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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 14th, 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 9th, 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 15th, 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 6th, 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 15th, 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 15th, 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



Kellan Smith
Project Scientist

Attachments:

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

SITE CHARACTERIZATION INFORMATION

Karst Map


Legend Page 6 of 126




300ft radius




Half Mile Radius



High



Low



Medium



Thistle Unit 22 CTB 2

Targa Brininstool

Thistle Unit 22 CTB 2

Google Earth

Image © 2023 Maxar Technologies
Image Landsat / Copernicus



1 mi

National Flood Hazard Layer FIRMette



103°33'35"W 32°17'58"N



Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		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
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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

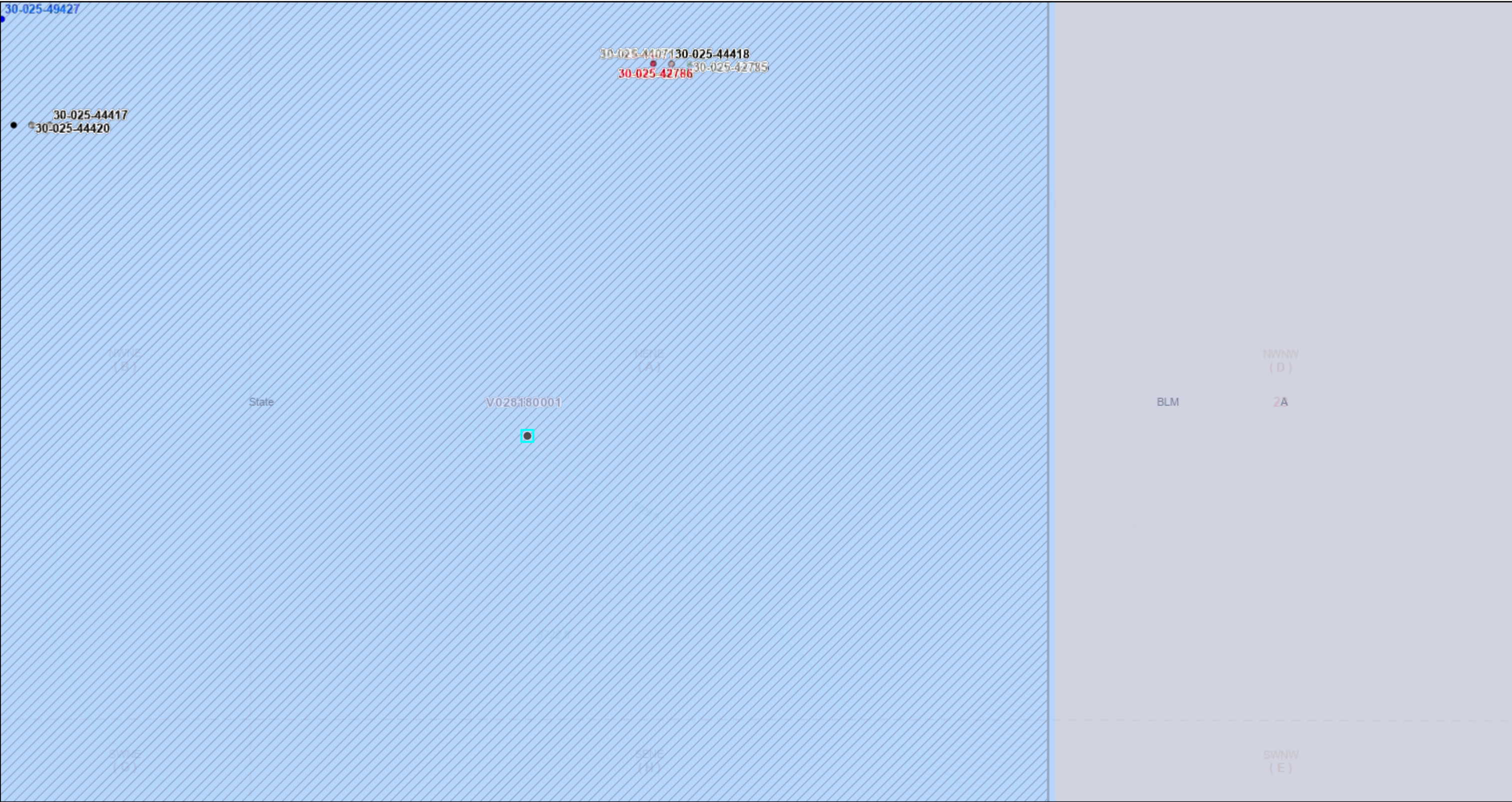
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/23/2023 at 11:29 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by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

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.

0 250 500 1,000 1,500 2,000 Feet 1:6,000

103°32'57"W 32°17'27"N

OCD Well Locations



6/23/2023, 9:33:14 AM

Wells - Large Scale

- Oil, Active
- Oil, Cancelled
- Oil, New
- Oil, Plugged

Karst Occurrence Potential

- Low
- Oil and Gas Leasing Restrictions
- Oil and Gas Leases

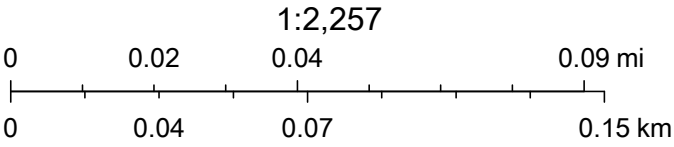
Mineral Ownership

- A-All minerals are owned by U.S.
- N-No minerals are owned by the U.S.

Land Ownership

- BLM

- S
- PLSS Second Division
- PLSS First Division



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

OSE POD Locations Map



6/23/2023, 11:05:56 AM

Override 1

OSE District Boundary

Active

Closure Area

GIS WATERS PODs

Water Right Regulations

New Mexico State Trust Lands

Subsurface Estate

Surface Estate

Both Estates

NHD Flowlines

Artificial Path

Stream River

SiteBoundaries

1:18,056

00.170.350.7 mi

00.30.61.2 km

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


Released to Imaging: 8/26/2024 10:25:59 AM

Web Generated Map
Map is generated by web users.



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)		(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04664 POD1	4	1	4	15	23S	33E	635784	3574818 
x									
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:			Source:				
Pump Type:		Pipe Discharge Size:			Estimated Yield:				
Casing Size:		Depth Well:			55 feet		Depth Water:		
x									

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

Devon - Thistle 22 CTB 2

Significant Watercourse Map

Released to Imaging: 8/26/2024 10:25:59 AM

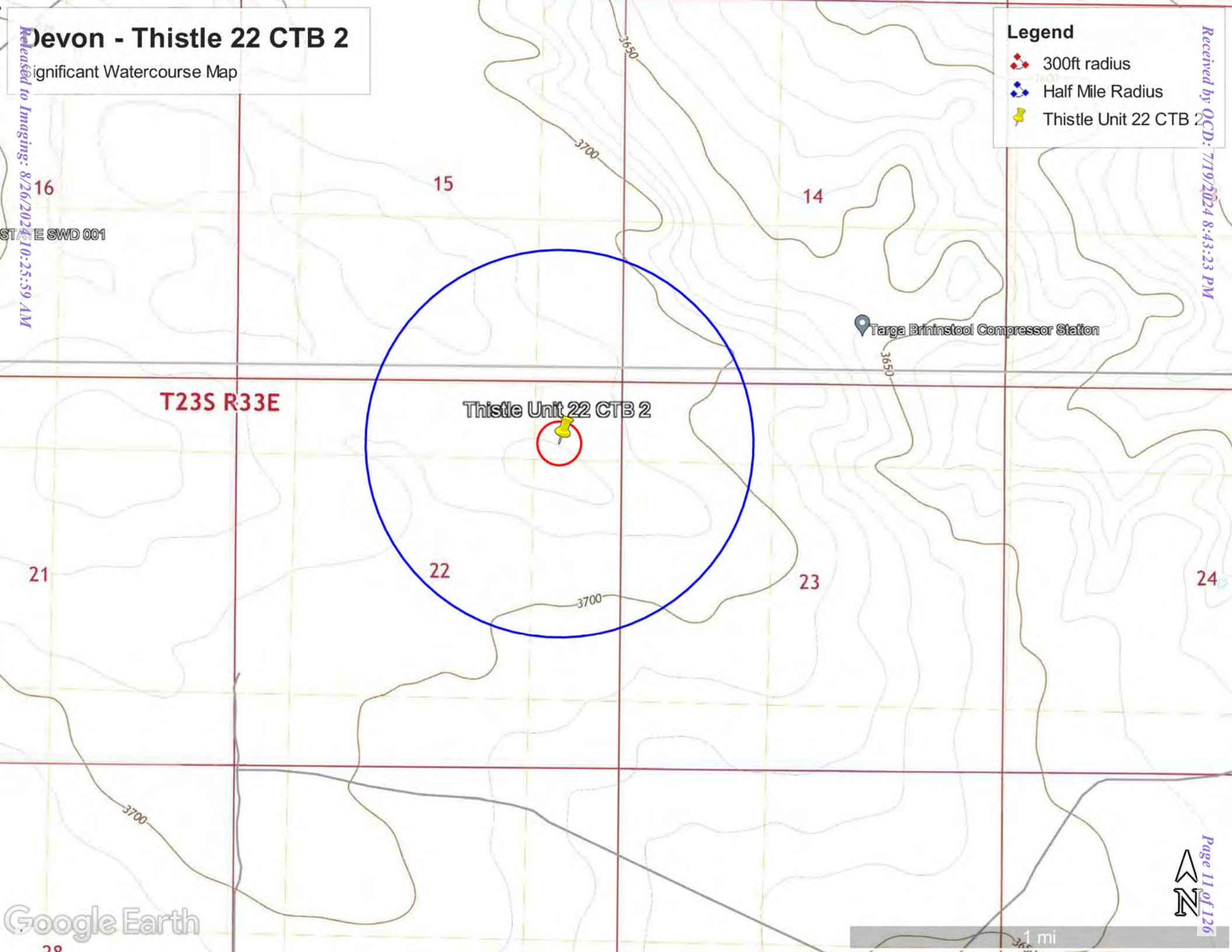
Received by OCD: 7/19/2024 8:43:23 PM

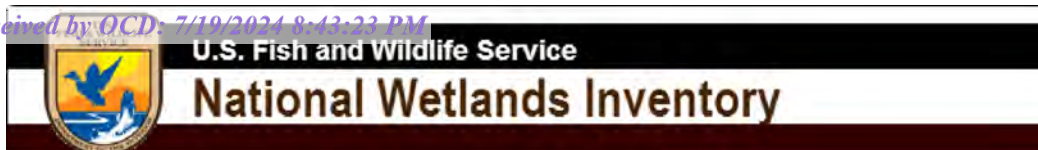
Legend

 300ft radius

 Half Mile Radius

 Thistle Unit 22 CTB 2





Thistle 22 CTB 2



June 23, 2023

Wetlands_Alaska

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

- Lake
- Other
- Riverine

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

TABLES

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

Sample ID	Sample Date	Depth (ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH					Chloride
								GRO (C6-C10)	DRO (C10-C28)	GRO + DRO (C6-C28)	MRO (C28-C35)	Total GRO/DRO/MRO (C6-C35)	
			(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
Vertical Delineation Samples													
TP-1	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
	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
TP-2	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
	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
TP-3	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
Horizontal Delineation 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	<10.0	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:

- Values reported in mg/kg
- < = Value Less Than Reporting Limit (RL)
- Bold indicates Analyte Detected
- BTEX analyses by EPA Method SW 8021B

- TPH analyses by EPA Method SW 8015 Mod.
- 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

SP-1

Sample Point Excavated

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

Sample ID	Sample Date	Depth (ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH					Chloride
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	GRO (C6-C10)	DRO (C10-C28)	GRO + DRO (C6-C28)	MRO (C28-C35)	Total GRO/DRO/MRO (C6-C35)	
								(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 Samples													
CS-1	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
CS-2	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
CS-3	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
CS-4	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
CS-5	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
CS-6	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48
CS-7	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
CS-8	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
CS-9	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
CS-10	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	517	517	103	620	128
CS-11	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	15.3	1,500	1513.3	270	1783.3	816
CS-12	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	505	505	105	610	2,080
CS-13	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
CS-14	05/06/24	1'	<0.050	<0.050	0.12	<0.150	<0.300	<10.0	1,000	1,000	282	1282	1,230
CS-15	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	843	843	148	991	1,170
CS-16	05/06/24	1'	0.275	6.04	3.47	22.5	32.3	427	4,050	4,477	583	5060	1,640
CS-17	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,000
	05/15/24	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,480
CS-18	05/06/24	1'	1.18	11.4	2.48	41.6	56.7	1,040	5,830	6,870	925	7795	2,000
CS-19	05/06/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	2,340	2,340	480	2820	2,600
CS-20	05/06/24	1'	<0.050	1.95	3.53	34.8	40.2	801	6,350	7,151	909	8060	2,080
CS-21	05/15/24	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	65.5	65.5	12.2	77.7	80
Sidewall Samples													
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	0-1'	2.3	79.6	32.5	240	335	4,760	14,600	19,360	2,060	21,420	2,640
	05/15/24	0-4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,180
SW-8	05/06/24	0-1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	871	871	199	1,070	7,200
	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

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

Notes:

1. Values reported in mg/kg

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

3. Bold indicates Analyte Detected

4. BTEX analyses by EPA Method SW 8021B

5. TPH analyses by EPA Method SW 8015 Mod.

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

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

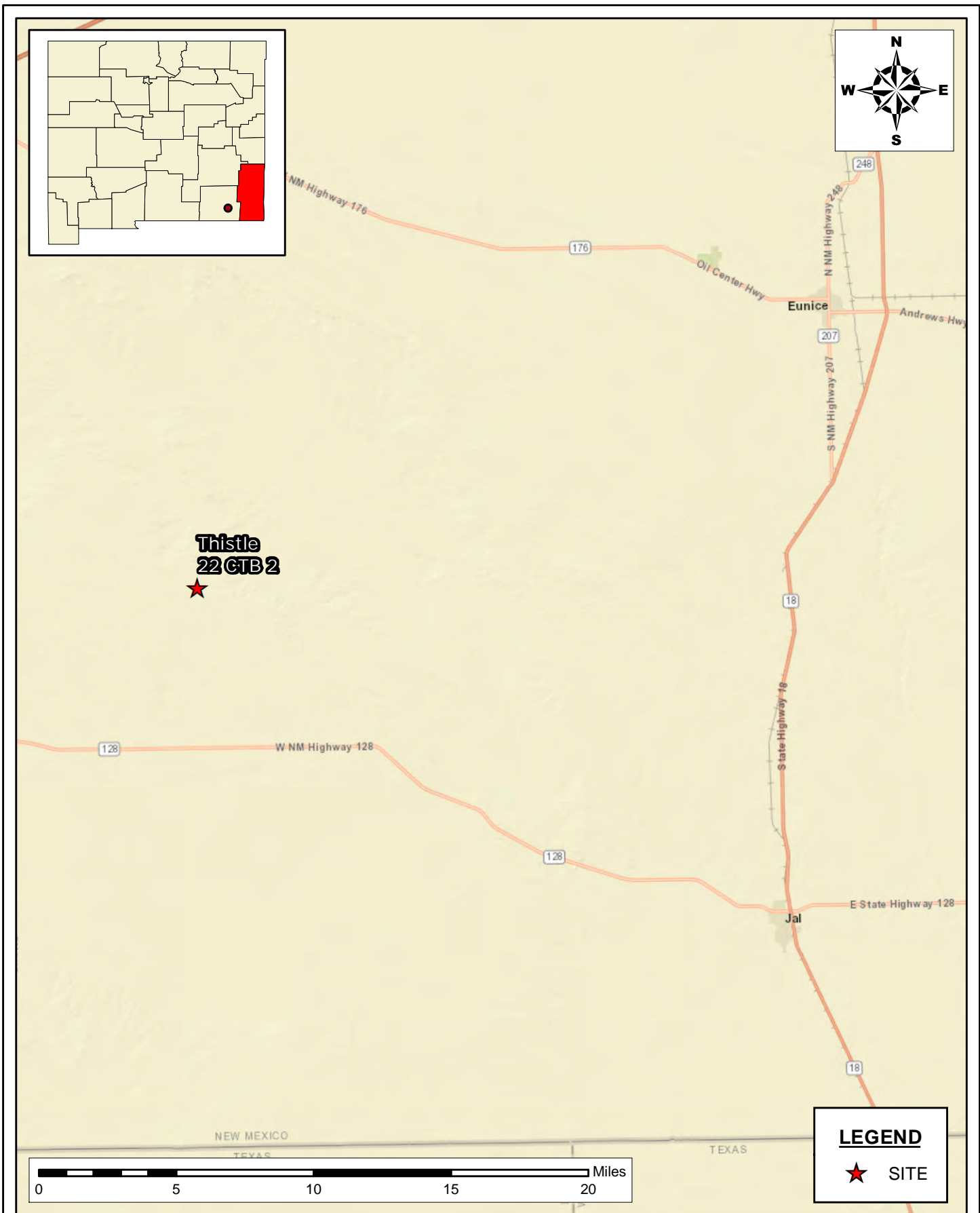
8. Peach shaded cells indicate analytical samples that exceed the NMAC 19.15.29.13 Table I Closure Criteria for the site (Surface to 4 Feet Below Grade).

9. --- Not Analyzed

 Sample Point Excavated

FIGURES

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**SITE LOCATION MAP
DEFERRAL REQUEST
DEVON ENERGY PRODUCTION COMPANY
THISTLE 22 CTB 2
LEA COUNTY, NEW MEXICO**

SCALE: As Shown Date: 6/23/2023 PROJECT #:237334



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

NOTES:

1. Base Image: ESRI Maps & Data 2013
2. Map Projection: NAD 1983

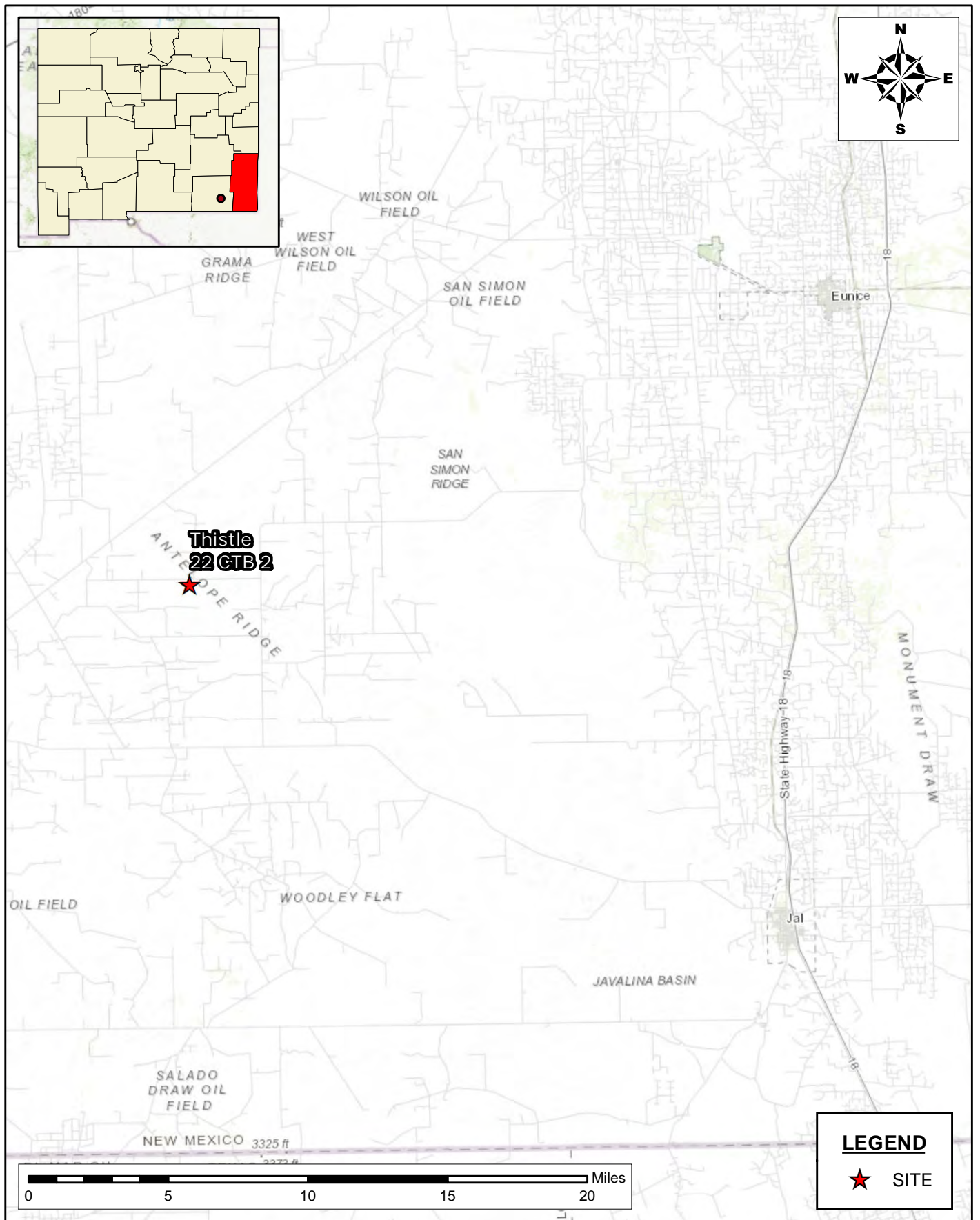
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FIGURE 1

SHEET NUMBER:

1 of 1

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

SCALE: As Shown Date: 6/23/2023 PROJECT #:237334



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911 Regional Park Drive
Houston, Texas 77060
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NOTES:

1. Base Image: ESRI Maps & Data 2013
2. Map Projection: NAD 1983

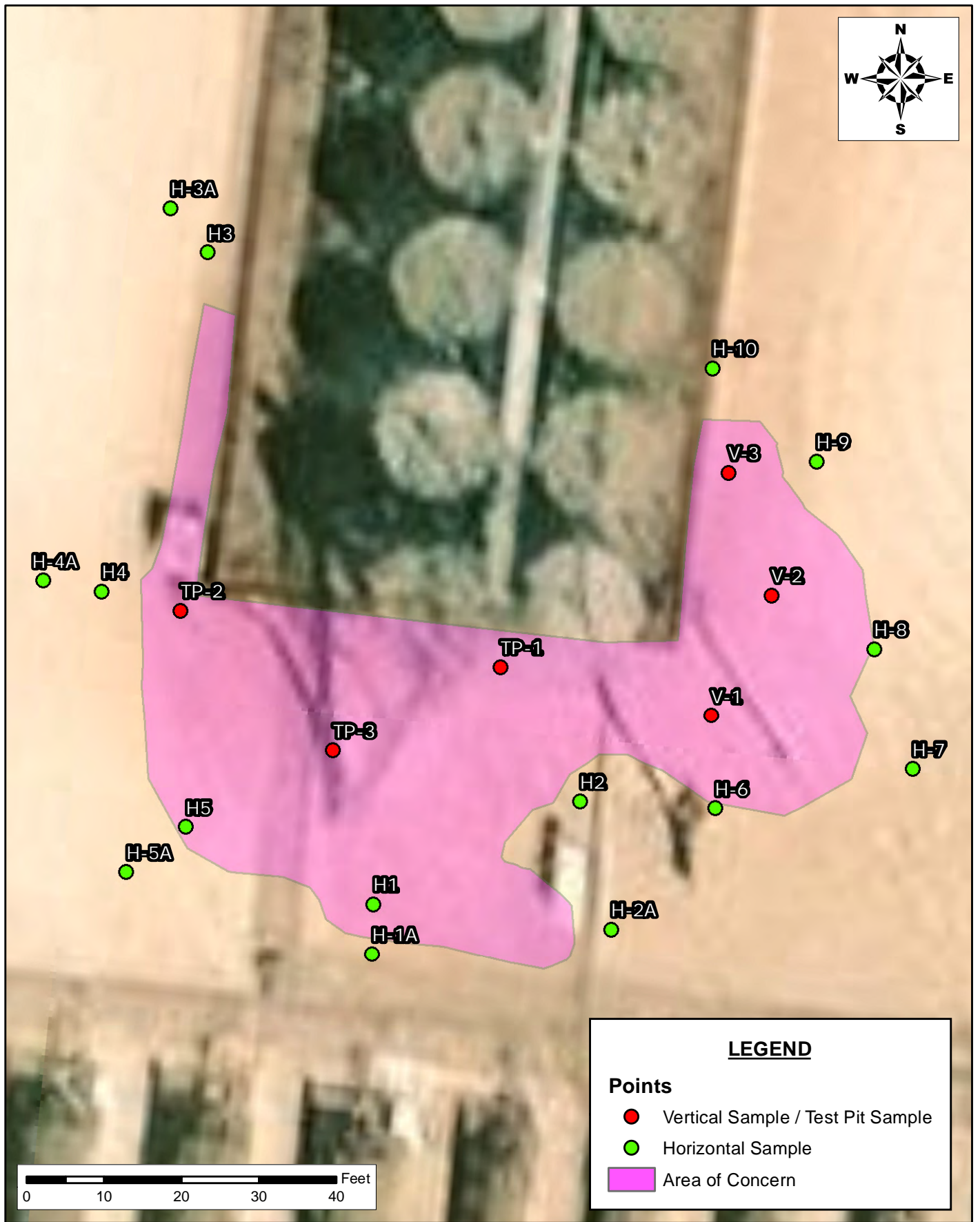
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FIGURE 2

SHEET NUMBER:

1 of 1

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INITIAL ASSESSMENT MAP
DEFERRAL REQUEST
DEVON ENERGY PRODUCTION COMPANY
THISTLE UNIT 22 CTB 2
LEA COUNTY, NEW MEXICO



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

NOTES:

1. Base Image: ESRI Maps & Data 2017
2. Map Projection: NAD 1983

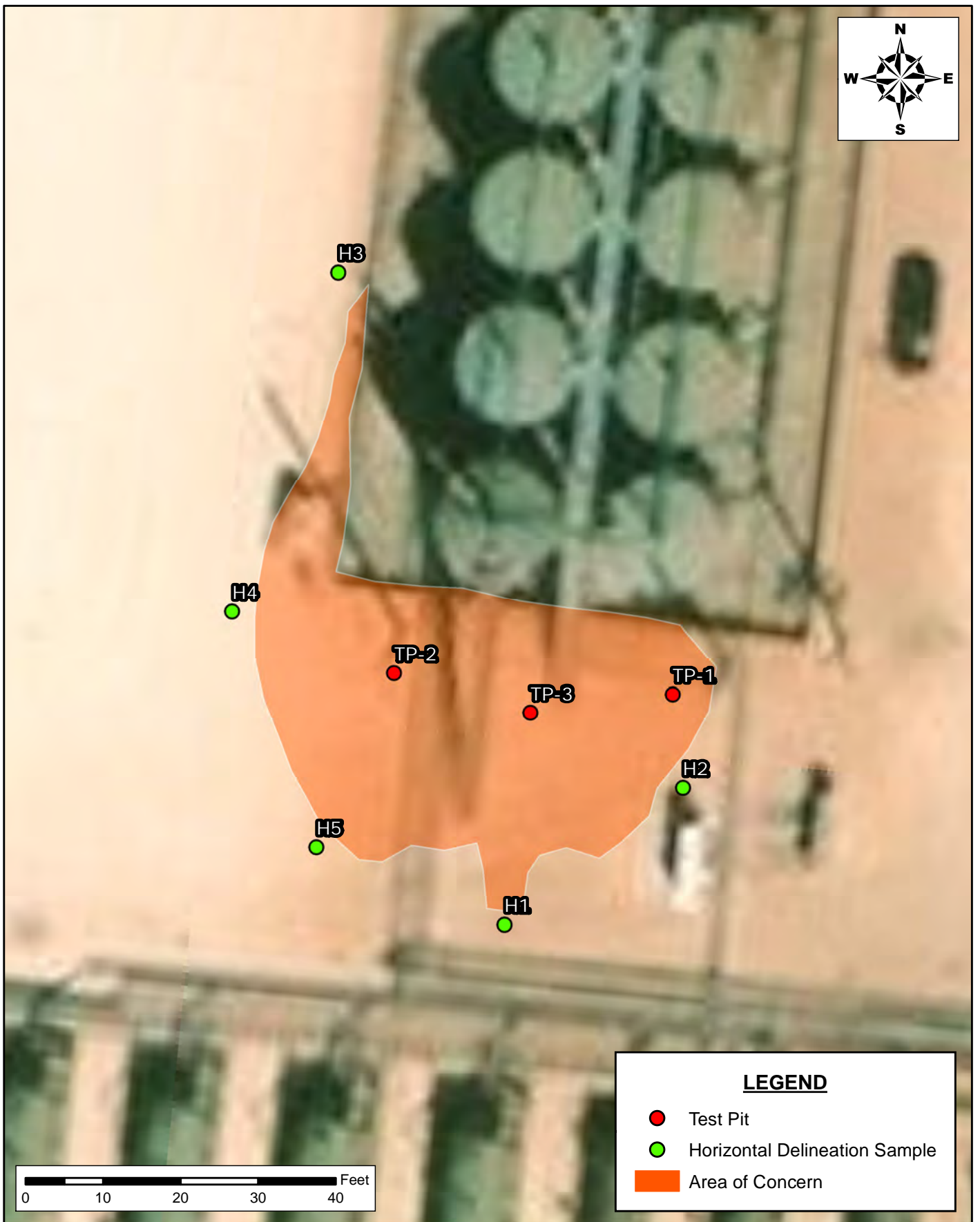
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FIGURE 3

SHEET NUMBER:

1 of 1

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LEGEND

- Test Pit
- Horizontal Delineation Sample
- Area of Concern

INITIAL ASSESSMENT MAP
DEFERRAL REQUEST
DEVON ENERGY PRODUCTION COMPANY
THISTLE UNIT 22 CTB 2
LEA COUNTY, NEW MEXICO



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NOTES:

1. Base Image: ESRI Maps & Data 2017
2. Map Projection: NAD 1983

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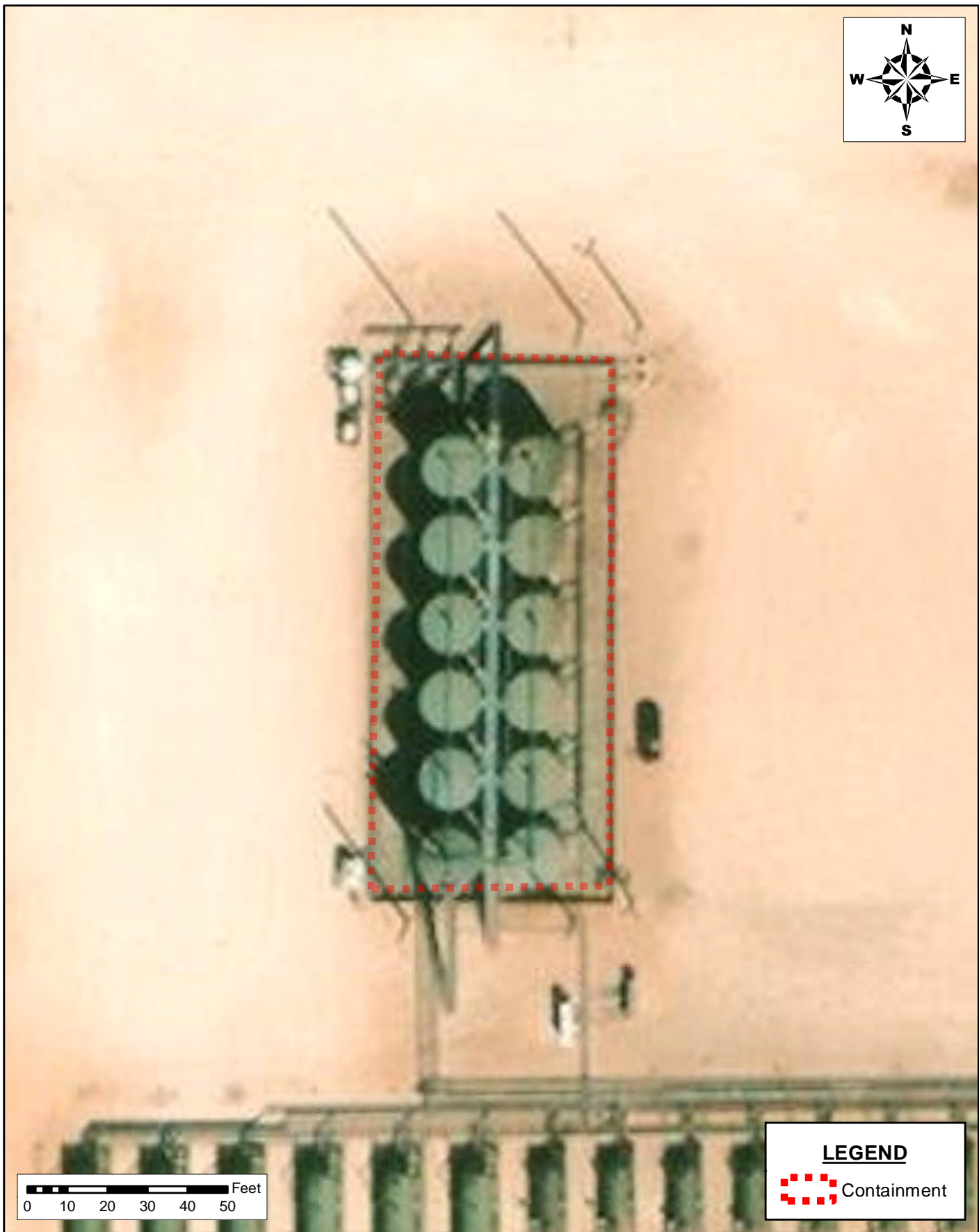
FIGURE 3

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1 of 1

SCALE: AS SHOWN DATE: 11/28/2023 PROJECT #: 237334

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

SCALE: As Shown Date: 6/23/2023 PROJECT #:237334



New Tech Global Environmental, LLC
911 Regional Park Drive
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NOTES:

1. Base Image: ESRI Maps & Data 2013
2. Map Projection: NAD 1983

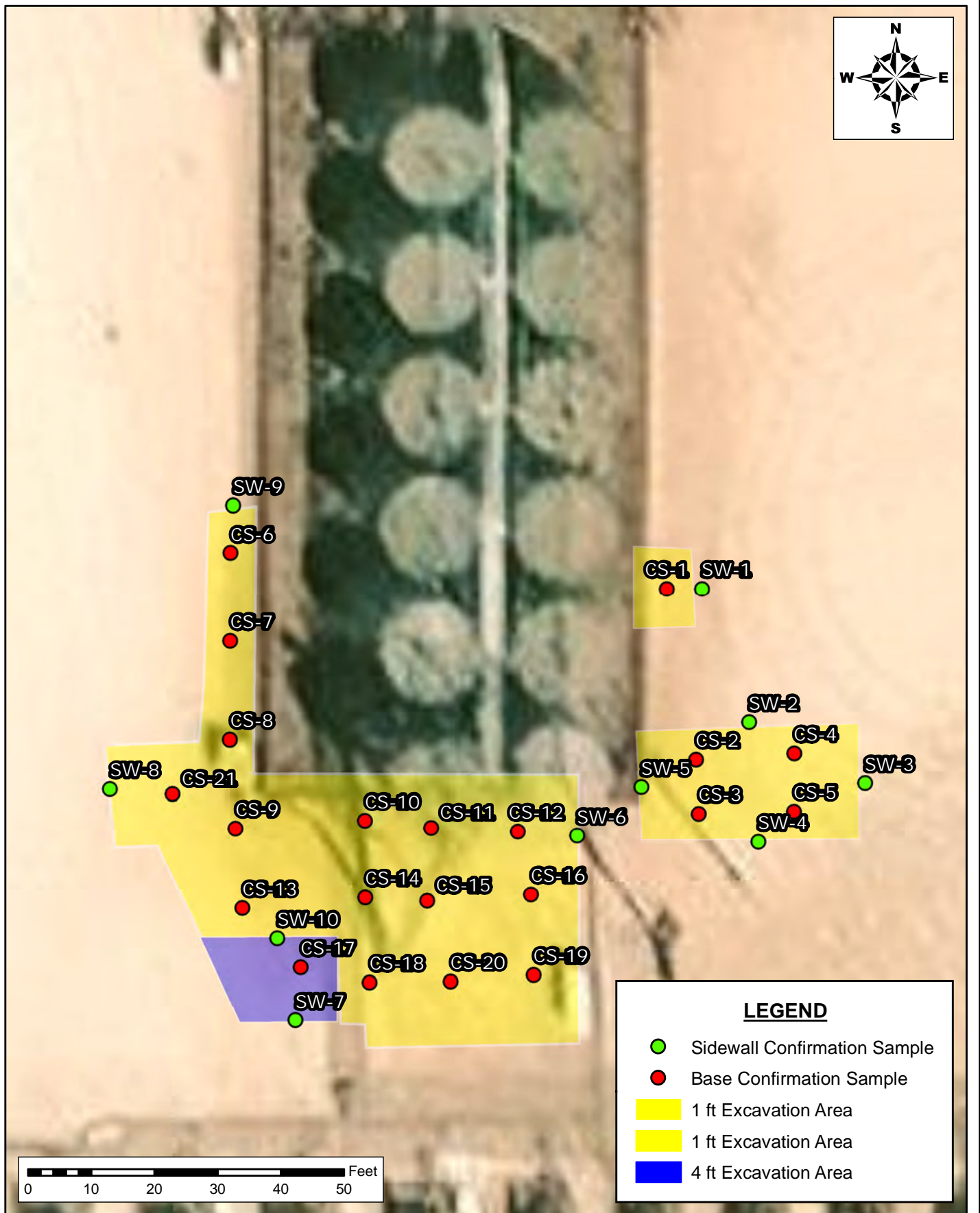
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FIGURE 3

SHEET NUMBER:

1 of 1

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**CONFIRMATION SAMPLING MAP
DEFERRAL REQUEST
DEVON ENERGY PRODUCTION COMPANY
THISTLE 22 CTB 2
LEA COUNTY, NEW MEXICO**

SCALE: As Shown Date: 6/17/2024 PROJECT #: 237334



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

NOTES:

1. Base Image: ESRI Maps & Data 2013
2. Map Projection: NAD 1983

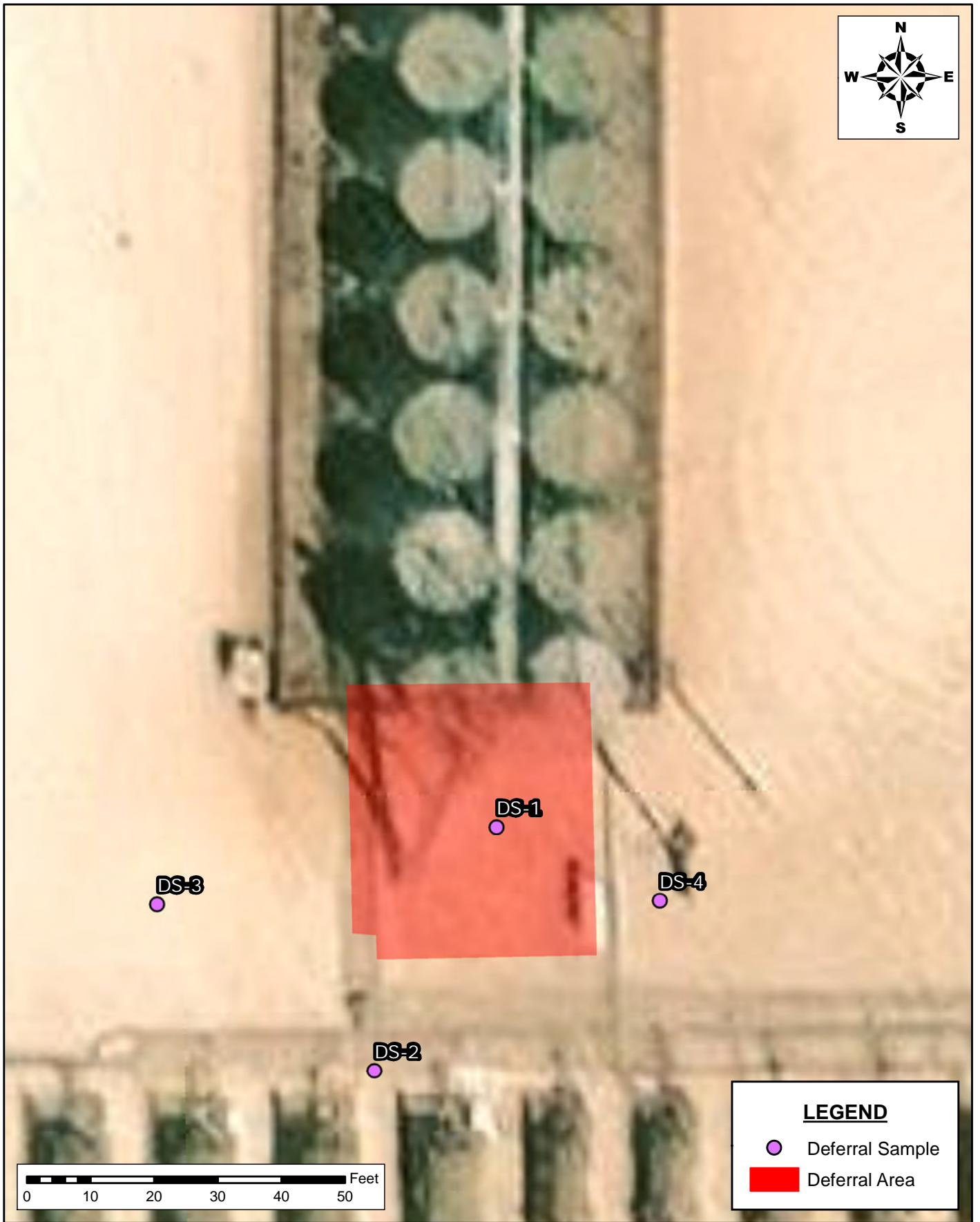
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FIGURE 4

SHEET NUMBER:

1 of 1

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

SCALE: As Shown Date: 6/17/2024 PROJECT #:237334



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

NOTES:

1. Base Image: ESRI Maps & Data 2013
2. Map Projection: NAD 1983

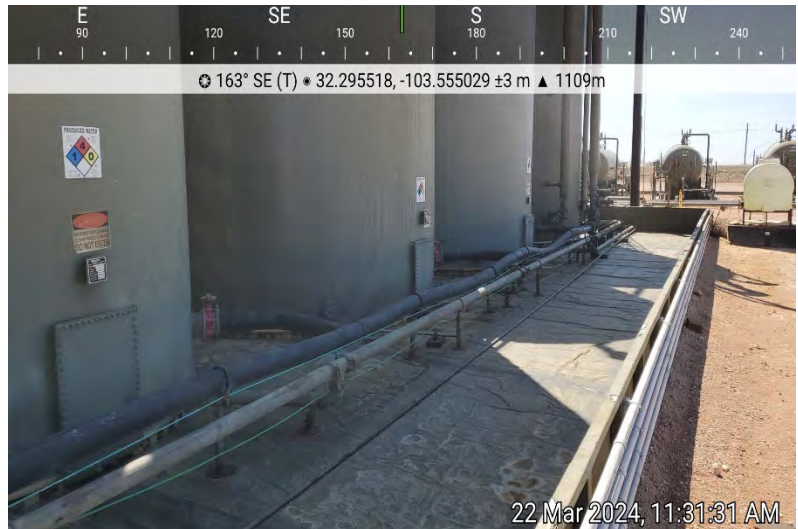
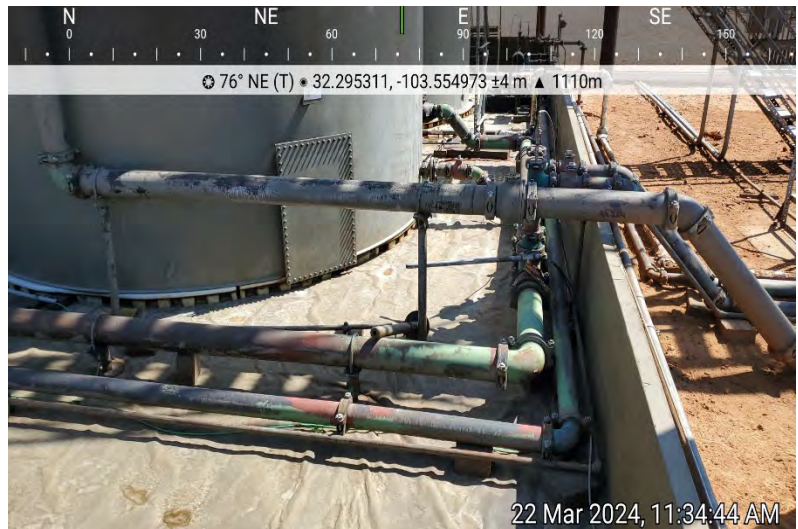
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FIGURE 5

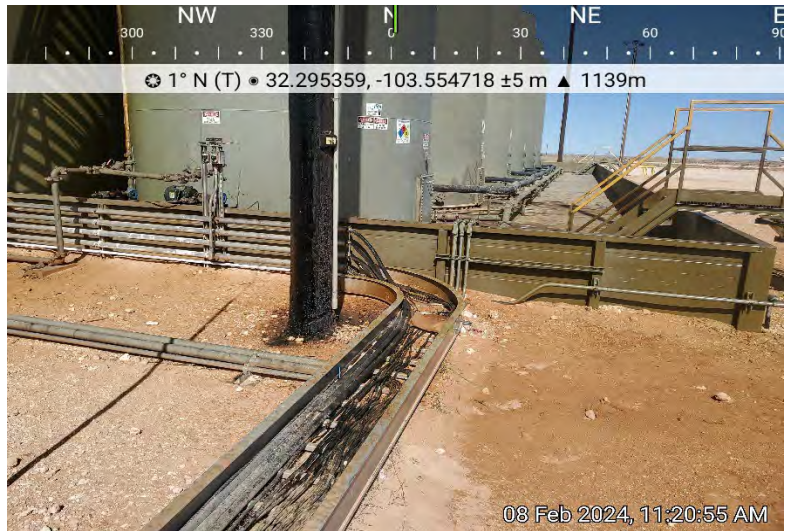
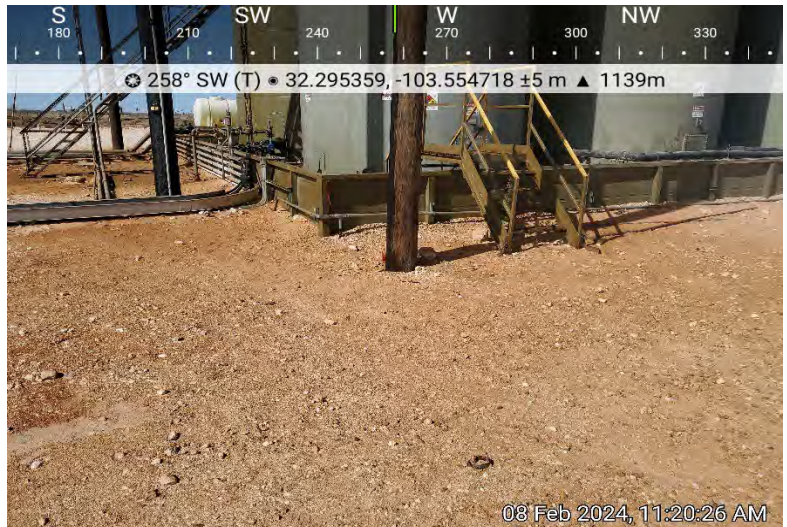
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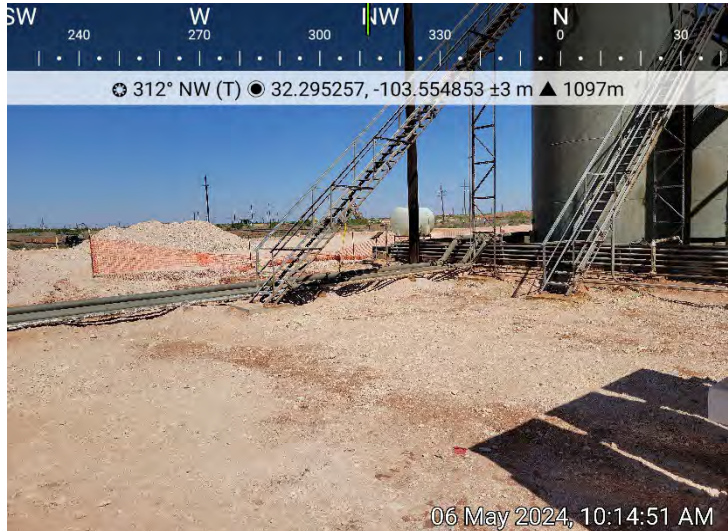
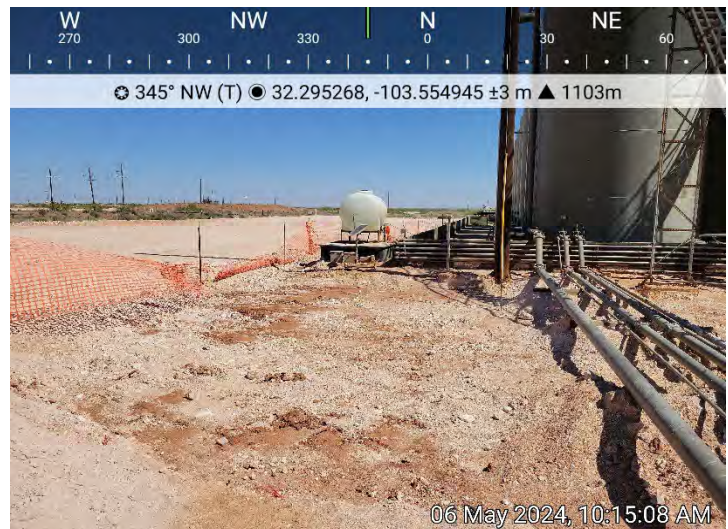
1 of 1

PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG**Thistle Unit 22 CTB 2****Photograph No. 1****Facility:** Thistle Unit 22 CTB 2**County:** Lea County, New Mexico**Description:**
View of Liner.**Photograph No. 2****Facility:** Thistle Unit 22 CTB 2**County:** Lea County, New Mexico**Description:**
View of Liner.**Photograph No. 3****Facility:** Thistle Unit 22 CTB 2**County:** Lea County, New Mexico**Description:**
View of Liner.

PHOTOGRAPHIC LOG**Thistle Unit 22 CTB 2****Photograph No. 4****Facility:** Thistle Unit 22 CTB 2**County:** Lea County, New Mexico**Description:**
View of Liner.**Photograph No. 5****Facility:** Thistle Unit 22 CTB 2**County:** Lea County, New Mexico**Description:**
View of Liner**Photograph No. 6****Facility:** Thistle Unit 22 CTB 2**County:** Lea County, New Mexico**Description:**
View of Liner.

PHOTOGRAPHIC LOG**Thistle Unit 22 CTB 2****Photograph No. 7****Facility:** Thistle Unit 22 CTB 2**County:** Lea County, New Mexico**Description:**
Area of Concern.**Photograph No. 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.

PHOTOGRAPHIC LOG**Thistle Unit 22 CTB 2****Photograph No. 10****Facility:** Thistle Unit 22 CTB 2**County:** Lea County, New Mexico**Description:**
Area of Excavation.**Photograph No. 11****Facility:** Thistle Unit 22 CTB 2**County:** Lea County, New Mexico**Description:**
Area of Excavation.**Photograph No. 12****Facility:** Thistle Unit 22 CTB 2**County:** Lea County, New Mexico**Description:**
Area of Excavation.

PHOTOGRAPHIC LOG**Thistle Unit 22 CTB 2****Photograph No. 10****Facility:** Thistle Unit 22 CTB 2**County:** Lea County, New Mexico**Description:**
Area of Excavation.**Photograph No. 11****Facility:** Thistle Unit 22 CTB 2**County:** Lea County, New Mexico**Description:**
Area of Excavation.**Photograph No. 12****Facility:** Thistle Unit 22 CTB 2**County:** Lea County, New Mexico**Description:**
Area of Excavation.

LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTS



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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: H - 1 0-6" (H236226-01)

BTX 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 BTX	<0.300	0.300	11/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2880	16.0	11/15/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					

Surrogate: 1-Chlorooctane 78.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 72.7 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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: H - 2 0-6" (H236226-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824		
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04		
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619		
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286		
Total BTEx	<0.300	0.300	11/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 120 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/15/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	56.5	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					

Surrogate: 1-Chlorooctane 78.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 74.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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: 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 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	11/15/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	1040	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	433	10.0	11/15/2023	ND					

Surrogate: 1-Chlorooctane 72.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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
 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: H - 4 0-6" (H236226-04)

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) 117 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	11/15/2023	ND	432	108	400	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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
 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: H - 5 0-6" (H236226-05)

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) 117 % 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	
Chloride	240	16.0	11/15/2023	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed 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 % 48.2-134

Surrogate: 1-Chlorooctadecane 561 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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 6" (H236227-01)

BTX 8021B		mg/kg	Analyzed 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 BTX	57.6	1.20	11/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 178 % 71.5-134

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	11/15/2023	ND	432	108	400	3.64	

TPH 8015M		mg/kg	Analyzed 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 % 48.2-134

Surrogate: 1-Chlorooctadecane 144 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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
 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 1' (H236227-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/15/2023	ND	1.96	98.0	2.00	0.824		
Toluene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.04		
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.11	105	2.00	0.619		
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.40	107	6.00	0.286		
Total BTEx	<0.300	0.300	11/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 120 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed 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		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/16/2023	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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
 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		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) 119 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	11/15/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	188	94.1	200	2.54	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	169	84.3	200	0.531	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					

Surrogate: 1-Chlorooctane 70.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 64.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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 3' (H236227-04)

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 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	11/15/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		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 82.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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 4' (H236227-05)

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 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/15/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		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 81.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 74.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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
 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 - 2 6" (H236227-06)

BTX 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 BTX	<0.300	0.300	11/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	784	16.0	11/15/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		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*	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 78.5 % 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
 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 - 2 1' (H236227-07)

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) 119 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	11/15/2023	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	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 64.7 % 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
 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 - 2 2' (H236227-08)

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 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/15/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		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	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.3 % 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
 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 - 2 3' (H236227-09)

BTX 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	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 BTX	<0.300	0.300	11/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/15/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		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	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.2 % 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
 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 - 2 4' (H236227-10)

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	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 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	11/15/2023	ND	432	108	400	3.64		

TPH 8015M		mg/kg		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	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.9 % 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
 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 - 3 6" (H236227-11)

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	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 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	11/15/2023	ND	448	112	400	0.00	QM-07	
TPH 8015M		mg/kg		Analyzed By: MS						S-06

TPH 8015M		mg/kg		Analyzed 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 % 48.2-134

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
 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 - 3 1' (H236227-12)

BTX 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	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 BTX	<0.300	0.300	11/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

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		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	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.1 % 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
 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 - 3 2' (H236227-13)

BTX 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	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 BTX	<0.300	0.300	11/15/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

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		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	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.7 % 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
 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 - 3 3' (H236227-14)

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	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 % 71.5-134

Chloride, SM4500Cl-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		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	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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
 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 - 3 3-3.5' (H236227-15)

BTEx 8021B		mg/kg		Analyzed 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 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	11/15/2023	ND	448	112	400	0.00		

TPH 8015M		mg/kg		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	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by 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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A handwritten signature in black ink, appearing to read "Celey D. Keene", written in a cursive style.

Celey D. Keene, Lab Director/Quality Manager



Work Order No: H236227

Page 1 of 2



Project Manager:	Ethan Sessums	Bill to: (if different)	Dale Woodall
Company Name:	NTG Environmental	Company Name:	Devon
Address:	209 W McKay St	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	432-766-1918	Email:	

Work Order Comments					
Program:	UST/PST	<input type="checkbox"/> PRP	<input type="checkbox"/> Brownfields	<input type="checkbox"/> RC	<input type="checkbox"/> Superfund
State of Project:					
Reporting:	Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> ST/UST	<input type="checkbox"/> RRP	<input type="checkbox"/> Level IV
Deliverables:	EDD	<input type="checkbox"/>	ADaPT	<input type="checkbox"/>	Other:

Project Name:		Thistle 22 CTB 2		Turn Around		Pres. Code		ANALYSIS REQUEST																Preservative Codes							
Project Number:		237334		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		Due Date:		<div style="display: flex; justify-content: space-between;"> <div> BTEX 8021B TPH 8015M (GRO + DRO + MRO) Chloride 4500 </div> <div> HOLD None: NO Cool: Cool HCL: HC H₂SO₄: H₂ H₃PO₄: HP NaHSO₄: NABIS Na₂S₂O₃: NaSO₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SAPC </div> <div> DI Water: H₂O MeOH: Me HNO₃: HN NaOH: Na </div> </div>																None: NO							
Project Location		Lea Co, NM		TAT starts the day received by the lab, if received by 4:30pm																											
Sampler's Name:		Dmitry Nikanorov																													
PO #:		21233012																													
SAMPLE RECEIPT		Temp Blank:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Wet Ice:																		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
Received Intact:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Thermometer ID:		140																									
Cooler Custody Seals:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		Correction Factor:		1																									
Sample Custody Seals:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		Temperature Reading:		2-32																									
Total Containers:				Corrected Temperature:																											
Sample Identification		Depth (ft bgs)		Date		Time		Soil		Water		Grab/ Comp		# of Cont		Sample Comments															
TP-1		6"		11/14/2023				X				Grab/		1		X X X															
TP-1		1'		11/14/2023				X				Grab/		1		X X X															
TP-1		2'		11/14/2023				X				Grab/		1		X X X															
TP-1		3'		11/14/2023				X				Grab/		1		X X X															
TP-1		4'		11/14/2023				X				Grab/		1		X X X															
TP-2		6"		11/14/2023				X				Grab/		1		X X X															
TP-2		1'		11/14/2023				X				Grab/		1		X X X															
TP-2		2'		11/14/2023				X				Grab/		1		X X X															
TP-2		3'		11/14/2023				X				Grab/		1		X X X															
TP-2		4'		11/14/2023				X				Grab/		1		X X X															

[illegible]

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

of Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$2.00 for each sample submitted.							
Relinquished by: (Signature)		Received by: (Signature)		Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1				11/4/23	2		
3					4		
5					6		

Revised Date 05/12/2020 Rev. 20



Chain of Custody

Work Order No:

1230225

Page 2 of 2



Project Manager:	Ethan Sessums	Bill to: (if different)	Dale Woodall
Company Name:	NTG Environmental	Company Name:	Devon
Address:	209 W McKay St	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	432-766-1918	Email:	

Work Order Comments				
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/>	rownfields <input type="checkbox"/> RC <input type="checkbox"/>	perfund <input type="checkbox"/>	
State of Project:				
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/>	ST/UST <input type="checkbox"/> RRP <input type="checkbox"/>	Level IV <input type="checkbox"/>	
Deliverables:	EDD <input type="checkbox"/>	ADaPT <input type="checkbox"/>	Other:	

[illegible]

Additional Comments:

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 		11-4-23 1408	2		
3			4		
5			6		



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 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)

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	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 % 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	
Chloride	240	16.0	02/16/2024	ND	448	112	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*	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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
 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 - 2 0 - .5 (H240741-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	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 % 71.5-134

Chloride, SM4500Cl-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		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*	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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
 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 - 3 0 - .5 (H240741-03)

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	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 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed 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		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 75.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 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: H - 2A 0 - .5 (H240741-04)

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	02/16/2024	ND	1.89	94.7	2.00	13.0		
Toluene*	<0.050	0.050	02/16/2024	ND	1.79	89.4	2.00	17.1		
Ethylbenzene*	<0.050	0.050	02/16/2024	ND	1.81	90.5	2.00	18.4		
Total Xylenes*	<0.150	0.150	02/16/2024	ND	5.33	88.9	6.00	18.4		
Total BTEX	<0.300	0.300	02/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed 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		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, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 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: H - 6 0 - .5 (H240741-05)

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	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 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	02/16/2024	ND	432	108	400	3.64	

TPH 8015M		mg/kg		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 77.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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
 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: H - 7 0 - .5 (H240741-06)

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	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 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	416	16.0	02/16/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		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 75.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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
 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: H - 8 0 - .5 (H240741-07)

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	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 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	02/16/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		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*	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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
 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: H - 9 0 - .5 (H240741-08)

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	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 % 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	
Chloride	144	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 81.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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
 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: H - 10 0 - .5 (H240741-09)

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	02/16/2024	ND	1.89	94.7	2.00	13.0		
Toluene*	<0.050	0.050	02/16/2024	ND	1.79	89.4	2.00	17.1		
Ethylbenzene*	<0.050	0.050	02/16/2024	ND	1.81	90.5	2.00	18.4		
Total Xylenes*	<0.150	0.150	02/16/2024	ND	5.33	88.9	6.00	18.4		
Total BTEX	<0.300	0.300	02/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed 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		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*	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager




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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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Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>N-CLAS</u>				BILL TO				ANALYSIS REQUEST											
Project Manager: <u>Ethan Sessums</u>				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div>TPH</div> <div>Chlorides</div> <div>BTEX</div> </div>											
Address: <u>209 W McElroy</u>				Company:															
City: <u>Carlsbad</u> State: <u>NM</u> Zip: <u>88220</u>				Attn:															
Phone #: <u>254-266-5456</u> Fax #:				Address:															
Project #: <u>237334</u> Project Owner: <u>Devon</u>				City:															
Project Name: <u>Thistle 22</u>				State: Zip:															
Project Location: <u>Lea County</u>				Phone #:															
Sampler Name: <u>Tyler Umbell</u>				Fax #:															
FOR LAB USE ONLY																			
Lab I.D.		Sample I.D.		(G)IRAB OR (C)OMP.		# CONTAINERS		MATRIX				PRESERV.		SAMPLING					
								GROUNDWATER											
								WASTEWATER											
								SOIL											
								OIL											
								SLUDGE											
								OTHER:											
								ACID/BASE:											
								ICE / COOL											
								OTHER:											
								DATE				TIME							
1		V-1 0-.5		6		1		X				2-15		10:00					
2		V-2 0-.5												10:05					
3		V-3 0-.5												10:10					
4		H-2A 0-.5												10:15					
5		H-6 0-.5												10:20					
6		H-7 0-.5												10:25					
7		H-8 0-.5												10:30					
8		H-9 0-.5												10:35					
9		H-10 0-.5												10:40					
10																			

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Relinquished By: <u>[Signature]</u>		Date: <u>2-15</u>		Received By: <u>[Signature]</u>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
Time: <u>2:45</u>		Time:		Time:		All Results are emailed. Please provide Email address:	
Relinquished By:		Date:		Received By:		REMARKS:	
Time:		Time:		Time:			
Delivered By: (Circle One)		Observed Temp. °C <u>0.20</u>		Sample Condition		Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>	
Sampler - UPS - Bus - Other:		Corrected Temp. °C		Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No		Bacteria (only) Sample Condition	
				CHECKED BY: (Initials) <u>[Signature]</u>		Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	
						Thermometer ID #140	
						Correction Factor 0°C	
						Observed Temp. °C	
						Corrected Temp. °C	

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



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 05/15/2024
 Reported: 05/17/2024
 Project Name: THISTLE 22 CTB 2
 Project Number: 237334
 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 2' (H242672-01)

BTX 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	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 BTX	<0.300	0.300	05/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		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		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	16.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

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



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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
 Reported: 05/17/2024
 Project Name: THISTLE 22 CTB 2
 Project Number: 237334
 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 3' (H242672-02)

BTX 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	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 BTX	<0.300	0.300	05/15/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	05/16/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	33.7	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 130 % 49.1-148

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



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 05/15/2024
 Reported: 05/17/2024
 Project Name: THISTLE 22 CTB 2
 Project Number: 237334
 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)

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	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 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	05/16/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	<10.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					

Surrogate: 1-Chlorooctane 82.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.6 % 49.1-148

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



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 05/15/2024
 Reported: 05/17/2024
 Project Name: THISTLE 22 CTB 2
 Project Number: 237334
 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 5' (H242672-04)

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	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 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	05/16/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	<10.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					

Surrogate: 1-Chlorooctane 94.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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

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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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A handwritten signature in black ink, appearing to read "Mike Snyder", is written over a horizontal line.

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 7 of 7

Company Name: NTGE				BILL TO				ANALYSIS REQUEST																		
Project Manager: Ethan Sessions				P.O. #: 21298433				<div style="display: flex; justify-content: space-around; font-size: 2em;"> BTEX TPH Chloride </div>																		
Address: 209 W McKay St				Company: Devon																						
City: Carlsbad State: NM Zip: 88720				Attn:																						
Phone #: Fax #:				Address:																						
Project #: 237334 Project Owner:				City:																						
Project Name: Thistle 22 CTB 2				State: Zip:																						
Project Location: Lea County				Phone #:																						
Sampler Name: Clayton T.				Fax #:																						
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING																		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME												
H2H2072	DS-1 2'	G	1			X					✓		5/15	11:00												
1	DS-1 3'	↓	↓			↓							↓	↓												
2	DS-1 4'	↓	↓			↓							↓	↓												
3	DS-1 5'	↓	↓			↓							↓	↓												
4																										

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Relinquished By:	Date: 5/15	Received By:	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
Relinquished By:	Time: 12:07	Received By:	All Results are emailed. Please provide Email address:
Delivered By: (Circle One)	Observed Temp. °C 3.4	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	REMARKS:
Sampler - UPS - Bus - Other:	Corrected Temp. °C	CHECKED BY: (Initials) TO	Turnaround Time: Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/> 48 hrs
Thermometer ID #140 Correction Factor 0°C		Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	Observed Temp. °C Corrected Temp. °C

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



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 05/15/2024
 Reported: 05/17/2024
 Project Name: THISTLE 22 CTB 2
 Project Number: 237334
 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: SW - 8A (H242673-01)

BTX 8021B		mg/kg		Analyzed 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 BTX	<0.300	0.300	05/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	
Chloride	16.0	16.0	05/16/2024	ND	400	100	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	<10.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					

Surrogate: 1-Chlorooctane 92.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 05/15/2024
 Reported: 05/17/2024
 Project Name: THISTLE 22 CTB 2
 Project Number: 237334
 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: SW - 7A (H242673-02)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/16/2024	ND	2.08	104	2.00	16.1	
Toluene*	<0.050	0.050	05/16/2024	ND	2.04	102	2.00	15.8	
Ethylbenzene*	<0.050	0.050	05/16/2024	ND	2.08	104	2.00	16.0	
Total Xylenes*	<0.150	0.150	05/16/2024	ND	6.74	112	6.00	15.8	
Total BTEX	<0.300	0.300	05/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1180	16.0	05/16/2024	ND	400	100	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	<10.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					

Surrogate: 1-Chlorooctane 91.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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



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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
 Reported: 05/17/2024
 Project Name: THISTLE 22 CTB 2
 Project Number: 237334
 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: SW - 10 (H242673-03)

BTEX 8021B		mg/kg		Analyzed 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 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	05/16/2024	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	<10.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					

Surrogate: 1-Chlorooctane 87.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 05/15/2024
 Reported: 05/17/2024
 Project Name: THISTLE 22 CTB 2
 Project Number: 237334
 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: CS - 17 (H242673-04)

BTX 8021B		mg/kg		Analyzed 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 BTX	<0.300	0.300	05/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2480	16.0	05/16/2024	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	<10.0	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	05/16/2024	ND					

Surrogate: 1-Chlorooctane 96.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

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



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 05/15/2024
 Reported: 05/17/2024
 Project Name: THISTLE 22 CTB 2
 Project Number: 237334
 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: CS - 21 (H242673-05)

BTEx 8021B		mg/kg		Analyzed 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 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	05/16/2024	ND	400	100	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/16/2024	ND	177	88.3	200	1.27	
DRO >C10-C28*	65.5	10.0	05/16/2024	ND	173	86.4	200	2.87	
EXT DRO >C28-C36	12.2	10.0	05/16/2024	ND					

Surrogate: 1-Chlorooctane 88.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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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A handwritten signature in black ink, appearing to read "Mike Snyder".

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: NTGE				BILL TO				ANALYSIS REQUEST																		
Project Manager: Ethan Sessums				P.O. #: 21298433				<div style="display: flex; justify-content: space-around; font-size: 2em;"> BTEX TPH Chloride </div>																		
Address: 209 W McKay St				Company: Devon																						
City: Carlsbad State: NM Zip: 88270				Attn:																						
Phone #: Fax #:				Address:																						
Project #: 237334 Project Owner:				City:																						
Project Name: Thistle 22 CTB 2				State: Zip:																						
Project Location: Lea County				Phone #:																						
Sampler Name: Clayton T				Fax #:																						
FOR LAB USE ONLY				MATRIX		PRESERV		SAMPLING																		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME												
H242673	SW-8A	C	1			X							5/15	10:00												
1	SW-7A																									
2	SW-10																									
3	CS-17																									
4	CS-21																									
5																										

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Relinquished By:	Date: 5/15	Received By:	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Time: 12:05pm			All Results are emailed. Please provide Email address:	
Relinquished By:	Date:	Received By:	REMARKS:	
Time:				
Delivered By: (Circle One)	Observed Temp. °C 3.4	Sample Condition	CHECKED BY: (Initials)	Turnaround Time: Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/>
Sampler - UPS - Bus - Other:	Corrected Temp. °C	<input checked="" type="checkbox"/> Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No		Bacteria (only) Sample Condition Cool Intact Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C
				Thermometer ID #140 Correction Factor 0°C

FORM 000-R 5.4 07/11/20

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 05/20/2024
 Reported: 05/22/2024
 Project Name: THISTLE 22 CTB 2
 Project Number: 237334
 Project Location: DEVON - LEA CO., NM

Sampling Date: 05/20/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

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

BTX 8021B		mg/kg		Analyzed 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 BTX	<0.300	0.300	05/21/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	05/20/2024	ND	416	104	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	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 05/20/2024
 Reported: 05/22/2024
 Project Name: THISTLE 22 CTB 2
 Project Number: 237334
 Project Location: DEVON - LEA CO., NM

Sampling Date: 05/20/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

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

BTEx 8021B		mg/kg		Analyzed 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 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	05/20/2024	ND	416	104	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	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 05/20/2024
 Reported: 05/22/2024
 Project Name: THISTLE 22 CTB 2
 Project Number: 237334
 Project Location: DEVON - LEA CO., NM

Sampling Date: 05/20/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

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

BTEx 8021B		mg/kg		Analyzed 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 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed 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		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/20/2024	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 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager

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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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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: MTGE Project Manager: Ethan Sessums Address: 209 W. McKay Street City: Carlsbad State: NM Zip: 88220 Phone #: 254-266-5456 Fax #: Project #: 237334 Project Owner: Devon Project Name: Thistle 22 CTB 2 Project Location: Lea Co, NM Sampler Name: Kenny Hawn				BILL TO P.O. #: 21298433 Company: Devon Attn: Dale Woodall Address: City: State: Zip: Phone #: Fax #:				ANALYSIS REQUEST																																	
FOR LAB USE ONLY		Lab I.D.		Sample I.D.		G/RAB OR (C)OMP.		# CONTAINERS		GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER		ACID/BASE		ICE / COOL		OTHER		DATE		TIME		BTEX		TPH		Chloride					
		H242701		DS-2 DS-3 DS-4		0-6"		G 1 G 1 G 1		1		1		1		1		1		1		1		1		1		5/20/24		10:40		10:45		10:50							

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Relinquished By: 		Date: 5/20/24 Time: 12:29		Received By: 		Date: Time:		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: All Results are emailed. Please provide Email address:	
Relinquished By: 		Date: Time:		Received By: 		Date: Time:		REMARKS:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Observed Temp. °C: 5.6 Corrected Temp. °C:		Sample Condition: Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		CHECKED BY: (Initials) 		Turnaround Time: Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Thermometer ID #140 Correction Factor 0°C	
								Bacteria (only) Sample Condition Cool Intact Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C	

FORM 006 R 3.4 07/11/23

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



Environment Testing

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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



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

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

Client: NT Global
Project/Site: THISTLE 22

Laboratory Job ID: 890-5929-1

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Definitions/Glossary

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: NT Global
Project: THISTLE 22

Job ID: 890-5929-1

Job ID: 890-5929-1

Eurofins Carlsbad

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 method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

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

Receipt

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

Receipt Exceptions

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

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

GC VOA

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

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

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

GC Semi VOA

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

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

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

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

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

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

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Case Narrative

Client: NT Global
Project: THISTLE 22

Job ID: 890-5929-1

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
Project/Site: THISTLE 22

Job ID: 890-5929-1

Client Sample ID: H-1

Lab Sample ID: 890-5929-1

Date Collected: 01/09/24 00:00

Matrix: Solid

Date Received: 01/09/24 14:20

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	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 BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			01/11/24 23:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/12/24 05:48	1

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

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

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			01/11/24 22:54	1

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)

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

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Client Sample Results

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

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
1,4-Difluorobenzene (Surr)	82		70 - 130	01/11/24 12:30	01/11/24 23:21	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			01/11/24 23:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			01/12/24 06:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		01/11/24 13:45	01/12/24 06:10	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		01/11/24 13:45	01/12/24 06:10	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		01/11/24 13:45	01/12/24 06:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	304	S1+	70 - 130				01/11/24 13:45	01/12/24 06:10	1
o-Terphenyl	266	S1+	70 - 130				01/11/24 13:45	01/12/24 06:10	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			01/11/24 14:49	1

Client Sample ID: H-4

Lab Sample ID: 890-5929-3

Date Collected: 01/09/24 00:00

Matrix: Solid

Date Received: 01/09/24 14:20

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/11/24 12:30	01/11/24 23:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/11/24 12:30	01/11/24 23:42	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/11/24 12:30	01/11/24 23:42	1
m-Xylene & p-Xylene	<0.00398	U *	0.00398		mg/Kg		01/11/24 12:30	01/11/24 23:42	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/11/24 12:30	01/11/24 23:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/11/24 12:30	01/11/24 23:42	1

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

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/11/24 23:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			01/11/24 22:02	1

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Client Sample Results

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

Client Sample ID: H-4

Lab Sample ID: 890-5929-3

Date Collected: 01/09/24 00:00

Matrix: Solid

Date Received: 01/09/24 14:20

Sample Depth: 0.5

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

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.04	U	5.04		mg/Kg			01/11/24 14:54	1	

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: SW846 8021B - Volatile Organic Compounds (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00202	U	0.00202		mg/Kg		01/11/24 12:30	01/12/24 00:02	1	
Toluene	<0.00202	U	0.00202		mg/Kg		01/11/24 12:30	01/12/24 00:02	1	
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/11/24 12:30	01/12/24 00:02	1	
m-Xylene & p-Xylene	<0.00403	U *	0.00403		mg/Kg		01/11/24 12:30	01/12/24 00:02	1	
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/11/24 12:30	01/12/24 00:02	1	
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		01/11/24 12:30	01/12/24 00:02	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	105		70 - 130				01/11/24 12:30	01/12/24 00:02	1	
1,4-Difluorobenzene (Surr)	101		70 - 130				01/11/24 12:30	01/12/24 00:02	1	

Method: TAL SOP Total BTEX - Total BTEX Calculation										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	<0.00403	U	0.00403		mg/Kg			01/12/24 00:02	1	

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<50.5	U	50.5		mg/Kg			01/11/24 23:07	1	

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		01/11/24 13:50	01/11/24 23:07	1	
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		01/11/24 13:50	01/11/24 23:07	1	
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		01/11/24 13:50	01/11/24 23:07	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	126		70 - 130				01/11/24 13:50	01/11/24 23:07	1	
o-Terphenyl	127		70 - 130				01/11/24 13:50	01/11/24 23:07	1	

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Client Sample Results

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

Client Sample ID: H-5

Date Collected: 01/09/24 00:00

Date Received: 01/09/24 14:20

Sample Depth: 0.5

Lab Sample ID: 890-5929-4

Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.62		4.97		mg/Kg			01/11/24 15:00	1

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Surrogate Summary

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

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

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (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
Surrogate Legend			
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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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+
MB 880-70655/1-A	Method Blank	133 S1+	155 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-70580/5-A							Client Sample ID: Method Blank		
Matrix: Solid							Prep Type: Total/NA		
Analysis Batch: 70626							Prep Batch: 70580		
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/10/24 14:02	01/11/24 11:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/10/24 14:02	01/11/24 11:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/10/24 14:02	01/11/24 11:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/10/24 14:02	01/11/24 11:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/10/24 14:02	01/11/24 11:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/10/24 14:02	01/11/24 11:00	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130				01/10/24 14:02	01/11/24 11:00	1
1,4-Difluorobenzene (Surr)	90		70 - 130				01/10/24 14:02	01/11/24 11:00	1

Lab Sample ID: MB 880-70640/5-A							Client Sample ID: Method Blank		
Matrix: Solid							Prep Type: Total/NA		
Analysis Batch: 70626							Prep Batch: 70640		
Analyte	MB Result	MB 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 21:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/11/24 12:30	01/11/24 21:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/11/24 12:30	01/11/24 21:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/11/24 12:30	01/11/24 21:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/11/24 12:30	01/11/24 21:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/11/24 12:30	01/11/24 21:37	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	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							Client Sample ID: Lab Control Sample		
Matrix: Solid							Prep Type: Total/NA		
Analysis Batch: 70626							Prep Batch: 70640		
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130						
1,4-Difluorobenzene (Surr)	107		70 - 130						

Lab Sample ID: LCSD 880-70640/2-A							Client Sample ID: Lab Control Sample Dup		
Matrix: Solid							Prep Type: Total/NA		
Analysis Batch: 70626							Prep Batch: 70640		
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1046		mg/Kg		105	70 - 130	10	35

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QC Sample Results

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

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

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

Matrix: Solid

Analysis Batch: 70626

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 70640

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
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

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

Lab Sample ID: 890-5939-A-1-B MS

Matrix: Solid

Analysis Batch: 70626

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 70640

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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	

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

Lab Sample ID: 890-5939-A-1-C MSD

Matrix: Solid

Analysis Batch: 70626

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 70640

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits			
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

Surrogate	MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

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

Lab Sample ID: MB 880-70654/1-A

Matrix: Solid

Analysis Batch: 70617

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 70654

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/11/24 13:45	01/11/24 20:57	1

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QC Sample Results

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

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

Lab Sample ID: MB 880-70654/1-A

Matrix: Solid

Analysis Batch: 70617

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 70654

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/11/24 13:45	01/11/24 20:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/11/24 13:45	01/11/24 20:57	1
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1-Chlorooctane	178	S1+	70 - 130				01/11/24 13:45	01/11/24 20:57	1
o-Terphenyl	179	S1+	70 - 130				01/11/24 13:45	01/11/24 20:57	1

Lab Sample ID: LCS 880-70654/2-A

Matrix: Solid

Analysis Batch: 70617

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 70654

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	781.1		mg/Kg		78	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	854.2		mg/Kg		85	70 - 130		
Surrogate		LCS	LCS				Limits		
		%Recovery	Qualifier						
1-Chlorooctane		82					70 - 130		
o-Terphenyl		86					70 - 130		

Lab Sample ID: LCSD 880-70654/3-A

Matrix: Solid

Analysis Batch: 70617

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 70654

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	831.3		mg/Kg		83	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	1015		mg/Kg		101	70 - 130	17	20
Surrogate		LCSD	LCSD				Limits		
		%Recovery	Qualifier						
1-Chlorooctane		98					70 - 130		
o-Terphenyl		114					70 - 130		

Lab Sample ID: 890-5932-A-1-E MS

Matrix: Solid

Analysis Batch: 70617

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 70654

Analyte	Sample	Sample	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
	Result	Qualifier									
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	1000	1316		mg/Kg		129	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U F1	1000	1591	F1	mg/Kg		157	70 - 130		
Surrogate		MS	MS						Limits		
		%Recovery	Qualifier								
1-Chlorooctane		156	S1+						70 - 130		
o-Terphenyl		129							70 - 130		

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QC Sample Results

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

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

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

Matrix: Solid

Analysis Batch: 70617

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 70654

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	1000	1360	F1	mg/Kg		134	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	1000	1628	F1	mg/Kg		160	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	159	S1+	70 - 130								
o-Terphenyl	132	S1+	70 - 130								

Lab Sample ID: MB 880-70655/1-A

Matrix: Solid

Analysis Batch: 70619

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 70655

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/11/24 13:50	01/11/24 20:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/11/24 13:50	01/11/24 20:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/11/24 13:50	01/11/24 20:57	1
Surrogate	MB %Recovery	MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	815.7		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	1000	986.4		mg/Kg		99	70 - 130
Surrogate	LCS %Recovery	LCS 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 Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 70655

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	891.3		mg/Kg		89	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	968.6		mg/Kg		97	70 - 130	2	20

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QC Sample Results

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

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

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

Matrix: Solid

Analysis Batch: 70619

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 70655

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

Lab Sample ID: 890-5929-3 MS

Matrix: Solid

Analysis Batch: 70619

Client Sample ID: H-4

Prep Type: Total/NA

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	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	113		70 - 130							
o-Terphenyl	104		70 - 130							

Lab Sample ID: 890-5929-3 MSD

Matrix: Solid

Analysis Batch: 70619

Client Sample ID: H-4

Prep Type: Total/NA

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 C10-C28)	<49.6	U	1010	908.2		mg/Kg		87	70 - 130	3	20	
Surrogate	%Recovery	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

Matrix: Solid

Analysis Batch: 70595

Client Sample ID: Method Blank

Prep Type: Soluble

	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

Matrix: Solid

Analysis Batch: 70595

Client Sample ID: Lab Control Sample

Prep Type: Soluble

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

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QC Sample Results

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-70487/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 70595											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	253.7		mg/Kg		101	90 - 110	1	20
Lab Sample ID: 880-37706-A-2-B MS				Client Sample ID: Matrix Spike							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 70595											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1530		2510	4281		mg/Kg		110	90 - 110		
Lab Sample ID: 880-37706-A-2-C MSD				Client Sample ID: Matrix Spike Duplicate							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 70595											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1530		2510	4244		mg/Kg		108	90 - 110	1	20
Lab Sample ID: MB 880-70612/1-A				Client Sample ID: Method Blank							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 70696											
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed		Dil Fac	
Chloride	<5.00	U	5.00		mg/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							
Analysis Batch: 70696											
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	248.4		mg/Kg		99	90 - 110		
Lab Sample ID: LCSD 880-70612/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 70696											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	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							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 70696											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%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							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 70696											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	89.1	F1	249	312.6		mg/Kg		90	90 - 110	0	20

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QC Association Summary

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

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
Project/Site: THISTLE 22

Job ID: 890-5929-1

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

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

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QC Association Summary

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

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

Lab Chronicle

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

Client Sample ID: H-1

Date Collected: 01/09/24 00:00

Date Received: 01/09/24 14:20

Lab Sample ID: 890-5929-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Date Collected: 01/09/24 00:00

Date Received: 01/09/24 14:20

Lab Sample ID: 890-5929-2

Matrix: Solid

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

Client Sample ID: H-4

Date Collected: 01/09/24 00:00

Date Received: 01/09/24 14:20

Lab Sample ID: 890-5929-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Sample ID: 890-5929-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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

Lab Chronicle

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

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

Lab Sample ID: 890-5929-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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
Project/Site: THISTLE 22

Job ID: 890-5929-1

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI 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

Sample Summary

Client: NT Global
Project/Site: THISTLE 22

Job ID: 890-5929-1

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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Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page ____ of ____




Project Manager:	Ethan Sessums	Bill to: (if different)	Dave Woodall
Company Name:	NTGE	Company Name:	Devon
Address:	204 W McKay St	Address:	
City, State ZIP:	Carlsbad Nn 88220	City, State ZIP:	
Phone:		Email:	NTG_emailchain

Work Order Comments					
Program:	UST/PST <input type="checkbox"/>	PRP <input type="checkbox"/>	Brownfields <input type="checkbox"/>	RRC <input type="checkbox"/>	Superfund <input type="checkbox"/>
State of Project:					
Reporting:	Level II <input type="checkbox"/>	Level III <input type="checkbox"/>	PST/UST <input type="checkbox"/>	TRRP <input type="checkbox"/>	Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/>	ADaPT <input type="checkbox"/>	Other:		

[illegible]

Total 200.7/6010	200.8/6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP/SPLP 6010 : 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)		Received by: (Signature)		Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1				11/9/24			
3							
5							

Revised Date: 08/25/2020 Rev. 2020.2

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	

Login Sample Receipt Checklist

Client: NT Global

Job Number: 890-5929-1

Login Number: 5929

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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

QUESTIONS

Action 365802

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 365802
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2327226475
Incident Name	NAPP2327226475 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 <i>Please answer all the questions in this group.</i>	
Site Name	THISTLE UNIT 22 CTB 2
Date Release Discovered	09/28/2023
Surface Owner	State

Incident Details <i>Please answer all the questions in this group.</i>	
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 <i>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.</i>	
Crude Oil Released (bbls) Details	Cause: Equipment Failure Other (Specify) Crude Oil Released: 15 BBL Recovered: 15 BBL Lost: 0 BBL.
Produced Water Released (bbls) Details	Cause: Equipment Failure Other (Specify) Produced Water Released: 27 BBL Recovered: 25 BBL Lost: 2 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	The water dump hung open causing the gun barrel to be over pressured and for liquid to run into containment. 40 bbls was recovered with 1.5 bbls recovered from outside the containment. The 3 phase was isolated to stop the spill.

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QUESTIONS, Page 2

Action 365802

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:	6137
	Action Number:	365802
	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	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
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 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.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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@dmv.com Date: 07/19/2024
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QUESTIONS, Page 3

Action 365802

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:
	6137
	Action Number: 365802
	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 provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl 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 completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	11/14/2023
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	3796
What is the estimated volume (in cubic yards) that will be remediated	169

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4

Action 365802

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:	6137
	Action Number:	365802
	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@dmn.com Date: 07/19/2024
----------------------------------------------------	--------------------------------------------------------------------------------------------------

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 365802

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:	6137
	Action Number:	365802
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS**Deferral Requests Only**

Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.

Requesting a deferral of the remediation closure due date with the approval of this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	areas are located around a tank battery, separators, above ground lines, and buried high voltage electrical lines
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	1616
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	239
<i>Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.</i>	
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
<i>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>	
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@dmn.com Date: 07/19/2024

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
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District III
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QUESTIONS, Page 6

Action 365802

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:	6137
	Action Number:	365802
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	343627
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/15/2024
What was the (estimated) number of samples that were to be gathered	3
What was the sampling surface area in square feet	600

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

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CONDITIONS

Action 365802

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 365802
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	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