane	81.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	92.4	% 49.1-14	8						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SL MIDLAND TX, 79706 Fax To:	JITE C	
Received:	02/15/2024		Sampling Date:	02/15/2024
Reported:	02/20/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Dionica Hinojos

## Sample ID: H - 10 0 - .5 (H240741-09)

Project Location:

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/16/2024	ND	1.89	94.7	2.00	13.0	
Toluene*	<0.050	0.050	02/16/2024	ND	1.79	89.4	2.00	17.1	
Ethylbenzene*	<0.050	0.050	02/16/2024	ND	1.81	90.5	2.00	18.4	
Total Xylenes*	<0.150	0.150	02/16/2024	ND	5.33	88.9	6.00	18.4	
Total BTEX	<0.300	0.300	02/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	114	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/16/2024	ND	432	108	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/16/2024	ND	226	113	200	0.351	
DRO >C10-C28*	167	10.0	02/16/2024	ND	222	111	200	0.446	
EXT DRO >C28-C36	106	10.0	02/16/2024	ND					
Surrogate: 1-Chlorooctane	80.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	102	% 49.1-14	8						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



## **Notes and Definitions**

QR-04	The RPD for the BS/BSD was outside of historical limits.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



7/18/2024 9:14:16 AM

Received by OCD:

## CHAIN-OF CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name:N - (dEBILL TOANProject Manager:Ethan SessionP.O. #:Company:Address:ZG 9 W McUayCompany:Company:City:Ccr (sbad state: NMZip: 88220Attn:Phone #:Z54-266-5456Fax #:Address:Project #:237334Project Owner:QCMProject Name:Highle ZZState:Zip:	ALYSIS REQUEST
Address:     ZG9     W     Mclay     Company:       City:     Cw     State:     VM Zip:     SS220     Attn:       Phone #:     Z54-266-5456     Fax #:     Address:       Project #:     237334     Project Owner:     Oclassic	
City:Cw/sbadState:Mm zip:S8220Attn:Phone #:254-266-5456Fax #:Address:Project #:237334Project Owner:Qe VanCity:	
Phone #:         ZSY-Z66-SYS6         Fax #:         Address:           Project #:         237334         Project Owner:         QCOA         City:	
Project #: 237334 Project Owner: De Van City:	
2-1-11 75	
Project Name: This file CC State: Zip:	
Project Location: Leg Conny Phone #:	
Sampler Name: Tuler Umball Fax #:	
FOR LAB USE ONLY     MATRIX     PRESERV.     SAMPLING       H240741     Lab I.D.     Sample I.D.     H000000000000000000000000000000000000	
LAU1011 Lab I.D. Sample I.D. Sample I.D. Sample I.D.	
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PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or lort, shall be limited to the amount paid by the client for the'	
analyses. All claims including those for negligence and any other cause whatsover shall be deemed waved unless made in writing and received by Cradinia within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries,	
ensities of successors arising out of of related to the penormance of services hereunder L. Gardinal, regardless of whether such claim is based upon any of the above ateled and the above ateled	
All Results are emailed Places provide Email address:	
Time: 2. W. Him	
Relinquisfied By: Date: Received By: REMARKS:	
Time:	
Delivered By: (Circle One) Observed Temp. °C D. 2°C Sample Condition CHECKED BY: Turnaround Time: Standard Rush	Bacteria (only) Sample Condition
Sampler - UPS - Bus - Other:     Corrected Temp. °C     Cool Intact     (Initials)     Rush       FORM-000 R 3.4 07/11/23     No     No     No     Yes	Cool Intact Observed Temp. °C Yes Yes No No Corrected Temp. °C

Page 12 of 12



May 17, 2024

ETHAN SESSUMS NTG ENVIRONMENTAL 701 TRADEWINDS BLVD. SUITE C MIDLAND, TX 79706

RE: THISTLE 22 CTB 2

Enclosed are the results of analyses for samples received by the laboratory on 05/15/24 12:07.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Whe Singh

Mike Snyder For Celey D. Keene Lab Director/Quality Manager



### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SL MIDLAND TX, 79706 Fax To:	JITE C	
Received:	05/15/2024		Sampling Date:	05/15/2024
Reported:	05/17/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Tamara Oldaker

### Sample ID: DS - 1 2' (H242672-01)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/15/2024	ND	1.95	97.6	2.00	1.20	
Toluene*	<0.050	0.050	05/15/2024	ND	2.06	103	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/15/2024	ND	2.08	104	2.00	1.50	
Total Xylenes*	<0.150	0.150	05/15/2024	ND	6.42	107	6.00	1.17	
Total BTEX	<0.300	0.300	05/15/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	gate: 4-Bromofluorobenzene (PID 109 % 71.5-13		24						
Chloride, SM4500Cl-B mg/kg			Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	05/16/2024	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	16.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					
Surrogate: 1-Chlorooctane	100	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	rogate: 1-Chlorooctadecane 125 % 49.1-148		18						

### Cardinal Laboratories

### \*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	05/15/2024		Sampling Date:	05/15/2024
Reported:	05/17/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Tamara Oldaker

### Sample ID: DS - 1 3' (H242672-02)

Project Location:

BTEX 8021B	mg	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/15/2024	ND	1.95	97.6	2.00	1.20	
Toluene*	<0.050	0.050	05/15/2024	ND	2.06	103	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/15/2024	ND	2.08	104	2.00	1.50	
Total Xylenes*	<0.150	0.150	05/15/2024	ND	6.42	107	6.00	1.17	
Total BTEX	<0.300	0.300	05/15/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	te: 4-Bromofluorobenzene (PID 106 % 71.5-13		4						
Chloride, SM4500Cl-B	oride, SM4500Cl-B mg/kg			Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	05/16/2024	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	33.7	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					
Surrogate: 1-Chlorooctane	105	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	130	% 49.1-14	8						

### Cardinal Laboratories

### \*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	UITE C	
Received:	05/15/2024		Sampling Date:	05/15/2024
Reported:	05/17/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Tamara Oldaker

### Sample ID: DS - 1 4' (H242672-03)

Project Location:

BTEX 8021B	mg,	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/15/2024	ND	1.95	97.6	2.00	1.20	
Toluene*	<0.050	0.050	05/15/2024	ND	2.06	103	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/15/2024	ND	2.08	104	2.00	1.50	
Total Xylenes*	<0.150	0.150	05/15/2024	ND	6.42	107	6.00	1.17	
Total BTEX	<0.300	0.300	05/15/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	′kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	05/16/2024	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	<10.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0 10.0		05/16/2024 ND						
Surrogate: 1-Chlorooctane	82.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	99.6	% 49.1-14	8						

### Cardinal Laboratories

\*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	05/15/2024		Sampling Date:	05/15/2024
Reported:	05/17/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Tamara Oldaker

### Sample ID: DS - 1 5' (H242672-04)

Project Location:

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/15/2024	ND	1.95	97.6	2.00	1.20	
Toluene*	<0.050	0.050	05/15/2024	ND	2.06	103	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/15/2024	ND	2.08	104	2.00	1.50	
Total Xylenes*	<0.150	0.150	05/15/2024	ND	6.42	107	6.00	1.17	
Total BTEX	<0.300	0.300	05/15/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	PID 105 % 71.5-134		4						
Chloride, SM4500Cl-B	mg/kg			Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	05/16/2024	ND	432	108	400	3.64	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	<10.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0 10.0		05/16/2024 ND						
Surrogate: 1-Chlorooctane	94.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	113 9	% 49.1-14	8						

### Cardinal Laboratories

\*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



### **Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

### Cardinal Laboratories

### \*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

5	CARDINAL Laboratories	
	Laboratories	

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

SHEET H TOHNS

101 East Marland, Hobbs, NM 88240 (575) 393-2326 EAX (575) 393-2476

Company Name:	NTGE Ethan			1				B	ILL T	0				A	ALYS	S RE	QUES	T	
Project Manager:	Ethan	Sessums					P.(	D. #:	21298	3 433		T			T	T			
Address: 209	W Mck	State: NM					Co	mpany:		non									
city: Carls	bad	State: NM	Zip:	8	877	20	Att	Attn:											
Phone #:		Fax #:					Add	dress:			1								
Project #: 23		Project Owner					City	y:			1								
Project Name:	Thistle	ZZ CTB	2				Sta	te:	Zip:								1 1		
Project Location:	Lea Co Clayton	unty					Pho	one #:			1								
Sampler Name:	Clayfor-	Τ. ΄					Fax												
FOR LAB USE ONLY	J			T	M	ATRIX	T	PRESER	. SA	MPLING	ン		2						
Lab I.D.	Sample I.	.D.	CORAB OR (C)OMP	GROUNDWATER	WASTEWATER	OIL	OTHER ;	ACID/BASE: ICE / COOL C			BIE	TPG	Chlori						
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ASE NOTE: Liability and Damag	ges. Cardinal's liability and client	I's exclusive remedy for any c	laim aris	uing whet	ther based	f in contract	or tort, sh	half be limited	o the amount p	reid by the client for	The	-			_		-		
lyses. All claims including those t rice. In no event shall Cardinal be rates or successor, which out of r	a service for another service of counselor	ventali Gamages, including wo	YOUT BITS	diation by	minaes int	MATTURNING 1	max efficient	a no bien of m	within the second has	A DECK OF THE OWNER	he applicabl ries,	Ae							
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livered By: (Circle One) Observed Temp. °C 3,4 Sample Condition			n	CHECK (Initi		Turnaround Time: Standard Bacteria (only) Sample Condition													
Impler - UPS - Bus - Other: Corrected Temp. °C Cool Intact				funt		Thermomete	-		Rush	Shrs	Cool	I Yes	Obse	rved Tem	p. °C				

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

Received by OCD: 7/18/2024 9:14:16 AM

6.81



May 17, 2024

ETHAN SESSUMS NTG ENVIRONMENTAL 701 TRADEWINDS BLVD. SUITE C MIDLAND, TX 79706

RE: THISTLE 22 CTB 2

Enclosed are the results of analyses for samples received by the laboratory on 05/15/24 12:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Whe Singh

Mike Snyder For Celey D. Keene Lab Director/Quality Manager



### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	05/15/2024		Sampling Date:	05/15/2024
Reported:	05/17/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Tamara Oldaker

### Sample ID: SW - 8A (H242673-01)

Project Location:

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/16/2024	ND	2.08	104	2.00	16.1	
Toluene*	<0.050	0.050	05/16/2024	ND	2.04	102	2.00	15.8	
Ethylbenzene*	<0.050	0.050	05/16/2024	ND	2.08	104	2.00	16.0	
Total Xylenes*	<0.150	0.150	05/16/2024	ND	6.74	112	6.00	15.8	
Total BTEX	<0.300	0.300	05/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	108	% 71.5-13	24						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	05/16/2024	ND	400	100	400	7.69	
TPH 8015M	mg/	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	<10.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					
Surrogate: 1-Chlorooctane	92.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	113 9	% 49.1-14	18						

### Cardinal Laboratories

\*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	05/15/2024		Sampling Date:	05/15/2024
Reported:	05/17/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Tamara Oldaker

### Sample ID: SW - 7A (H242673-02)

Project Location:

BTEX 8021B	mg,	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/16/2024	ND	2.08	104	2.00	16.1	
Toluene*	<0.050	0.050	05/16/2024	ND	2.04	102	2.00	15.8	
Ethylbenzene*	<0.050	0.050	05/16/2024	ND	2.08	104	2.00	16.0	
Total Xylenes*	<0.150	0.150	05/16/2024	ND	6.74	112	6.00	15.8	
Total BTEX	<0.300	0.300	05/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	109	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1180	16.0	05/16/2024	ND	400	100	400	7.69	
TPH 8015M	mg,	kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	<10.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					
Surrogate: 1-Chlorooctane	91.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	111 9	6 49.1-14	8						

### Cardinal Laboratories

\*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SI MIDLAND TX, 79706 Fax To:	UITE C	
Received:	05/15/2024		Sampling Date:	05/15/2024
Reported:	05/17/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Tamara Oldaker

### Sample ID: SW - 10 (H242673-03)

Project Location:

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/16/2024	ND	2.08	104	2.00	16.1	
Toluene*	<0.050	0.050	05/16/2024	ND	2.04	102	2.00	15.8	
Ethylbenzene*	<0.050	0.050	05/16/2024	ND	2.08	104	2.00	16.0	
Total Xylenes*	<0.150	0.150	05/16/2024	ND	6.74	112	6.00	15.8	
Total BTEX	<0.300	0.300	05/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	107 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	05/16/2024	ND	400	100	400	7.69	
TPH 8015M	mg/	'kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	<10.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					
Surrogate: 1-Chlorooctane	87.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	106 9	% 49.1-14	8						

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\*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	05/15/2024		Sampling Date:	05/15/2024
Reported:	05/17/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Tamara Oldaker

### Sample ID: CS - 17 (H242673-04)

Project Location:

BTEX 8021B	mg,	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/16/2024	ND	2.08	104	2.00	16.1	
Toluene*	<0.050	0.050	05/16/2024	ND	2.04	102	2.00	15.8	
Ethylbenzene*	<0.050	0.050	05/16/2024	ND	2.08	104	2.00	16.0	
Total Xylenes*	<0.150	0.150	05/16/2024	ND	6.74	112	6.00	15.8	
Total BTEX	<0.300	0.300	05/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2480	16.0	05/16/2024	ND	400	100	400	7.69	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	<10.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					
Surrogate: 1-Chlorooctane	96.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	117 9	% 49.1-14	8						

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\*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	05/15/2024		Sampling Date:	05/15/2024
Reported:	05/17/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Tamara Oldaker

### Sample ID: CS - 21 (H242673-05)

Project Location:

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/16/2024	ND	2.08	104	2.00	16.1	
Toluene*	<0.050	0.050	05/16/2024	ND	2.04	102	2.00	15.8	
Ethylbenzene*	<0.050	0.050	05/16/2024	ND	2.08	104	2.00	16.0	
Total Xylenes*	<0.150	0.150	05/16/2024	ND	6.74	112	6.00	15.8	
Total BTEX	<0.300	0.300	05/16/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	05/16/2024	ND	400	100	400	7.69	
TPH 8015M	mg/	′kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	65.5	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	12.2	10.0	05/16/2024	ND					
Surrogate: 1-Chlorooctane	88.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	109 9	% 49.1-14	8						

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\*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



### **Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

### Cardinal Laboratories

### \*=Accredited Analyte

Mite Sugar

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

State & Inc. Manual.

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name:	NTGE		BILL TO			· /	ANALYSIS	REQUEST	
Project Manager:	Ethan Sessums		P.O. #: 212984	33					
	29 IN McKay St		Company: Devo						
city: Carls	ad state: NN	Zip: \$\$270	Attn:						
Phone #:	Fax #:		Address:						
Project #: 2	37339 Project Owne		City:						
Project Name:	Thistle 22 CTB?	1	State: Zip:						
Project Location:	Lea County		Phone #:						
Sampler Name:	Clayton T		Fax #:						
FOR LAB USE ONLY	Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	PRESERV SAMP	LING	BTEX TPH	Llorid			
Ha42473	0.1. 44	(G)RAB # CONT GROUN WASTE VASTE SolL OIL	ACIDIBASE: ACIDIBASE: ICE / COOL	TIME		2			
1	SW-8A		5 15	10.00		1			
	SW-TA .			-					
3	SW- 10 CS- 17					1			
4	CS-21	1 4 4		V		V			
							•		
analyses. All claims including the	mages. Cardinal's liability and client's exclusive remarky for nee for negligence and any other cause whatsoever shall be at be liable for incidental or consequential damages, include to or related to the performance of services hereunder by Date: Time: Time:	deemed waved usites made in witing a g without limitation, business interruptions and and a second	toss of use, or loss of profits incurred by c	fiert, is subsidie asons or otherwi Verbal Re All Results REMARKS	sult: Yes s are emailed. I	Please provide		s:	
Delivered By: (Circl Sampler - UPS - But		J.4 Cool Intact	(Initials)	Turnaroun Thermomet Correction	er ID #140	Standard Rush 48 hr	Cool I	Ves Yes	ndition d Temp. °C ed Temp. °C

ALL ALLER FOR A

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

Ringen b - 405 inter



May 22, 2024

ETHAN SESSUMS NTG ENVIRONMENTAL 701 TRADEWINDS BLVD. SUITE C MIDLAND, TX 79706

RE: THISTLE 22 CTB 2

Enclosed are the results of analyses for samples received by the laboratory on 05/20/24 12:29.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	05/20/2024		Sampling Date:	05/20/2024
Reported:	05/22/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

### Sample ID: DS - 2 0-6" (H242761-01)

Project Location:

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/21/2024	ND	1.72	85.8	2.00	2.94	
Toluene*	<0.050	0.050	05/21/2024	ND	1.77	88.5	2.00	4.83	
Ethylbenzene*	<0.050	0.050	05/21/2024	ND	1.77	88.4	2.00	4.90	
Total Xylenes*	<0.150	0.150	05/21/2024	ND	5.85	97.4	6.00	4.64	
Total BTEX	<0.300	0.300	05/21/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	05/20/2024	ND	416	104	400	0.00	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/20/2024	ND	183	91.5	200	1.49	
DRO >C10-C28*	<10.0	10.0	05/20/2024	ND	183	91.3	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	05/20/2024	ND					
Surrogate: 1-Chlorooctane	87.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	87.0	% 49.1-14	0						

### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	05/20/2024		Sampling Date:	05/20/2024
Reported:	05/22/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

### Sample ID: DS - 3 0-6" (H242761-02)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/21/2024	ND	1.72	85.8	2.00	2.94	
Toluene*	<0.050	0.050	05/21/2024	ND	1.77	88.5	2.00	4.83	
Ethylbenzene*	<0.050	0.050	05/21/2024	ND	1.77	88.4	2.00	4.90	
Total Xylenes*	<0.150	0.150	05/21/2024	ND	5.85	97.4	6.00	4.64	
Total BTEX	<0.300	0.300	05/21/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	05/20/2024	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/20/2024	ND	183	91.5	200	1.49	
DRO >C10-C28*	<10.0	10.0	05/20/2024	ND	183	91.3	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	05/20/2024	ND					
Surrogate: 1-Chlorooctane	84.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	84.3	% 49.1-14	8						

### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

		NTG ENVIRONMENTAL ETHAN SESSUMS 701 TRADEWINDS BLVD. SU MIDLAND TX, 79706 Fax To:	JITE C	
Received:	05/20/2024		Sampling Date:	05/20/2024
Reported:	05/22/2024		Sampling Type:	Soil
Project Name:	THISTLE 22 CTB 2		Sampling Condition:	Cool & Intact
Project Number:	237334		Sample Received By:	Shalyn Rodriguez

### Sample ID: DS - 4 0-6" (H242761-03)

Project Location:

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/21/2024	ND	1.72	85.8	2.00	2.94	
Toluene*	<0.050	0.050	05/21/2024	ND	1.77	88.5	2.00	4.83	
Ethylbenzene*	<0.050	0.050	05/21/2024	ND	1.77	88.4	2.00	4.90	
Total Xylenes*	<0.150	0.150	05/21/2024	ND	5.85	97.4	6.00	4.64	
Total BTEX	<0.300	0.300	05/21/2024	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	05/20/2024	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/20/2024	ND	183	91.5	200	1.49	
DRO >C10-C28*	19.1	10.0	05/20/2024	ND	183	91.3	200	2.46	
EXT DRO >C28-C36	<10.0	10.0	05/20/2024	ND					
Surrogate: 1-Chlorooctane	94.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	94.6	% 49.1-14	8						

### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



### **Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

### Cardinal Laboratories

### \*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

# **CARDINAL** Laboratories

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX	(575) 393-2476	BILL TO	ANALYSIS REQUEST
roject #: 237334	Sheet State: UM Zip: 88770 Fax #: Project Owner: Devon CTB 2 NM	P.O. #: 21298433 Company: Deron Attn: Pale Woodall Address: City: State: Zip: Phone #: Fax #:	
POR LAB USE ONLY Lab I.D. Sample I. HALANU DS-2 DS-3 DS-4	(C)OMP. ERS //TER	UDGE HER : I/VBASE: I/COOL HER :	AELE HALL
PLEASE NOTE: Liability and Damages. Cardina's liability and ch analyses. All claims including those for negligence and any other service. In no event shall Cardinal be liable for incidental or conse attiliates or successor. **sing out of or related to the performance Relinquished By: Relinquished By: Delivered By: (Circle One) 0 Sampler - UPS - Bus - Other: 0 PORM-000 R 3:4 07/11/23	equential damages, including vethout limitation, business intere- e of services hereunder by Cardinal, regardless of whether e Date: Time: Date: Time: bserved Temp. °C Cool I Press	Condition CHECKED BY: Yes Checked BY: (Ipitials) Checked BY: Correcting Checked BY: Correcting Checked BY: Checked BY: Correcting Checked BY: Checked BY:	reles. Result: ☐ Yes ☐ No   Add'I Phone #: Its are emailed. Please provide Email address:

Received by OCD: 7/18/2024 9:14:16 AM

Received by OCD: 7/18/2024 9:14:16 AM



**Environment Testing** 

# **ANALYTICAL REPORT**

# **PREPARED FOR**

Attn: Ethan Sessums NT Global 701 Tradewinds Blvd Midland, Texas 79706 Generated 1/12/2024 2:09:46 PM

JOB DESCRIPTION

THISTLE 22

# **JOB NUMBER**

890-5929-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

See page two for job notes and contact information.

# **Eurofins Carlsbad**

# Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

# **Authorization**

AMER

Generated 1/12/2024 2:09:46 PM

Authorized for release by Jessica Kramer, Project Manager Jessica.Kramer@et.eurofinsus.com (432)704-5440

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

Laboratory Job ID: 890-5929-1

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	Definitions/Glossary		
Client: NT Glob Project/Site: TH		Job ID: 890-5929-1	
Qualifiers			Ē
GC VOA			ł
Qualifier	Qualifier Description		
*+	LCS and/or LCSD is outside acceptance limits, high biased.		÷
S1+	Surrogate recovery exceeds control limits, high biased.		
U	Indicates the analyte was analyzed for but not detected.		
GC Semi VOA			
Qualifier	Qualifier Description		
 F1	MS and/or MSD recovery exceeds control limits.		
S1+	Surrogate recovery exceeds control limits, high biased.		
U	Indicates the analyte was analyzed for but not detected.		
HPLC/IC			
Qualifier	Qualifier Description		
F1	MS and/or MSD recovery exceeds control limits.		j
U	Indicates the analyte was analyzed for but not detected.		
Glossary			
Abbreviation	These commonly used abbreviations may or may not be present in this report.		
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis		
%R	Percent Recovery		
CFL	Contains Free Liquid		
CFU	Colony Forming Unit		
CNF	Contains No Free Liquid		
DER	Duplicate Error Ratio (normalized absolute difference)		
Dil Fac	Dilution Factor		
DL	Detection Limit (DoD/DOE)		
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample		
DLC	Decision Level Concentration (Radiochemistry)		
EDL	Estimated Detection Limit (Dioxin)		
LOD	Limit of Detection (DoD/DOE)		
LOQ	Limit of Quantitation (DoD/DOE)		
MCL	EPA recommended "Maximum Contaminant Level"		
MDA	Minimum Detectable Activity (Radiochemistry)		
MDC	Minimum Detectable Concentration (Radiochemistry)		
MDL	Method Detection Limit		
ML	Minimum Level (Dioxin)		
MPN	Most Probable Number		
MQL	Method Quantitation Limit		
NC	Not Calculated		
ND	Not Detected at the reporting limit (or MDL or EDL if shown)		
NEG	Negative / Absent		
POS	Positive / Present		
F03	Practical Quantitation Limit		
PQL	Presumptive		
PQL PRES	Presumptive Quality Control		
PQL PRES QC	Quality Control		
PQL PRES QC RER	Quality Control Relative Error Ratio (Radiochemistry)		
PQL PRES QC RER RL	Quality Control Relative Error Ratio (Radiochemistry) Reporting Limit or Requested Limit (Radiochemistry)		
PQL PRES QC RER RL RPD	Quality Control Relative Error Ratio (Radiochemistry) Reporting Limit or Requested Limit (Radiochemistry) Relative Percent Difference, a measure of the relative difference between two points		
PQL PRES QC RER RL	Quality Control Relative Error Ratio (Radiochemistry) Reporting Limit or Requested Limit (Radiochemistry)		

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# **Case Narrative**

Client: NT Global Project: THISTLE 22

Job ID: 890-5929-1

Job ID: 890-5929-1

### Job Narrative 890-5929-1

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Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### Receipt

The samples were received on 1/9/2024 2:20 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C

### Receipt Exceptions

The following samples is biphasic: H-1 (890-5929-1), H-3 (890-5929-2), H-4 (890-5929-3) and H-5 (890-5929-4). The client was contacted, and the laboratory was instructed to <CHOOSE\_ONE> analyze and report both phases; analyze and report the top layer only; analyze and report the bottom layer only.

The following samples were received and analyzed from an unpreserved bulk soil jar: H-1 (890-5929-1), H-3 (890-5929-2), H-4 (890-5929-3) and H-5 (890-5929-4).

### GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-70626 recovered under the lower control limit for Benzene and Toluene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-70640 and analytical batch 880-70626 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-70655 and analytical batch 880-70619 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-70655/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: H-1 (890-5929-1), H-3 (890-5929-2), (890-5932-A-1-D), (890-5932-A-1-E MS) and (890-5932-A-1-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-70654 and analytical batch 880-70617 was outside the upper control limits.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-70654 and analytical batch 880-70617 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

# **Case Narrative**

Client: NT Global Project: THISTLE 22 Job ID: 890-5929-1

**Eurofins Carlsbad** 

### Job ID: 890-5929-1 (Continued)

### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-70612 and analytical batch 880-70696 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Job ID: 890-5929-1

Client: NT Global
Project/Site: THISTLE 22

## **Client Sample ID: H-1**

Date Collected: 01/09/24 00:00 Date Received: 01/09/24 14:20

# Lab Sample ID: 890-5929-1

Analyzed

01/11/24 23:00

01/11/24 23:00

01/11/24 23:00

01/11/24 23:00

01/11/24 23:00

01/11/24 23:00

Analyzed

01/11/24 23:00

01/11/24 23:00

Analyzed

01/11/24 23:00

Lab Sample ID: 890-5929-2

Matrix: Solid

D

D

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Prepared

01/11/24 12:30

01/11/24 12:30

01/11/24 12:30

01/11/24 12:30

01/11/24 12:30

01/11/24 12:30

Prepared

01/11/24 12:30

01/11/24 12:30

Prepared

Matrix: Solid

Dil Fac

1

1

1

1

1

1

1

1

Dil Fac

Dil Fac

5

Analyte	Result	Qualifier	RL	MD
Benzene	<0.00198	U	0.00198	
Toluene	<0.00198	U	0.00198	
Ethylbenzene	<0.00198	U	0.00198	
m-Xylene & p-Xylene	<0.00397	U *+	0.00397	
o-Xylene	<0.00198	U	0.00198	
Xylenes, Total	<0.00397	U	0.00397	
Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	92		70 - 130	
1,4-Difluorobenzene (Surr)	78		70 - 130	
Method: TAL SOP Total BTEX	- Total BTEX Cald	ulation		
Analyte	Result	Qualifier	RL	MDL
Total BTEX	< 0.00397	U	0.00397	

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac			
Total TPH	<50.0 U	50.0	mg/Kg			01/12/24 05:48	1			

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		01/11/24 13:45	01/12/24 05:48	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		01/11/24 13:45	01/12/24 05:48	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/11/24 13:45	01/12/24 05:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	311	S1+	70 - 130				01/11/24 13:45	01/12/24 05:48	1
o-Terphenyl	270	S1+	70 - 130				01/11/24 13:45	01/12/24 05:48	1

	Method: EPA 300.0 - Anions, Ion C	hromatograp	hy - Soluble							
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Chloride	<4.96	U	4.96		mg/Kg			01/11/24 22:54	1

### **Client Sample ID: H-3** Date Collected: 01/09/24 00:00

Date Received: 01/09/24 14:20

Sample Depth: 0.5

Method: SW846 8021B - Volat	ile Organic Comp	ounds (GC	)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/11/24 12:30	01/11/24 23:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/11/24 12:30	01/11/24 23:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/11/24 12:30	01/11/24 23:21	1
m-Xylene & p-Xylene	<0.00400	U *+	0.00400		mg/Kg		01/11/24 12:30	01/11/24 23:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/11/24 12:30	01/11/24 23:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/11/24 12:30	01/11/24 23:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				01/11/24 12:30	01/11/24 23:21	1

5

Job ID: 890-5929-1

### Client: NT Global Project/Site: THISTLE 22 **Client Sample ID: H-3** Lab Sample ID: 890-5929-2 Date Collected: 01/09/24 00:00 Matrix: Solid Date Received: 01/09/24 14:20 Sample Depth: 0.5 Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued) Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 70 - 130 01/11/24 12:30 1,4-Difluorobenzene (Surr) 82 01/11/24 23:21 Method: TAL SOP Total BTEX - Total BTEX Calculation Analyte Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared Total BTEX < 0.00400 Ū 0.00400 01/11/24 23:21 mg/Kg Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total TPH <49.7 U 49.7 01/12/24 06:10 mg/Kg Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier MDL Unit Analyte RL D Prepared Analyzed Dil Fac Gasoline Range Organics <49.7 U 49.7 01/11/24 13:45 01/12/24 06:10 mg/Kg (GRO)-C6-C10 <49.7 U 49.7 mg/Kg 01/11/24 13:45 01/12/24 06:10 **Diesel Range Organics (Over** C10-C28) Oll Range Organics (Over C28-C36) <49.7 U 49.7 mg/Kg 01/11/24 13:45 01/12/24 06:10 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 304 S1+ 70 - 130 01/11/24 13:45 01/12/24 06:10 266 S1+ o-Terphenyl 70 - 130 01/11/24 13:45 01/12/24 06:10 1 Method: EPA 300.0 - Anions, Ion Chromatography - Soluble Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Dil Fac Chloride <4.99 U 4.99 01/11/24 14:49 mg/Kg 1 **Client Sample ID: H-4** Lab Sample ID: 890-5929-3 Date Collected: 01/09/24 00:00 Matrix: Solid Date Received: 01/09/24 14:20 Sample Depth: 0.5 Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Benzene <0.00199 U 0.00199 mg/Kg 01/11/24 12:30 01/11/24 23:42 Toluene <0.00199 U 0.00199 mg/Kg 01/11/24 12:30 01/11/24 23:42 1 Ethylbenzene <0.00199 U 0.00199 mg/Kg 01/11/24 12:30 01/11/24 23:42 0.00398 01/11/24 12:30 01/11/24 23:42 m-Xylene & p-Xylene <0.00398 U\*+ mg/Kg 1 o-Xylene <0.00199 U 0.00199 mg/Kg 01/11/24 12:30 01/11/24 23:42 Xylenes, Total <0.00398 U 0.00398 mg/Kg 01/11/24 12:30 01/11/24 23:42 1 Surrogate %Recoverv Qualifier Limits Prepared Dil Fac Analvzed

**Client Sample Results** 

canegate	,	quanner					
4-Bromofluorobenzene (Surr)	95		70 - 130				01/11/24 12:3
1,4-Difluorobenzene (Surr)	77		70 _ 130				01/11/24 12:3
Method: TAL SOP Total BTEX - 1	fotal BTEX Cale	ulation					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/11/24 23:42	1
Method: SW846 8015 NM - Diesel Ra	ange Organ	ics (DRO) (O	GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			01/11/24 22:02	1

**Eurofins Carlsbad** 

12:30

12:30

01/11/24 23:42

01/11/24 23:42

1

1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Method: SW846 8021B - Volatile Organic Compounds (GC)

Result Qualifier

<49.6 U

<49.6 U

<49.6 U

%Recovery Qualifier

Result Qualifier

115

120

<5.04 U

RL

49.6

49.6

49.6

RL

5.04

Limits

70 - 130

70 - 130

MDL Unit

MDL Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Job ID: 890-5929-1

## Client: NT Global Project/Site: THISTLE 22

# **Client Sample ID: H-4**

Date Collected: 01/09/24 00:00 Date Received: 01/09/24 14:20

Sample Depth: 0.5

Gasoline Range Organics

Diesel Range Organics (Over

**Client Sample ID: H-5** 

Sample Depth: 0.5

Date Collected: 01/09/24 00:00

Date Received: 01/09/24 14:20

Oll Range Organics (Over C28-C36)

Analyte

C10-C28)

Surrogate 1-Chlorooctane

o-Terphenyl

Analyte

Chloride

(GRO)-C6-C10

### Lab Sample ID: 890-5929-3 Matrix: Solid

Analyzed

01/11/24 22:02

01/11/24 22:02

01/11/24 22:02

Analyzed

01/11/24 22:02

01/11/24 22:02

Analyzed

01/11/24 14:54

Lab Sample ID: 890-5929-4

Prepared

01/11/24 13:50

01/11/24 13:50

01/11/24 13:50

Prepared

01/11/24 13:50

01/11/24 13:50

Prepared

D

D

5 Dil Fac Dil Fac Dil Fac

1

1

1

1

1

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/11/24 12:30	01/12/24 00:02	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/11/24 12:30	01/12/24 00:02	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/11/24 12:30	01/12/24 00:02	1
m-Xylene & p-Xylene	<0.00403	U *+	0.00403		mg/Kg		01/11/24 12:30	01/12/24 00:02	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/11/24 12:30	01/12/24 00:02	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		01/11/24 12:30	01/12/24 00:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				01/11/24 12:30	01/12/24 00:02	1
1,4-Difluorobenzene (Surr)	101		70 - 130				01/11/24 12:30	01/12/24 00:02	1
- Method: TAL SOP Total BTEX - T	otal BTEX Cal	culation							
			RL	МП	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	RL		onne		rioparoa	· · · · · · · · · · · · · · · · · · ·	
Analyte Total BTEX	Result <0.00403		0.00403		mg/Kg			01/12/24 00:02	1
Total BTEX	<0.00403	U	0.00403						1
	<0.00403	U	0.00403		mg/Kg				1
Total BTEX	<0.00403	U	0.00403			<u>D</u>	Prepared		1 Dil Fac
Total BTEX Method: SW846 8015 NM - Diese	<0.00403	U ics (DRO) ( Qualifier	0.00403		mg/Kg		<u> </u>	01/12/24 00:02	·
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH	<0.00403 I Range Organ Result <50.5	U ics (DRO) ( Qualifier U	0.00403 GC) RL 50.5		mg/Kg Unit		<u> </u>	01/12/24 00:02 Analyzed	Dil Fac
Total BTEX Method: SW846 8015 NM - Diese Analyte	- <0.00403 I Range Organ Result <	U ics (DRO) ( Qualifier U	0.00403 GC) RL 50.5		mg/Kg Unit mg/Kg		<u> </u>	01/12/24 00:02 Analyzed	Dil Fac
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	- <0.00403 I Range Organ Result <	U ics (DRO) ( Qualifier U nics (DRO) Qualifier	0.00403 GC) <u>RL</u> 50.5	MDL	mg/Kg Unit mg/Kg	D	Prepared	01/12/24 00:02 Analyzed 01/11/24 23:07	Dil Fac
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<0.00403 I Range Organ Result <p>c50.5 cel Range Orga Result</p>	U ics (DRO) (1 Qualifier U mics (DRO) Qualifier U	0.00403 GC) RL 50.5 (GC) RL	MDL	mg/Kg Unit mg/Kg Unit	D	Prepared	01/12/24 00:02 Analyzed 01/11/24 23:07 Analyzed	Dil Fac 1 Dil Fac
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10	<pre>&lt;0.00403 I Range Organ Result <pre></pre> <pre><!--</td--><td>U ics (DRO) (1 Qualifier U mics (DRO) Qualifier U U</td><td>0.00403 GC) RL 50.5 (GC) RL 50.5</td><td>MDL</td><td>Unit mg/Kg Unit mg/Kg</td><td> D</td><td>Prepared Prepared 01/11/24 13:50</td><td>01/12/24 00:02 Analyzed 01/11/24 23:07 Analyzed 01/11/24 23:07</td><td>Dil Fac 1 Dil Fac 1</td></pre></pre>	U ics (DRO) (1 Qualifier U mics (DRO) Qualifier U U	0.00403 GC) RL 50.5 (GC) RL 50.5	MDL	Unit mg/Kg Unit mg/Kg	D	Prepared Prepared 01/11/24 13:50	01/12/24 00:02 Analyzed 01/11/24 23:07 Analyzed 01/11/24 23:07	Dil Fac 1 Dil Fac 1
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<ul> <li>&lt;0.00403</li> <li>I Range Organ</li> <li>Result</li> <li>&lt;50.5</li> <li>Range Orga</li> <li>Result</li> <li>&lt;50.5</li> <li>&lt;5</li></ul>	U ics (DRO) (1 Qualifier U mics (DRO) Qualifier U U U	0.00403 GC) RL 50.5 (GC) RL 50.5 50.5	MDL	Unit mg/Kg Unit mg/Kg mg/Kg	D	Prepared Prepared 01/11/24 13:50 01/11/24 13:50	01/12/24 00:02 Analyzed 01/11/24 23:07 Analyzed 01/11/24 23:07 01/11/24 23:07	Dil Fac 1 Dil Fac 1
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<0.00403 I Range Organ Result <50.5 sel Range Orga Result <50.5 <50.5 <50.5	U ics (DRO) (1 Qualifier U mics (DRO) Qualifier U U U	0.00403 GC) RL 50.5 (GC) RL 50.5 50.5 50.5	MDL	Unit mg/Kg Unit mg/Kg mg/Kg	D	Prepared Prepared 01/11/24 13:50 01/11/24 13:50 01/11/24 13:50	01/12/24 00:02 Analyzed 01/11/24 23:07 Analyzed 01/11/24 23:07 01/11/24 23:07 01/11/24 23:07	Dil Fac 1 Dil Fac 1 1

		Client S	Sample R	esults	;					
Client: NT Global Project/Site: THISTLE 22								Job ID: 890	)-5929-1	2
Client Sample ID: H-5 Date Collected: 01/09/24 00:00							Lab Sa	mple ID: 890- Matr	5929-4 ix: Solid	
Date Received: 01/09/24 14:20 Sample Depth: 0.5										4
Method: EPA 300.0 - Anions, Ion Cl Analyte		<mark>hy - Soluble</mark> Qualifier	RL	МП	Unit	D	Prepared	Analyzed	Dil Fac	5
Chloride	7.62		4.97		mg/Kg		Fieparea	01/11/24 15:00	1	
										8
										9
										1

### Method: 8021B - Volatile Organic Compounds (GC) Matrix: Solid

				Percent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-5929-1	H-1	92	78	
890-5929-2	H-3	95	82	
890-5929-3	H-4	95	77	
890-5929-4	H-5	105	101	
890-5939-A-1-B MS	Matrix Spike	125	107	
890-5939-A-1-C MSD	Matrix Spike Duplicate	128	115	
LCS 880-70640/1-A	Lab Control Sample	134 S1+	107	
LCSD 880-70640/2-A	Lab Control Sample Dup	110	104	
MB 880-70580/5-A	Method Blank	73	90	
MB 880-70640/5-A	Method Blank	72	88	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

# Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix:	Sol	id

				Percent Surrogate Recovery (Acceptance Limi
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-5929-1	H-1	311 S1+	270 S1+	
890-5929-2	H-3	304 S1+	266 S1+	
890-5929-3	H-4	115	120	
890-5929-3 MS	H-4	113	104	
890-5929-3 MSD	H-4	115	106	
390-5929-4	H-5	126	127	
390-5932-A-1-E MS	Matrix Spike	156 S1+	129	
90-5932-A-1-F MSD	Matrix Spike Duplicate	159 S1+	132 S1+	
CS 880-70654/2-A	Lab Control Sample	82	86	
CS 880-70655/2-A	Lab Control Sample	130	141 S1+	
CSD 880-70654/3-A	Lab Control Sample Dup	98	114	
_CSD 880-70655/3-A	Lab Control Sample Dup	99	113	
MB 880-70654/1-A	Method Blank	178 S1+	179 S1+	
MB 880-70655/1-A	Method Blank	133 S1+	155 S1+	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Prep Type: Total/NA

Prep Type: Total/NA

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# **QC Sample Results**

Job ID: 890-5929-1

Client: NT Global Project/Site: THISTLE 22

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-70580/	5-A										Client Sa	mple ID: Me		
Matrix: Solid												Prep Typ		
Analysis Batch: 70626												Prep Ba	tch:	70580
			MB											
Analyte			Qualifier	RL		MDL	Unit		D		repared	Analyzed		Dil Fac
Benzene	<0.00	200	U	0.00200			mg/Kg			01/1	0/24 14:02	01/11/24 11:0	0	1
Toluene	<0.00	200	U	0.00200			mg/Kg			01/1	0/24 14:02	01/11/24 11:0	0	1
Ethylbenzene	<0.00	200	U	0.00200			mg/Kg			01/1	0/24 14:02	01/11/24 11:0	0	1
m-Xylene & p-Xylene	<0.00	400	U	0.00400			mg/Kg			01/1	0/24 14:02	01/11/24 11:0	0	1
o-Xylene	<0.00	200	U	0.00200			mg/Kg			01/1	0/24 14:02	01/11/24 11:0	0	1
Xylenes, Total	<0.00	400	U	0.00400			mg/Kg			01/1	0/24 14:02	01/11/24 11:0	0	1
		ΜВ	МВ											
Surrogate	%Recov	very	Qualifier	Limits						Р	repared	Analyzed		Dil Fac
4-Bromofluorobenzene (Surr)		73		70 - 130						01/1	0/24 14:02	01/11/24 11:0	00 -	1
1,4-Difluorobenzene (Surr)		90		70 - 130						01/1	0/24 14:02	01/11/24 11:0	00	1
Lab Sample ID: MB 880-70640/	5-A										Client Sa	mple ID: Me		
Matrix: Solid												Prep Typ		
Analysis Batch: 70626												Prep Ba	itch:	70640
			MB						_	_	<u>.</u>			
Analyte			Qualifier			MDL	Unit		<u>D</u>		repared	Analyzed		Dil Fac
Benzene	<0.00		U	0.00200			mg/Kg				1/24 12:30	01/11/24 21:3		1
Toluene	<0.00		U	0.00200			mg/Kg				1/24 12:30	01/11/24 21:3		1
Ethylbenzene	<0.00			0.00200			mg/Kg				1/24 12:30	01/11/24 21:3		1
m-Xylene & p-Xylene	<0.00			0.00400			mg/Kg				1/24 12:30	01/11/24 21:3		1
o-Xylene	<0.00		U	0.00200			mg/Kg				1/24 12:30	01/11/24 21:3		1
Xylenes, Total	<0.00	400	U	0.00400			mg/Kg			01/1	1/24 12:30	01/11/24 21:3	87	1
		ΜВ	МВ											
Surrogate	%Recov	/ery	Qualifier	Limits						Р	repared	Analyzed		Dil Fac
4-Bromofluorobenzene (Surr)		72		70 - 130						01/1	1/24 12:30	01/11/24 21:3	37	1
1,4-Difluorobenzene (Surr)		88		70 - 130						01/1	1/24 12:30	01/11/24 21:3	37	1
Lab Campia ID: 1 CC 890 70640	14 A								~	liant	Complet			
Lab Sample ID: LCS 880-70640	/1-A								C	nem	Sample	D: Lab Cont		-
Matrix: Solid												Prep Typ		
Analysis Batch: 70626				Calles	1.00	LCS						Prep Ba	itch:	/0640
Awalada				Spike	LCS			11		-	0/ D	%Rec		
Analyte				Added	Result	Qua		Unit			%Rec	Limits		
Benzene				0.100	0.1159			mg/Kg			116	70 - 130		
				0.100	0.1082			mg/Kg			108	70 - 130		
Ethylbenzene				0.100	0.1213			mg/Kg			121	70 - 130		
m-Xylene & p-Xylene				0.200	0.2613	*+		mg/Kg			131	70 - 130		
o-Xylene				0.100	0.1246			mg/Kg			125	70 - 130		
	LCS	LCS												
Surrogate	%Recovery	Qual	lifier	Limits										
4-Bromofluorobenzene (Surr)	134	S1+		70 - 130										
1,4-Difluorobenzene (Surr)	107			70 - 130										
Lab Sample ID: LCCD 000 7004	0/2 4							0.1	o	S		ab Control O	o	lo D
Lab Sample ID: LCSD 880-7064 Matrix: Solid	-U/Z-A							CI	ent	San	ipie ID: L	ab Control S		
Analysis Batch: 70626												Prep Typ		
ALIAIVSIS DALCH: (U020												Prep Ba	ucn:	70640 RPD
····· <b>,</b> ··· · ·····				Crika	1000	100								
Analyte				Spike Added	LCSD Result			Unit		D	%Rec	%Rec Limits	RPD	Limit

# **QC Sample Results**

Lab Sample ID: LCSD 880-7 Matrix: Solid Analysis Batch: 70626	0640/2-A				Clier	nt Sam	ple ID:		I Sample ype: Tot Batch:	tal/NA
		Spike	LCSD	LCSD				%Rec		RPD
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene		0.100	0.08721		mg/Kg		87	70 - 130	22	35
Ethylbenzene		0.100	0.09701		mg/Kg		97	70 - 130	22	35
m-Xylene & p-Xylene		0.200	0.1972		mg/Kg		99	70 - 130	28	35
o-Xylene		0.100	0.09543		mg/Kg		95	70 - 130	26	35
	LCSD LCSD									
Currente	% Decessory Outstifier	Lingita								

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

### Lab Sample ID: 890-5939-A-1-B MS Matrix: Solid

### Analysis Batch: 70626

Analysis Batch: 70626									Prep	Batch: 70640
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U	0.101	0.1109		mg/Kg		110	70 - 130	
Toluene	<0.00202	U	0.101	0.1034		mg/Kg		103	70 - 130	
Ethylbenzene	<0.00202	U	0.101	0.1187		mg/Kg		118	70 - 130	
m-Xylene & p-Xylene	<0.00404	U *+	0.202	0.2456		mg/Kg		122	70 - 130	
o-Xylene	<0.00202	U	0.101	0.1158		mg/Kg		115	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	125		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

## Lab Sample ID: 890-5939-A-1-C MSD Matrix: Solid

### Analysis Batch: 70626

1,4-Difluorobenzene (Surr)

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U	0.0994	0.1048		mg/Kg		105	70 - 130	6	35
Toluene	<0.00202	U	0.0994	0.09392		mg/Kg		94	70 - 130	10	35
Ethylbenzene	<0.00202	U	0.0994	0.1074		mg/Kg		108	70 - 130	10	35
m-Xylene & p-Xylene	<0.00404	U *+	0.199	0.2288		mg/Kg		115	70 - 130	7	35
o-Xylene	<0.00202	U	0.0994	0.1084		mg/Kg		109	70 - 130	7	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	128		70 - 130								

# Method: 8015B NM - Diesel Range Organics (DRO) (GC)

115

Lab Sample ID: MB 880-70654/1-A Matrix: Solid Analysis Batch: 70617							Client Sa	mple ID: Metho Prep Type: <sup>-</sup> Prep Batcl	Total/NA
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		01/11/24 13:45	01/11/24 20:57	1
(GRO)-C6-C10									

70 - 130

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**Client Sample ID: Matrix Spike** 

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 70640

Job ID: 890-5929-1

Client: NT Global Project/Site: THISTLE 22

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-70654/ Matrix: Solid	п <b>-А</b>									Client Sa	ample ID: Prep 1	Metho Type: T	
Analysis Batch: 70617												Batch	
		МВ МВ											
Analyte	Re	sult Qualifi	er F	RL	MDL	Unit		D	Р	repared	Analyz	ed	Dil Fa
Diesel Range Organics (Over		50.0 U	50			mg/Kg	1			1/24 13:45	01/11/24		
C10-C28)						0.0							
Oll Range Organics (Over C28-C36)	<5	50.0 U	50	0.0		mg/Kg	3		01/1	1/24 13:45	01/11/24	20:57	
		MB MB											
Surragata	%Recov		er Limits							roporod	Analua	ad	Dil Fa
Surrogate 1-Chlorooctane		$\frac{178}{178}$ $\frac{\text{Quann}}{\text{S1+}}$	70 - 130	)				-		repared 1/24 13:45	Analyz 01/11/24		DIIFa
p-Terphenyl		179 S1+	70 - 130 70 - 130							1/24 13:45	01/11/24		
- respirenzi		119 51	70 - 700						01/1	1/24 13.45	01/11/24	20.07	
Lab Sample ID: LCS 880-70654	l/2-A							CI	ient	Sample	ID: Lab Co	ontrol	Sampl
Matrix: Solid										•		Type: T	
Analysis Batch: 70617												Batch	
· · · · · · · · · · · · · · · · · · ·			Spike	LCS	LCS						%Rec		
Analyte			Added	Result	Qual	lifier	Unit		D	%Rec	Limits		
Gasoline Range Organics			1000	781.1			mg/Kg		_	78	70 - 130		
GRO)-C6-C10													
Diesel Range Organics (Over			1000	854.2			mg/Kg			85	70 - 130		
C10-C28)													
	LCS	LCS											
Surrogate	%Recovery	Qualifier	Limits										
I-Chlorooctane	82		70 - 130										
o-Terphenyl	86		70 - 130										
Matrix: Solid Analysis Batch: 70617			• "			_					Prep	Type: T Batch	: <b>706</b> 5
			Spike	LCSD					_	~ -	%Rec		RP
Analyte			Added	Result	Qua	lifier	Unit		D	%Rec	Limits 70 - 130	6	
Gasoline Range Organics GRO)-C6-C10			1000	831.3			mg/Kg			83	70 - 130	0	4
Diesel Range Organics (Over			1000	1015			mg/Kg			101	70 - 130	17	2
C10-C28)													
	1000												
Surrogato	LCSD % Pocovory		Limito										
Surrogate	%Recovery 98	Qualifier	<i>Limits</i> 70 _ 130										
p-Terphenyl	98 114		70 - 130 70 - 130										
- icipitetiyi	114		70 - 700										
Lab Sample ID: 890-5932-A-1-E	EMS									Client S	Sample ID	: Matri	x Spik
Matrix: Solid												Type: T	
Analysis Batch: 70617												Batch	
-	Sample	Sample	Spike	MS	MS						%Rec		
Analyte	-	Qualifier	Added	Result		lifier	Unit		D	%Rec	Limits		
Gasoline Range Organics GRO)-C6-C10	<49.9		1000	1316			mg/Kg		_	129	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	1000	1591	F1		mg/Kg			157	70 - 130		
	MS % Decovery		1 ins 14-										
Surrogate	%Recovery 156		<i>Limits</i>										
1-Chlorooctane	100	517	70 - 130										

Released to Imaging: 8/26/2024 10:03:22 AM

129

o-Terphenyl

70 - 130

# **QC Sample Results**

Project/Site: THISTLE 22

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-5932-A-1-	F MSD								Clie	nt Sa	ample ID:	Matrix S	oike Du	plicate
Matrix: Solid													Type: To	
Analysis Batch: 70617													Batch:	
	Sample	Sam	ple	Spike	MSD	MSE	5					%Rec		RPD
Analyte	Result	Qua	lifier	Added	Result	Qua	lifier	Unit		D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U F1		1000	1360	F1		mg/Kg			134	70 - 130	3	20
(GRO)-C6-C10								0 0						
Diesel Range Organics (Over	<49.9	U F1	l	1000	1628	F1		mg/Kg			160	70 - 130	2	20
C10-C28)														
	MSD	MSE	)											
Surrogate	%Recovery		lifier	Limits										
1-Chlorooctane	159	S1+		70 - 130										
o-Terphenyl		S1+		70 - 130										
Lab Sample ID: MB 880-70655	6/1-A										<b>Client Sa</b>	ample ID:	Method	Blank
Matrix: Solid													Type: To	
Analysis Batch: 70619													Batch:	
,		мв	МВ											
Analyte	R	esult	Qualifier	F	RL	MDL	Unit		D	Р	repared	Analyz	ed	Dil Fac
Gasoline Range Organics	<	<50.0	U	50	).0		mg/K	a	_		1/24 13:50	01/11/24		1
(GRO)-C6-C10							5.	5						
Diesel Range Organics (Over	<	<50.0	U	50	0.0		mg/K	g		01/1	1/24 13:50	01/11/24	20:57	1
C10-C28)														
Oll Range Organics (Over C28-C36)	<	\$50.0	U	50	).0		mg/K	g		01/1	1/24 13:50	01/11/24	20:57	1
		ΜВ	МВ											
Surrogate	%Reco			Limits						D	repared	Analyz	od	Dil Fac
1-Chlorooctane		133		70 - 130	)						1/24 13:50	01/11/24		1
o-Terphenyl			S1+	70 - 130							1/24 13:50	01/11/24		1
		100	0,1	10-100						01/1	1/21 10:00	0111121	20.07	
Lab Sample ID: LCS 880-7065	5/2-A								С	lient	Sample	ID: Lab C	ontrol S	ample
Matrix: Solid													Type: To	-
Analysis Batch: 70619													Batch:	
				Spike	LCS	LCS	;					%Rec		
Analyte				Added	Result	Qua	lifier	Unit		D	%Rec	Limits		
Gasoline Range Organics				1000	815.7	. —		mg/Kg			82	70 - 130		
(GRO)-C6-C10														
Diesel Range Organics (Over				1000	986.4			mg/Kg			99	70 - 130		
C10-C28)														
	LCS	LCS												
Surrogate	%Recovery			Limits										
1-Chlorooctane	130			70 - 130										
o-Terphenyl		S1+		70 - 130										
Lab Sample ID: LCSD 880-706	55/3-A							Cli	ient	Sam	ple ID: L	ab Contro	Samp	le Dup
Matrix: Solid											-		· Type: To	
Analysis Batch: 70619													Batch:	
-				Spike	LCSD	LCS	D					%Rec		RPD
Analyte				Added	Result	Qua	lifier	Unit		D	%Rec	Limits	RPD	Limit
Gasoline Range Organics				1000	891.3			mg/Kg			89	70 - 130	9	20
(GRO)-C6-C10														
Diesel Range Organics (Over				1000	968.6	i		mg/Kg			97	70 - 130	2	20
C10-C28)														

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Job ID: 890-5929-1

# **QC Sample Results**

Job ID: 890-5929-1

Client: NT Global Project/Site: THISTLE 22

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-7065	5/3-A					Clie	nt San	ple ID:	_ab Contro		
Matrix: Solid										Type: To	
Analysis Batch: 70619									Prep	Batch:	/065
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	99		70 - 130								
p-Terphenyl	113		70 - 130								
Lab Sample ID: 890-5929-3 MS									Client S	ample II	D: H
Matrix: Solid										Type: To	
Analysis Batch: 70619										Batch:	
-	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	<49.6	U	1010	1297		mg/Kg		126	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.6	U	1010	883.9		mg/Kg		85	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
-Chlorooctane	113		70 - 130								
-Terphenyl	104		70 - 130								
.ab Sample ID: 890-5929-3 MSD	)								Client S	ample I	D: H
Matrix: Solid										· Type: To	
Analysis Batch: 70619										Batch:	
	Sample	Sample	Spike	MSD	MSD				• %Rec		R
nalyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Lir
Gasoline Range Organics	<49.6	U	1010	1322		mg/Kg		128	70 - 130	2	
Diesel Range Organics (Over C10-C28)	<49.6	U	1010	908.2		mg/Kg		87	70 - 130	3	
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
-Chlorooctane	115		70 - 130								
p-Terphenyl	106		70 - 130								
ethod: 300.0 - Anions, Ion	Chromat	ography									
Lab Sample ID: MB 880-70487/1								Client S	ample ID:	Method	Blar
Matrix: Solid	-74							Sherit 3			
Mali IX. JUIU									гер	Type: Se	oiut

	MB	МВ										
Analyte	Result	Qualifier	F	RL	MDL	Unit		D F	Prepared	Analyz	zed	Dil Fac
Chloride	<5.00	U	5.	00		mg/Kg				01/11/24	04:06	1
Lab Sample ID: LCS 880-70487/2-A Matrix: Solid Analysis Batch: 70595								Clien	t Sample	e ID: Lab C Prep		Sample Soluble
Analysis Daten. 10000			Spike	LCS	LCS					%Rec		
Analyte		4	dded	Result	Quali	ifier U	Jnit	D	%Rec	Limits		
Chloride			250	252.4		n	ng/Kg		101	90 - 110		·

Job ID: 890-5929-1

Client: NT Global Project/Site: THISTLE 22

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-70	487/3-A					Cli	ent Sar	nple ID:	Lab Contro		
Matrix: Solid									Prep	Type: S	olubio
Analysis Batch: 70595			• "								
			Spike		LCSD		_	~-	%Rec		RPD
Analyte	·		Added		Qualifier	Unit	<u>D</u>	%Rec	Limits	RPD	Limi
Chloride			250	253.7		mg/Kg		101	90 - 110	1	20
Lab Sample ID: 880-37706-A-	2-B MS							Client	Sample ID	: Matrix	Spike
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 70595											
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	1530		2510	4281		mg/Kg		110	90 - 110		
_ab Sample ID: 880-37706-A-	2-C MSD					C	Client S	ample ID	D: Matrix S	pike Dup	olicate
Matrix: Solid										Type: S	
Analysis Batch: 70595										1	
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	-	Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Chloride	1530		2510	4244		mg/Kg		108	90 - 110	1	20
ab Sample ID: MB 880-7061	2/1-A							Client S	Sample ID:		
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 70696		MB MB									
Analyte	R	esult Qualifier		RL	MDL Unit		DI	Prepared	Analyz	zed	Dil Fac
Chloride		5.00 U		5.00	mg/K	g			01/11/24		1
Lab Sample ID: LCS 880-706	12/2-A						Clien	t Sample	ID: Lab C		
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 70696											
			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride			250	248.4		mg/Kg		99	90 - 110		
Lab Sample ID: LCSD 880-70	612/3-A					Cli	ent Sar	nple ID:	Lab Contro	ol Sampl	le Dur
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 70696											
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Chloride	·		250	248.8		mg/Kg		100	90 - 110	0	20
								Client	Sample ID	Matrix	Spiles
ah Sampio ID: 990 37770 A	58 E MS							Chefft	Sample ID	· widli X	JUIKE
-	-58-E MS								Dron		
Matrix: Solid	-58-E MS								Prep	Type: S	
Matrix: Solid		Sample	Spike	MS	MS						
Matrix: Solid Analysis Batch: 70696	Sample	-	Spike Added		MS Qualifier	Unit	п	%Rec	%Rec		
Matrix: Solid Analysis Batch: 70696 <sup>Analyte</sup>	Sample	Qualifier	Spike Added 249		Qualifier	Unit mg/Kg	<u>D</u>	%Rec 89			
Matrix: Solid Analysis Batch: 70696 Analyte Chloride	Sample Result 89.1	Qualifier	Added	Result	Qualifier	mg/Kg		89	%Rec Limits 90 - 110	Type: S	oluble
Matrix: Solid Analysis Batch: 70696 Analyte Chloride Lab Sample ID: 880-37779-A-	Sample Result 89.1	Qualifier	Added	Result	Qualifier	mg/Kg		89	%Rec Limits 90 - 110 D: Matrix S	Type: S	oluble
Matrix: Solid Analysis Batch: 70696 Analyte Chloride Lab Sample ID: 880-37779-A- Matrix: Solid	Sample Result 89.1	Qualifier	Added	Result	Qualifier	mg/Kg		89	%Rec Limits 90 - 110 D: Matrix S	Type: S	oluble
Matrix: Solid Analysis Batch: 70696 Analyte Chloride Lab Sample ID: 880-37779-A- Matrix: Solid	Sample 	Qualifier F1	Added	Result 311.2	Qualifier F1	mg/Kg		89	%Rec Limits 90 - 110 D: Matrix S Prep	Type: S	oluble
Matrix: Solid Analysis Batch: 70696 Analyte Chloride Lab Sample ID: 880-37779-A- Matrix: Solid Analysis Batch: 70696	Sample Result 89.1 58-F MSD Sample	Qualifier F1	Added 249 Spike	Result 311.2 MSD	Qualifier F1 MSD	mg/Kg	Client S	89 Sample IE	%Rec Limits 90 - 110 D: Matrix S Prep %Rec	Type: S  pike Dup Type: S	oluble
Lab Sample ID: 880-37779-A- Matrix: Solid Analysis Batch: 70696 Analyte Chloride Lab Sample ID: 880-37779-A- Matrix: Solid Analysis Batch: 70696 Analyte	Sample Result 89.1 58-F MSD Sample	Qualifier F1	Added	Result 311.2 MSD	Qualifier F1	mg/Kg		89	%Rec Limits 90 - 110 D: Matrix S Prep	Type: S	oluk olica oluk R
Matrix: Solid Analysis Batch: 70696 Analyte Chloride Lab Sample ID: 880-37779-A- Matrix: Solid Analysis Batch: 70696	Sample Result 89.1 58-F MSD Sample	Qualifier F1 Sample Qualifier	Added 249 Spike	Result 311.2 MSD	Qualifier F1 MSD	mg/Kg	Client S	89 Sample IE	%Rec Limits 90 - 110 D: Matrix S Prep %Rec	Type: S  pike Dup Type: S	oluble

## **QC** Association Summary

Client: NT Global Project/Site: THISTLE 22 Job ID: 890-5929-1

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> 9 10 11

70640

70640

8

12 13

GC VOA

### Prep Batch: 70580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-70580/5-A	Method Blank	Total/NA	Solid	5035	
nalysis Batch: 70626					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5929-1	H-1	Total/NA	Solid	8021B	70640
890-5929-2	H-3	Total/NA	Solid	8021B	70640
890-5929-3	H-4	Total/NA	Solid	8021B	70640
890-5929-4	H-5	Total/NA	Solid	8021B	70640
MB 880-70580/5-A	Method Blank	Total/NA	Solid	8021B	70580
MB 880-70640/5-A	Method Blank	Total/NA	Solid	8021B	70640
LCS 880-70640/1-A	Lab Control Sample	Total/NA	Solid	8021B	70640
LCSD 880-70640/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	70640

Total/NA

Total/NA

Solid

Solid

8021B

8021B

## 890-5939-A-1-C MSD Prep Batch: 70640

890-5939-A-1-B MS

Matrix Spike

Matrix Spike Duplicate

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5929-1	H-1	Total/NA	Solid	5035	
890-5929-2	H-3	Total/NA	Solid	5035	
890-5929-3	H-4	Total/NA	Solid	5035	
890-5929-4	H-5	Total/NA	Solid	5035	
MB 880-70640/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-70640/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-70640/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5939-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-5939-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

### Analysis Batch: 70771

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-5929-1	H-1	Total/NA	Solid	Total BTEX	
890-5929-2	H-3	Total/NA	Solid	Total BTEX	
890-5929-3	H-4	Total/NA	Solid	Total BTEX	
890-5929-4	H-5	Total/NA	Solid	Total BTEX	

## GC Semi VOA

### Analysis Batch: 70617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5929-1	H-1	Total/NA	Solid	8015B NM	70654
890-5929-2	H-3	Total/NA	Solid	8015B NM	70654
MB 880-70654/1-A	Method Blank	Total/NA	Solid	8015B NM	70654
LCS 880-70654/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	70654
LCSD 880-70654/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	70654
890-5932-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	70654
890-5932-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	70654

### Analysis Batch: 70619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5929-3	H-4	Total/NA	Solid	8015B NM	70655
890-5929-4	H-5	Total/NA	Solid	8015B NM	70655
MB 880-70655/1-A	Method Blank	Total/NA	Solid	8015B NM	70655

## **QC** Association Summary

Client: NT Global Project/Site: THISTLE 22

## GC Semi VOA (Continued)

## Analysis Batch: 70619 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-70655/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	70655
LCSD 880-70655/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	70655
890-5929-3 MS	H-4	Total/NA	Solid	8015B NM	70655
890-5929-3 MSD	H-4	Total/NA	Solid	8015B NM	70655

### Prep Batch: 70654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5929-1	H-1	Total/NA	Solid	8015NM Prep	
890-5929-2	H-3	Total/NA	Solid	8015NM Prep	
MB 880-70654/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
_CS 880-70654/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
_CSD 880-70654/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
390-5932-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
390-5932-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

### Prep Batch: 70655

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-5929-3	H-4	Total/NA	Solid	8015NM Prep	
890-5929-4	H-5	Total/NA	Solid	8015NM Prep	
MB 880-70655/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-70655/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-70655/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5929-3 MS	H-4	Total/NA	Solid	8015NM Prep	
890-5929-3 MSD	H-4	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 70704

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method Prep Batch
890-5929-1	H-1	Total/NA	Solid	8015 NM
890-5929-2	H-3	Total/NA	Solid	8015 NM
890-5929-3	H-4	Total/NA	Solid	8015 NM
890-5929-4	H-5	Total/NA	Solid	8015 NM

### HPLC/IC

### Leach Batch: 70487

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-5929-2	H-3	Soluble	Solid	DI Leach	
890-5929-3	H-4	Soluble	Solid	DI Leach	
890-5929-4	H-5	Soluble	Solid	DI Leach	
MB 880-70487/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-70487/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-70487/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-37706-A-2-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-37706-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

### Analysis Batch: 70595

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-5929-2	H-3	Soluble	Solid	300.0	70487
890-5929-3	H-4	Soluble	Solid	300.0	70487
890-5929-4	H-5	Soluble	Solid	300.0	70487
MB 880-70487/1-A	Method Blank	Soluble	Solid	300.0	70487

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### Job ID: 890-5929-1

## **QC Association Summary**

Client: NT Global Project/Site: THISTLE 22

## HPLC/IC (Continued)

880-37779-A-58-F MSD

Matrix Spike Duplicate

## Analysis Batch: 70595 (Continued)

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch	
LCS 880-70487/2-A	Lab Control Sample	Soluble	Solid	300.0	70487	E
LCSD 880-70487/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	70487	5
880-37706-A-2-B MS	Matrix Spike	Soluble	Solid	300.0	70487	
880-37706-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	70487	
Leach Batch: 70612						
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
890-5929-1	H-1	Soluble	Solid	DI Leach		8
MB 880-70612/1-A	Method Blank	Soluble	Solid	DI Leach		
LCS 880-70612/2-A	Lab Control Sample	Soluble	Solid	DI Leach		9
LCSD 880-70612/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach		
880-37779-A-58-E MS	Matrix Spike	Soluble	Solid	DI Leach		
880-37779-A-58-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach		
Analysis Batch: 70696						
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
890-5929-1	H-1	Soluble	Solid	300.0	70612	
MB 880-70612/1-A	Method Blank	Soluble	Solid	300.0	70612	40
LCS 880-70612/2-A	Lab Control Sample	Soluble	Solid	300.0	70612	13
LCSD 880-70612/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	70612	
880-37779-A-58-E MS	Matrix Spike	Soluble	Solid	300.0	70612	

Soluble

Solid

300.0

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70612

Job ID: 890-5929-1

Job ID: 890-5929-1

## Lab Sample ID: 890-5929-1

Lab Sample ID: 890-5929-2

Lab Sample ID: 890-5929-3

Lab Sample ID: 890-5929-4

Matrix: Solid

Matrix: Solid

Matrix: Solid

5

9

### **Client Sample ID: H-1** Date Collected: 01/09/24 00:00

Project/Site: THISTLE 22

Client: NT Global

Date Received: 01/09/24 14:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	70640	01/11/24 12:30	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	70626	01/11/24 23:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			70771	01/11/24 23:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			70704	01/12/24 05:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	70654	01/11/24 13:45	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	70617	01/12/24 05:48	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	70612	01/10/24 17:01	SA	EET MID
Soluble	Analysis	300.0		1			70696	01/11/24 22:54	СН	EET MID

## **Client Sample ID: H-3**

Date Collected: 01/09/24 00:00

Date Received: 01/09/24 14:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	70640	01/11/24 12:30	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	70626	01/11/24 23:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			70771	01/11/24 23:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			70704	01/12/24 06:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	70654	01/11/24 13:45	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	70617	01/12/24 06:10	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	70487	01/11/24 11:30	SA	EET MID
Soluble	Analysis	300.0		1			70595	01/11/24 14:49	СН	EET MID

## **Client Sample ID: H-4**

## Date Collected: 01/09/24 00:00

Date Received: 01/09/24 14:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	70640	01/11/24 12:30	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	70626	01/11/24 23:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			70771	01/11/24 23:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			70704	01/11/24 22:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	70655	01/11/24 13:50	ткс	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	70619	01/11/24 22:02	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	70487	01/11/24 11:30	SA	EET MID
Soluble	Analysis	300.0		1			70595	01/11/24 14:54	СН	EET MID

### **Client Sample ID: H-5** Date Collected: 01/09/24 00:00 Date Received: 01/09/24 14:20

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	70640	01/11/24 12:30	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	70626	01/12/24 00:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			70771	01/12/24 00:02	SM	EET MID

**Eurofins Carlsbad** 

Matrix: Solid

## Released to Imaging: 8/26/2024 10:03:22 AM

Job ID: 890-5929-1

Matrix: Solid

9

Lab Sample ID: 890-5929-4

# Project/Site: THISTLE 22 Client Sample ID: H-5

Client: NT Global

## Date Collected: 01/09/24 00:00

Date Received: 01/09/24 14:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			70704	01/11/24 23:07	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	70655	01/11/24 13:50	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	70619	01/11/24 23:07	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	70487	01/11/24 11:30	SA	EET MID
Soluble	Analysis	300.0		1			70595	01/11/24 15:00	CH	EET MID

### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Progra	am	Identification Number	Expiration Date		
Texas	NELAP T104704400-23-26		T104704400-23-26	06-30-24		
The following analytes	are included in this report, but	t the laboratory is not certif	ied by the governing authority. This lis	t may include analytes		
0,	oes not offer certification. Pren Method	Matrix	Analyte			
for which the agency d Analysis Method 8015 NM	oes not offer certification. Prep Method	Matrix Solid	Analyte  Total TPH			

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Job ID: 890-5929-1

## **Method Summary**

Client: NT Global Project/Site: THISTLE 22 Job ID: 890-5929-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep DI Leach	Microextraction Deionized Water Leaching Procedure	SW846 ASTM	EET MID EET MID
Protocol Refe			
	STM International		
	Environmental Protection Agency		
	"Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Ed	ition, November 1986 And Its Updates.	
TAL SOP =	<ul> <li>TestAmerica Laboratories, Standard Operating Procedure</li> </ul>		
EET MID =	= Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440		

### Laboratory References:

## Sample Summary

Client: NT Global Project/Site: THISTLE 22

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5929-1	H-1	Solid	01/09/24 00:00	01/09/24 14:20	0.5
890-5929-2	H-3	Solid	01/09/24 00:00	01/09/24 14:20	0.5
890-5929-3	H-4	Solid	01/09/24 00:00	01/09/24 14:20	0.5
890-5929-4	H-5	Solid	01/09/24 00:00	01/09/24 14:20	0.5

euro 🥐		Enviro Xenco	nment	Testi	ng		Midland	l, TX (43	2) 704-5	5440, Sai	n Antoi	, TX (214) 902-0300 nio, TX (210) 509-3334	Work O	order No:	
		Aenco										r, TX (806) <b>794-1296</b> J. NM (575) 988-3199	200404	xenco.com	Page of
oject Manager:	Eth	a Ses	SUM	S		Bill to: (if a	differen	t)	$\square$	all		oodall		ork Order Cor	
ompany Name:	NTO					Company			T		1 on		Program: UST/PST	PRP Brow	nfields RRC Superfur
ddress:		WMa	Kay	st		Address:							State of Project:		
City, State ZIP:	Corisi	bad N	M	887	20	City, State									T/UST TRRP Level IV
hone:					Email:	NT	G	ema	ul I	cha:	<u> </u>		Deliverables: EDD	ADaPT	Other:
roject Name:	Thist	1e 22			Turn	Around	/					ANALYSIS REC	QUEST		Preservative Codes
roject Number:					Routine	Rush	724	Pres.							None: NO DI Water: H
roject Location:	-			Du	e Date:	1/12/	24								Cool: Cool MeOH: Me
ampler's Name:						day receive			6		0		, I I I I I I I I I I I I I I I I I I I		HCL: HC HNO 3: HN
O #:		33012				eived by 4:30	-	SLIS	80213	<	4500				H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> NaOH: Na
AMPLE RECEIPT		emp Blank:	Yes N		Vet ice:	Yes M	No	Parameters	0	OISM	5				H₃PO ₄: HP NaHSO ₄: NABIS
amples Received Inta Cooler Custody Seals:		Yes No No N/A		ion Facto			_	Para	8			890-5929 Chai	n of Custody		Na 25 203: NaSO 3
ample Custody Seals:		No N/A		rature Re		4.8			×	00	r; d			_	Zn Acetate+NaOH: Zn
otal Containers:		4	Correct	ed Temp	erature:	<u> </u>			BTEX	E	100				NaOH+Ascorbic Acid: SAPC
Sample Identi	fication	Matri	x Date		Time	Denth	Grab/ Comp	# of Cont	Q	TPH	CMIO				Sample Comments
H-1		5				0.0.5		1	1	1	17				
H-3		S				0.0.5	1	•	1	/	1				
K-4		5				0-0.5		1	/	/	1				
H-5		5				0-0.5	,	<u> '</u>	/	/	-				
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Total 200.7 / 601	0 200	0.8 / 6020:		8RCR	RA 13PF	PM Texa	s 11	Al Sb	As B	a Be	B Co	d Ca Cr Co Cu Fe Pb N	1g Mn Mo Ni K Se Ag Si	iO <sub>2</sub> Na Sr T	I Sn U V Zn
Circle Method(s)			nalyzed									Cr Co Cu Pb Mn Mo Ni			7470 / 7471
otice: Signature of this doc	ument and relind	quishment of sa	mples constitu	ites a valid j	purchase or	ler from client	compan	y to Eurof	ins Xenc	o, its affili	lates an	d subcontractors. It assigns standard to	erms and conditions		
f Service. Eurofins Xenco w f Eurofins Xenco. A minimu	ill be liable only f m charge of \$85	for the cost of sa 5.00 will be appil	mples and sha ed to each pro	all not assur oject and a	me any respo charge of \$5	for each samp	ny losses ple subm	or expens itted to Eu	es incun profins X	enco, but	t not and	if such losses are due to circumstances alyzed. These terms will be enforced un	less previously negotiated.		
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Released to Imaging: 8/26/2024 10:03:22 AM

## Login Sample Receipt Checklist

Client: NT Global

### Login Number: 5929 List Number: 1 Creator: Lopez, Abraham

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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### Job Number: 890-5929-1

List Source: Eurofins Carlsbad

14

Job Number: 890-5929-1

List Source: Eurofins Midland

List Creation: 01/11/24 11:21 AM

## Login Sample Receipt Checklist

Client: NT Global

Login Number: 5929 List Number: 2 Creator: Rodriguez, Leticia

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

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

District III

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

QUESTIONS

Action 365175

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	365175
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

### QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2404353463
Incident Name	NAPP2404353463 THISTLE UNIT 22 CTB 2 @ 0
Incident Type	Produced Water Release
Incident Status	Deferral Request Received
Incident Facility	[fAPP2123650155] THISTLE UNIT 22 CTB 2

### Location of Release Source

Please answer all the questions in this group.	
Site Name	THISTLE UNIT 22 CTB 2
Date Release Discovered	02/12/2024
Surface Owner	State

### Incident Details

Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	Νο
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

#### Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Other (Specify)   Produced Water   Released: 22 BBL   Recovered: 20 BBL   Lost: 2 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Gun barrel spilled over due to thistle 183 gator dump hung open sending everything to gun barrel. 21.5 bbls spilled in and out of containment, 20 bbls recovered

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

QUESTIONS, Page 2

Action 365175

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**QUESTIONS** (continued)

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	365175
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a s	afety hazard that would result in injury.
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.
	ation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of ted or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of valuation in the follow-up C-141 submission.
to report and/or file certain release notifications and perform corrective actions for release the OCD does not relieve the operator of liability should their operations have failed to a	knowledge and understand that pursuant to OCD rules and regulations all operators are required ases which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface t does not relieve the operator of responsibility for compliance with any other federal, state, or
	Nama: Dala Weadall

	Name: Dale Woodall
I hereby agree and sign off to the above statement	Title: EHS Professional
Thereby agree and sign on to the above statement	Email: Dale.Woodall@dvn.com
	Date: 07/18/2024

District I

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

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

QUESTIONS, Page 3

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Action 365175

QUESTIONS (continued)

Operator:	OGRID:	i i
DEVON ENERGY PRODUCTION COMPANY, LP	6137	l
333 West Sheridan Ave.	Action Number:	l
Oklahoma City, OK 73102	365175	l
	Action Type:	l
	[C-141] Deferral Request C-141 (C-141-v-Deferral)	i.

#### QUESTIONS

Site Characterization

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.
What is the shallowest denth to groundwater beneath the area affected by the

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release an	d the following surface areas:
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Νο

#### Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date. Requesting a remediation plan approval with this submission Yes Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC. Have the lateral and vertical extents of contamination been fully delineated Yes Was this release entirely contained within a lined containment area No Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.) Chloride (EPA 300.0 or SM4500 CI B) 2880 TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M) 18720 GRO+DRO (EPA SW-846 Method 8015M) 15700 BTEX (EPA SW-846 Method 8021B or 8260B) 57.6 (EPA SW-846 Method 8021B or 8260B) Benzene 0.1 Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation. On what estimated date will the remediation commence 02/12/2024 On what date will (or did) the final sampling or liner inspection occur 05/14/2024 On what date will (or was) the remediation complete(d) 06/20/2024 What is the estimated surface area (in square feet) that will be reclaimed 3796 What is the estimated volume (in cubic yards) that will be reclaimed 169 What is the estimated surface area (in square feet) that will be remediated 3796 What is the estimated volume (in cubic yards) that will be remediated 169 These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed. The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to

significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required

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District IV 1220 S. St Francis Dr., Santa Fe, NM 87505

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

QUESTIONS, Page 4

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Action 365175

QUESTI	ONS (continued)	
Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137 Action Number: 365175	
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)	
QUESTIONS		
Remediation Plan (continued)		
Please answer all the questions that apply or are indicated. This information must be provided to the	appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate	/ reduce contaminants:	
(Select all answers below that apply.)		
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes	
Which OCD approved facility will be used for off-site disposal	LEA LAND LANDFILL [fEEM0112342028]	
OR which OCD approved well (API) will be used for off-site disposal	Not answered.	
OR is the off-site disposal site, to be used, out-of-state	Not answered.	
OR is the off-site disposal site, to be used, an NMED facility	Not answered.	
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.	
(In Situ) Soil Vapor Extraction	Not answered.	
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.	
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.	
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.	
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.	
OTHER (Non-listed remedial process)	Not answered.	
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed ef which includes the anticipated timelines for beginning and completing the remediation.	forts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMA(	
to report and/or file certain release notifications and perform corrective actions for relea the OCD does not relieve the operator of liability should their operations have failed to a	mowledge and understand that pursuant to OCD rules and regulations all operators are required uses which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface t does not relieve the operator of responsibility for compliance with any other federal, state, or	
I hereby agree and sign off to the above statement	Name: Dale Woodall Title: EHS Professional Email: Dale.Woodall@dvn.com Date: 07/18/2024	

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

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QUESTIONS, Page 5

Action 365175

QUESTIONS (continued)			
Operator:	OGRID:		
DEVON ENERGY PRODUCTION COMPANY, LP	6137		
333 West Sheridan Ave.	Action Number:		
Oklahoma City, OK 73102	365175		
	Action Type:		
	[C-141] Deferral Request C-141 (C-141-v-Deferral)		

### QUESTIONS

Deferral Requests Only				
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of	the following items must be confirmed as part of any request for deferral of remediation.			
Requesting a deferral of the remediation closure due date with the approval of this submission	Yes			
Have the lateral and vertical extents of contamination been fully delineated	Yes			
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes			
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	areas are located around a tank battery, separators, above ground lines, and buried high voltage electrical lines			
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	1616			
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	239			
	ately under or around production equipment such as production tanks, wellheads and pipelines where may be deferred with division written approval until the equipment is removed during other operations, or when			
Enter the facility ID (f#) on which this deferral should be granted	THISTLE UNIT 22 CTB 2 [fAPP2123650155]			
Enter the well API (30-) on which this deferral should be granted	Not answered.			
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True			
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed eff which includes the anticipated timelines for beginning and completing the remediation.	forts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,			
to report and/or file certain release notifications and perform corrective actions for relea the OCD does not relieve the operator of liability should their operations have failed to a	nowledge and understand that pursuant to OCD rules and regulations all operators are required ses which may endanger public health or the environment. The acceptance of a C-141 report by idequately investigate and remediate contamination that pose a threat to groundwater, surface does not relieve the operator of responsibility for compliance with any other federal, state, or			
I hereby agree and sign off to the above statement	Name: Dale Woodall Title: EHS Professional Email: Dale.Woodall@dvn.com			

Date: 07/18/2024

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

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QUESTIONS, Page 6

Action 365175

**QUESTIONS** (continued) Operator: OGRID: DEVON ENERGY PRODUCTION COMPANY, LP 6137 333 West Sheridan Ave. Action Number Oklahoma City, OK 73102 365175 Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	343633
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/15/2024
What was the (estimated) number of samples that were to be gathered	3
What was the sampling surface area in square feet	600

### Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed. Requesting a remediation closure approval with this submission No

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

CONDITIONS

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	365175
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

COMDITIE			
Created	Condition	Condition	
By		Date	
nvelez	Deferral is approved. Remediation Due date will be left open until the site has been plugged and abandoned or a major facility deconstruction takes place.	8/26/2024	

CONDITIONS

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Action 365175