

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.

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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 ½-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



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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.

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# **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** 

Ethan Sessums Project Manager

aplus

Attachments:

Site Characterization Information

Tables Figures

Photographic Log

Laboratory Reports and Chain-of-Custody

Kellan Smith Project Scientist

Zur Luth

NTGE Project No.: 237334





# National Flood Hazard Layer FIRMette



# Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD HAZARD AREAS Regulatory Floodway 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X **Future Conditions 1% Annual** Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes. Zone X OTHER AREAS OF Area with Flood Risk due to Levee Zone D FLOOD HAZARD NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D - - - Channel, Culvert, or Storm Sewer **GENERAL** STRUCTURES | LILLIL Levee, Dike, or Floodwall 20.2 Cross Sections with 1% Annual Chance 17.5 Water Surface Elevation **Coastal Transect** Base Flood Elevation Line (BFE) Limit of Study **Jurisdiction Boundary** --- Coastal Transect Baseline OTHER **Profile Baseline FEATURES** Hydrographic Feature Digital Data Available No Digital Data Available MAP PANELS Unmapped The pin displayed on the map is an approximate point selected by the user and does not represent

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/23/2023 at 11:29 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

an authoritative property location.

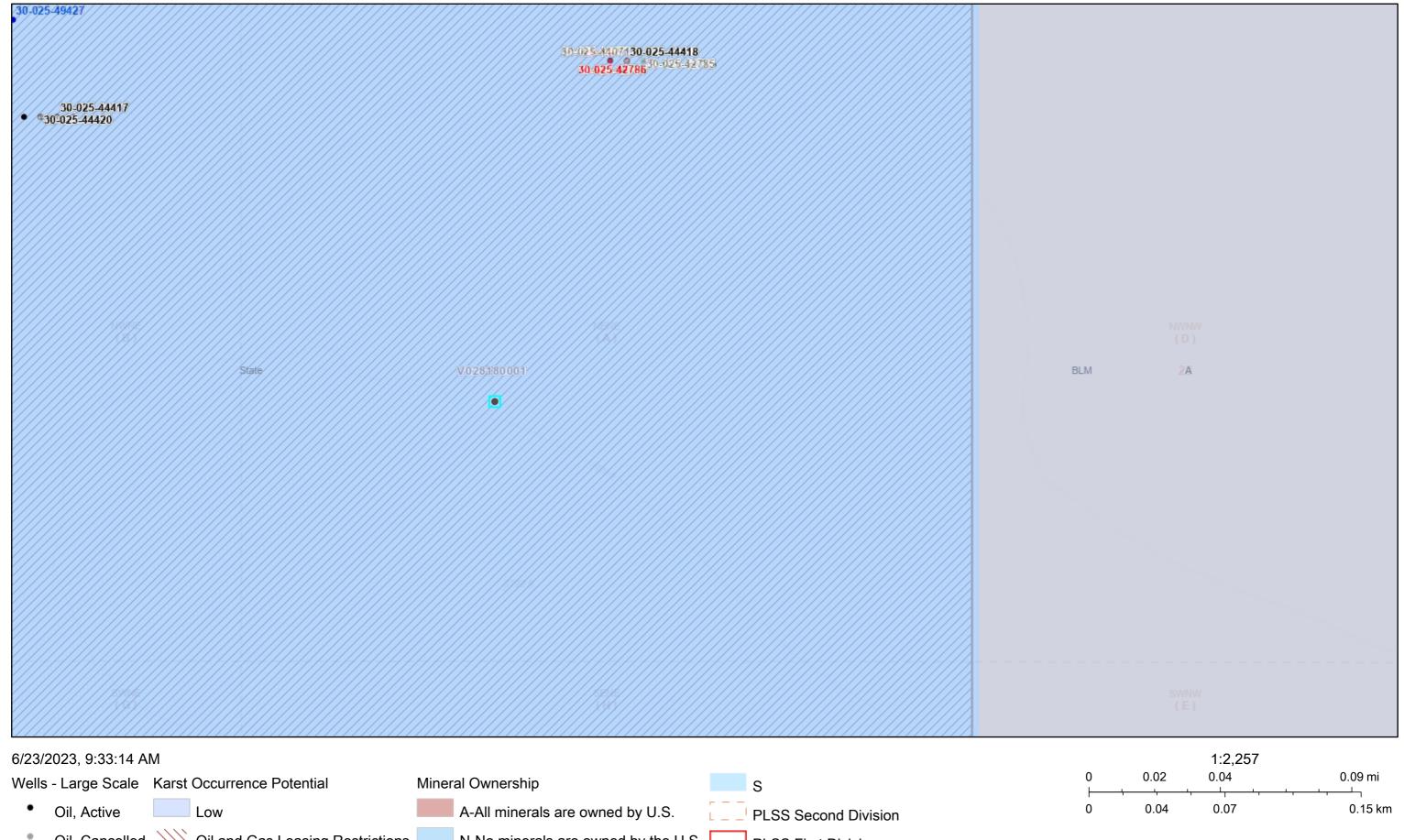
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



2.000

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# **OCD Well Locations**



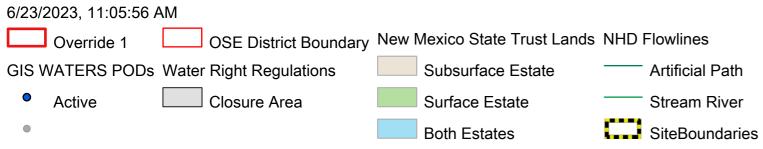
Oil, Active Low A-All minerals are owned by U.S. PLSS Second Division
 Oil, Cancelled Oil and Gas Leasing Restrictions N-No minerals are owned by the U.S. PLSS First Division
 Oil, New Oil and Gas Leases Land Ownership
 Oil, Plugged BLM

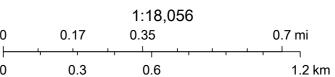
U.S. BLM, BLM, OCD, New Mexico Tech, Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., USGS, Bureau of Land Management, Texas Parks & Wildlife,

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# OSE POD Locations Map







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

Released to Imaging: 8/26/2024 10:19:10 AM



# New Mexico Office of the State Engineer

# **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag **POD Number** Q64 Q16 Q4 Sec Tws Rng

C 04664 POD1

NA

1 4 15 23S 33E

635784 3574818

**Driller License:** 1249

**Driller Company:** 

ATKINS ENGINEERING ASSOC. INC.

**Driller Name:** 

JACKIE D ATKINS

**Drill Start Date:** 

09/07/2022

**Drill Finish Date:** 

09/07/2022

**Plug Date:** 

09/13/2022

Log File Date:

09/26/2022

**PCW Rcv Date:** 

**Pipe Discharge Size:** 

Source:

**Estimated Yield:** 

**Pump Type: Casing Size:** 

**Depth Well:** 

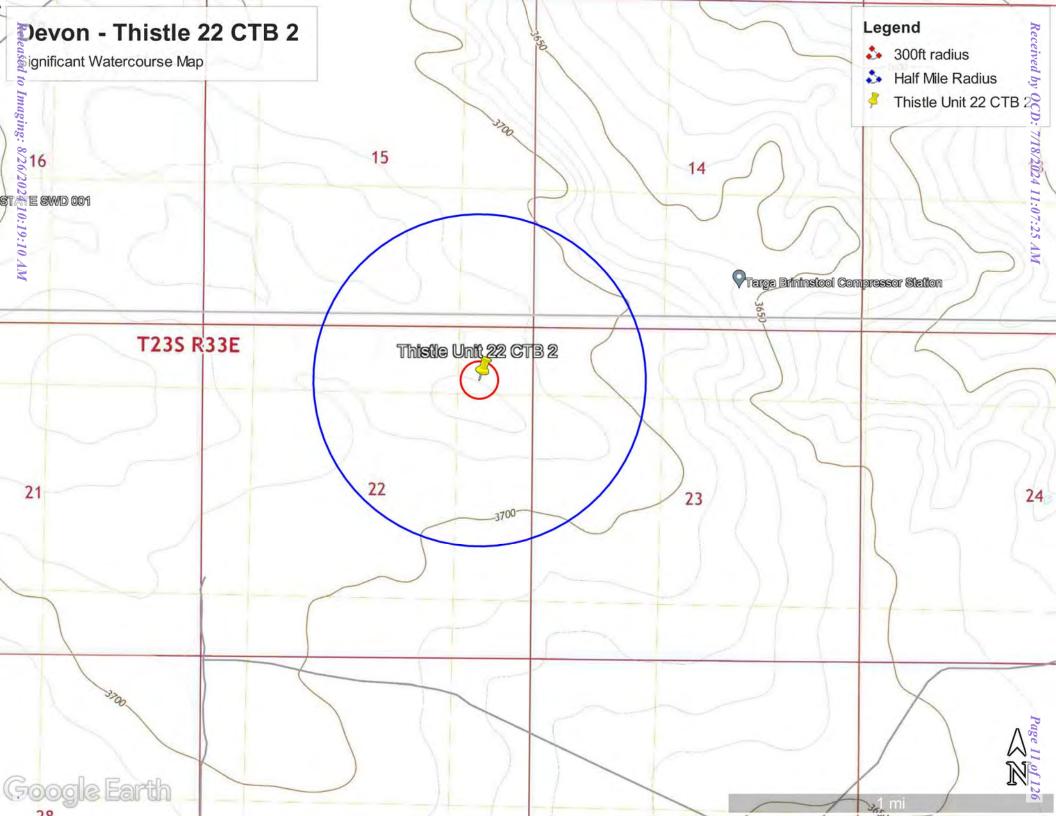
55 feet

**Depth 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, usability, or suitability for any particular purpose of the data.

6/23/23 10:47 AM

POINT OF DIVERSION SUMMARY





# Thistle 22 CTB 2



June 23, 2023

# Wetlands\_Alaska

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Pond

Freshwater Forested/Shrub Wetland

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.

**TABLES** 

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

Sample ID	Sample Date	Depth	Benzene	Toluene	Ethylhonzor								
Sample ID	Sample Date	Depth			ne Ethylbenzene	Xylenes	BTEX	GRO (C6-C10)	DRO (C10-C28)	GRO + DRO (C6-C28)	MRO (C28-C35)	Total GRO/DRO/MRO (C6-C35)	Chloride
		(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	NMAC		
			10 mg/kg				50 mg/kg			1,000 mg/kg		2,500 mg/kg	10,000 mg/kg
						Verti	ical Delineation	Samples					
	11/14/23	0.5'	<0.200	2.56	1.95	53.1	57.6	547	2490	3037	446	3483	2200
[	11/14/23	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	33.4	33.4	<10.0	33.4	304
TP-1	11/14/23	2'	<0.050	<0.050	< 0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96
[	11/14/23	3'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48
	11/14/23	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
	11/14/23	0.5'	<0.050	<0.050	< 0.050	<0.150	<0.300	<10.0	32.8	32.8	<10.0	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
TP-2	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
V-1	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
V-2	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
V-3	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					
H-1	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
H-1A	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
H-2	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
H-2A	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
H-3	11/14/23	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	1040	1040	433	1473	16
H-3A	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
H-4	11/14/23	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	214	214	95.4	309.4	48
H-4A	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	<5.04
H-5	11/14/23	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	8960	8960	2780	11740	240
H-5A	01/09/24	0-0.5'	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	<50.5	<50.5	<50.5	<50.5	<50.5	7.62
H-6	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
H-7	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	416
H-8	02/15/24	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	336	336	58	394	112
H-9	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
H-10	02/15/24	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	167	167	106	273	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

Sample Point Excavated

- 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).
- 9. --- Not Analyzed

Table 2
Summary of Soil Analytical Data - Confirmation Samples/Deferral Samples
Thistle 22 CTB 2
Devon Energy Production Company
Lea County, NM

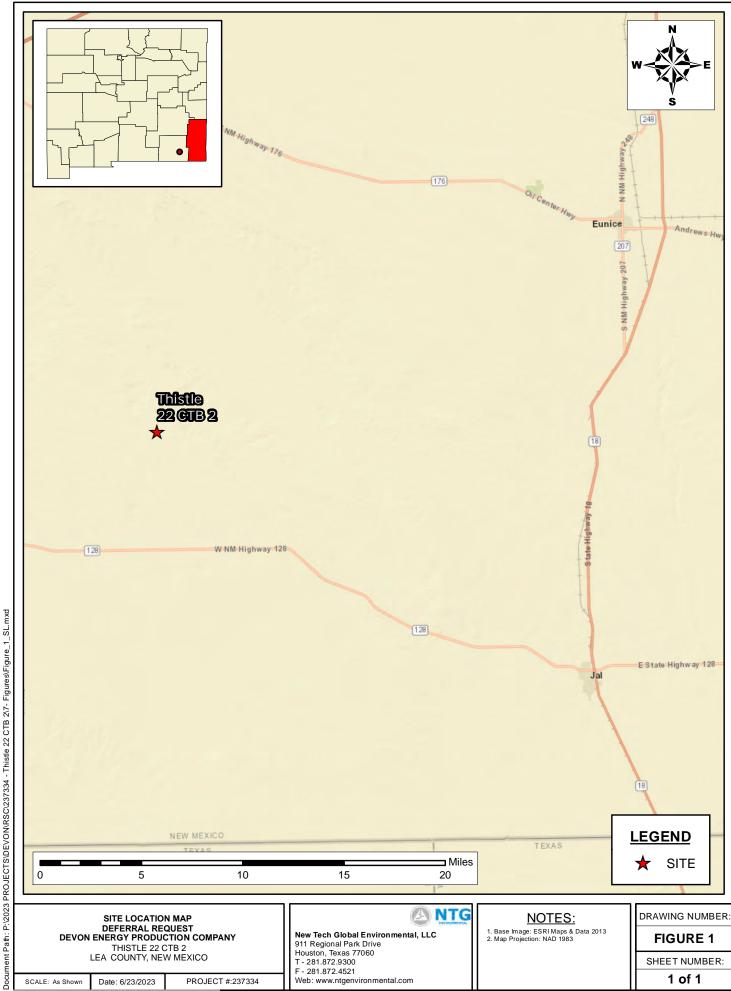
										ТРН				
				Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	GRO	DRO	GRO + DRO	MRO	Total GRO/DRO/MRO	Chloride
Sample ID Sample Date	Depth Depth						(C6-C10)	(C10-C28)	(C6-C28)	(C28-C35)	(C6-C35)			
Sample ID	(ft bgs)	(ft bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
			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	
							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	
C5 17	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	les						
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	05/06/24	<del>0-1'</del>	2.3	79.6	32.5	240	335	4 <del>,760</del>	14,600	<del>19,360</del>	2,060	21,420	<del>2,640</del>	
344-7	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	<del>0-1'</del>	<0.050	<b>∠0.050</b>	<b>∠0.050</b>	<b>∠0.150</b>	<b>∠0.300</b>	< <del>10.0</del>	<del>871</del>	<del>871</del>	<del>199</del>	<del>1,070</del>	<del>7,200</del>	
3VV-0	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	

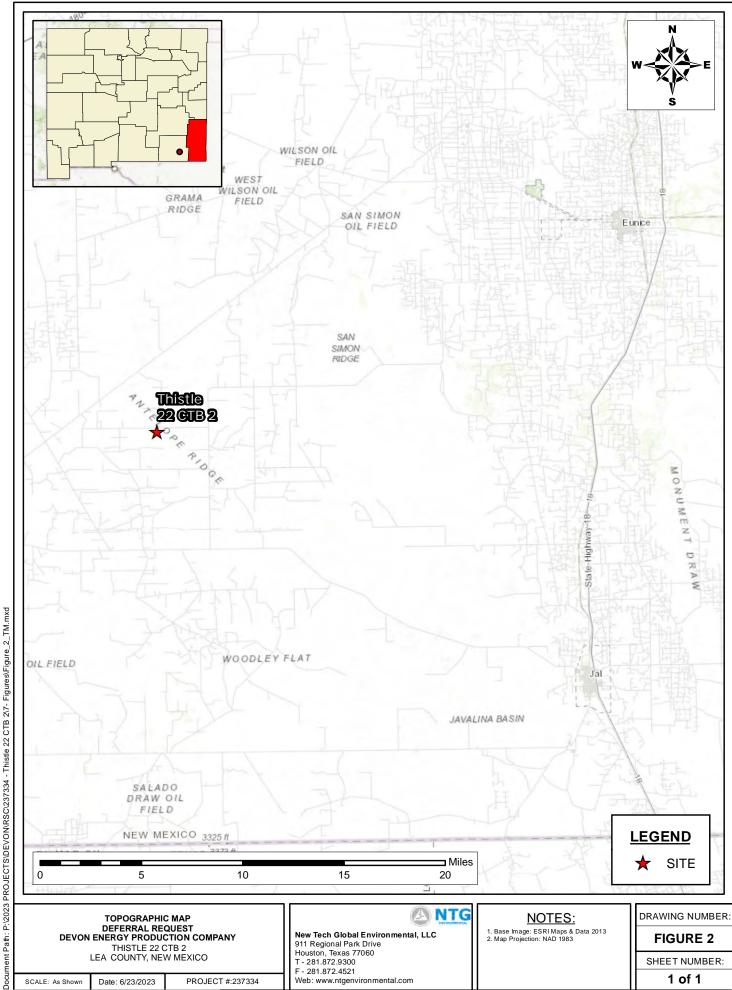
									TPH			
		Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	GRO	DRO	GRO + DRO	MRO	Total GRO/DRO/MRO	Chloride
Dato	Depth						(C6-C10)	(C10-C28)	(C6-C28)	(C28-C35)	(C6-C35)	
Date	(ft bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
	Table I Closure Criteria for Soil ≤ 50 feet Depth to Groundwater 19.15.29 NMAC											
		10 mg/kg				50 mg/kg	1		1,000 mg/kg	-	2,500 mg/kg	10,000 mg/kg
Deferral Samples												
5/24	2'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	16	16	<10.0	16	368
5/24	3'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	33.7	33.7	<10.0	33.7	64
5/24	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
5/24	5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
)/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
)/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
)/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
5/: 5/: 5/: 0/:	24 24 24 24 24	24 2' 24 3' 24 4' 24 5' 24 0-0.5' 24 0-0.5'	(ft bgs)   (mg/kg)	(ft bgs)   (mg/kg)   (mg/kg)	(ft bgs)   (mg/kg)   (mg/kg)   (mg/kg)	(ft bgs)   (mg/kg)   (mg/kg)   (mg/kg)   Tab	(ft bgs)	(ft bgs)         (mg/kg)         (mg/kg) <td>  (ft bgs)</td> <td>  (ft bgs)</td> <td>  (ft bgs)   (mg/kg)   (m</td> <td>  (ft bgs)   (mg/kg)   (mg</td>	(ft bgs)	(ft bgs)	(ft bgs)   (mg/kg)   (m	(ft bgs)   (mg/kg)   (mg

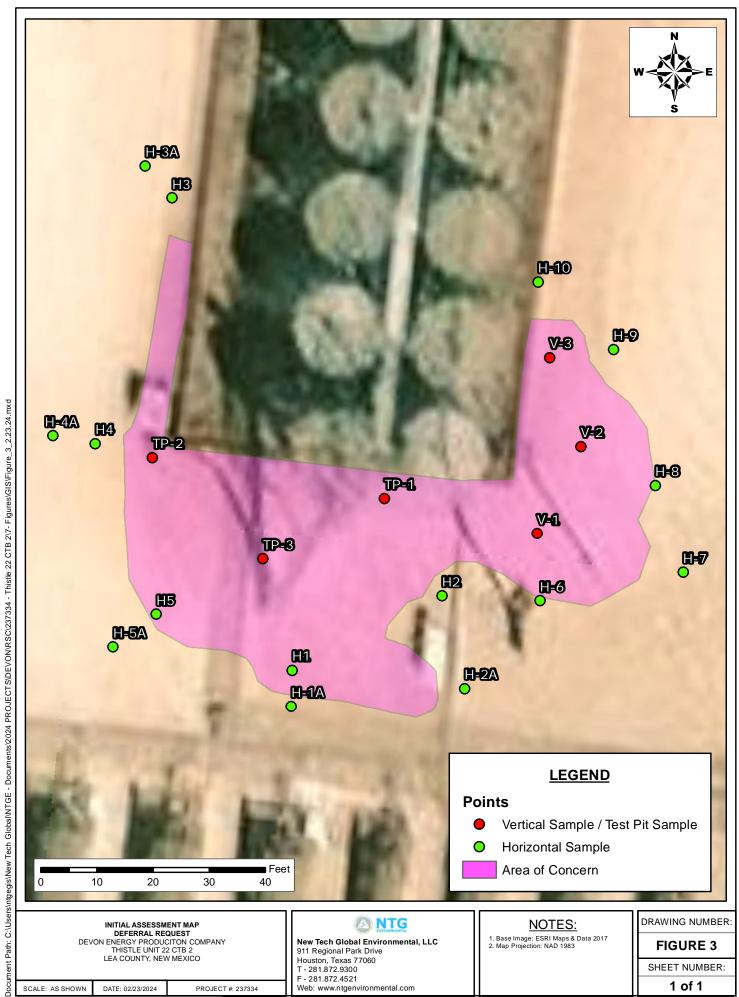
#### Notes:

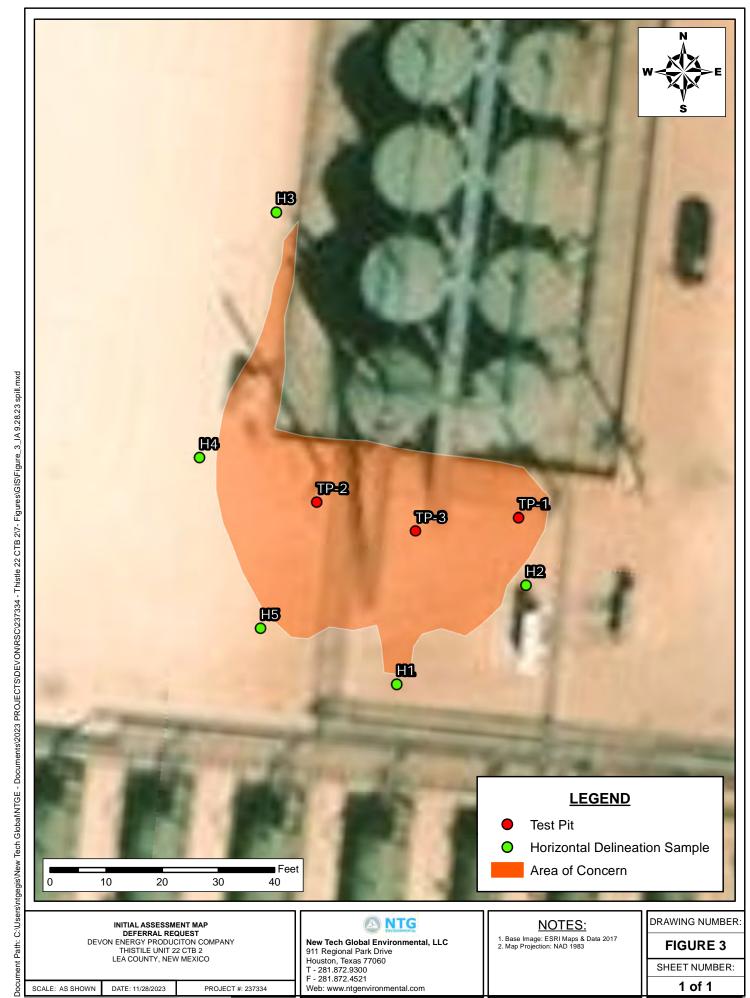
- 1. Values reported in mg/kg
- 2.< = Value Less Than Reporting Limit (RL)
- 3. Bold indicates Analyte Detected
- 4. BTEX analyses by EPA Method SW 8021B
- SP-1 Sample Point Excavated
- 5. TPH analyses by EPA Method SW 8015 Mod.
- 6. GRO/DRO/MRO Gasoline/Diesel/Motor Oil
- 7. Yellow shaded cells indicate 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).
- 9. --- Not Analyzed

# **FIGURES**









SECONDARY CONTAINEMENT MAP DEFERRAL REQUEST DEVON ENERGY PRODUCTION COMPANY THISTLE 22 CTB 2 LEA COUNTY, NEW MEXICO

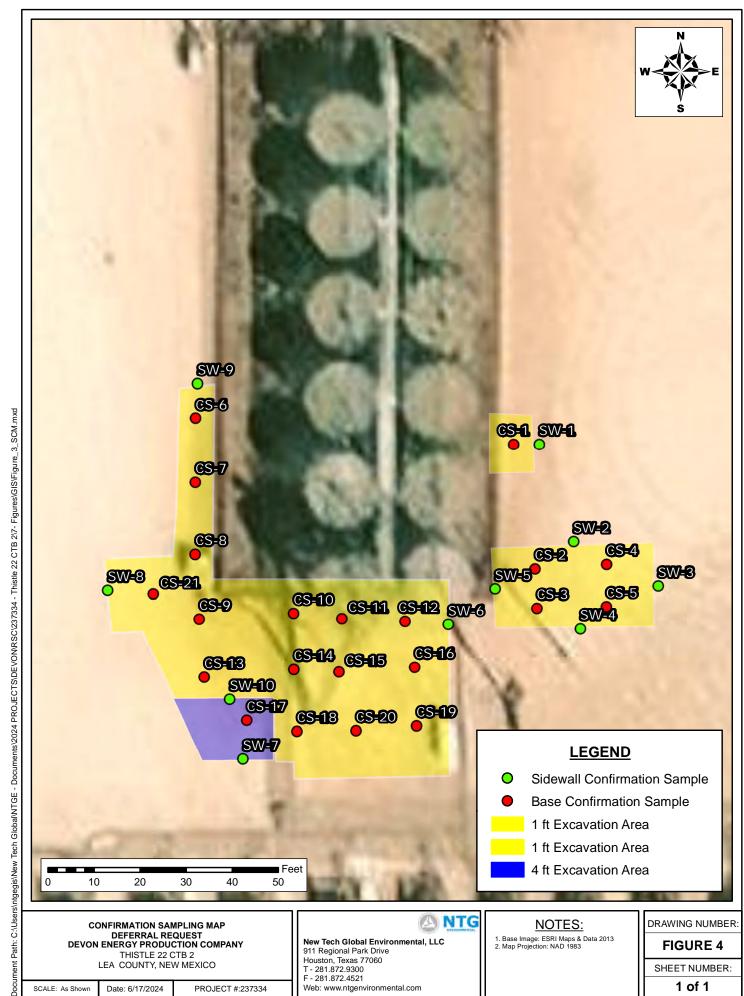
PROJECT #:237334

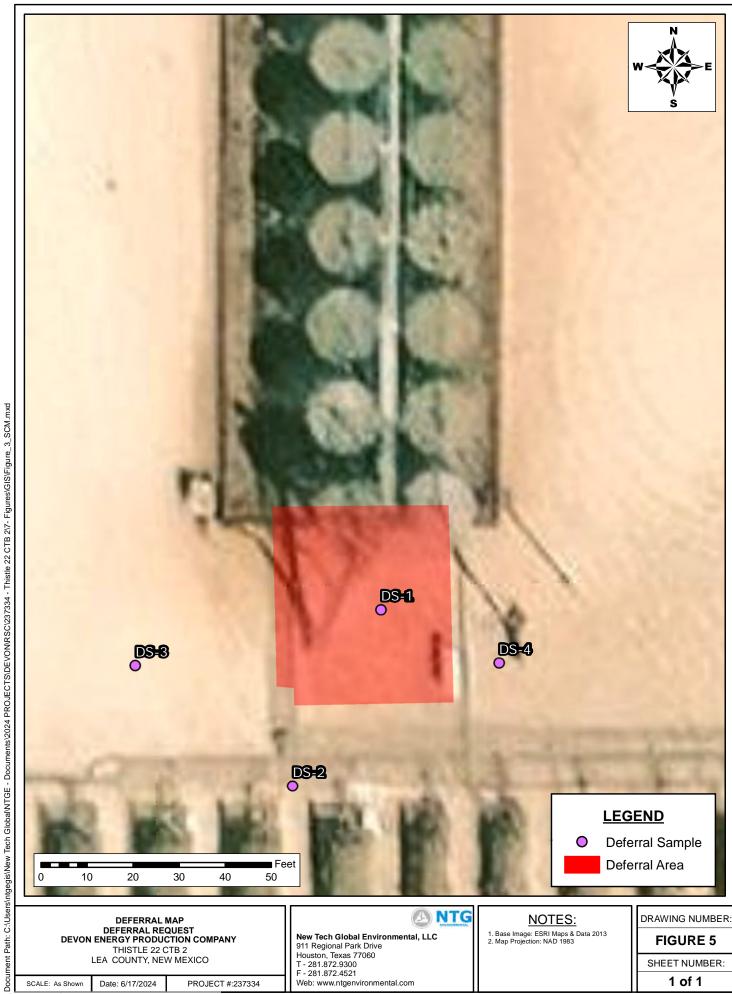
New Tech Global Environmental, LLC 911 Regional Park Drive Houston, Texas 77060 T - 281.872.9300 F - 281.872.4521 Web: www.ntgenvironmental.com

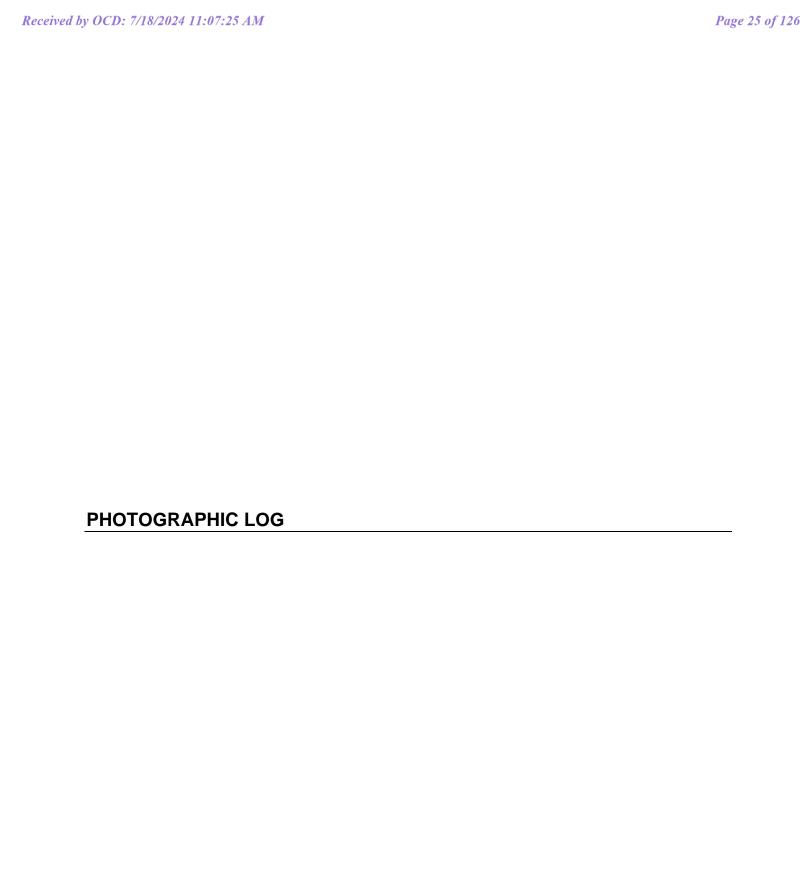
NOTES: Base Image: ESRI Maps & Data 2013
 Map Projection: NAD 1983 DRAWING NUMBER: FIGURE 3

SHEET NUMBER:

1 of 1







# 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.



# 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

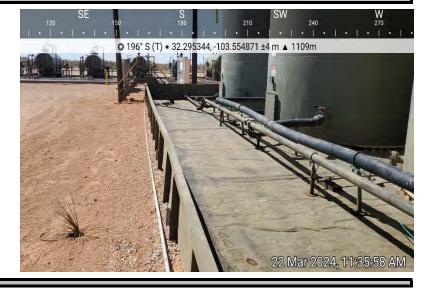


Photograph No. 6

Facility: Thistle Unit 22 CTB 2

County: Lea County, New Mexico

**Description:** View of Liner.



# 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. 8

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.



# 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.



#### 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.



Received by OCD: 7/18/2024 11:07:25 AM  Page 3	of 126
LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTS	
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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">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

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.

Celey D. Keene

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. Keene

Lab Director/Quality Manager



## Analytical Results For:

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

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

Applyand By 14

Project Location: DEVON - LEA CO., NM

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

DTEV 0021D

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	116% 71.5-13		4						
Chloride, SM4500CI-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	8						

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keene



Shalyn Rodriguez

## Analytical Results For:

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

Fax To:

Received: 11/14/2023 Sampling Date: 11/14/2023

Reported: 11/17/2023 Sampling Type: Soil THISTLE 22 CTB 2 Sampling Condition: Cool & Intact

Project Name: Sample Received By: Project Number: 237334

Project Location: DEVON - LEA CO., NM

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

BTEX 8021B	mg/kg		Analyze	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 % 71.5-1		4						
Chloride, SM4500CI-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	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						

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Celey D. Keine



## Analytical Results For:

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

Fax To:

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., NM

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

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 % 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	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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Celeg D. Keene



## Analytical Results For:

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

Fax To:

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

Applyzod By: 14

Project Location: DEVON - LEA CO., NM

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

RTFY 8021R

B1EX 8021B	тд/кд		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	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	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*	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	8						

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Celey D. Keine



#### Analytical Results For:

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

Fax To:

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., NM

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

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						

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keene



#### **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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Celey D. Keine

Received by OCD: 7/18/2024 11:07:25 AM

# **Chain of Custody**



Work Order No: 1303030-1-5

Project Manager:	Ethan Sessum	ns			Bill to: (i	f different)		Dale	Wood	iali									Worl	k Ord	ler C	Page1_ omments	
Company Name:	NTG Environm	nental			Compar	ny Name:		Dev	on						$\neg$	Progr	am: IIS	T/PST	PRP				perfund
Address:	209 W McKay	St			Address										$\neg$		of Proje		Пекс	_,	OWIII	ielus Like	_iperiuna
City, State ZIP:	Carlsbad, NM	88220			City, Sta	ate ZIP:													Level I		ST/I	JST  RRP [	Level IV
Phone:	432-766-1918			Email											7		rables:				aPT		Trevelly [
Project Name:	This	tle 22 CTB 2		Tur	n Around								ΔΝΔΙ	LYSIS	REC	LIEST					Т	Description	· Code
Project Number:		237334		☑ Routine	☐ Rush	1	Pres. Code		T	T			1		ILL	ULST				T		Preservativ	
roject Location	Le	ea Co. NM		Due Date:			Code										-	$\rightarrow$	_	+			Ol Water: H <sub>2</sub>
Sampler's Name:		try Nikanorov			day receiv	ed by the		1	6												1.554 .575		ИеОН: Me
O#:		21233012		lab, if rece	day received by the eived by 4:30pm			1	MRO)												- 1		HNO <sub>3</sub> : HN
SAMPLE RECEIF	Ten	np Blank:	Yes No.	Wet Ice:	Yes	No	Parameters	l	80 +														NaOH: Na
Received Intact:	Ye	1	Thermome		140		am	BTEX 8021B	1	4500												H <sub>3</sub> PO <sub>4</sub> : HP NaHSO <sub>4</sub> : NABIS Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub> Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SAPC	
Cooler Custody Seals:	Yes	No N/A	Correction		-		Par	X	GR O	Chloride											JOE L		
Sample Custody Seals	Yes Yes	No N/A	Temperatu	ure Reading:	2.3	3 &		E	W	S.													
otal Containers:			Corrected	Temperature:	_				TPH 8015M ( GRO + DRO												- 1		
Sample Identification	Depth (ft bgs)	Date	Time	Soil	Water	Grab/ Comp	# of Cont		TPH									Nac				Sample Cor	
H-1	0-6"	11/14/2023		Х		Grab/	1	X	x	X				$\rightarrow$			-	+	+	+	+		
H-2	0-6"	11/14/2023		Х		Grab/	1	X	X	X							$\rightarrow$	+	+	+	-	`	
H-3	0-6"	11/14/2023		Х		Grab/	1	X	X	Х				-			+	+	+	+		<u>2</u> 2	
H-4	0-6"	11/14/2023		Х		Grab/	1	X	X	Х				-			-	+	-	+	$\rightarrow$	-	
H-5	0-6"	11/14/2023		Х		Grab/	1	х	Х	Х							+	+		+		5	
														-	-		-	+	1	-	+		
																					$\pm$		
											$\dashv$	-	-	+	$\dashv$	-	+	+	+	+	+		
Addition	al Comments	:										_	_	_	_						_		
tice: Signature of this doc service. Xenco will be lia Xenco. A minimum charg	DIE ONLY FOR THE COST	t of samples and s	hall not assur	me any reenanell	Hitse for ance	Income or a	warmen to	A															
Relinquished by:		04		by: (Signatu		usinitied to		Date/T		nese te				y: (Sig				eceive	ed by: (S	Signa	ture)	Date	e/Time
		Spool	lion	Off			1-14	23	14	108	_	1-2		, (0.9		-,	***	200140	o by. (	oigila	iture)	Dali	e/ Fillie
V																							
										- 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">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

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.

Celey D. Keine

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. Keene

Lab Director/Quality Manager



#### Analytical Results For:

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

Fax To:

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., NM

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

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	Analyze	d 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						

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Celey D. Keine



#### Analytical Results For:

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

Fax To:

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 Shalyn Rodriguez Project Number: 237334 Sample Received By:

Project Location: DEVON - LEA CO., NM

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

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 9	71.5-13	4						
Chloride, SM4500CI-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						

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Celeg D. Freene



#### Analytical Results For:

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

Received: 11/14/2023

Reported: 11/17/2023

Project Name: THISTLE 22 CTB 2

Project Number: 237334

Project Location: DEVON - LEA CO., NM Sampling Date: 11/14/2023

Sampling Type: Soil

Sampling Condition: Cool & Intact Sample Received By:

Shalyn Rodriguez

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

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	% 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	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	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						

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Celey D. Keine



#### Analytical Results For:

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

Applyzod By: 14

Received: 11/14/2023 Reported: 11/17/2023

ma/ka

Project Name: THISTLE 22 CTB 2
Project Number: 237334

Project Location: DEVON - LEA CO., NM

Sampling Date: 11/14/2023

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

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

RTFY 8021R

BIEX 8021B	mg	/кд	Anaiyze	a 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	% 71.5-13	4						
Chloride, SM4500CI-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	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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Celey D. Keene



#### Analytical Results For:

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

Fax To:

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

Analyzed By: JH

Project Location: DEVON - LEA CO., NM

mg/kg

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

BTEX 8021B

DILX GOZID	mg/	ng .	Andryzo	u by. 511					
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	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						

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Celey D. Keene



#### Analytical Results For:

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

Fax To:

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 Shalyn Rodriguez Project Number: 237334 Sample Received By:

Project Location: DEVON - LEA CO., NM

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

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	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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Celey D. Keine



#### Analytical Results For:

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

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., NM

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

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	% 71.5-13	4						
Chloride, SM4500CI-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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Celeg D. Freene



#### Analytical Results For:

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

Fax To:

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

Applyzod By: 14

Project Location: DEVON - LEA CO., NM

ma/ka

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

RTFY 8021R

B1EX 8021B	mg	/кд	Anaiyze	a 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	% 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	89.3	% 49.1-14	8						

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Celey D. Keene



#### Analytical Results For:

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

Fax To:

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

Applyzod By: 14

Project Location: DEVON - LEA CO., NM

ma/ka

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

RTFY 8021R

B1EX 8021B	mg	/ kg	Anaiyze	a 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	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	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. SUITE C MIDLAND TX, 79706

Fax To:

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., NM

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

BTEX 8021B	mg	/kg	Analyze	ed 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, SM4500CI-B	mg,	/kg	Analyze	ed 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	ed 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	18						

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Celeg D. Freene



Shalyn Rodriguez

Sample Received By:

#### Analytical Results For:

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

Fax To:

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

Project Location: DEVON - LEA CO., NM

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

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	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	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	% 48.2-13	4						
Summagata: 1 Chlamanatadanana	150	0/ 40.1.14	0						

Surrogate: 1-Chlorooctadecane 458 % 49.1-148

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#### Analytical Results For:

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

Fax To:

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 Sample Received By: Shalyn Rodriguez Project Number: 237334

Project Location: DEVON - LEA CO., NM

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

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, SM4500CI-B	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. SUITE C MIDLAND TX, 79706

Fax To:

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 Sample Received By: Shalyn Rodriguez Project Number: 237334

Project Location: DEVON - LEA CO., NM

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

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, SM4500CI-B	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	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. SUITE C MIDLAND TX, 79706

Fax To:

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 Sample Received By: Shalyn Rodriguez Project Number: 237334

Project Location: DEVON - LEA CO., NM

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

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, SM4500CI-B	mg,	/kg	Analyzed 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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Sample Received By:

#### Analytical Results For:

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

Fax To:

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 Shalyn Rodriguez

Project Location: DEVON - LEA CO., NM

237334

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

Project Number:

BTEX 8021B	mg,	/kg	Analyze	ed 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, SM4500CI-B	mg,	/kg	Analyze	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	ed 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						

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keene



# **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 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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Celey D. Keene

Received by OCD: 7/18/2024 11:07:25 AM

# **Chain of Custody**



Work Order No: H231227

Ethan Sessums NTG Environme	ntal												Program: UST/PST PRP In								
	IIIdi			Company	Name:		Devor	1					_   P	rogram:	UST/PS	TPRP	Iro	wnfields	RC	perfund	
209 W McKay S				Address:										State of P			_				
Carlsbad, NM 8				City, State	e ZIP:											Level II			RRP	Level IV	
	0220		Email:											Deliverable	es: EDI		AD	aPT 🗆	Other	r:	
	T. A. T. S. T.				- 3				-		ANA	Veis	PEOU	FST					Preserv	ative Codes	
11						Pres.				_	ANA		LGO		T		T	None	: NO	DI Water: H <sub>2</sub> 0	
	237334		☑ Routine	∐ Rush		Code				$\rightarrow$	+	$\vdash$	_	_	+		+	-		MeOH: Me	
Le	a Co, NM		Due Date:					6				1 1						1000		HNO <sub>3</sub> : HN	
							MRC												NaOH: Na		
			lab, ii rece	zeived by 4:30pm										1							
IPT Tem	p Blank:	-	Wet Ice:		No	met	218	+ DR	4500			1 1					- 1			IIS	
				140		Para	× 80	SRO SRO	ride												
7				72	1	-	BTE	N G	Shlo	-	100										
als: Yes	No N/A			2-3	-			0151				1 1									
		Corrected	Temperature:			or s	1	H S				1 1								A STATE OF	
Depth (ft bgs)	Date	Time	Soil	Water	Grab/ Comp	# of Cont		F									1		Sample	Comments	
6"	11/14/2023		Х		Grab/	1	X	Х	X			$\sqcup$			-		+	1			
1'	11/14/2023		Х		Grab/	1	X	X			_	$\vdash$	_	_	-	-	+	,			
2'	11/14/2023		Х		Grab/	1	X	Х	X			$\sqcup$	$\rightarrow$	_	-	$\vdash$	+	1			
3'	11/14/2023		Х		Grab/	1	Х	X	Х				_		1	$\vdash$	+				
4'	11/14/2023		X		Grab/	1	X	X	X						_	-	-	5			
6"	11/14/2023		Х		Grab/	1	Х	X	Х							1	_	4			
1'	11/14/2023		Х		Grab/	1	X	X	Х								_	17			
2'	11/14/2023		Х		Grab/	1	X	Х	Х								_	4			
3'	11/14/2023		Х		Grab/	1	X	X	Х								1	4			
4'	11/14/2023		Х		Grab/	1	X	X	X		1							10	)		
a document and relinque liable only for the co- charge of \$85.00 will be	ishment of samp	shall not as roject and a	charge of \$5 for e	ach sample		Xenco, b	ut not an	nalyzed.		ms will be	enforced	unless pro	eviously	negotiated.		eived by	(Sign	nature)		Date/Time	
	Depth (ft bgs)  6" 1' 2' 3' 4' 6" 1' 2' 3' 4' 6" 1' 2' 3' 4' 6 " 1' 2' 3' 4' 6 " 1' 2' 3' 4' 6 "	Thistle 22 CTB 2 237334  Lea Co, NM Dmitry Nikanorov 21233012  IPT Temp Blank:  Yes No N/A  als: Yes No N/A  Depth (ft bgs) Date  6" 11/14/2023  1' 11/14/2023  2' 11/14/2023  4' 11/14/2023  1' 11/14/2023  4' 11/14/2023  1' 11/14/2023  4' 11/14/2023  1' 11/14/2023  4' 11/14/2023  1' 11/14/2023	Thistle 22 CTB 2 237334  Lea Co, NM Dmitry Nikanorov 21233012  IPT Temp Blank: Yes No Yes No N/A Correction als: Yes No N/A Temperat Corrected  Depth (ft bgs) Date Time 6" 11/14/2023 1' 11/14/2023 2' 11/14/2023 3' 11/14/2023 4' 11/14/2023 6" 11/14/2023 1' 11/14/2023 4' 11/14/2023 1' 11/14/2023	Thistle 22 CTB 2  237334  Lea Co, NM  Due Date:  Dmitry Nikanorov  21233012  IPT  Temp Blank:  Yes No Thermometer ID:  Yes No N/A Correction Factor:  The Soil  Time  Ti	Thistle 22 CTB 2  237334  Lea Co, NM Due Date:  Dmitry Nikanorov  21233012  IPT Temp Blank: Yes No Thermometer ID: Yes No N/A Correction Factor:  Tals: Yes No N/A Temperature Reading: Corrected Temperature:  Depth (ft bgs) Date Time Soil Water  6" 11/14/2023 X 1' 11/14/2023 X 2' 11/14/2023 X 4' 11/14/2023 X 4' 11/14/2023 X 1' 11/14/2023 X 1' 11/14/2023 X 1' 11/14/2023 X 3' 11/14/2023 X 1' 11/14/2023 X 3' 3' 5' 5' 6' 6' 6' 6' 6' 6' 6' 6' 6' 6' 6' 6' 6'	Thistle 22 CTB 2  237334  De Routine  Rush  Lea Co, NM  Due Date:  Dmitry Nikanorov  21233012  TAT starts the day received by the lab, if received by 4:30pm  Temp Blank:  Yes No  Thermometer ID:  Yes No  N/A  Correction Factor:  Yes No  N/A  Temperature Reading:  Corrected Temperature:  Depth (ft bgs)  Date  Time  Soil  Water  Grab/ Comp  6"  11/14/2023  X  Grab/  1'  11/14/2023  X  Grab/  3'  11/14/2023  X  Grab/  6"  11/14/2023  X  Grab/  6"  11/14/2023  X  Grab/  1'  11/14/2023  X  Grab/  1'  11/14/2023  X  Grab/  4'  11/14/2023  X  Grab/  1'  11/14/2023  X  Grab/  1'  11/14/2023  X  Grab/  1'  11/14/2023  X  Grab/  3'  11/14/2023  X  Grab/  4'  11/14/2023  X  Grab/  1'  11/14/2023  X  Grab/  1'  11/14/2023  X  Grab/  3'  11/14/2023  X  Grab/  1'  11/14/2023  X  Grab/  3'  11/14/2023  X  Grab/  3'  11/14/2023  X  Grab/  3'  11/14/2023  X  Grab/  Gr	Thistle 22 CTB 2  237334    Routine   Rush   Rush	Thistle 22 CTB 2  237334  Lea Co, NM  Due Date:  Dmiltry Nikanorov  21233012  IPT Temp Blank: Yes No Wet Ice: Yes No  Yes No N/A Correction Factor:  Is: Yes No N/A Temperature Reading: Corrected Temperature:  Depth (ft bgs)  Date  Time  Soil  Water  Comp  Cont  6"  11/14/2023  X  Grab/  1'  11/14/2023  X  Grab/  3'  11/14/2023  X  Grab/  4'  11/14/2023  X  Grab/  6"  11/14/2023  X  Grab/  1 X  Grab/	Thistle 22 CTB 2  237334  Lea Co, NM  Due Date:    Dmitry Nikanorov	Thistle 22 CTB 2  237334    Routine   Rush   Pres.   Code	Thistile 22 CTB 2  237334  Lea Co, NM  Due Date:  Dmitry Nikanorov  17AT starts the day received by the lab, if received by 430pm  21233012  IPT  Temp Blank: Yes No Wet Ice: Yes No  [Yes No N/A Correction Factor:  als: Yes No N/A Temperature Reading: Q-3 /  als: Yes No N/A Temperature Reading: Q-3 /  11/11/4/2023  X Grab/  11/11/4/2023  X Gra	Thistle 22 CTB 2    Counting	Thistle 22 CTB 2    237334	Thistle 22 CTB 2  237334  Lea Co, NM  Due Date:  Dmitry Nikanorov  1AT starts the day received by the lab, it received by 4 30pm  1As well as the day received by the lab, it received by 4 30pm  1As well as the day received by the lab, it received by 4 30pm  1As well as the day received by the lab, it received by 4 30pm  1As well as the day received by the lab, it received by 4 30pm  1As well as the day received by the lab, it received by the lab, it received by 4 30pm  1As well as the day received by the lab, it received by 4 30pm  1As well as	Thistite 22 CTB 2	Thistle 22 CTB 2	Thistle 22 CTB 2    Continue   Rush   Code   Rush   Rush   Code   Rush   Rush	Thistle 22 CTB 2	Thistile 22 CTB 2	Thistle 22 CTB 2	

Released to Imaging: 8/26/2024 10:19:10 AM

Revised Date 05012020 Rev. 2020.1



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">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

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)

Celey D. Keine

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. Keene

Lab Director/Quality Manager



#### Analytical Results For:

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

02/15/2024

Reported: 02/20/2024

Project Name: THISTLE 22 CTB 2

Project Number: 237334

Project Location: DEVON - LEA CO., NM

Sampling Date: 02/15/2024

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Dionica Hinojos

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

Received:

			Analyze						
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 5	% 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	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	8						

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#### Analytical Results For:

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

Fax To:

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

Project Location: DEVON - LEA CO., NM

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

BTEX 8021B	mg	/kg	Analyze	ed 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, SM4500CI-B	mg,	/kg	Analyzed 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	ed 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						

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Celey D. Keine



#### Analytical Results For:

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

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

Analyzed By: JH

Project Location: DEVON - LEA CO., NM

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

BTEX 8021B

	9,	9	7	7: :					
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, SM4500CI-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						

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Celey D. Keine



#### Analytical Results For:

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

Fax To:

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

Project Location: DEVON - LEA CO., NM

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

Analyte Result Reporting Limit Analyzed Method Blank BS Benzene* <0.050 0.050 02/16/2024 ND 1.89	% Recovery	True Value QC	RPD	Qualifier
Benzene* <0.050 0.050 02/16/2024 ND 1.89		2.00		
		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 % 71.5-134				
Chloride, SM4500Cl-B mg/kg Analyzed By: AC				
Analyte Result Reporting Limit Analyzed Method Blank BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride 48.0</b> 16.0 02/16/2024 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 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 % 48.2-134				
Surrogate: 1-Chlorooctadecane 84.7 % 49.1-148				

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Celey D. Keene



#### Analytical Results For:

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

Fax To:

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

Analyzed By: JH

Project Location: DEVON - LEA CO., NM

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

BTEX 8021B

DILX GOZID	iiig/	, kg	Andryzo	.u Dy. 311					
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, SM4500CI-B	mg,	/kg	Analyze	ed 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	ed 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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Celey D. Keene



Sample Received By:

02/15/2024

Dionica Hinojos

#### Analytical Results For:

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

Received: 02/15/2024 Sampling Date:

Reported: 02/20/2024 Sampling Type: Soil
Project Name: THISTLE 22 CTB 2 Sampling Condition: Cool & Intact

Project Number: 237334

Project Location: DEVON - LEA CO., NM

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

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, SM4500CI-B	mg,	/kg	Analyze	d 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	18							

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Celey D. Keine



#### Analytical Results For:

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

Fax To:

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

Applyzod By: 14

Project Location: DEVON - LEA CO., NM

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

RTFY 8021R

B1EX 8021B	mg,	<sup>и</sup> кд	Anaiyze	а ву: ЈН					
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	Analyze	ed 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	ed 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						

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Celey D. Keine



#### Analytical Results For:

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

Received: 02/15/2024 Sampling Date: 02/15/2024

Reported: 02/20/2024 Sampling Type: Soil Project Name: THISTLE 22 CTB 2 Sampling Condition: Coo

Project Name: THISTLE 22 CTB 2 Sampling Condition: Cool & Intact
Project Number: 237334 Sample Received By: Dionica Hinojos

Applyzod By: 14

Project Location: DEVON - LEA CO., NM

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

RTFY 8021R

BIEX 8021B	mg	/кд	Anaiyze	a 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, SM4500CI-B	mg,	/kg	Analyze	d 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						

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Celey D. Kreine



#### Analytical Results For:

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

Fax To:

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

Project Location: DEVON - LEA CO., NM

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

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 9	6 71.5-13	4						
Chloride, SM4500CI-B	nloride, 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 9	% 49.1-14	8						

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Celey D. Keine



#### **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

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Celeg D. Freene

Page 12 of 12

# CHAIN-OF CUSTODY AND ANALYSIS REQUEST

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

Company Name:	NIGE									BI	LL T	0							ANA	LYS	IS F	REQ	UES	T		
Project Manager	Ethan Sessums							P.0	. #:							T				Т	T	Ĩ				T
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FOR LAB USE ONLY	Igas Minteres	T			MA	TRIX	_	_		ERV.	SA	AMP	LING	1	0								- 1			
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Relinquished By:		regardless of whether such claim is based upon any of the above st ceived By:	Verbal Result: ☐ Yes ☐ No Add'I Phone #:
alle	Time: 2.45.	111-	All Results are emailed. Please provide Email address:
Relinquished By:	Date: Re	ceived By:	REMARKS:
	Time:		
Delivered By: (Circle One)	Observed Temp. °C D. 2		Dacteria (only) Sample Condition
Sampler - UPS - Bus - Other:	Corrected Temp. °C	Cool Intact (Initials)	Rush Cool Intact Observed Temp. °C  Thermometer ID #140 Correction Factor 0°C



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)

Wite Sough

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,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



#### Analytical Results For:

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

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

Project Location: DEVON - LEA CO., NM

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

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	109	% 71.5-13	4						
Chloride, SM4500CI-B	mg,	/kg	Analyze	Analyzed 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	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*	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	125	% 49.1-14	8						

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Me Sough

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



05/15/2024

Soil

#### Analytical Results For:

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

Sampling Date:

Sampling Type:

Received: 05/15/2024 Reported: 05/17/2024

Project Name: THISTLE 22 CTB 2 Sampling Condition: Cool & Intact
Project Number: 237334 Sample Received By: Tamara Oldaker

Project Location: DEVON - LEA CO., NM

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

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, SM4500CI-B	mg,	/kg	Analyze	d 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	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*	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

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#### Analytical Results For:

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

Applyzod By: 14

Received: 05/15/2024 Reported: 05/17/2024

Project Name: THISTLE 22 CTB 2

237334

ma/ka

Project Location: DEVON - LEA CO., NM

Sampling Date: 05/15/2024

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

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

Project Number:

RTFY 8021R

B1EX 8021B	mg	/кд	Anaiyze	a 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	Analyze	d 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	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	82.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	99.6	% 49.1-14	8						

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#### Analytical Results For:

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

Fax To:

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

Project Location: DEVON - LEA CO., NM

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

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	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	105	% 71.5-13	4						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d 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	% 49.1-14	8						

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#### **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

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

Page 6 of 7

7/18/2024 11:07:25 AM

Received by OCD:

Page 7 of

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	company Name: NT6 F roject Manager: Ethan Scssums ddress: 209 W McKay St ity: Carlsbud State: NM Zip: 88770 hone #: Fax #:						BI	LL TO					AN	IALYSI	S RF	QUE	ST				
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Sampler Name:	Clayfor -	Γ.					1	Fax #	t			1						1			
FOR LAB USE ONLY			Т	П	M	ATRI)	(	PF	RESERV.	SAN	PLING	17		1			1	1			
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vice in no event shall Cardinal to lates or successor. Writing out of ellinquished by:		ental damages, including services hereunder by Co. Date: 5/15 Time: 12:07 Date: Time:	Rec	eived	business in s of whether	in writing terruptio	ris, loss	of use, o	cardinal with it loss of prof	hin 30 days after its incurred by o		ne applicab ries, se. sult:	☐ Yes			Phone #	is:	•			
Delivered By: (Circle (	- Other: Corre	rved Temp. °C	3.4	4	Cool Yes	Intact	1	-	(Initial	s)	Turnaround Thermomete Correction F	rID #1	40	Standard Rush 48	hrs	Cool I		Obs	erved T	tion emp. °C	



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">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

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)

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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,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



#### Analytical Results For:

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

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

Analyzed By MC

Project Location: DEVON - LEA CO., NM

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

DTEV 0021D

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	4						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d 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	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	92.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	113 9	% 49.1-14	8						

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#### Analytical Results For:

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

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 Sample Received By: Project Number: 237334 Tamara Oldaker

Project Location: DEVON - LEA CO., NM

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

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 9	% 71.5-13	4						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d 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	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	91.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	111 9	% 49.1-14	8						

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Tamara Oldaker

#### Analytical Results For:

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

Fax To:

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 Name: THISTLE 22 CTB 2 Sampling Condition:
Project Number: 237334 Sample Received By:

Project Location: DEVON - LEA CO., NM

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

BTEX 8021B	mg	/kg	Analyze	ed 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	% 71.5-13	4						
Chloride, SM4500CI-B	mg,	/kg	Analyze	ed 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	Analyze	ed 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	% 49.1-14	8						

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#### Analytical Results For:

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

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

Applyzod By: MC

Project Location: DEVON - LEA CO., NM

ma/ka

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

RTFY 8021R

BIEX 8021B	mg	/кд	Anaiyze	а ву: м5					
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	Analyze	d 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	% 49.1-14	8						

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Sample Received By:

Tamara Oldaker

#### Analytical Results For:

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

Fax To:

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

Project Location: DEVON - LEA CO., NM

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

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	% 71.5-13	4						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d 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	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*	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	% 49.1-14	18						

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Mr. Songh



#### **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

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Mule Sough

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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

STORES & SERVICE

8

Page 8 of

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

Company Name:	NITGE							E	31L	L TO					*	ANA	LYSIS	REC	QUES	T			
Project Manager:	Ethan Sessum	5					P.O.	#: .	21	2984	33								7				
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	37334 Project Ow						City:					ш		¢			1 1				1		
Project Name:	Thistle 22 CTB	, 2					State	e:		Zip:						1	1 1			1	1		
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Sampler Name:	Clayton T		_			_	Fax	_	_	/				2	)					1			
FOR LAB USE ONLY	J	0	-		MATR	ux.	P	RESER	7	SAMP	LING	X	_										
Lab I.D.	Sample I.D.	(G)RAB OR (C)OM	# CONTAINERS	GROUNDWATER	SOIL	SLUDGE	OTHER:	ICE / COOL	OTHER:	DATE	TIME	BTE	TPA	Chlorid									
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Relinquisted 2y:	Date: 1/15 Receiv	ed By:	Verbal Result:   All Results are emailed	es  No Add'i i. Please provide Ema	Phone #: ill address:
Relinquished By:	Date: Receiv	ed By:	REMARKS:		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 3.4	Sample Condition CHECKED BY:  Cool Intact (Initials)  Yes Yes No No	Turnaround Time: Thermometer ID #140 Correction Factor 0°C	Standard Rush 48 W/S	Bacteria (only) Sample Condition Cool Intact Observed Temp. °C  Yes Yes No No Corrected Temp. °C

<sup>†</sup> Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



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">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

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)

Celey D. Keine

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. Keene

Lab Director/Quality Manager



#### Analytical Results For:

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

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

Project Location: DEVON - LEA CO., NM

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

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	% 71.5-13	4						
Chloride, SM4500CI-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	8						

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Celey D. Keine



#### Analytical Results For:

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

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

Project Location: DEVON - LEA CO., NM

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

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, SM4500CI-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

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Celey D. Keene



#### Analytical Results For:

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

Fax To:

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

Project Location: DEVON - LEA CO., NM

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

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 5	% 71.5-13	4						
Chloride, SM4500CI-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

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Celey D. Keene



#### **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. Freene



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-24	476			_	P	LL TO					ANA	LYSIS	REQU	EST	
Project Manager: Ethan Sessums				P.O	_	29843 Devon	3								
address: 209 W. Mckay Street Sity: Carlsbad State: UM	Zip:	887	30	Attr	n	1 - 4	all								
hone #: 254-266-5456 Fax #: roject #: 237334 Project Owne	r: D	evon		City		Zip:									
roject Name: Thiste 22 CTB 2 roject Location: Lea Co; NM				Fax	one #: c #:					رو					
FOR LAB USE ONLY	(C)OMP.		MATRIX		PRESER	V. SAMF	LING	BIEX	PH	Chlonde					
Lab I.D. Sample I.D.	(G)RAB OR (C)C # CONTAINERS	GROUNDWATER	SOIL	SLUDGE	ACID/BASE:	DATE	TIME			)					
12427UI DS-2 0-6" 2 DS-3 1. 3 DS-4	6 2	9 3	× SOIL	8 0	. O 0	5/20/24	- 0								
3 DS-4 +	6-11		•												
			s hased in co	ntract or t	ort, shall be lim	nited to the amount p	aid by the client	for the							
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service. In no event shall Cardinal be liable for incidental affiliates or successor. **sing out of or related to the per Relinquished By:	or consequental carriages, formance of services hereunder by Cardinal, regard formance of services hereunder by Cardinal, regard	fless of whether such claim is based. ~n any of the a	Verbal Result:	Yes
Relinquished By:	Time: Date: Receiv	COOKIONIO	REMARKS:	
*	Time:	Sample Condition CHECKE	D BY: Turnaround Time:	Standard Bacteria (only) Sample Condition Cool Intact Observed Temp. °C
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. % Ui	Cool Intact  Yes Yes  No No		Yes Yes

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

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Page 6 of 6

**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

# **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**

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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

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

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### **Definitions/Glossary**

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

#### **Qualifiers**

**GC VOA** 

Qualifier **Qualifier Description** LCS and/or LCSD is outside acceptance limits, high biased. S1+ Surrogate recovery exceeds control limits, high biased. 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. Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description** F1 MS and/or MSD recovery exceeds control limits. U Indicates the analyte was analyzed for but not detected.

**Glossary** 

%R

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

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

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry) MDA Minimum Detectable Concentration (Radiochemistry) MDC

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

PQL Practical Quantitation Limit

Presumptive **PRES** QC **Quality Control** 

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TFO

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**TNTC** Too Numerous To Count

### Case Narrative

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

**Eurofins Carlsbad** Job ID: 890-5929-1

#### Job Narrative 890-5929-1

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
- 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 Job ID: 890-5929-1 Project: THISTLE 22

Job ID: 890-5929-1 (Continued)

### **Eurofins Carlsbad**

#### 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.

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## **Client Sample Results**

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

Client Sample ID: H-1

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

Sample Depth: 0.5

Lab	Sample	ID:	890-5929-1
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Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/11/24 12:30	01/11/24 23:00	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/11/24 12:30	01/11/24 23:00	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/11/24 12:30	01/11/24 23:00	1
m-Xylene & p-Xylene	<0.00397	U *+	0.00397		mg/Kg		01/11/24 12:30	01/11/24 23:00	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/11/24 12:30	01/11/24 23:00	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		01/11/24 12:30	01/11/24 23:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130				01/11/24 12:30	01/11/24 23:00	1
1,4-Difluorobenzene (Surr)	78		70 - 130				01/11/24 12:30	01/11/24 23:00	1
Method: TAL SOP Total BTEX	Total PTEV Cale	vulation							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
					""	=		0444404.00.00	

Total BTEX <0.00397 U 0.00397 mg/Kg 01/11/24 23:00

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

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL MDL Unit Dil Fac D Prepared Analyzed <50.0 U Gasoline Range Organics 50.0 mg/Kg 01/11/24 13:45 01/12/24 05:48 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 01/11/24 13:45 01/12/24 05:48 C10-C28) 50.0 OII Range Organics (Over C28-C36) <50.0 U 01/11/24 13:45 01/12/24 05:48 mg/Kg

%Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed 311 S1+ 70 - 130 01/11/24 13:45 01/12/24 05:48 1-Chlorooctane 270 S1+ 70 - 130 01/11/24 13:45 01/12/24 05:48 o-Terphenyl

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

Client Sample ID: H-3 Lab Sample ID: 890-5929-2 Date Collected: 01/09/24 00:00

Date Received: 01/09/24 14:20

Sample Depth: 0.5

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

**Eurofins Carlsbad** 

**Matrix: Solid** 

Client: NT Global Job ID: 890-5929-1

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 0.00400 01/11/24 23:21 mg/Kg

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

Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total TPH <49.7 U 49.7 mg/Kg 01/12/24 06:10

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

MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac <49.7 U 49.7 01/11/24 13:45 01/12/24 06:10 Gasoline Range Organics mg/Kg (GRO)-C6-C10 <49.7 U 49.7 01/11/24 13:45 01/12/24 06:10 Diesel Range Organics (Over mg/Kg C10-C28) OII 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 01/12/24 06:10 o-Terphenyl 266 S1+ 70 - 130 01/11/24 13:45

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

Lab Sample ID: 890-5929-3 Client Sample ID: H-4

Date Collected: 01/09/24 00:00

Date Received: 01/09/24 14:20

Sample Depth: 0.5

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

Prepared Analyte Result Qualifier RL MDL Unit D 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 01/11/24 12:30 01/11/24 23:42 mg/Kg Ethylbenzene <0.00199 U 0.00199 01/11/24 12:30 01/11/24 23:42 mg/Kg 0.00398 01/11/24 12:30 01/11/24 23:42 m-Xylene & p-Xylene <0.00398 U\*+ mg/Kg o-Xylene <0.00199 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

%Recovery Qualifier Limits Dil Fac Surrogate Prepared Analyzed 70 - 130 01/11/24 12:30 4-Bromofluorobenzene (Surr) 95 01/11/24 23:42 1,4-Difluorobenzene (Surr) 77 70 - 130 01/11/24 12:30 01/11/24 23:42

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte Result Qualifier RL MDL D Dil Fac Unit Prepared Analyzed Total BTEX <0.00398 0.00398 01/11/24 23:42 mg/Kg

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

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac <49.6 U Total TPH 49.6 01/11/24 22:02 mg/Kg

**Eurofins Carlsbad** 

**Matrix: Solid** 

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		01/11/24 13:50	01/11/24 22:02	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		01/11/24 13:50	01/11/24 22:02	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		01/11/24 13:50	01/11/24 22:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				01/11/24 13:50	01/11/24 22:02	1
o-Terphenyl	120		70 - 130				01/11/24 13:50	01/11/24 22:02	1

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride <5.04 U 5.04 01/11/24 14:54 mg/Kg

**Client Sample ID: H-5** Lab Sample ID: 890-5929-4 **Matrix: Solid** 

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

Sample Depth: 0.5

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
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	
Total BTEX  Method: SW846 8015 NM - Diese	<0.00403	ics (DRO) (	0.00403 GC)		mg/Kg	<u></u>		01/12/24 00:02	Dil Fac Dil Fac
Total BTEX	<0.00403	ics (DRO) (C	0.00403		mg/Kg	_ =	Prepared		
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese	<0.00403  Il Range Organ Result <50.5  sel Range Orga	ics (DRO) (Outline Qualifier Unics (DRO)	0.00403  GC)  RL  50.5	MDL	mg/Kg  Unit mg/Kg	<u></u>	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	<0.00403  I Range Organ Result <50.5  sel Range Orga Result	ics (DRO) ((Qualifier Unics (DRO)) Qualifier	0.00403 GC)  RL  50.5	MDL	mg/Kg  Unit mg/Kg  Unit	_ =		01/12/24 00:02 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese	<0.00403  Il Range Organ Result <50.5  sel Range Orga	ics (DRO) ((Qualifier Unics (DRO)) Qualifier	0.00403  GC)  RL  50.5  (GC)  RL	MDL	mg/Kg  Unit mg/Kg	<u></u>	Prepared Prepared	01/12/24 00:02  Analyzed  01/11/24 23:07  Analyzed	Dil Fac 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 <50.5  sel Range Orga Result	ics (DRO) (O Qualifier U nics (DRO) Qualifier	0.00403  GC)  RL  50.5  (GC)  RL	MDL	mg/Kg  Unit mg/Kg  Unit	<u></u>	Prepared Prepared	01/12/24 00:02  Analyzed  01/11/24 23:07  Analyzed	Dil Fac Dil Fac
Total BTEX  Method: SW846 8015 NM - Diese Analyte  Total TPH  Method: SW846 8015B NM - Diese Analyte  Gasoline Range Organics (GRO)-C6-C10	<0.00403  I Range Organ Result <50.5  Sel Range Orga Result <50.5	ics (DRO) (O Qualifier U nics (DRO) Qualifier U	0.00403  GC)  RL  50.5  (GC)  RL  50.5	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg	<u></u>	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 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 C10-C28)	<0.00403  I Range Organ Result <50.5  Sel Range Orga Result <50.5  <50.5	ics (DRO) (CQualifier U)  mics (DRO) Qualifier U  Qualifier U  U	0.00403  RL 50.5  (GC) RL 50.5  50.5	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u></u>	Prepared  Prepared  01/11/24 13:50  01/11/24 13:50	Analyzed 01/11/24 23:07  Analyzed 01/11/24 23:07  01/11/24 23:07	Dil Fac  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	ics (DRO) (CQualifier U)  mics (DRO) Qualifier U  Qualifier U  U	0.00403  RL 50.5  (GC) RL 50.5  50.5  50.5	MDL	mg/Kg  Unit mg/Kg  Unit mg/Kg  mg/Kg	<u></u>	Prepared  Prepared  01/11/24 13:50  01/11/24 13:50	Analyzed 01/11/24 23:07  Analyzed 01/11/24 23:07  01/11/24 23:07  01/11/24 23:07	Dil Fac  Dil Fac  1  1  1

## **Client Sample Results**

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

Client Sample ID: H-5 Lab Sample ID: 890-5929-4 Date Collected: 01/09/24 00:00

Matrix: Solid

Date Received: 01/09/24 14:20

Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion C	hromatography - S	Soluble						
Analyte	Result Qualit	ifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.62	4.97		mg/Kg	_		01/11/24 15:00	1

# **Surrogate Summary**

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		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: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		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	
890-5929-4	H-5	126	127	
890-5932-A-1-E MS	Matrix Spike	156 S1+	129	
890-5932-A-1-F MSD	Matrix Spike Duplicate	159 S1+	132 S1+	
LCS 880-70654/2-A	Lab Control Sample	82	86	
LCS 880-70655/2-A	Lab Control Sample	130	141 S1+	
LCSD 880-70654/3-A	Lab Control Sample Dup	98	114	
LCSD 880-70655/3-A	Lab Control Sample Dup	99	113	
MB 880-70654/1-A	Method Blank	178 S1+	179 S1+	
	Method Blank	133 S1+	155 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

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

Lab Sample ID: MB 880-70580/5-A

Analysis Batch: 70626

**Matrix: Solid** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 70580

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	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		01/10/24 14:02	01/11/24 11:00	
Toluene	<0.00200	U	0.00200		mg/Kg		01/10/24 14:02	01/11/24 11:00	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/10/24 14:02	01/11/24 11:00	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/10/24 14:02	01/11/24 11:00	
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/10/24 14:02	01/11/24 11:00	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/10/24 14:02	01/11/24 11:00	

MB MB

MR MR

<0.00200 U

Result Qualifier

Surrogate	%Recovery Qualifier	Limits	Prep	ared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73	70 - 130	01/10/2	4 14:02	01/11/24 11:00	1
1,4-Difluorobenzene (Surr)	90	70 - 130	01/10/2	4 14:02	01/11/24 11:00	1

Lab Sample ID: MB 880-70640/5-A

**Matrix: Solid** 

Analyte

Benzene

Toluene

Analysis Batch: 70626

Client Sample ID: Method Blank Prep Type: Total/NA

Analyzed

01/11/24 21:37

Prepared

01/11/24 12:30

Prep Batch: 70640

Dil Fac

<0.00200 U 0.00200 mg/Kg 01/11/24 12:30 01/11/24 21:37 0.00200 mg/Kg 01/11/24 12:30

MDL Unit

mg/Kg

Ethylbenzene <0.00200 U 01/11/24 21:37 <0.00400 U 0.00400 01/11/24 12:30 01/11/24 21:37 m-Xylene & p-Xylene mg/Kg <0.00200 U 0.00200 01/11/24 21:37 o-Xylene mg/Kg 01/11/24 12:30 01/11/24 12:30 Xylenes, Total <0.00400 U 0.00400 mg/Kg 01/11/24 21:37

0.00200

RL

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	l Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	01/11/24 12	:30 01/11/24 21:37	1
1,4-Difluorobenzene (Surr)	88		70 - 130	01/11/24 12	:30 01/11/24 21:37	1

Lab Sample ID: LCS 880-70640/1-A

**Matrix: Solid** 

**Analysis Batch: 70626** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 70640

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1159		mg/Kg		116	70 - 130	
Toluene	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	Qualifier	Limits
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130
1.4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-70640/2-A

Matrix: Solid

**Analysis Batch: 70626** 

Client Sample ID: Lab	<b>Control Sample Dup</b>
	Dunn Times Tetal/NIA

Prep Type: Total/NA

Prep Batch: 70640

	Spike	LCSD LCSD				%Rec		KPD	
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1046	mg/Kg		105	70 - 130	10	35	

Lab Sample ID: LCSD 880-70640/2-A

### QC Sample Results

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

**Matrix: Solid** 

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

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 70640

Analysis Batch: 70626

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

Lab Sample ID: 890-5939-A-1-B MS Client Sample ID: Matrix Spike

**Matrix: Solid** Prep Type: Total/NA 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 %Recovery Qualifier Surrogate Limits 70 - 130 4-Bromofluorobenzene (Surr) 125 1,4-Difluorobenzene (Surr) 107 70 - 130

Lab Sample ID: 890-5939-A-1-C MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 70626** Prep Batch: 70640

i many ord Editorni i does											
	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 %Recovery Qualifier Limits Surrogate 4-Bromofluorobenzene (Surr) 128 70 - 130 1,4-Difluorobenzene (Surr) 115

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

Lab Sample ID: MB 880-70654/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 70617 Prep Batch: 70654 мв мв

Result Qualifier MDL Unit Prepared Gasoline Range Organics <50.0 U 50.0 01/11/24 13:45 01/11/24 20:57 mg/Kg (GRO)-C6-C10

01/11/24 13:45

101

70 - 130

01/11/24 20:57

Prep Type: Total/NA

Prep Batch: 70654

17

20

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

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

Lab Sample ID: MB 880-70654/1-A Client Sample ID: Method Blank

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 70617 Prep Batch: 70654 MR MR

	MID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/11/24 13:45	01/11/24 20:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/11/24 13:45	01/11/24 20:57	1
	МВ	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	178	S1+	70 - 130				01/11/24 13:45	01/11/24 20:57	1

Lab Sample ID: LCS 880-70654/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Prep Batch: 70654

70 - 130

Analysis Batch: 70617

o-Terphenyl

LCS LCS Spike Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics 1000 781.1 78 70 - 130 mg/Kg (GRO)-C6-C10 1000 854.2 Diesel Range Organics (Over mg/Kg 85 70 - 130C10-C28)

LCS LCS Qualifier Limits Surrogate %Recovery 1-Chlorooctane 70 - 130 82 o-Terphenyl 86 70 - 130

179 S1+

Lab Sample ID: LCSD 880-70654/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Analysis Batch: 70617

Spike LCSD LCSD %Rec **RPD** Added Result Qualifier %Rec Limits RPD Limit Analyte Unit D Gasoline Range Organics 1000 831.3 83 70 - 130 20 mg/Kg (GRO)-C6-C10

1015

mg/Kg

1000

Diesel Range Organics (Over C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 98 70 - 130 o-Terphenyl 114 70 - 130

Lab Sample ID: 890-5932-A-1-E MS Client Sample ID: Matrix Spike Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 70617 Prep Batch: 70654 MS MS %Rec

Sample Sample Spike Result Qualifier Added Result Qualifier %Rec Analyte Unit Limits <49.9 U F1 1000 70 - 130 Gasoline Range Organics 1316 129 mg/Kg (GRO)-C6-C10 1000 Diesel Range Organics (Over <49.9 UF1 1591 F1 mg/Kg 157 70 - 130

C10-C28)

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	156	S1+	70 - 130
o-Terphenyl	129		70 - 130

Lab Sample ID: 890-5932-A-1-F MSD

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

Analysis Batch: 70617

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

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 70654

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	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											
Diesel Range Organics (Over	<49.9	U F1	1000	1628	F1	mg/Kg		160	70 - 130	2	20
C10-C28)											

**Matrix: Solid** 

	IVISD	MISD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	159	S1+	70 - 130
o-Terphenyl	132	S1+	70 - 130

Lab Sample ID: MB 880-70655/1-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 70619** 

Prep Type: Total/NA Prep Batch: 70655

мв мв MDL Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac <50.0 U 50.0 01/11/24 13:50 01/11/24 20:57 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 01/11/24 13:50 01/11/24 20:57 C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 01/11/24 13:50 01/11/24 20:57

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130	01/11/24 13:50	01/11/24 20:57	1
o-Terphenyl	155	S1+	70 - 130	01/11/24 13:50	01/11/24 20:57	1

Lab Sample ID: LCS 880-70655/2-A

Matrix: Solid

**Analysis Batch: 70619** 

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 70655

Spike LCS LCS %Rec Analyte Added Result Qualifier %Rec Limits Unit D 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	Qualifier	Limits
1-Chlorooctane	130		70 - 130
o-Terphenyl	141	S1+	70 - 130

Lab Sample ID: LCSD 880-70655/3-A

**Matrix: Solid** 

Analysis Batch: 70619

Client Samp	le ID: Lab	Control	Sample	Dup
-------------	------------	---------	--------	-----

Prep Type: Total/NA

Prep Batch: 70655

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	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		mg/Kg		97	70 - 130	2	20	
C10-C28)										

Prep Batch: 70655

Client Sample ID: H-4 Prep Type: Total/NA

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

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

Lab Sample ID: LCSD 880-70655/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 70619

LCSD LCSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 99 70 - 130 o-Terphenyl 113 70 - 130

Lab Sample ID: 890-5929-3 MS Client Sample ID: H-4 Prep Type: Total/NA **Matrix: Solid** 

Analysis Batch: 70619									Prep	Batch: 70655
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<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 113 70 - 130 1-Chlorooctane o-Terphenyl 104 70 - 130

Lab Sample ID: 890-5929-3 MSD

**Matrix: Solid** 

Analysis Batch: 70619									Prep Batch: 70655			
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	1322		mg/Kg		128	70 - 130	2	20	
Diesel Range Organics (Over	<49.6	U	1010	908.2		mg/Kg		87	70 - 130	3	20	

C10-C28)

	MSD N	/ISD	
Surrogate	%Recovery G	Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	106		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-70487/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 70595** 

7									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/11/24 04:06	1

Lab Sample ID: LCS 880-70487/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble** 

Matrix: Solid

Analysis Batch: 70595

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	252.4		mg/Kg		101	90 - 110	

Lab Sample ID: LCSD 880-70487/3-A

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

Method: 300.0 - Anions, Ion Chromatography (Continued)

Client Sample ID: Lab Control Sample Dup

% Pac

**Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 70595

%Rec Spike LCSD LCSD RPD Analyte babbA Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 253.7 mg/Kg 101 90 - 110

Lab Sample ID: 880-37706-A-2-B MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 70595** 

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	1530		2510	4281		ma/Ka		110	90 - 110	

Lab Sample ID: 880-37706-A-2-C MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 70595

MSD MSD %Rec RPD Spike Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 1530 2510 4244 mg/Kg 108 90 - 110

Lab Sample ID: MB 880-70612/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 70696

мв мв

Analyte		Qualifier	RL	nit D	Prepa		Dil Fac
Chloride	<5.00 U	U	5.00	g/Kg		01/11/24 21:48	1

Lab Sample ID: LCS 880-70612/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

100 100

Analysis Batch: 70696

	Opino						701100	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	248.4		mg/Kg	_	99	90 - 110	

Snika

Lab Sample ID: LCSD 880-70612/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 70696

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	248.8		mg/Kg	_	100	90 - 110	0	20	

Lab Sample ID: 880-37779-A-58-E MS Client Sample ID: Matrix Spike **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 70696** 

	Sample Sample	ample Spike	MS MS				%Rec
Analyte	Result Qualifier	ualifier Added	Result Qualifier	Unit	D	%Rec	Limits
Chloride	89.1 F1	249	311.2 F1	mg/Kg		89	90 - 110

Lab Sample ID: 880-37779-A-58-F MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Patch: 70606

Released to Imaging: 8/26/2024 10:19:10 AM

Analysis Batch: 70696											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	89.1	F1	249	312.6		ma/Ka		90	90 - 110		

# **QC Association Summary**

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

**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	

Analysis 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
890-5939-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	70640
890-5939-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	70640

Prep Batch: 70640

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	Prep Type	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

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# **QC Association Summary**

Client: NT Global Job ID: 890-5929-1

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	
LCS 880-70654/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-70654/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5932-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5932-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Prep Batch: 70655

Lab Sample ID	Client Sample ID	Prep Type	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	Prep Type	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	Prep Type	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

<b>Lab Sample ID</b> 890-5929-2	Client Sample ID H-3	Prep Type Soluble	Matrix Solid	Method 300.0	Prep Batch 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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# **QC Association Summary**

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

## **HPLC/IC** (Continued)

## **Analysis Batch: 70595 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-70487/2-A	Lab Control Sample	Soluble	Solid	300.0	70487
LCSD 880-70487/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	70487
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	_
MB 880-70612/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-70612/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
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
LCS 880-70612/2-A	Lab Control Sample	Soluble	Solid	300.0	70612
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
880-37779-A-58-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	70612

**Eurofins Carlsbad** 

Client: NT Global

Client Sample ID: H-1

Lab Sample ID: 890-5929-1

**Matrix: Solid** 

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			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	TKC	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	CH	EET MID

Client Sample ID: H-3 Lab Sample ID: 890-5929-2 Matrix: Solid

Date Collected: 01/09/24 00:00

Date Received: 01/09/24 14:20

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

70595

01/11/24 14:49

Client Sample ID: H-4

Soluble

Date Collected: 01/09/24 00:00

Analysis

300.0

Date Received: 01/09/24 14:20

Lab Sample ID: 890-5929-3

Lab Sample ID: 890-5929-4

СН

**Matrix: Solid** 

**EET MID** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	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	TKC	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	CH	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	Type	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** 

Page 21 of 28

Matrix: Solid

## Lab Chronicle

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

Client Sample ID: H-5 Lab Sample ID: 890-5929-4

Matrix: Solid

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	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

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# **Accreditation/Certification Summary**

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

**Laboratory: Eurofins Midland** 

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

Authority	Progra	am	Identification Number	Expiration Date
Texas	NELA	Р	T104704400-23-26	06-30-24
,	are included in this report, bu	it the laboratory is not certif	fied by the governing authority. This lis	t may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	
Total BTEX		Solid	Total BTEX	

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# **Method Summary**

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

<b>l</b> lethod	Method Description	Protocol	Laboratory
3021B	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	Microextraction	SW846	EET MID
Ol Leach	Deionized Water Leaching Procedure	ASTM	EET MID

#### **Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

## Laboratory References:

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

Eurofins Carlsbad

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# Sample Summary

Client: NT Global Job ID: 890-5929-1

Project/Site: THISTLE 22

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

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# Chain of Custody

EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300

Environment Testing

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Work Order No:

1/12/2024

# **Login Sample Receipt Checklist**

Client: NT Global Job Number: 890-5929-1

Login Number: 5929 List Source: Eurofins Carlsbad

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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# **Login Sample Receipt Checklist**

Client: NT Global Job Number: 890-5929-1

Login Number: 5929 **List Source: Eurofins Midland** List Number: 2 List Creation: 01/11/24 11:21 AM

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 <6mm (1/4").	N/A	

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

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

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

QUESTIONS

Action 365244

#### **QUESTIONS**

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	365244
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

#### QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2404051181
Incident Name	NAPP2404051181 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	02/08/2024
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	No
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: 12 BBL   Lost: 10 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)	Personnel arrived at location to discover a spill had occurred in and out of the containment. shut in location to stop the spill.

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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 2

Action 365244

Phone:(505) 476-3470 Fax:(505) 476-3462	
QUEST	IONS (continued)
Operator:  DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137 Action Number: 365244 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	safety 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.
	iation 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 evaluation 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	knowledge and understand that pursuant to OCD rules and regulations all operators are required asses 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

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

Action 365244

#### **QUESTIONS** (continued)

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	365244
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

#### 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 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 and 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	No	

Remediation Plan		
Please answer all the questions that apply or are indicated. This information must be pro	rovided 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 cont	tamination 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	d 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	
Benzene (EPA SW-846 Method 8021B or 8260B)	0.1	
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes which includes the anticipated timelines for beginning and completing the remediation.	completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,	
On what estimated date will the remediation commence	02/08/2024	
On what date will (or did) the final sampling or liner inspection occur	05/15/2024	
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	d 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 calculate	ation 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 adj	justed 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.

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 4

Action 365244

**QUESTIONS** (continued)

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	365244
	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 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.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

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

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

QUESTIONS, Page 5

Action 365244

**QUESTIONS** (continued)

DEVON ENERGY PRODUCTION COMPANY, LP	OGRID: 6137
333 West Sheridan Ave. Oklahoma City, OK 73102	Action Number: 365244
	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 o	f 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
	iately under or around production equipment such as production tanks, wellheads and pipelines where In 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 el which includes the anticipated timelines for beginning and completing the remediation.	fforts 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 releate 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 asses 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

District I
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Phone: (575) 393-6161 Fax: (575) 393-0720

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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 6

Action 365244

**QUESTIONS** (continued)

Operator:		OGRID:
	DEVON ENERGY PRODUCTION COMPANY, LP	6137
	333 West Sheridan Ave.	Action Number:
	Oklahoma City, OK 73102	365244
		Action Type:
		[C-141] Deferral Request C-141 (C-141-v-Deferral)

#### QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	343632
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

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

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

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

District III 1000 Rio Brazos Rd., Aztec, NM 87410

Phone:(505) 334-6178 Fax:(505) 334-6170

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

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

CONDITIONS

Action 365244

## **CONDITIONS**

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	365244
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

#### CONDITIONS

Created By		Condition 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