

#### SITE INFORMATION

Closure Report
Blue Thunder 5 Federal #4 (12.04.21)
Eddy County, New Mexico
Unit P Sec 05 T19S R31E
32.683565°, -103.884622°

Crude Oil Release/Produced Water Point of Release: Wellhead Release Date: 12/04/2022

Volume Released: 3 barrels of Crude Oil, 8 barrels of Produced Water Volume Recovered: 0 barrels of Crude Oil, 0 barrels of Produced Water

## CARMONA RESOURCES

Prepared for: Concho Operating, LLC 15 West London Road Loving, New Mexico 88256

Prepared by: Carmona Resources, LLC 310 West Wall Street Suite 415 Midland, Texas 79701



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LABORATORY REPORTS

310 West Wall Street, Suite 415 Midland TX, 79701 432.813.1992

APPENDIX E



March 15, 2022

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

**Re:** Closure Report

**Blue Thunder 5 Federal #4 (12.04.21)** 

Concho Operating, LLC Incident ID NAPP2201126212

Site Location: Unit P, S05, T19S, R31E (Lat 32.683565°, Long -103.884622°)

**Eddy County, New Mexico** 

To whom it may concern:

On behalf of Concho Operating, LLC (COG), Carmona Resources, LLC has prepared this letter to document Blue Thunder 5 Federal No.4 (12.04.21) site activities. The site is located at 32.683565°, -103.884622° within Unit P, S05, T19S, R31E, in Eddy County, New Mexico (Figures 1 and 2).

#### 1.0 Site information and Background

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on December 4, 2021, due to a leak at the wellhead. It resulted in approximately three (3) barrels of crude oil and eight (8) barrels of produced water. Zero (0) barrels of crude oil were recovered, and zero (0) barrels of produced water were recovered. See figure 3. The initial C-141 form is attached in Appendix C.

On March 8, 2022, Robert Hamlet approved an extension for remediation activities and a closure report to be completed by June 4, 2022.

#### 2.0 Site Characterization and Groundwater

The site is located within a low karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, no known water sources are within a 0.50-mile radius of the location. The closest well is approximately 2.51 miles Northeast of the site in S35, T18S, R31E and was drilled in 1994. The well has a reported depth to groundwater of 260.67' feet below ground surface (ft bgs). A copy of the associated *USGS – National Water Information System* report is attached in Appendix D.

#### 3.0 NMAC Regulatory Criteria

Per the NMOCD regulatory criteria established in 19.15.29.12 NMAC, the following criteria were utilized in assessing the site.

- Benzene: 10 milligrams per kilogram (mg/kg).
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg.
- TPH: 100 mg/kg (GRO + DRO + MRO).
- Chloride: 600 mg/kg



#### **4.0 Site Assessment Activities**

On December 15, 2021, a third-party consultant performed site assessment activities to evaluate soil impacts stemming from the release. A total of seven (7) sample points were advanced to depths ranging from surface -0.5' bgs inside and surrounding the release area to evaluate the vertical and horizontal extent. See Figure 3 for the soil sample locations.

For chemical analysis, the soil samples were collected and placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories in Midland, Texas. The samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015 modified benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, and chloride by EPA method 300.0. The laboratory reports, including analytical methods, results, and chain-of-custody documents, are attached in Appendix E.

Refer to Table 1.

#### **5.0 Remediation Activities**

Carmona Resources personnel were onsite from March 9, 2022, through March 10, 2022, to supervise the remediation activities and collect confirmation samples. The areas were excavated to 1.5' below surface to remove all impacted soils.

A total of eight (8) confirmation samples were collected (CS-1 through CS-8), and eight (8) sidewall samples (SW-1 through SW-8) were collected every 200 square feet to ensure proper removal of the contaminated soils. All collected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 4500 Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E. The results of the sampling are summarized in Table 2. The excavation depths and confirmation sample locations are shown in Figure 4.

All the final confirmation samples were below the 19.15.29.12 NMAC criteria. Refer to Table 2.

Once the remediation activities were completed, the excavated areas were backfilled with clean material to surface grade. Approximately 80 cubic yards of material were excavated and transported offsite for proper disposal

#### 6.0 Conclusions

Based on the assessment finding and the analytical results, no further actions are required at the site. The final C-141 is attached, and COG formally requests closure of the spill. If you have any questions regarding this report or need additional information, please contact us at 432-813-1992.

Sincerely,

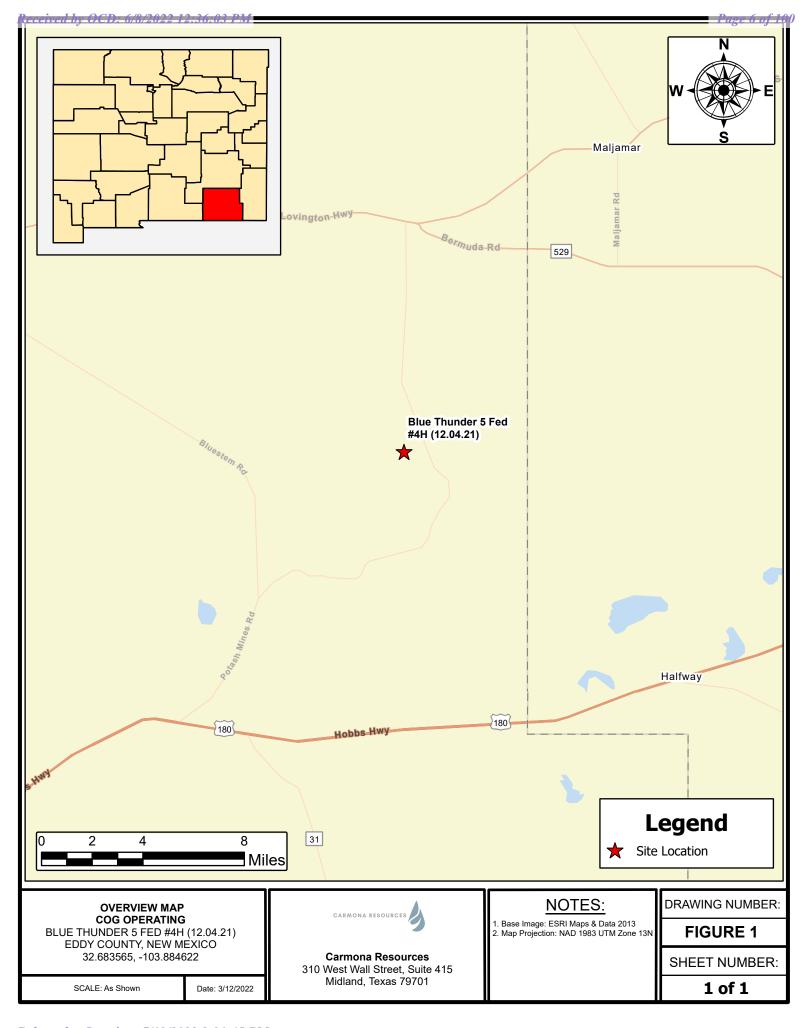
Carmona Resources, LLC

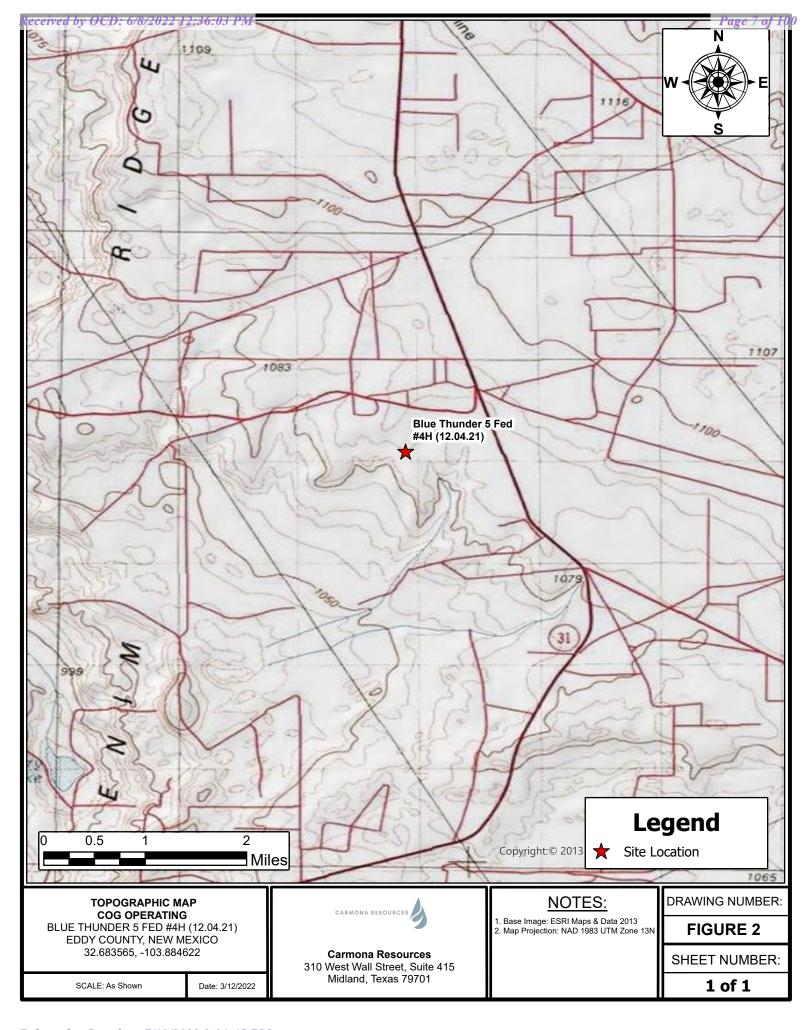
Mike Carmona

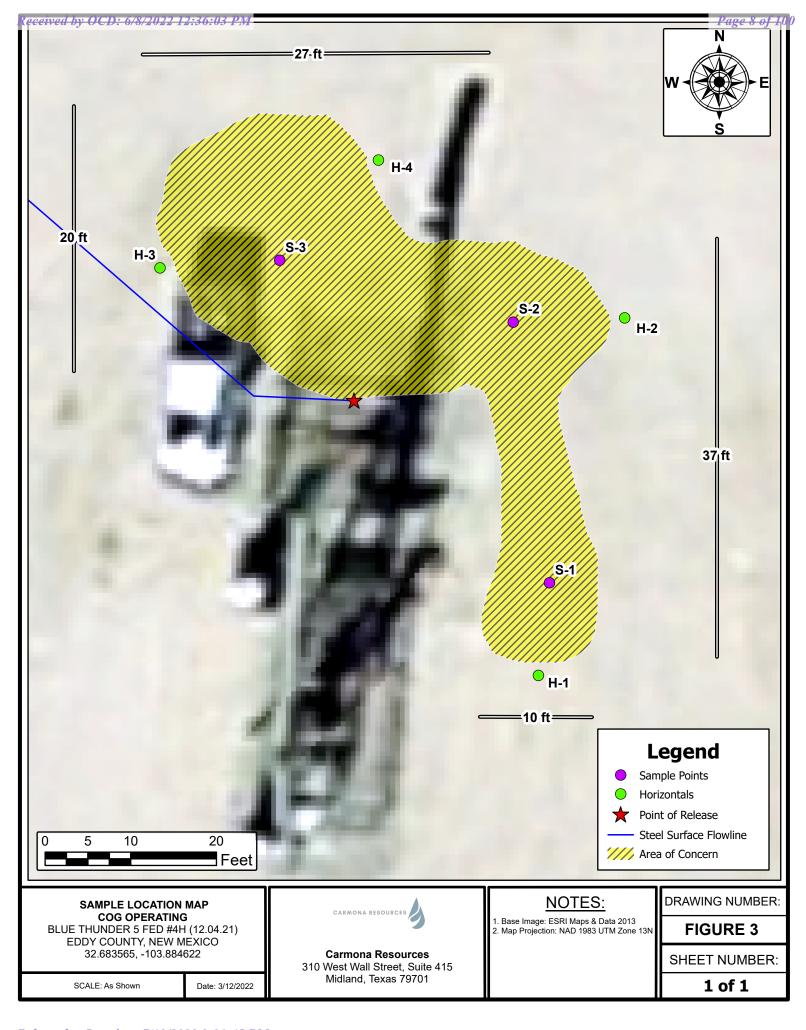
**Environmental Manager** 

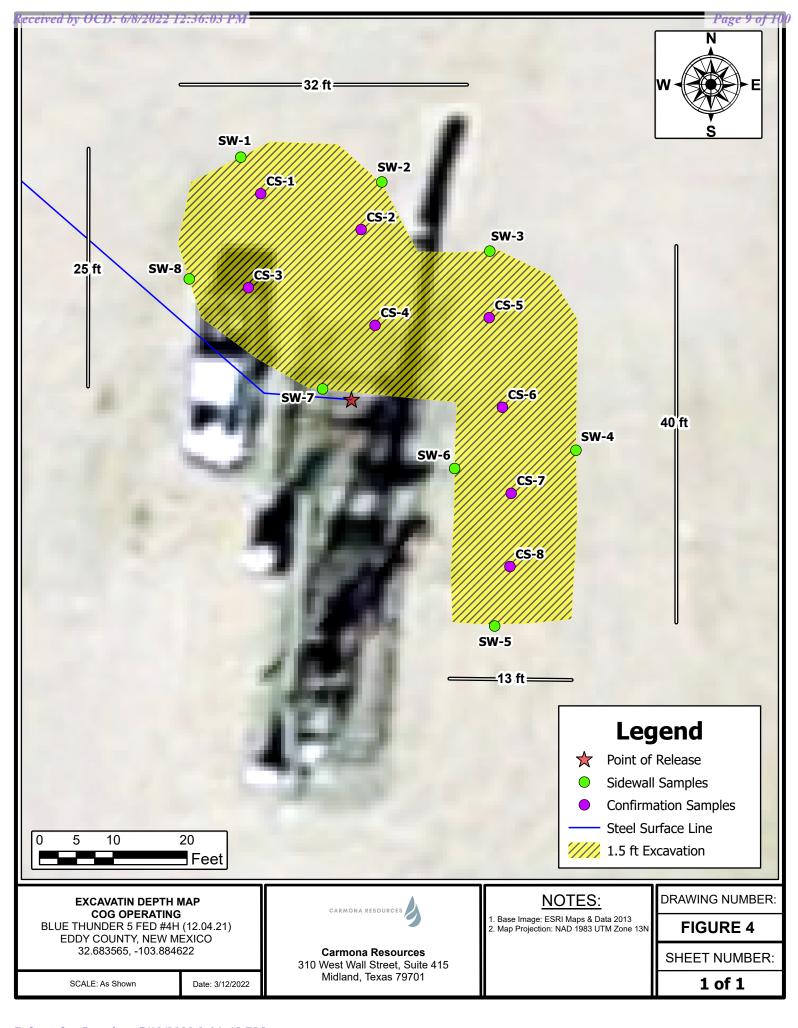
Clinton Merritt Sr Project Manager

## **FIGURES**









## **APPENDIX A**

Table 1
COG Operating, LLC
Blue Thunder 5 Fed #4H (12.04.21)
Eddy County, New Mexico

0	D. C.	Sample		TPI	H (mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Date	Depth (ft)	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
S-1	12/15/2021	0-0.5'	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	2,630
S-2	12/15/2021	0-0.5'	<49.9	431	<49.9	431	<0.0401	<0.0401	<0.0401	<0.0802	<0.0802	11,900
S-3	12/15/2021	0-0.5'	<50.0	136	<50.0	136	<0.0402	<0.0402	<0.0402	<0.0803	<0.0803	907
H-1	12/15/2021	0-0.5'	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	61.3
H-2	12/15/2021	0-0.5'	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	56.9
H-3	12/15/2021	0-0.5'	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	267
H-4	12/15/2021	0-0.5'	50.1	69.4	<50.0	120	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	56.2
Regulate				100 mg/kg	10 mg/kg	-	-	-	50 mg/kg	600 mg/kg		

(-) Not Analyzed

A - Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH- Total Petroleum Hydrocarbons

ft-feet

Removed

Table 2 COG Blue Thunder 5 Federal No.4 (12.04.21) Eddy County, New Mexico

				TPH	l (mg/kg)		Benzene	Toluene	Ethlybenzene	Xylene	Total BTEX	Chloride
Sample ID	Date	Depth (ft)	GRO	DRO	MRO	Total	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
CS-1	3/10/2022	1.5	<10.0	14.4	<10.0	14.4	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
CS-2	3/10/2022	1.5	<10.0	10.2	<10.0	10.2	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
CS-3	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
CS-4	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
CS-5	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
CS-6	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
CS-7	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
CS-8	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-1	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
SW-2	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
SW-3	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-4	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
SW-5	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
SW-6	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
SW-7	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
SW-8	3/10/2022	1.5	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	16.0
	ory Criteria A					100 mg/kg	10 mg/kg	-	-	-	50 mg/kg	600 mg/kg

(-) Not Analyzed

A – Table 1 - 19.15.29 NMAC mg/kg - milligram per kilogram TPH- Total Petroleum Hydrocarbons ft-feet (CS) Confirmation Sample (SW) Sidewall

## **APPENDIX B**

#### PHOTOGRAPHIC LOG

**Concho Operating, LLC** 

#### Photograph No. 1

Facility: Blue Thunder 5 Federal No.4

(12.04.21)

County: Eddy County, New Mexico

**Description:** 

View Southeast, areas of Confirmation samples (1-5)



#### Photograph No. 2

Facility: Blue Thunder 5 Federal No.4

(12.04.21)

County: Eddy County, New Mexico

**Description:** 

View Southeast, areas of Confirmation samples (1-4)



#### Photograph No. 3

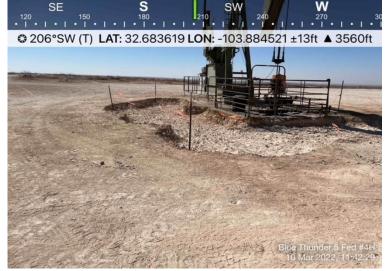
Facility: Blue Thunder 5 Federal No.4

(12.04.21)

County: Eddy County, New Mexico

Description:

View Southeast, areas of Confirmation samples (1-8)





## **APPENDIX C**

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

### **Release Notification**

#### **Responsible Party**

Responsible Party					OGRID				
Contact Name					Contact Telephone				
Contact email					(assigned by OCI	D)			
Contact mail	ing address								
			Location	of Release S	ource				
Latitude Longitude (NAD 83 in decimal degrees to 5 decimal places)									
Site Name				Site Type					
Date Release	Discovered			API# (if app	plicable)				
Unit Letter	Section	Township	Range	Cour	nty				
Crude Oil	Material	Federal Tr	Nature and	Volume of	justification for t	he volumes provided below) covered (bbls)			
Produced		Volume Release			Volume Recovered (bbls)				
Troduced	Water		ion of dissolved cl	nloride in the	` '				
Condensa	te	Volume Released	d (bbls)		Volume Rec	covered (bbls)			
☐ Natural G	as	Volume Released	d (Mcf)		Volume Rec	covered (Mcf)			
Other (describe) Volume/Weight Released (provide uni			units)	Volume/We	ight Recovered (provide units)				
Cause of Rela	ease								

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Page 2 Oil Conservation Division

	rage ageog a)
Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the	responsible party consider this a major release?
19.15.29.7(A) NMAC?		
☐ Yes ☐ No		
If VFS, was immediate no	ntice given to the OCD? By whom?	To whom? When and by what means (phone, email, etc)?
11 1 E5, was ininediate no	thee given to the OCD. By whom.	To whom: When and by what means (phone, email, etc).
	Initia	al Response
The responsible p	earty must undertake the following actions imm	nediately unless they could create a safety hazard that would result in injury
☐ The source of the relea	ase has been stopped.	
l <u></u>	s been secured to protect human healt	th and the environment.
Released materials have	ve been contained via the use of bern	ns or dikes, absorbent pads, or other containment devices.
All free liquids and re	coverable materials have been remov	ved and managed appropriately.
If all the actions described	l above have <u>not</u> been undertaken, ex	plain why:
D 1015200D (A) NR	11 ·	
has begun, please attach a	a narrative of actions to date. If rem	ence remediation immediately after discovery of a release. If remediation addial efforts have been successfully completed or if the release occurred AC), please attach all information needed for closure evaluation.
		to the best of my knowledge and understand that pursuant to OCD rules and se notifications and perform corrective actions for releases which may endanger
public health or the environm	nent. The acceptance of a C-141 report by	y the OCD does not relieve the operator of liability should their operations have
addition, OCD acceptance of		e a threat to groundwater, surface water, human health or the environment. In ator of responsibility for compliance with any other federal, state, or local laws
and/or regulations.		
Printed Name	9	Title:
Signature:	tanegaparge	Date:
email:		Telephone:
OCD Only		
Received by: Ramona Ma	arcus	Date: 01/11/2022

#### L48 Spill Volume Estimate Form Received by OCD: 6/8/2022 12:36:03 PM Number Page 18-of 100 Asset Area: NAPP2201126212 Release Discovery Date & Time: Release Type: Provide any known details about the event: Spill Calculation - On Pad Surface Pool Spill Deepest point in Estimated Pool Estimated Estimated volume Total Estimated

## of Spill

0.000

0.000

0.000

0.000

0.000

0.000

0.000

#DIV/01

#DIV/0!

Total Volume Release:

#DIV/0!

#DIV/0!

#DIV/0!

#DIV/0!

#DIV/0!

#DIV/0!

#DIV/0!

11.359

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	each of the areas (in.)	No. of boundaries of "shore" in each area	Area (sq. ft.)	Average Depth (ft.)	of each pool area (bbl.)	Penetration allowance (ft.)	Volume of Spi (bbl.)
Rectangle A	60.0	15.0	1.00	4	900.000	0.021	3.338	0.001	3.341
Rectangle B	60.0	36.0	1.00	4	2160.000	0.021	8.010	0.001	8.018
Rectangle C					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Rectangle D

Rectangle E

Rectangle F

Rectangle G

Rectangle H

Rectangle I

Released to Imaging: 7/13/2022 2:31:45 PM1

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

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

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

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

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

CONDITIONS

Action 71536

#### **CONDITIONS**

Operator:	OGRID:
COG OPERATING LLC	229137
600 W Illinois Ave	Action Number:
Midland, TX 79701	71536
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By		Condition Date
rmarcus	None	1/11/2022

Received by OCD: 6/8/2022 12:36:03 PM Form C-141 State of New Mexico Page 3 Oil Conservation Division

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Incident ID	
District RP	
Facility ID	
Application ID	

### **Site Assessment/Characterization**

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

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

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

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Application ID		

est of my knowledge and understand that pursuant to OCD rules and cations and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have t to groundwater, surface water, human health or the environment. In esponsibility for compliance with any other federal, state, or local laws
Title:
6/8/2022 Date:
Telephone:
Date:

Received by OCD: 6/8/2022 12:36:03 PM Form C-141 State of New Mexico Page 6 Oil Conservation Division

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Application ID	

### Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC								
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)								
☐ Laboratory analyses of final sampling (Note: appropriate ODC	C District office must be notified 2 days prior to final sampling)							
☐ Description of remediation activities								
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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.								
Printed Name:								
Signature: _ Paqui Prois	Date: 6/8/2022							
email:	Telephone:							
OCD Only								
Received by:	Date:							
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.								
Closure Approved by:	Date:							
Printed Name:	Title:							



#### COG Blue Thunder 5 Federal #4 (12.04.21) 48 Hr Sampling Notification



#### Mike Carmona < Mcarmona@carmonaresources.com>

11:17 AM

To: OCD.Enviro@state.nm.us Cc: Harris, Jacqui; Clint Merritt Bcc: Conner Moehring

#### Good morning,

On behalf of COG, Carmona Resources will be collecting confirmation samples at the below-referenced site for the at-risk remediation on 03/10/2022 at 10:20 a.m. Mountain Time. Please let me know if you have any questions.

COG Blue Thunder 5 Federal #4 (12.04.21) Sec 5 T19S R31E 32.683391 -103.884585 Eddy County, New Mexico

Mike J. Carmona 310 West Wall Street, Suite 415 Midland TX, 79701 M: 432-813-1992 Mcarmona@carmonaresources.com



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CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

RE: Incident #NAPP2201126212

Brittany,

Your request for an extension to June 4th, 2022 is approved. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet . Environmental Specialist - Advanced Environmental Bureau EMNRD - Oil Conservation Division 811 S. First Street | Artesia, NM 88210 575.909.0302 | robert.hamlet@state.nm.us http://www.emnrd.state.nm.us/OCD/



From: Esparza, Brittany < Brittany. Esparza@conocophillips.com>

Sent: Tuesday, March 8, 2022 8:31 AM

To: CFO Spill, BLM NM <BLM NM CFO Spill@blm.gov>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>

Cc: Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Gonzalez, Jessika L <Jessika.L.Gonzalez@conocophillips.com>; Esparza, Brittany, Esparza@conocophillips.com>; Harris, Jacqui, Harris, Jacqui, Harris, Jacqui, Harris, Jacqui, Harris, Jacqui, Harris, Lacqui, Harris, Jacqui, Harris, Har

<G.Fejervary@conocophillips.com>

Subject: [EXTERNAL] (Extension Request #1) Blue Thunder 5 Federal 004H (NAPP2201126212) 12-04-2021

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

To Whom it May Concern,

Under the new spill rule a Work Plan or Closure Report is due for the above release on March 4, 2022. ConocoPhillips is requesting a three-month extension until June 4, 2022 in order to complete ongoing remediation.

Please let me know if you have any questions or concerns.

Thank you,

Brittany N. Esparza

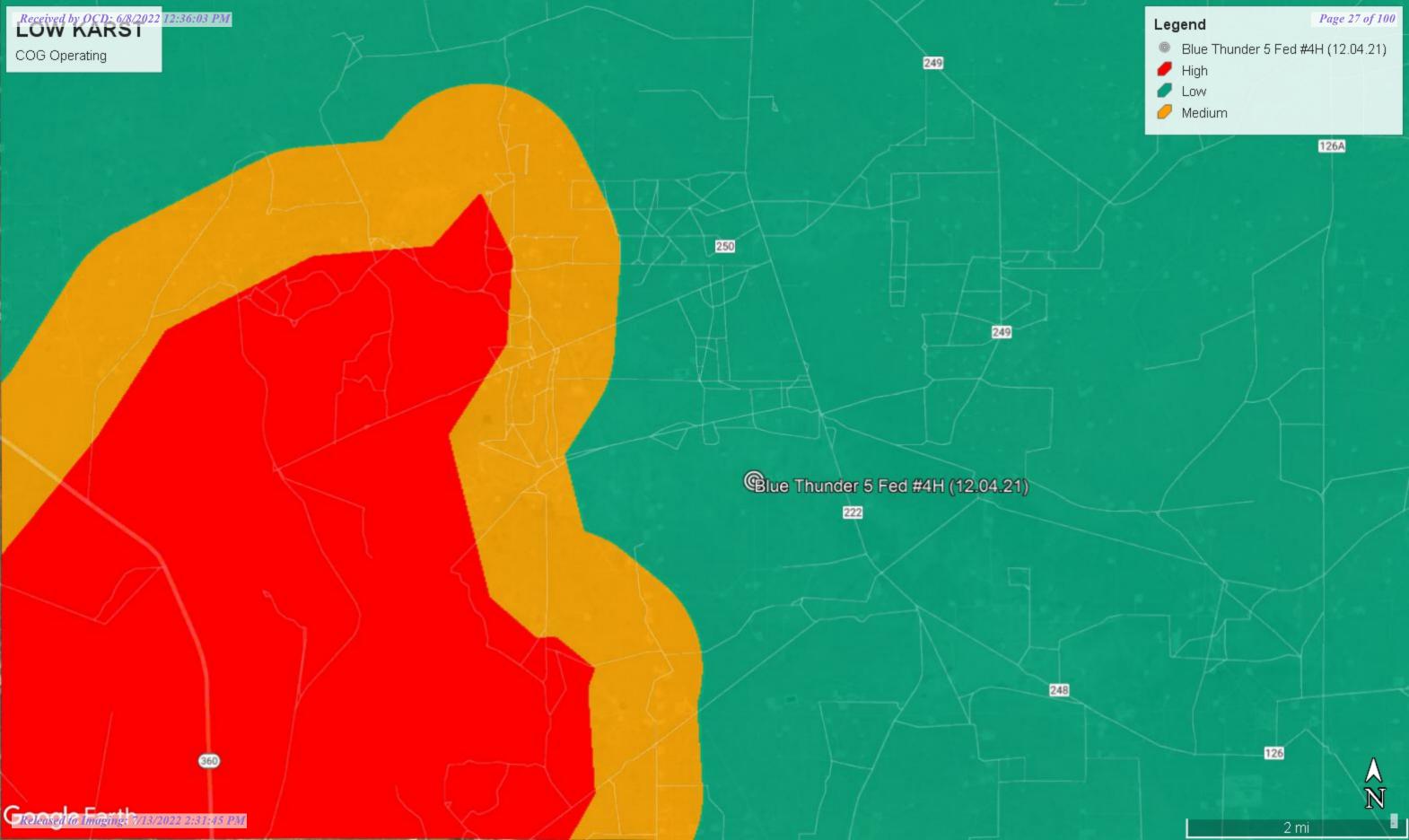
Brittany N. Esparza | Environmental Technician, Permian | ConocoPhillips

O: 432-221-0398 | C: 432-349-1911 | 1CC-331 Midland, Texas

Released to Imaging: 7/13/2022 2:31:45 PM

## **APPENDIX D**





(In feet)



## New Mexico Office of the State Engineer Water Column/Average Depth to Water

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

(R=POD has been replaced, O=orphaned,

C=the file is

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

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

		POD Sub-		Q	Q (	)					Depth	Depth	Water
POD Number	Code	basin	County	64	16	4 Sec	: Tws	Rng	X	Υ	Well	Water	Column
CP 00641 POD1		CP	ED		4 1	36	19S	31E	610247	3609634* 🌍	300	130	170
CP 00642 POD1		СР	ED		2 2	25	19S	31E	611025	3611657* 🌍	250		
CP 00722 POD1		СР	LE	4	3 3	28	198	31E	605106	3610273* 🎒	200		
CP 00722 POD1	R	СР	LE	4	3 3	28	19S	31E	605106	3610273* 🌍	200		
CP 00722 POD3		СР	LE	2	4 1	33	19S	31E	605519	3609673*	220	140	80
CP 00723 POD1		СР	ED	2	1 1	33	198	31E	605111	3610071* 🎒	139		
CP 00725 POD1		СР	ED	1	3 3	28	19S	31E	604906	3610473* 🌍	231		
CP 00829 POD1		СР	LE		2 4	16	19S	31E	606165	3614009* 🌍	120		
CP 00873 POD1		СР	LE		1 1	19	19S	31E	601772	3613147* 🎒	340	180	160
CP 01554 POD1		СР	LE	2	2 1	22	198	31E	607166	3613354 🌍	400		
CP 01554 POD2		СР	LE	2	2 1	22	198	31E	607165	3613322 🎒	400		
CP 01864 POD1		СР	ED	4	2 1	34	19S	31E	607068	3609824	110		

Average Depth to Water: 150 feet

> 130 feet Minimum Depth:

> Maximum Depth: 180 feet

Record Count: 12

**PLSS Search:** 

Township: 19S Range: 31E

\*UTM location was derived from PLSS - see Help

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.



USGS Home Contact USGS Search USGS

**National Water Information System: Web Interface** 

**USGS** Water Resources

Data Category:		Geographic Area:		
Groundwater	~	New Mexico	~	GO

#### Click to hideNews Bulletins

- Explore the NEW <u>USGS National Water Dashboard</u> interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

Important: <u>Next Generation Monitoring Location Page</u>

#### Search Results -- 1 sites found

Agency code = usgs site\_no list =

• 324159103503801

#### Minimum number of levels = 1

Save file of selected sites to local disk for future upload

#### USGS 324159103503801 18S.31E.35.31324

Eddy County, New Mexico

Latitude 32°42'07.3", Longitude 103°50'50.1" NAD83

Land-surface elevation 3,630 feet above NAVD88

The depth of the well is 300 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Chinle Formation (231CHNL) local aquifer.

#### Output formats

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

Reselect period											
Date	? Water-level date-time accurace		? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu	
1971-04-05		D	62610		3367.36	NGVD29	1	Z			
1971-04-05		D	62611		3368.92	NAVD88	1	Z			
1971-04-05		D	72019	261.08			1	Z			
1976-05-27		D	62610		3367.91	NGVD29	1	Z			
1976-05-27		D	62611		3369.47	NAVD88	1	Z			
1976-05-27		D	72019	260.53			1	Z			
1983-04-11		D	62610		3367.94	NGVD29	1	Z			
1983-04-11		D	62611		3369.50	NAVD88	1	Z			
1983-04-11		D	72019	260.50			1	Z			
1987-01-26		D	62610		3367.44	NGVD29	1	S			
1987-01-26		D	62611		3369.00	NAVD88	1	S			
1987-01-26		D	72019	261.00			1	S			
1994-03-17		D	62610		3367.77	NGVD29	1	S			
1994-03-17		D	62611		3369.33	NAVD88	1	S			

Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1994-03-17		D	72019	260.67			1	S		

#### Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	А	Approved for publication Processing and review completed.

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

Accessibility FOIA Privacy Policies and Notices

<u>U.S. Department of the Interior</u> | <u>U.S. Geological Survey</u> **Title: Groundwater for New Mexico: Water Levels** 

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

Page Contact Information: New Mexico Water Data Maintainer

Page Last Modified: 2022-03-11 16:33:42 EST

0.34 0.3 nadww01





### 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

CP 00873 POD1

1 1 19 19S 31E

601772 3613147\*

Driller License: 421 Driller Company: GLENN'S WATER WELL SERVICE

**Driller Name:** GLENN, CLARK A."CORKY"

Log File Date:01/15/1998PCW Rcv Date:Source:ShallowPump Type:Pipe Discharge Size:Estimated Yield:50 GPMCasing Size:6.62Depth Well:340 feetDepth Water:180 feet

Water Bearing Stratifications: Top Bottom Description

240 320 Shallow Alluvium/Basin Fill

Casing Perforations: Top Bottom

226 340

Meter Number:805Meter Make:MASTERMeter Serial Number:1748543Meter Multiplier:100.0000Number of Dials:6Meter Type:Diversion

Unit of Measure: Gallons Return Flow Percent:

2000

Usage Multiplier: Reading Frequency: Monthly

#### **Meter Readings (in Acre-Feet)**

Read Date	Year M	tr Reading	Fla	g Rdr	Comment	Mtr Amount Online
01/01/1999	1999	37400	A	fm		0
01/15/1999	1999	43541	A	fm		1.885
04/27/2000	2000	14849	R	jw	Meter Rollover	298.083
07/31/2000	2000	24399	A	jw		2.931
**YTD Mete	er Amounts:	: Year		Amount	•	
		1999		1.885		

<sup>\*</sup>UTM location was derived from PLSS - see Help

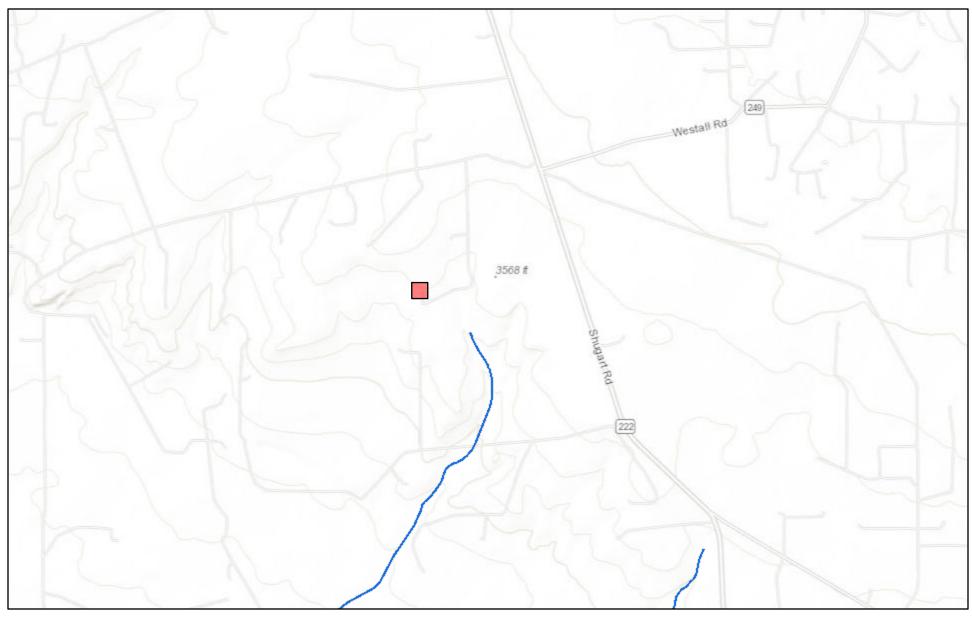
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

301.014

3/11/22 2:22 PM

POINT OF DIVERSION SUMMARY

### New Mexico NFHL Data



March 11, 2022

FEMA, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

## **APPENDIX E**



## **Environment Testing America**

### **ANALYTICAL REPORT**

Eurofins Xenco, Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-9412-1

Laboratory Sample Delivery Group: Eddy Co, NM Client Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

For:

NT Global 701 Tradewinds Blvd Midland, Texas 79706

Attn: Mike Carmona

MAMER

Authorized for release by: 12/21/2021 6:26:13 PM

Jessica Kramer, Project Manager (432)704-5440 jessica.kramer@eurofinset.com

.....LINKS .....

Review your project results through

**Have a Question?** 



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 7/13/2022 2:31:45 PM

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

3

E

6

9

10

12

13

Client: NT Global Project/Site: Blue Thunder 5 Fed #4H (12.04.21) Laboratory Job ID: 880-9412-1 SDG: Eddy Co, NM

## **Table of Contents**

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Certification Summary	17
Method Summary	18
Sample Summary	19
Chain of Custody	20
Receipt Checklists	21

#### **Definitions/Glossary**

Client: NT Global Job ID: 880-9412-1 Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

**Qualifiers** 

**GC VOA** Qualifier **Qualifier Description** 

S1+ Surrogate recovery exceeds control limits, high biased. Indicates the analyte was analyzed for but not detected. U

GC Semi VOA

Qualifier **Qualifier Description** 

S1+ Surrogate recovery exceeds control limits, high biased. U Indicates the analyte was analyzed for but not detected.

**HPLC/IC** 

Qualifier **Qualifier Description** 

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.

Listed under the "D" column to designate that the result is reported on a dry weight basis Percent Recovery

%R **CFL** Contains Free Liquid **CFU** Colony Forming Unit Contains No Free Liquid **CNF** 

**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

**Practical Quantitation Limit** PQL

**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) Toxicity Equivalent Quotient (Dioxin) TEQ

**TNTC** Too Numerous To Count

Eurofins Xenco, Midland

#### **Case Narrative**

Client: NT Global

Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

Job ID: 880-9412-1

SDG: Eddy Co, NM

Job ID: 880-9412-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-9412-1

#### Receipt

The samples were received on 12/16/2021 10:14 AM. 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 1.8°C

#### **GC VOA**

Method 8021B: The following samples were diluted due to the nature of the sample matrix: S-2 (0-0.5) (880-9412-2) and S-3 (0-0.5) (880-9412-3) at 20.0 and 20.0. Elevated reporting limits (RLs) are provided.

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: These samples were biased high in the diesel range and will be reanalyzed to confirm the detection, however since it appears it was the prep of the CCV and not the instrument causing the high reading the data will be qualified and reported currently.S-2 (0-0.5) (880-9412-2) and S-3 (0-0.5) (880-9412-3)

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

#### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-14941 and analytical batch 880-15074 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.

Client: NT Global Job ID: 880-9412-1 Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

Client Sample ID: S-1 (0-0.5)
Date Collected: 12/15/21 00:00

Lab Sample ID: 880-9412-1

Date Received: 12/16/21 10:14

	Matrix: Solid	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00198	U	0.00198		mg/Kg		12/16/21 17:00	12/17/21 07:45	
Toluene	<0.00198	U	0.00198		mg/Kg		12/16/21 17:00	12/17/21 07:45	
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		12/16/21 17:00	12/17/21 07:45	
m-Xylene & p-Xylene	< 0.00397	U	0.00397		mg/Kg		12/16/21 17:00	12/17/21 07:45	
o-Xylene	<0.00198	U	0.00198		mg/Kg		12/16/21 17:00	12/17/21 07:45	
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		12/16/21 17:00	12/17/21 07:45	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130				12/16/21 17:00	12/17/21 07:45	
1,4-Difluorobenzene (Surr)	119		70 - 130				12/16/21 17:00	12/17/21 07:45	
Method: Total BTEX - Total B	ΓEX Calcula	tion							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00397	U	0.00397		mg/Kg			12/17/21 08:43	
: Method: 8015 NM - Diesel Rai	nge Organic	s (DRO) (6	C)						
Analyte	•	Qualifier	RL			_			
			RL.	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.0		50.0	MDL	mg/Kg	— <u> </u>	Prepared	Analyzed 12/21/21 13:47	Dil Fa
		U	50.0	MDL		— —	Prepared		Dil Fa
Method: 8015B NM - Diesel R	ange Organ	U	50.0			_ <u>р</u>	Prepared		Dil Fac
Method: 8015B NM - Diesel R Analyte	ange Organ	ics (DRO) Qualifier	50.0 (GC)		mg/Kg		<u> </u>	12/21/21 13:47	Dil Fa
Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10	ange Organ Result	ics (DRO) Qualifier	50.0 (GC)		mg/Kg Unit		Prepared	12/21/21 13:47  Analyzed	,
Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ange Organ Result	U ics (DRO) Qualifier	50.0 (GC)		mg/Kg Unit		Prepared	12/21/21 13:47  Analyzed 12/20/21 20:01	Dil Fa
Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ange Organ Result <50.0 <50.0	ics (DRO) Qualifier U	50.0 (GC) RL 50.0 50.0		mg/Kg  Unit mg/Kg mg/Kg		Prepared 12/16/21 14:25 12/16/21 14:25	12/21/21 13:47  Analyzed 12/20/21 20:01 12/20/21 20:01	Dil Fa
Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ange Organ Result <50.0	ics (DRO) Qualifier U	50.0 (GC) RL 50.0		mg/Kg  Unit mg/Kg		Prepared 12/16/21 14:25	12/21/21 13:47  Analyzed 12/20/21 20:01 12/20/21 20:01	Dil Fa
Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	ange Organ Result <50.0 <50.0	U C C C C C C C C C C C C C C C C C C C	50.0 (GC) RL 50.0 50.0		mg/Kg  Unit mg/Kg mg/Kg		Prepared 12/16/21 14:25 12/16/21 14:25	12/21/21 13:47  Analyzed 12/20/21 20:01 12/20/21 20:01	Dil Fac
Total TPH  Method: 8015B NM - Diesel R  Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	ange Organ Result <50.0 <50.0 <50.0	U C C C C C C C C C C C C C C C C C C C	50.0 (GC) RL 50.0 50.0 50.0		mg/Kg  Unit mg/Kg mg/Kg		Prepared 12/16/21 14:25 12/16/21 14:25 12/16/21 14:25	Analyzed 12/20/21 20:01 12/20/21 20:01 12/20/21 20:01	Dil Fac

Client Sample ID: S-2 (0-0.5)

Date Collected: 12/15/21 00:00

Lab Sample ID: 880-9412-2

Matrix: Solid

RL

24.8

MDL Unit

mg/Kg

Prepared

Date Received: 12/16/21 10:14

Analyte

Chloride

Method: 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

2630

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0401	U	0.0401		mg/Kg		12/16/21 17:00	12/17/21 08:30	20
Toluene	<0.0401	U	0.0401		mg/Kg		12/16/21 17:00	12/17/21 08:30	20
Ethylbenzene	<0.0401	U	0.0401		mg/Kg		12/16/21 17:00	12/17/21 08:30	20
m-Xylene & p-Xylene	<0.0802	U	0.0802		mg/Kg		12/16/21 17:00	12/17/21 08:30	20
o-Xylene	<0.0401	U	0.0401		mg/Kg		12/16/21 17:00	12/17/21 08:30	20
Xylenes, Total	<0.0802	U	0.0802		mg/Kg		12/16/21 17:00	12/17/21 08:30	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				12/16/21 17:00	12/17/21 08:30	20
1,4-Difluorobenzene (Surr)	99		70 - 130				12/16/21 17:00	12/17/21 08:30	20

Eurofins Xenco, Midland

Analyzed

12/19/21 23:50

2

4

9

11

12

Client: NT Global Job ID: 880-9412-1 Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

Lab Sample ID: 880-9412-2 **Client Sample ID: S-2 (0-0.5)** Date Collected: 12/15/21 00:00

**Matrix: Solid** 

12/16/21 14:25 12/20/21 20:21

Date Received: 12/16/21 10:14

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0802	U	0.0802		mg/Kg			12/17/21 08:43	1
Method: 8015 NM - Diesel Rar	nge Organic	s (DRO) (G	SC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	431		49.9		mg/Kg			12/21/21 13:47	1
Method: 8015B NM - Diesel R	•		` '	MDI	Unit	<b>D</b>	Dronorod	Analyzad	Dil Eco
	•		` '	MDI	l lmi4	_	Duamawad	Amalumad	Dil Foo
Analyte	•	Qualifier	(GC) RL 49.9	MDL		<u>D</u>	Prepared 12/16/21 14:25	Analyzed 12/20/21 20:21	Dil Fac
Analyte Gasoline Range Organics	Result	Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>			Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	Result	Qualifier	RL	MDL		<u>D</u>			Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	<b>Result</b> <49.9	Qualifier	RL 49.9	MDL	mg/Kg	<u>D</u>	12/16/21 14:25	12/20/21 20:21	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<b>Result</b> <49.9	Qualifier U	RL 49.9	MDL	mg/Kg	<u>D</u>	12/16/21 14:25	12/20/21 20:21	1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9  431  <49.9	Qualifier U	RL 49.9	MDL	mg/Kg	<u> </u>	12/16/21 14:25 12/16/21 14:25	12/20/21 20:21 12/20/21 20:21	Dil Fac  1  1  Dil Fac

Method: 300.0 - Anions, Ion Chro	matography - Solubl	e					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11900	49.5	mg/Kg			12/19/21 23:57	10

70 - 130

125

Lab Sample ID: 880-9412-3 **Client Sample ID: S-3 (0-0.5)** Date Collected: 12/15/21 00:00 **Matrix: Solid** 

Date Received: 12/16/21 10:14

o-Terphenyl

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0402	U	0.0402		mg/Kg		12/16/21 17:00	12/17/21 08:50	20
Toluene	<0.0402	U	0.0402		mg/Kg		12/16/21 17:00	12/17/21 08:50	20
Ethylbenzene	<0.0402	U	0.0402		mg/Kg		12/16/21 17:00	12/17/21 08:50	20
m-Xylene & p-Xylene	<0.0803	U	0.0803		mg/Kg		12/16/21 17:00	12/17/21 08:50	20
o-Xylene	<0.0402	U	0.0402		mg/Kg		12/16/21 17:00	12/17/21 08:50	20
Xylenes, Total	<0.0803	U	0.0803		mg/Kg		12/16/21 17:00	12/17/21 08:50	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	111		70 - 130				12/16/21 17:00	12/17/21 08:50	20
1,4-Difluorobenzene (Surr)	98		70 - 130				12/16/21 17:00	12/17/21 08:50	20
Method: Total BTEX - Total E		tion	70 - 130				12/10/21 17:00	12 11/21 00:00	-
- '	BTEX Calcula	tion Qualifier	70 - 130 RL	MDL	Unit	D	Prepared	Analyzed	
Method: Total BTEX - Total E	BTEX Calcula	Qualifier		MDL	Unit mg/Kg	<u>D</u>			
Method: Total BTEX - Total E Analyte Total BTEX	BTEX Calcula Result <0.0803	Qualifier U	RL 0.0803	MDL		<u>D</u>		Analyzed	
Method: Total BTEX - Total E Analyte	BTEX Calcula Result <0.0803 ange Organic	Qualifier U	RL 0.0803	MDL MDL	mg/Kg	<u>D</u>		Analyzed	Dil Fa
Method: Total BTEX - Total E Analyte Total BTEX  Method: 8015 NM - Diesel Ra	BTEX Calcula Result <0.0803 ange Organic	Qualifier U	RL 0.0803		mg/Kg	_ =	Prepared	Analyzed 12/17/21 08:43	Dil Fac
Method: Total BTEX - Total E Analyte Total BTEX  Method: 8015 NM - Diesel Ra Analyte Total TPH	BTEX Calcula Result <0.0803 ange Organic Result 136	Qualifier U  s (DRO) (O Qualifier	RL 0.0803		mg/Kg Unit	_ =	Prepared	Analyzed 12/17/21 08:43 Analyzed	Dil Fac
Method: Total BTEX - Total E Analyte Total BTEX  Method: 8015 NM - Diesel Ra Analyte	BTEX Calcula Result <0.0803 ange Organic Result 136 Range Organi	Qualifier U  s (DRO) (O Qualifier	RL 0.0803		mg/Kg  Unit mg/Kg	_ =	Prepared	Analyzed 12/17/21 08:43 Analyzed	Dil Fa
Method: Total BTEX - Total BAnalyte Total BTEX  Method: 8015 NM - Diesel Ranalyte Total TPH  Method: 8015B NM - Diesel I	BTEX Calcula Result <0.0803 ange Organic Result 136 Range Organi	Qualifier U  S (DRO) (C Qualifier  ics (DRO) Qualifier	RL 0.0803  GC)  RL 50.0	MDL	mg/Kg  Unit mg/Kg	<u>-</u> <u>D</u>	Prepared Prepared	Analyzed 12/17/21 08:43  Analyzed 12/21/21 13:47	Dil Fa

# **Client Sample Results**

Job ID: 880-9412-1 Client: NT Global Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

Client Sample ID: S-3 (0-0.5) Lab Sample ID: 880-9412-3 Date Collected: 12/15/21 00:00

**Matrix: Solid** 

Date Received: 12/16/21 10:14

Method: 8015B NM - Diesel R	ange Organi	ics (DRO)	(GC) (Contin	ued)				
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/16/21 14:25	12/20/21 20:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			12/16/21 14:25	12/20/21 20:42	1
o-Terphenyl	119		70 - 130			12/16/21 14:25	12/20/21 20:42	1

Method: 300.0 - Anions, Ion Ch	le								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	907		4.99		mg/Kg			12/20/21 00:03	1

# **Surrogate Summary**

Client: NT Global Job ID: 880-9412-1 Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

**Matrix: Solid Prep Type: Total/NA** 

			Percen	t Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-9412-1	S-1 (0-0.5)	140 S1+	119	
880-9412-2	S-2 (0-0.5)	106	99	
880-9412-3	S-3 (0-0.5)	111	98	
880-9414-A-21-A MS	Matrix Spike	109	94	
880-9414-A-21-B MSD	Matrix Spike Duplicate	111	98	
LCS 880-14828/1-A	Lab Control Sample	109	97	
LCS 880-14936/1-A	Lab Control Sample	110	97	
LCSD 880-14828/2-A	Lab Control Sample Dup	113	97	
LCSD 880-14936/2-A	Lab Control Sample Dup	114	96	
MB 880-14828/5-A	Method Blank	118	91	
MB 880-14936/5-A	Method Blank	122	103	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

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

**Matrix: Solid** Prep Type: Total/NA

			Percent	Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-9412-1	S-1 (0-0.5)	112	115	
880-9412-2	S-2 (0-0.5)	120	125	
880-9412-3	S-3 (0-0.5)	113	119	
880-9414-A-44-C MS	Matrix Spike	100	100	
880-9414-A-44-D MSD	Matrix Spike Duplicate	108	104	
LCS 880-14975/2-A	Lab Control Sample	123	117	
LCSD 880-14975/3-A	Lab Control Sample Dup	121	121	
MB 880-14975/1-A	Method Blank	135 S1+	144 S1+	

**Surrogate Legend** 

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: NT Global Job ID: 880-9412-1
Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-14828/5-A

Matrix: Solid

**Analysis Batch: 14891** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 14828

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/16/21 07:30	12/16/21 23:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/16/21 07:30	12/16/21 23:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/16/21 07:30	12/16/21 23:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/16/21 07:30	12/16/21 23:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/16/21 07:30	12/16/21 23:59	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/16/21 07:30	12/16/21 23:59	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	12/16/21 07:30	12/16/21 23:59	1
1,4-Difluorobenzene (Surr)	91		70 - 130	12/16/21 07:30	12/16/21 23:59	1

Lab Sample ID: LCS 880-14828/1-A

**Matrix: Solid** 

**Analysis Batch: 14891** 

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 14828

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Benzene 70 - 130 0.100 0.08235 mg/Kg 82 Toluene 0.100 mg/Kg 85 70 - 130 0.08528 Ethylbenzene 0.100 0.09015 mg/Kg 90 70 - 130 0.200 87 m-Xylene & p-Xylene 0.1748 mg/Kg 70 - 130 o-Xylene 0.100 0.08404 mg/Kg 70 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-14828/2-A

**Matrix: Solid** 

**Analysis Batch: 14891** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 14828

Spike LCSD LCSD **RPD** %Rec. Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Benzene 0.100 0.09047 mg/Kg 90 70 - 130 9 35 Toluene 0.100 0.09010 mg/Kg 90 70 - 130 5 35 Ethylbenzene 0.100 0.09684 mg/Kg 97 70 - 130 35 m-Xylene & p-Xylene 0.200 0.1843 mg/Kg 92 70 - 130 35 0.100 0.09226 92 70 - 130 35 o-Xylene mg/Kg

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1.4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: MB 880-14936/5-A

**Matrix: Solid** 

**Analysis Batch: 14891** 

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 14936

	IVID	IVID						
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/16/21 10:00	12/16/21 10:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/16/21 10:00	12/16/21 10:46	1

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Client: NT Global Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

Job ID: 880-9412-1

SDG: Eddy Co, NM

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

Lab Sample ID: MB 880-14936/5-A Matrix: Solid

**Analysis Batch: 14891** 

**Client Sample ID: Method Blank** 

Prep Type: Total/NA Prep Batch: 14936

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/16/21 10:00	12/16/21 10:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/16/21 10:00	12/16/21 10:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/16/21 10:00	12/16/21 10:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/16/21 10:00	12/16/21 10:46	1

MB MB

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122	70 - 130	12/16/21 10:00	12/16/21 10:46	1
1,4-Difluorobenzene (Surr)	103	70 - 130	12/16/21 10:00	12/16/21 10:46	1

Lab Sample ID: LCS 880-14936/1-A

**Matrix: Solid** 

**Analysis Batch: 14891** 

**Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Prep Batch: 14936

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08538		mg/Kg	_	85	70 - 130	
Toluene	0.100	0.09109		mg/Kg		91	70 - 130	
Ethylbenzene	0.100	0.09631		mg/Kg		96	70 - 130	
m-Xylene & p-Xylene	0.200	0.1884		mg/Kg		94	70 - 130	
o-Xylene	0.100	0.09197		mg/Kg		92	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-14936/2-A

Matrix: Solid

**Analysis Batch: 14891** 

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA Prep Batch: 14936

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08995		mg/Kg		90	70 - 130	5	35
Toluene	0.100	0.09202		mg/Kg		92	70 - 130	1	35
Ethylbenzene	0.100	0.1005		mg/Kg		101	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1895		mg/Kg		95	70 - 130	1	35
o-Xylene	0.100	0.09398		mg/Kg		94	70 - 130	2	35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	114	70 - 130
1,4-Difluorobenzene (Surr)	96	70 - 130

Lab Sample ID: 880-9414-A-21-A MS

**Matrix: Solid** 

**Analysis Batch: 14891** 

Client Sample ID: Matrix Spike **Prep Type: Total/NA** 

Prep Batch: 14936

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U	0.0998	0.08864		mg/Kg		89	70 - 130	
Toluene	0.00399		0.0998	0.09438		mg/Kg		91	70 - 130	
Ethylbenzene	0.00998		0.0998	0.1035		mg/Kg		94	70 - 130	
m-Xylene & p-Xylene	0.00472		0.200	0.1976		mg/Kg		97	70 - 130	

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Client: NT Global Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

Job ID: 880-9412-1 SDG: Eddy Co, NM

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

Lab Sample ID: 880-9414-A-21-A MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 14891** Prep Batch: 14936 Spike MS MS %Rec. Sample Sample Analyte **Result Qualifier** Added Result Qualifier Unit %Rec Limits 0.0998 o-Xylene 0.00443 0.09421 90 70 - 130

mg/Kg

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-9414-A-21-B MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 14891									Prep E	•	
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U	0.0994	0.08911		mg/Kg		90	70 - 130	1	35
Toluene	0.00399		0.0994	0.09062		mg/Kg		87	70 - 130	4	35
Ethylbenzene	0.00998		0.0994	0.09812		mg/Kg		89	70 - 130	5	35
m-Xylene & p-Xylene	0.00472		0.199	0.1900		mg/Kg		93	70 - 130	4	35
o-Xylene	0.00443		0.0994	0.09286		mg/Kg		89	70 - 130	1	35

MSD MSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 111 70 - 130 1,4-Difluorobenzene (Surr) 98 70 - 130

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

Lab Sample ID: MB 880-14975/1-A **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA Prep Batch: 14975

**Analysis Batch: 15160** 

	MB	INIR								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/16/21 14:25	12/20/21 12:33	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/16/21 14:25	12/20/21 12:33	1	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/16/21 14:25	12/20/21 12:33	1	
	MD	MD								

	IVID	IVID				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	12/16/21 14:25	12/20/21 12:33	1
o-Terphenyl	144	S1+	70 - 130	12/16/21 14:25	12/20/21 12:33	1

Lab Sample ID: LCS 880-14975/2-A **Client Sample ID: Lab Control Sample** Matrix: Solid **Prep Type: Total/NA** Prep Batch: 14975 **Analysis Batch: 15160** 

LCS LCS Spike %Rec. Added Result Qualifier Unit Limits Analyte %Rec Gasoline Range Organics 1000 1158 116 70 - 130 mg/Kg (GRO)-C6-C10 1000 1102 110 70 - 130 Diesel Range Organics (Over mg/Kg C10-C28)

Client: NT Global Job ID: 880-9412-1 Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

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

Lab Sample ID: LCS 880-14975/2-A

**Matrix: Solid** 

**Analysis Batch: 15160** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 14975

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	123	70 - 130
o-Terphenyl	117	70 - 130

Lab Sample ID: LCSD 880-14975/3-A **Client Sample ID: Lab Control Sample Dup** 

**Matrix: Solid** 

**Analysis Batch: 15160** 

**Prep Type: Total/NA** 

Prep Batch: 14975

LCSD LCSD RPD Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics 1000 1291 mg/Kg 129 70 - 130 11 20 (GRO)-C6-C10 1000 Diesel Range Organics (Over 1102 mg/Kg 110 70 - 130 0 20

C10-C28)

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	121		70 - 130
o-Terphenyl	121		70 - 130

Lab Sample ID: 880-9414-A-44-C MS **Client Sample ID: Matrix Spike** 

**Matrix: Solid** 

**Analysis Batch: 15160** 

**Prep Type: Total/NA** 

Prep Batch: 14975

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1260		mg/Kg		122	70 - 130	
Diesel Range Organics (Over	<49.9	U	996	974.5		mg/Kg		93	70 - 130	

C10-C28)

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 100 70 - 130 o-Terphenyl 100 70 - 130

Lab Sample ID: 880-9414-A-44-D MSD

**Matrix: Solid** 

**Analysis Batch: 15160** 

Diesel Range Organics (Over

**Client Sample ID: Matrix Spike Duplicate** 

70 - 130

101

Prep Type: Total/NA Prep Batch: 14975

7

20

Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier RPD Added Result Qualifier Limits Limit Analyte Unit D %Rec <49.9 U 995 1278 mg/Kg 123 70 - 130 20 Gasoline Range Organics (GRO)-C6-C10

1047

mg/Kg

995

C10-C28)

MSD MSD

<49.9 U

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	108	70 - 130
o-Terphenyl	104	70 - 130

Job ID: 880-9412-1 Client: NT Global Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

SDG: Eddy Co, NM

# Method: 300.0 - Anions, Ion Chromatography

MD MD

Lab Sample ID: MB 880-14941/1-A **Client Sample ID: Method Blank Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 15074** 

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			12/19/21 22:24	1

Lab Sample ID: LCS 880-14941/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 15074** 

•	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	263.7		mg/Kg		105	90 - 110	

Lab Sample ID: LCSD 880-14941/3-A **Client Sample ID: Lab Control Sample Dup Matrix: Solid Prep Type: Soluble Analysis Batch: 15074** 

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	 250	268.8		mg/Kg		108	90 - 110	2	20

Lab Sample ID: 880-9410-A-1-F MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 15074** 

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	803	F1	1250	2234	F1	mg/Kg		115	90 - 110	

Lab Sample ID: 880-9410-A-1-G MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 15074** 

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	803	F1	1250	2252	F1	ma/Ka		116	90 - 110		20	

Lab Sample ID: 880-9413-A-2-C MS **Client Sample ID: Matrix Spike Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 15074** 

Sample Sample Spike MS MS %Rec. Analyte **Result Qualifier** Added Result Qualifier Limits Unit D %Rec 248 Chloride 56.9 324.3 mg/Kg 108 90 - 110

Lab Sample ID: 880-9413-A-2-D MSD **Client Sample ID: Matrix Spike Duplicate Matrix: Solid Prep Type: Soluble** 

Analysis Ratch: 15074

Analysis Baton, 10014	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	56.9		248	327.9		mg/Kg		109	90 - 110	1	20

Client: NT Global Project/Site: Blue Thunder 5 Fed #4H (12.04.21) Job ID: 880-9412-1 SDG: Eddy Co, NM

# **GC VOA**

## Prep Batch: 14828

<b>Lab Sample ID</b> 880-9412-1	Client Sample ID S-1 (0-0.5)	Prep Type Total/NA	Matrix Solid	Method 5035	Prep Batch
880-9412-2	S-2 (0-0.5)	Total/NA	Solid	5035	
880-9412-3	S-3 (0-0.5)	Total/NA	Solid	5035	
MB 880-14828/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-14828/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-14828/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

# **Analysis Batch: 14891**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9412-1	S-1 (0-0.5)	Total/NA	Solid	8021B	14828
880-9412-2	S-2 (0-0.5)	Total/NA	Solid	8021B	14828
880-9412-3	S-3 (0-0.5)	Total/NA	Solid	8021B	14828
MB 880-14828/5-A	Method Blank	Total/NA	Solid	8021B	14828
MB 880-14936/5-A	Method Blank	Total/NA	Solid	8021B	14936
LCS 880-14828/1-A	Lab Control Sample	Total/NA	Solid	8021B	14828
LCS 880-14936/1-A	Lab Control Sample	Total/NA	Solid	8021B	14936
LCSD 880-14828/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	14828
LCSD 880-14936/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	14936
880-9414-A-21-A MS	Matrix Spike	Total/NA	Solid	8021B	14936
880-9414-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	14936

# Prep Batch: 14936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-14936/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-14936/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-14936/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-9414-A-21-A MS	Matrix Spike	Total/NA	Solid	5035	
880-9414-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### **Analysis Batch: 15026**

<b>Lab Sample ID</b> 880-9412-1	Client Sample ID S-1 (0-0.5)	Prep Type Total/NA	Matrix Solid	Method Total BTEX	Prep Batch
880-9412-2	S-2 (0-0.5)	Total/NA	Solid	Total BTEX	
880-9412-3	S-3 (0-0.5)	Total/NA	Solid	Total BTEX	

# GC Semi VOA

## Prep Batch: 14975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9412-1	S-1 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-9412-2	S-2 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-9412-3	S-3 (0-0.5)	Total/NA	Solid	8015NM Prep	
MB 880-14975/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-14975/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-14975/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-9414-A-44-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-9414-A-44-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

# **Analysis Batch: 15160**

Released to Imaging: 7/13/2022 2:31:45 PM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9412-1	S-1 (0-0.5)	Total/NA	Solid	8015B NM	14975

Eurofins Xenco, Midland

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**5** 

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Job ID: 880-9412-1 Client: NT Global Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

# GC Semi VOA (Continued)

## **Analysis Batch: 15160 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9412-2	S-2 (0-0.5)	Total/NA	Solid	8015B NM	14975
880-9412-3	S-3 (0-0.5)	Total/NA	Solid	8015B NM	14975
MB 880-14975/1-A	Method Blank	Total/NA	Solid	8015B NM	14975
LCS 880-14975/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	14975
LCSD 880-14975/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	14975
880-9414-A-44-C MS	Matrix Spike	Total/NA	Solid	8015B NM	14975
880-9414-A-44-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	14975

## **Analysis Batch: 15253**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9412-1	S-1 (0-0.5)	Total/NA	Solid	8015 NM	
880-9412-2	S-2 (0-0.5)	Total/NA	Solid	8015 NM	
880-9412-3	S-3 (0-0.5)	Total/NA	Solid	8015 NM	

## HPLC/IC

#### Leach Batch: 14941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9412-1	S-1 (0-0.5)	Soluble	Solid	DI Leach	_
880-9412-2	S-2 (0-0.5)	Soluble	Solid	DI Leach	
880-9412-3	S-3 (0-0.5)	Soluble	Solid	DI Leach	
MB 880-14941/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-14941/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-14941/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9410-A-1-F MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9410-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-9413-A-2-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9413-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## **Analysis Batch: 15074**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9412-1	S-1 (0-0.5)	Soluble	Solid	300.0	14941
880-9412-2	S-2 (0-0.5)	Soluble	Solid	300.0	14941
880-9412-3	S-3 (0-0.5)	Soluble	Solid	300.0	14941
MB 880-14941/1-A	Method Blank	Soluble	Solid	300.0	14941
LCS 880-14941/2-A	Lab Control Sample	Soluble	Solid	300.0	14941
LCSD 880-14941/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	14941
880-9410-A-1-F MS	Matrix Spike	Soluble	Solid	300.0	14941
880-9410-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	14941
880-9413-A-2-C MS	Matrix Spike	Soluble	Solid	300.0	14941
880-9413-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	14941

Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

**Matrix: Solid** 

Date	Collected:	12/15/21	00:00
<b>Date</b>	Received:	12/16/21	10:14

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	14828	12/16/21 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	14891	12/17/21 07:45	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15026	12/17/21 08:43	KL	XEN MID
Total/NA	Analysis	8015 NM		1			15253	12/21/21 13:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	14975	12/16/21 14:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15160	12/20/21 20:01	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	14941	12/16/21 12:07	СН	XEN MID
Soluble	Analysis	300.0		5			15074	12/19/21 23:50	CH	XEN MID

Client Sample ID: S-2 (0-0.5)

Lab Sample ID: 880-9412-2

Date Collected: 12/15/21 00:00 Date Received: 12/16/21 10:14

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	14828	12/16/21 17:00	KL	XEN MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	14891	12/17/21 08:30	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15026	12/17/21 08:43	KL	XEN MID
Total/NA	Analysis	8015 NM		1			15253	12/21/21 13:47	AJ	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.02 g	10 mL	14975 15160	12/16/21 14:25 12/20/21 20:21		XEN MID XEN MID
Soluble Soluble	Leach Analysis	DI Leach 300.0		10	5.05 g	50 mL	14941 15074	12/16/21 12:07 12/19/21 23:57		XEN MID XEN MID

Client Sample ID: S-3 (0-0.5)

Lab Sample ID: 880-9412-3

**Matrix: Solid** 

Date Collected: 12/15/21 00:00 Date Received: 12/16/21 10:14

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Type Method Run **Factor** Amount **Amount** Number or Analyzed Analyst Lab Total/NA 5035 Prep 4.98 g 5 mL 14828 12/16/21 17:00 KL XEN MID Total/NA 8021B 5 mL Analysis 20 5 mL 14891 12/17/21 08:50 MR **XEN MID** Total/NA Analysis Total BTEX 1 15026 12/17/21 08:43 KL XEN MID 8015 NM Total/NA Analysis 15253 12/21/21 13:47 AJ XEN MID Total/NA Prep 8015NM Prep 14975 12/16/21 14:25 DM XEN MID 10.00 g 10 mL Total/NA Analysis 8015B NM 15160 12/20/21 20:42 AJ **XEN MID** XEN MID Soluble Leach DI Leach 5.01 g 50 mL 14941 12/16/21 12:07 CH Soluble Analysis 300.0 15074 12/20/21 00:03 CH XEN MID

**Laboratory References:** 

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

# **Accreditation/Certification Summary**

Client: NT Global
Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

Job ID: SDG: E

Job ID: 880-9412-1 SDG: Eddy Co, NM

# **Laboratory: Eurofins Xenco, Midland**

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

Authority	P	rogram	Identification Number	Expiration Date
Texas	N	ELAP	T104704400-21-22	06-30-22
The following analyte the agency does not		ort, but the laboratory is r	not certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	

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# **Method Summary**

Client: NT Global

Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

Job ID: 880-9412-1

SDG: Eddy Co, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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:**

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

S-3 (0-0.5)

880-9412-3

# **Sample Summary**

Client: NT Global Job ID: 880-9412-1
Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

12/15/21 00:00 12/16/21 10:14

Solid

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received

 880-9412-1
 S-1 (0-0.5)
 Solid
 12/15/21 00:00
 12/16/21 10:14

 880-9412-2
 S-2 (0-0.5)
 Solid
 12/15/21 00:00
 12/16/21 10:14

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Chain of Custody

ENVIRONMENTAL Project Manager Mike Carmona

Company Name

NTG Environmental
701 Tradewinds BLVD

Bill to: (if different)
Company Name

cog

Jacqui Harris

15 W Loving Rd

State of Project:

Program: UST/PST ☐PRP ☐Brownfields ☐RRC

□uperfund

**Work Order Comments** 

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Project Name:	Blue Thunder 5 Fed #4H (12 04 21)	Fed #4H (12	04 21)	Tum	Turn Around		-					ANAI	YSIS REQUEST		Ž			8					Carlos	الـ
Project Number	2	214974		Routine	☑ Rush		Pres.								$\dashv$		$\dashv$	1		Z O	None NO DI Water I	ב ב	DI Water: H <sub>2</sub> O	
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SAMPLE RECEIPT		Тердр Blank.	Yes (No)	Wet Ice:	(Yes)	No.	ete													Į,	H,PO, HP		i	
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Sample Custody Seals	Yes	No (N/A )	Temperature Reading	e Reading:	_ ئ															Žn .	Zn Acetate+NaOH Zn	S C	70	~_
Total Containers:			Corrected	Corrected Temperature.		Q			801						·····					Na	NaOH+Ascorbic Acid SAPC	bic Acı	d SAPC	- (
Sample Identification	itification	Date	Time	Soil	Water	Grab/	C # 의		IPI										· · · · · · · · · · · · · · · · · · ·	1	Sample Comments	e Con	ments	
S-1 (0-0 5')	0 5')	12/15/2021	ı	×	,	G	_	×	×					-	-		1		+	+				ᆜ
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S-3 (0-0 5')	0 5')	12/15/2021	ı	×	g	G		×	×					-	_			$\dashv$	+	$\dashv$				
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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	document and relinquingle liable only for the cos	ishment of sampl	es constitute shall not ass	s a valid purchas ume any respons	e order from libility for any	client compa	ny to Xer penses i	nco, its a	filiates ar	nd subco	ntractors	. It assigned the street of th	ssigns standard terms and conditions se to circumstances beyond the contro	dard ten	ms and beyond	conditio	ns							
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880-9412 Chain of Custody			

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Revised Date 05012020 Rev 2020 1

# **Login Sample Receipt Checklist**

Client: NT Global Job Number: 880-9412-1 SDG Number: Eddy Co, NM

Login Number: 9412 List Source: Eurofins Xenco, Midland

List Number: 1 Creator: Teel, Brianna

<6mm (1/4").

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

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# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Xenco, Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-9413-1

Laboratory Sample Delivery Group: Eddy Co, NM Client Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

For:

NT Global 701 Tradewinds Blvd Midland, Texas 79706

Attn: Mike Carmona

MAMER

Authorized for release by: 12/21/2021 3:08:36 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS .....

Review your project results through

**Have a Question?** 



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 7/13/2022 2:31:45 PM

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Client: NT Global Project/Site: Blue Thunder 5 Fed #4H (12.04.21) Laboratory Job ID: 880-9413-1 SDG: Eddy Co, NM

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# **Definitions/Glossary**

Client: NT Global Job ID: 880-9413-1
Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

ly Co, NM

#### **Qualifiers**

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

#### HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

#### **Glossary**

,	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)

MPN MQL

MCL

MDA

MDC

MDL

ML

Minimum Level (Dioxin)
Most Probable Number
Method Quantitation Limit

Method Detection Limit

NC Not Calculated
ND Not Detected a

ND Not Detected at the reporting limit (or MDL or EDL if shown)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Concentration (Radiochemistry)

Minimum Detectable Activity (Radiochemistry)

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 Job ID: 880-9413-1
Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

Job ID: 880-9413-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-9413-1

#### Receipt

The samples were received on 12/16/2021 10:16 AM. 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 1.8°C

#### **GC VOA**

Method 8021B: Surrogate recovery for the following samples were outside control limits: H-4 (0-0.5) (880-9413-4), (MB 880-14907/8), (MB 880-14933/5-A) and (880-9411-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### GC Semi VOA

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

#### HPLC/IC

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

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Client: NT Global

Job ID: 880-9413-1

Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

> Lab Sample ID: 880-9413-1 Matrix: Solid

Date Collected: 12/15/21	00:00
Date Received: 12/16/21	10:16

Client Sample ID: H-1 (0-0.5)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201		mg/Kg		12/16/21 10:37	12/17/21 02:07	
Toluene	< 0.00201	U	0.00201		mg/Kg		12/16/21 10:37	12/17/21 02:07	
Ethylbenzene	< 0.00201	U	0.00201		mg/Kg		12/16/21 10:37	12/17/21 02:07	
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/16/21 10:37	12/17/21 02:07	
o-Xylene	< 0.00201	U	0.00201		mg/Kg		12/16/21 10:37	12/17/21 02:07	
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/16/21 10:37	12/17/21 02:07	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)			70 - 130				12/16/21 10:37	12/17/21 02:07	
1,4-Difluorobenzene (Surr)	91		70 - 130				12/16/21 10:37	12/17/21 02:07	
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00402	U	0.00402		mg/Kg			12/17/21 09:00	
Method: 8015 NM - Diesel Range Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Total TPH	<49.9	U	49.9		mg/Kg			12/21/21 13:47	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/16/21 14:25	12/20/21 21:04	-
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		12/16/21 14:25	12/20/21 21:04	
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/16/21 14:25	12/20/21 21:04	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	103		70 - 130				12/16/21 14:25	12/20/21 21:04	
o-Terphenyl	112		70 - 130				12/16/21 14:25	12/20/21 21:04	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
						_			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa

Client Sample ID: H-2 (0-0.5) Lab Sample ID: 880-9413-2 **Matrix: Solid** 

Date Collected: 12/15/21 00:00 Date Received: 12/16/21 10:16

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		12/16/21 10:37	12/17/21 02:34	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/16/21 10:37	12/17/21 02:34	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/16/21 10:37	12/17/21 02:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/16/21 10:37	12/17/21 02:34	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/16/21 10:37	12/17/21 02:34	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/16/21 10:37	12/17/21 02:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130				12/16/21 10:37	12/17/21 02:34	1
1,4-Difluorobenzene (Surr)	72		70 - 130				12/16/21 10:37	12/17/21 02:34	1

Client: NT Global

Job ID: 880-9413-1 Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

Lab Sample ID: 880-9413-2 Client Sample ID: H-2 (0-0.5)

Date Collected: 12/15/21 00:00 Matrix: Solid

Date Received: 12/16/21 10:16

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			12/17/21 09:00	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/21/21 13:47	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		12/16/21 14:25	12/20/21 21:25	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		12/16/21 14:25	12/20/21 21:25	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/16/21 14:25	12/20/21 21:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				12/16/21 14:25	12/20/21 21:25	
o-Terphenyl	112		70 - 130				12/16/21 14:25	12/20/21 21:25	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.9		4.96		mg/Kg			12/20/21 00:17	1

Client Sample ID: H-3 (0-0.5) Lab Sample ID: 880-9413-3 **Matrix: Solid** 

Date Collected: 12/15/21 00:00 Date Received: 12/16/21 10:16

Released to Imaging: 7/13/2022 2:31:45 PM

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/16/21 10:37	12/17/21 03:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/16/21 10:37	12/17/21 03:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/16/21 10:37	12/17/21 03:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/16/21 10:37	12/17/21 03:01	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		12/16/21 10:37	12/17/21 03:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/16/21 10:37	12/17/21 03:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				12/16/21 10:37	12/17/21 03:01	1
1,4-Difluorobenzene (Surr)	93		70 - 130				12/16/21 10:37	12/17/21 03:01	1
: Method: Total BTEX - Total B1	ΓEX Calculation								
		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte			RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 12/17/21 09:00	
<b>Analyte</b> Total BTEX	<0.00398	U		MDL		<u>D</u>	Prepared		Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Rar	Result <0.00398	U				<u>D</u>	Prepared Prepared		1
Method: Total BTEX - Total BTAnalyte Total BTEX  Method: 8015 NM - Diesel Rar Analyte Total TPH	Result <0.00398	U O) (GC) Qualifier	0.00398		mg/Kg			12/17/21 09:00	
Analyte Total BTEX  Method: 8015 NM - Diesel Rar Analyte Total TPH	Result <0.00398  nge Organics (DRO Result <49.9	O) (GC) Qualifier	0.00398		mg/Kg			12/17/21 09:00 Analyzed	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Rar Analyte Total TPH  Method: 8015B NM - Diesel Ra	nge Organics (DR)  Result  <49.9  ange Organics (DI)	O) (GC) Qualifier	0.00398	MDL	mg/Kg			12/17/21 09:00 Analyzed	Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Rar Analyte Total TPH  Method: 8015B NM - Diesel Ra Analyte	nge Organics (DR)  Result  <49.9  ange Organics (DI)	O) (GC) Qualifier U  RO) (GC) Qualifier	0.00398  RL 49.9	MDL	mg/Kg  Unit mg/Kg	<u>D</u>	Prepared	12/17/21 09:00  Analyzed  12/21/21 13:47	Dil Fac
Analyte Total BTEX Method: 8015 NM - Diesel Rar Analyte	nge Organics (DR Result <49.9 ange Organics (DI Result	O) (GC) Qualifier U  RO) (GC) Qualifier	0.00398  RL 49.9	MDL	mg/Kg  Unit mg/Kg  Unit	<u>D</u>	Prepared Prepared	12/17/21 09:00  Analyzed  12/21/21 13:47  Analyzed	1 Dil Fac
Analyte Total BTEX  Method: 8015 NM - Diesel Rar Analyte Total TPH  Method: 8015B NM - Diesel Ra Analyte Gasoline Range Organics	nge Organics (DR Result <49.9 ange Organics (DI Result	U O) (GC) Qualifier U RO) (GC) Qualifier U	0.00398  RL 49.9	MDL	mg/Kg  Unit mg/Kg  Unit	<u>D</u>	Prepared Prepared	12/17/21 09:00  Analyzed  12/21/21 13:47  Analyzed	Dil Fac

Client: NT Global Job ID: 880-9413-1 Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

Client Sample ID: H-3 (0-0.5)

Date Collected: 12/15/21 00:00 Date Received: 12/16/21 10:16 Lab Sample ID: 880-9413-3

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/16/21 14:25	12/20/21 21:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			12/16/21 14:25	12/20/21 21:47	1
o-Terphenyl	110		70 - 130			12/16/21 14:25	12/20/21 21:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 25.0 12/20/21 00:37 Chloride 267 mg/Kg

Client Sample ID: H-4 (0-0.5)

Date Collected: 12/15/21 00:00 Date Received: 12/16/21 10:16

Lab Sample ID: 880-9413-4 **Matrix: Solid** 

Method: 8021B - Volatile Orga	nic Compounds	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/16/21 10:37	12/17/21 03:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/16/21 10:37	12/17/21 03:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/16/21 10:37	12/17/21 03:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/16/21 10:37	12/17/21 03:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/16/21 10:37	12/17/21 03:28	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/16/21 10:37	12/17/21 03:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	193	S1+	70 - 130				12/16/21 10:37	12/17/21 03:28	1
1,4-Difluorobenzene (Surr)	102		70 - 130				12/16/21 10:37	12/17/21 03:28	1

IV	lethod: Total BTEX - Total BTEX Calcul	ation								
Α	nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
To	otal BTEX <	0.00399	U	0.00399		mg/Kg			12/17/21 09:00	1
N	lethod: 8015 NM - Diesel Range Organi	cs (DR	O) (GC)							
Α	nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
To	otal TPH	120		50.0		mg/Kg			12/21/21 15:44	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	50.1		50.0		mg/Kg		12/16/21 12:00	12/16/21 12:46	
Diesel Range Organics (Over C10-C28)	69.4		50.0		mg/Kg		12/16/21 12:00	12/16/21 12:46	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/16/21 12:00	12/16/21 12:46	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	90		70 - 130				12/16/21 12:00	12/16/21 12:46	
o-Terphenyl	105		70 - 130				12/16/21 12:00	12/16/21 12:46	

Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.2		4.98		mg/Kg			12/19/21 14:57	1

# **Surrogate Summary**

Client: NT Global Job ID: 880-9413-1 Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limi
		BFB1	DFBZ1	
Sample ID	Client Sample ID	(70-130)	(70-130)	
)-9411-A-1-C MS	Matrix Spike	82	85	
)-9411-A-1-D MSD	Matrix Spike Duplicate	68 S1-	89	
)-9413-1	H-1 (0-0.5)	111	91	
)-9413-2	H-2 (0-0.5)	73	72	
)-9413-3	H-3 (0-0.5)	105	93	
9413-4	H-4 (0-0.5)	193 S1+	102	
8 880-14933/1-A	Lab Control Sample	95	100	
SD 880-14933/2-A	Lab Control Sample Dup	97	102	
880-14907/8	Method Blank	56 S1-	85	
880-14933/5-A	Method Blank	65 S1-	86	

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 Limi
		1CO1	OTPH1	
b Sample ID	Client Sample ID	(70-130)	(70-130)	
0-9101-A-1-E MS	Matrix Spike	78	84	
0-9101-A-1-F MSD	Matrix Spike Duplicate	75	81	
0-9413-1	H-1 (0-0.5)	103	112	
0-9413-2	H-2 (0-0.5)	102	112	
0-9413-3	H-3 (0-0.5)	100	110	
0-9413-4	H-4 (0-0.5)	90	105	
0-9414-A-44-C MS	Matrix Spike	100	100	
0-9414-A-44-D MSD	Matrix Spike Duplicate	108	104	
CS 880-14906/2-A	Lab Control Sample	94	104	
S 880-14975/2-A	Lab Control Sample	123	117	
CSD 880-14906/3-A	Lab Control Sample Dup	94	101	
SD 880-14975/3-A	Lab Control Sample Dup	121	121	
B 880-14906/1-A	Method Blank	102	129	
B 880-14975/1-A	Method Blank	135 S1+	144 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: NT Global Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

Job ID: 880-9413-1

SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-14907/8

**Matrix: Solid Analysis Batch: 14907** 

Analyte

Benzene

Toluene

o-Xylene

Client Sample ID: Method Blank

Prep Type: Total/NA

мв мв Dil Fac Result Qualifier RL MDL Unit D Prepared Analyzed <0.00200 U 0.00200 mg/Kg 12/16/21 12:24 <0.00200 U 0.00200 mg/Kg 12/16/21 12:24 Ethylbenzene <0.00200 U 0.00200 12/16/21 12:24 mg/Kg m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 12/16/21 12:24 <0.00200 U 0.00200 mg/Kg 12/16/21 12:24 Xylenes, Total <0.00400 U 0.00400 12/16/21 12:24

mg/Kg

MB MB

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	56	S1-	70 - 130		12/16/21 12:24	1
1,4-Difluorobenzene (Surr)	85		70 - 130		12/16/21 12:24	1

Lab Sample ID: MB 880-14933/5-A

**Matrix: Solid** 

**Analysis Batch: 14907** 

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

Prep Batch: 14933

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 mg/Kg 12/16/21 10:37 12/16/21 22:59 Toluene <0.00200 U 0.00200 mg/Kg 12/16/21 10:37 12/16/21 22:59 Ethylbenzene <0.00200 U 0.00200 mg/Kg 12/16/21 10:37 12/16/21 22:59 12/16/21 22:59 m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 12/16/21 10:37 12/16/21 22:59 o-Xylene <0.00200 U 0.00200 mg/Kg 12/16/21 10:37 Xylenes, Total <0.00400 U 0.00400 mg/Kg 12/16/21 10:37 12/16/21 22:59

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	65	S1-	70 - 130	12/16/21 10:37	12/16/21 22:59	1
1,4-Difluorobenzene (Surr)	86		70 - 130	12/16/21 10:37	12/16/21 22:59	1

Lab Sample ID: LCS 880-14933/1-A

**Matrix: Solid** 

**Analysis Batch: 14907** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 14933

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1011		mg/Kg		101	70 - 130	
Toluene	0.100	0.09637		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.08715		mg/Kg		87	70 - 130	
m-Xylene & p-Xylene	0.200	0.1748		mg/Kg		87	70 - 130	
o-Xylene	0.100	0.09329		mg/Kg		93	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	95	70 - 130
1.4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: LCSD 880-14933/2-A

**Matrix: Solid** 

**Analysis Batch: 14907** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 14933 0/ Baa

	Spike	LCSD LCSD				70Rec.		KFD	
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1065	mg/Kg		106	70 - 130	5	35	

LCCD LCCD

Chiles

# QC Sample Results

Client: NT Global Job ID: 880-9413-1 Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

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

Lab Sample ID: LCSD 880-14933/2-A **Matrix: Solid** 

Analysis Batch: 14907

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 14933

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.1039		mg/Kg		104	70 - 130	8	35
Ethylbenzene	0.100	0.09500		mg/Kg		95	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1903		mg/Kg		95	70 - 130	8	35
o-Xylene	0.100	0.1006		mg/Kg		101	70 - 130	8	35

LCSD LCSD

Sample Sample

Result Qualifier

U F1

UF1

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-9411-A-1-C MS Client Sample ID: Matrix Spike

Spike

Added

0.0998

0.0998

0.0998

0.200

0.0998

MS MS

0.03227 F1

0.02914 F1

0.02900 F1

0.05736 F1

0.03736 F1

Result Qualifier

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

**Matrix: Solid** 

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 14907

Prep Type: Total/NA	
Prep Batch: 14933	

%Rec.

%Rec Limits 32 70 - 130 29 70 - 130 29 70 - 130

MS MS

<0.00199

< 0.00199

<0.00199 UF1

<0.00398 UF1

<0.00199 UF1

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	82	70 - 130
1 4-Difluorobenzene (Surr)	85	70 - 130

Lab Sample ID: 880-9411-A-1-D MSD

**Matrix: Solid** 

**Analysis Batch: 14907** 

Client	Sample	ın.	Matrix	Snika	<b>Duplicate</b>
Ciletit	Sample	ID.	IVIALI IX	Spike	Duplicate

70 - 130

70 - 130

29

37

Prep Type: Total/NA Prep Batch: 14933

MSD MSD RPD Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Benzene <0.00199 U F1 0.0994 0.03001 F1 mg/Kg 30 70 - 130 35 Toluene <0.00199 UF1 0.0994 0.02330 F1 mg/Kg 23 70 - 130 22 35 Ethylbenzene <0.00199 UF1 0.0994 0.02249 F1 mg/Kg 23 70 - 130 25 35 0.199 0.04737 F1 24 70 - 130 m-Xylene & p-Xylene <0.00398 UF1 mg/Kg 19 35 0.0994 o-Xylene <0.00199 UF1 0.02791 F1 mg/Kg 70 - 130 29 35

MSD MSD

мв мв

<50.0 U

Result Qualifier

Surrogate	%Recovery	Quaimer	Limits
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

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

Lab Sample ID: MB 880-14906/1-A

**Matrix: Solid** 

Analysis Batch: 14894

Gasoline Range Organics

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

Prepared

12/16/21 08:22

Prep Batch: 14906

Analyzed 12/16/21 09:51

(GRO)-C6-C10

Analyte

Eurofins Xenco, Midland

RL

50.0

MDL Unit

mg/Kg

Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

Client: NT Global

Job ID: 880-9413-1

SDG: Eddy Co, NM

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

Lab Sample ID: MB 880-14906/1-A **Matrix: Solid** 

Analysis Batch: 14894

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 14906

Prep Type: Total/NA

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac <50.0 U 50.0 12/16/21 08:22 12/16/21 09:51 Diesel Range Organics (Over mg/Kg C10-C28) OII Range Organics (Over C28-C36) 50.0 mg/Kg 12/16/21 08:22 12/16/21 09:51

MB MB

<50.0 U

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	12/16/21 08:22	12/16/21 09:51	1
o-Terphenyl	129		70 - 130	12/16/21 08:22	12/16/21 09:51	1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 880-14906/2-A **Matrix: Solid** Prep Type: Total/NA

Prep Batch: 14906 Analysis Batch: 14894

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 897.9 90 70 - 130 mg/Kg (GRO)-C6-C10 1000 909.9 Diesel Range Organics (Over 91 70 - 130 mg/Kg C10-C28)

LCS LCS

ICED ICED

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: LCSD 880-14906/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** Analysis Batch: 14894

Analysis Batch: 14894							Prep	Batch:	14906	
	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	918.7		mg/Kg		92	70 - 130	2	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	1009		mg/Kg		101	70 - 130	10	20	

C10-C28)

	LCSD	LUSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 880-9101-A-1-E MS Client Sample ID: Matrix Spike

Matrix: Solid									Prep Type: Total/NA	
Analysis Batch: 14894									Prep Batch: 14906	
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	

<50.0 U Gasoline Range Organics 936.0 91 70 - 130996 mg/Kg (GRO)-C6-C10 996 872.8 Diesel Range Organics (Over <50.0 U mg/Kg 88 70 - 130 C10-C28)

	INIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	84		70 - 130

Job ID: 880-9413-1 Client: NT Global Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

SDG: Eddy Co, NM

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

Lab Sample ID: 880-9101-A-1-F MSD

**Matrix: Solid** 

Analysis Batch: 14894

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA Prep Batch: 14906

Sample Sample Spike MSD MSD RPD Result Qualifier RPD Limit Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U 995 1015 mg/Kg 99 70 - 130 8 20 (GRO)-C6-C10 995 Diesel Range Organics (Over <50.0 U 863.6 mg/Kg 87 70 - 13020

C10-C28)

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	75		70 - 130
o-Terphenyl	81		70 - 130

Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 15160** 

Lab Sample ID: MB 880-14975/1-A

Prep Type: Total/NA Prep Batch: 14975

мв мв MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac 12/16/21 14:25 12/20/21 12:33 Gasoline Range Organics <50.0 U 50.0 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 12/16/21 14:25 12/20/21 12:33 C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 12/16/21 14:25 12/20/21 12:33

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	12/16/21 14:25	12/20/21 12:33	1
o-Terphenyl	144	S1+	70 - 130	12/16/21 14:25	12/20/21 12:33	1

Lab Sample ID: LCS 880-14975/2-A

**Matrix: Solid** 

Analysis Batch: 15160

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 14975

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics 1000 1158 mg/Kg 116 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1102 mg/Kg 110 70 - 130 C10-C28)

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	123	70 - 130
o-Terphenyl	117	70 - 130

Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

Lab Sample ID: LCSD 880-14975/3-A

**Analysis Batch: 15160** 

Gasoline Range Organics

Diesel Range Organics (Over

Prep Type: Total/NA Prep Batch: 14975

LCSD LCSD %Rec. RPD Spike Added Result Qualifier Unit %Rec Limits Limit 1000 1291 mg/Kg 129 70 - 130 11 20 1000 1102 mg/Kg 110 70 - 130 20

C10-C28)

Analyte

(GRO)-C6-C10

Client: NT Global Job ID: 880-9413-1 Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

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

Lab Sample ID: LCSD 880-14975/3-A

**Matrix: Solid** Analysis Batch: 15160 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 14975

Surrogate %Recovery Qualifier 1-Chlorooctane 121

Limits 70 - 130 121 70 - 130

LCSD LCSD

Lab Sample ID: 880-9414-A-44-C MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

o-Terphenyl

Analysis Batch: 15160

Prep Type: Total/NA

Prep Batch: 14975

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits <49.9 U 996 1260 122 70 - 130Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 996 974.5 93 <49.9 U mg/Kg 70 - 130

C10-C28)

MS MS %Recovery Surrogate Qualifier Limits 70 - 130 1-Chlorooctane 100 100 70 - 130 o-Terphenyl

Lab Sample ID: 880-9414-A-44-D MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

**Analysis Batch: 15160** 

Prep Type: Total/NA

Prep Batch: 14975

MSD MSD Sample Sample Spike %Rec. RPD Analyte Result Qualifier hahhA Result Qualifier Unit %Rec I imits RPD Limit D Gasoline Range Organics <49.9 U 995 1278 mg/Kg 123 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 995 1047 mg/Kg 101 70 - 130 20 C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 108 70 - 130 o-Terphenyl 104

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-14941/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 15074** 

мв мв

MDL Unit Dil Fac Analyte Result Qualifier RL D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 12/19/21 22:24

Lab Sample ID: LCS 880-14941/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 15074

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit Limits Chloride 250 263.7 mg/Kg 105 90 - 110

Job ID: 880-9413-1 Client: NT Global Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-14941/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 15074

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit D Chloride 250 268.8 mg/Kg 108 90 - 110

Lab Sample ID: 880-9413-2 MS Client Sample ID: H-2 (0-0.5) **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 15074** 

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	56.9		248	324.3		mg/Kg		108	90 - 110	 

Lab Sample ID: 880-9413-2 MSD Client Sample ID: H-2 (0-0.5) **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 15074

MSD MSD %Rec. RPD Spike Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 56.9 327.9 248 mg/Kg 109 90 - 110

Lab Sample ID: MB 880-15034/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 15133** 

мв мв

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac <5.00 U 5.00 Chloride 12/19/21 11:47 mg/Kg

Lab Sample ID: LCS 880-15034/2-A Client Sample ID: Lab Control Sample **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 15133

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chlorido	250	260.4		malka	_	100	00 110	 

Lab Sample ID: LCSD 880-15034/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 15133** 

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	266.6		mg/Kg	_	107	90 - 110	1	20

Lab Sample ID: 880-9409-A-1-G MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

**Analysis Batch: 15133** 

	Sample Sample	Spike	MS	MS				%Rec.
Analyte	Result Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Chloride	139	248	408.1		mg/Kg		109	90 - 110

Lab Sample ID: 880-9409-A-1-H MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble** 

**Matrix: Solid** 

Released to Imaging: 7/13/2022 2:31:45 PM

Analysis Batch: 15133											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	139		248	408.5		mg/Kg		109	90 - 110		20

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**Prep Type: Soluble** 

Client: NT Global Job ID: 880-9413-1
Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

#### **GC VOA**

#### **Analysis Batch: 14907**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9413-1	H-1 (0-0.5)	Total/NA	Solid	8021B	14933
880-9413-2	H-2 (0-0.5)	Total/NA	Solid	8021B	14933
880-9413-3	H-3 (0-0.5)	Total/NA	Solid	8021B	14933
880-9413-4	H-4 (0-0.5)	Total/NA	Solid	8021B	14933
MB 880-14907/8	Method Blank	Total/NA	Solid	8021B	
MB 880-14933/5-A	Method Blank	Total/NA	Solid	8021B	14933
LCS 880-14933/1-A	Lab Control Sample	Total/NA	Solid	8021B	14933
LCSD 880-14933/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	14933
880-9411-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	14933
880-9411-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	14933

## Prep Batch: 14933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9413-1	H-1 (0-0.5)	Total/NA	Solid	5035	<u> </u>
880-9413-2	H-2 (0-0.5)	Total/NA	Solid	5035	
880-9413-3	H-3 (0-0.5)	Total/NA	Solid	5035	
880-9413-4	H-4 (0-0.5)	Total/NA	Solid	5035	
MB 880-14933/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-14933/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-14933/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-9411-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-9411-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### Analysis Batch: 15042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9413-1	H-1 (0-0.5)	Total/NA	Solid	Total BTEX	
880-9413-2	H-2 (0-0.5)	Total/NA	Solid	Total BTEX	
880-9413-3	H-3 (0-0.5)	Total/NA	Solid	Total BTEX	
880-9413-4	H-4 (0-0.5)	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 14894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9413-4	H-4 (0-0.5)	Total/NA	Solid	8015B NM	14906
MB 880-14906/1-A	Method Blank	Total/NA	Solid	8015B NM	14906
LCS 880-14906/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	14906
LCSD 880-14906/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	14906
880-9101-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	14906
880-9101-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	14906

#### Prep Batch: 14906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9413-4	H-4 (0-0.5)	Total/NA	Solid	8015NM Prep	
MB 880-14906/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-14906/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-14906/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-9101-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-9101-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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Client: NT Global Job ID: 880-9413-1
Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

#### **GC Semi VOA**

#### Prep Batch: 14975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9413-1	H-1 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-9413-2	H-2 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-9413-3	H-3 (0-0.5)	Total/NA	Solid	8015NM Prep	
MB 880-14975/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-14975/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-14975/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-9414-A-44-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-9414-A-44-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

#### Analysis Batch: 15160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9413-1	H-1 (0-0.5)	Total/NA	Solid	8015B NM	14975
880-9413-2	H-2 (0-0.5)	Total/NA	Solid	8015B NM	14975
880-9413-3	H-3 (0-0.5)	Total/NA	Solid	8015B NM	14975
MB 880-14975/1-A	Method Blank	Total/NA	Solid	8015B NM	14975
LCS 880-14975/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	14975
LCSD 880-14975/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	14975
880-9414-A-44-C MS	Matrix Spike	Total/NA	Solid	8015B NM	14975
880-9414-A-44-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	14975

#### Analysis Batch: 15254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9413-1	H-1 (0-0.5)	Total/NA	Solid	8015 NM	
880-9413-2	H-2 (0-0.5)	Total/NA	Solid	8015 NM	
880-9413-3	H-3 (0-0.5)	Total/NA	Solid	8015 NM	

#### Analysis Batch: 15281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9413-4	H-4 (0-0.5)	Total/NA	Solid	8015 NM	

#### HPLC/IC

#### Leach Batch: 14941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9413-1	H-1 (0-0.5)	Soluble	Solid	DI Leach	
880-9413-2	H-2 (0-0.5)	Soluble	Solid	DI Leach	
880-9413-3	H-3 (0-0.5)	Soluble	Solid	DI Leach	
MB 880-14941/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-14941/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-14941/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9413-2 MS	H-2 (0-0.5)	Soluble	Solid	DI Leach	
880-9413-2 MSD	H-2 (0-0.5)	Soluble	Solid	DI Leach	

## Leach Batch: 15034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9413-4	H-4 (0-0.5)	Soluble	Solid	DI Leach	
MB 880-15034/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-15034/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15034/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9409-A-1-G MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9409-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

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Client: NT Global Job ID: 880-9413-1
Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

## HPLC/IC

#### Analysis Batch: 15074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9413-1	H-1 (0-0.5)	Soluble	Solid	300.0	14941
880-9413-2	H-2 (0-0.5)	Soluble	Solid	300.0	14941
880-9413-3	H-3 (0-0.5)	Soluble	Solid	300.0	14941
MB 880-14941/1-A	Method Blank	Soluble	Solid	300.0	14941
LCS 880-14941/2-A	Lab Control Sample	Soluble	Solid	300.0	14941
LCSD 880-14941/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	14941
880-9413-2 MS	H-2 (0-0.5)	Soluble	Solid	300.0	14941
880-9413-2 MSD	H-2 (0-0.5)	Soluble	Solid	300.0	14941

#### Analysis Batch: 15133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9413-4	H-4 (0-0.5)	Soluble	Solid	300.0	15034
MB 880-15034/1-A	Method Blank	Soluble	Solid	300.0	15034
LCS 880-15034/2-A	Lab Control Sample	Soluble	Solid	300.0	15034
LCSD 880-15034/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15034
880-9409-A-1-G MS	Matrix Spike	Soluble	Solid	300.0	15034
880-9409-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	15034

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Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

SDG: Eddy Co, NM

Client Sample ID: H-1 (0-0.5)

Date Collected: 12/15/21 00:00 Date Received: 12/16/21 10:16 Lab Sample ID: 880-9413-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	14933	12/16/21 10:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	14907	12/17/21 02:07	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15042	12/17/21 09:00	KL	XEN MID
Total/NA	Analysis	8015 NM		1			15254	12/21/21 13:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	14975	12/16/21 14:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15160	12/20/21 21:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	14941	12/16/21 12:07	СН	XEN MID
Soluble	Analysis	300.0		1			15074	12/20/21 00:10	CH	XEN MID

Lab Sample ID: 880-9413-2

Client Sample ID: H-2 (0-0.5) Date Collected: 12/15/21 00:00 Matrix: Solid

Date Received: 12/16/21 10:16

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	14933	12/16/21 10:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	14907	12/17/21 02:34	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15042	12/17/21 09:00	KL	XEN MID
Total/NA	Analysis	8015 NM		1			15254	12/21/21 13:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	14975	12/16/21 14:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15160	12/20/21 21:25	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	14941	12/16/21 12:07	CH	XEN MID
Soluble	Analysis	300.0		1			15074	12/20/21 00:17	CH	XEN MID

Client Sample ID: H-3 (0-0.5) Lab Sample ID: 880-9413-3

Date Collected: 12/15/21 00:00

Date Received: 12/16/21 10:16

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	14933	12/16/21 10:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	14907	12/17/21 03:01	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15042	12/17/21 09:00	KL	XEN MID
Total/NA	Analysis	8015 NM		1			15254	12/21/21 13:47	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	14975	12/16/21 14:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15160	12/20/21 21:47	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	14941	12/16/21 12:07	CH	XEN MID
Soluble	Analysis	300.0		5			15074	12/20/21 00:37	CH	XEN MID

Client Sample ID: H-4 (0-0.5) Lab Sample ID: 880-9413-4

Date Collected: 12/15/21 00:00 Date Received: 12/16/21 10:16

Γ	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	14933	12/16/21 10:37	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	14907	12/17/21 03:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15042	12/17/21 09:00	KL	XEN MID

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**Matrix: Solid** 

**Matrix: Solid** 

## **Lab Chronicle**

Client: NT Global Job ID: 880-9413-1 Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

Client Sample ID: H-4 (0-0.5)

Date Received: 12/16/21 10:16

Lab Sample ID: 880-9413-4 Date Collected: 12/15/21 00:00

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			15281	12/21/21 15:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	14906	12/16/21 12:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			14894	12/16/21 12:46	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	15034	12/17/21 08:50	CA	XEN MID
Soluble	Analysis	300.0		1			15133	12/19/21 14:57	SC	XEN MID

#### Laboratory References:

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

# **Accreditation/Certification Summary**

Client: NT Global Job ID: 880-9413-1
Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

## Laboratory: Eurofins Xenco, Midland

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

Authority	Pi	ogram	Identification Number	<b>Expiration Date</b>
Texas	N	ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report hi	it the laboratory is not certifi	ed by the governing authority. This list ma	y include analytes for
the agency does not of	• •	at the laboratory is not certain	ed by the governing authority. This list his	ay include analytes for
,	• •	Matrix	Analyte	ay include analytes for
the agency does not of	fer certification.	•	, , ,	

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## **Method Summary**

Client: NT Global Job ID: 880-9413-1 Project/Site: Blue Thunder 5 Fed #4H (12.04.21)

SDG: Eddy Co, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

#### **Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. 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:

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

Eurofins Xenco, Midland

# **Sample Summary**

Client: NT Global Job ID: 880-9413-1
Project/Site: Blue Thunder 5 Fed #4H (12.04.21) SDG: Eddy Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-9413-1	H-1 (0-0.5)	Solid	12/15/21 00:00	12/16/21 10:16
880-9413-2	H-2 (0-0.5)	Solid	12/15/21 00:00	12/16/21 10:16
880-9413-3	H-3 (0-0.5)	Solid	12/15/21 00:00	12/16/21 10:16
880-9413-4	H-4 (0-0.5)	Solid	12/15/21 00:00	12/16/21 10:16

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Project Manager	Mike Carmona				Bill to: (if different)	int)	Ja	Jacqui Harris	Ŝ					The state of the s		S	ork o	rder C	Work Order Comments	nts	photograph of the second	
Company Name.	NTG Environmental	ental			Company Name	me	cog	Ğ					 	rogram	WTSU.	ĭST	Ř	Brown	Program· UST/PST	RRC	_	uperfund
Address:	701 Tradewinds BLVD	BLVD			Address.		15	15 W Loving Rd	g Rd				S	State of Project:	roject							[
City, State ZIP	Midland, TX 79706	706			City, State ZIP	Þ	Lo	Loving NM 88256	88256				<u></u>	Reporting Level II Level III PST/UST	Level	[   	vel ⊞	_pst_		RRP		Level IV
Phone.	432-813-0263			Email	<u>lacqui.harris@conocophillips_com</u>	@conoc	phillip	s com					U G	Deliverables	les EDD	ď		ADaPT 🗆		Other:	,	
Project Name	Blue Thunder 5 Fed #4H (12 04 21)	5 Fed #4H (1:	2 04 21)		Turn Around				G Constant Wilder on	age of the second	ANA	LYSIS	NALYSIS REQUEST	ST					P	eserva	Preservative Codes	odes
Project Number		214974		Routine	<b>√</b> Rush	Pres. Code	e s												None NO	ō	₽	DI Water: H₃O
Project Location	Edo	Eddy Co, NM		Due Date:	72 Hrs					_	-		_	4	1	1			Cool Cool	3.	5	L
Sampler's Name.		F		TAT starts the	TAT starts the day received by the	#	<u> </u>	RO)											HCL HC	ဂဋ	ONH CONH	HNO, HN
P0#				lab if recei	lab if received by 4 30pm			+ MI										****	H-20, H-	<del>,</del> (		NaOH Na
SAMPLE RECEIPT		Temp Blank.	Yes (No	Wet Ice.	Yes) No	eter			0 0								<del></del>		4H '04'H	등 .	ā	9
Received Intact:	/ Yes	)	Thermometer ID	eter ID	M				e 30									.D	NaHSO	NaHSO, NARIS	'n	
Cooler Custody Seals	Yes	No (N/A)	Correction Factor	Factor	<u>ه</u> /	Pa	rEX	_	orid									ноі	Na <sub>2</sub> S <sub>2</sub> O	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> NaSO <sub>3</sub>	ن ز	
Sample Custody Seals	Yes	No (N/A	Temperati	Temperature Reading:	7		8.		Chl								•		Zn Acet	Zn Acetate+NaOH Zn	9 Zn	
Total Containers:			Corrected	Corrected Temperature:		<u>۲</u>		1 801						·····					NaOH+	Ascorbi	NaOH+Ascorbic Acid SAPC	SAPC
Sample Identification	ification	Date	Time	Soil	Water G	Grab/ # of Comp   Cont	<b>∓</b> 4.	TP					·						S	ample	Sample Comments	ents
H-1 (0-0 5')	5)	12/15/2021	-	×		G 1	×	×	×	_			_	$\dashv$	-	$\dashv$	1					
H-2 (0-0 5')	5')	12/15/2021	1	X	-	G 1	×	×	×				_	-	1							
H-3 (0-0 5')	5')	12/15/2021	1	X	-	G 1	×	×	×					-	1							
H-4 (0-0 5')	5)	12/15/2021		×		G 1	×	×	×													
								-		<u> </u>												
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Additoi	Additoinal Comments:																					
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 \$5.00 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.	ocument and relinquiable only for the cos rge of \$85.00 will be	ishment of samp it of samples and applied to each p	les constitut shall not as roject and a	es a valid purchas sume any respons charge of \$5 for e	se order from clic sibility for any lo ach sample subi	ent company sses or expe mitted to Xe	/ to Xenc enses inc enco, but i	o, its affili urred by t not analyz	ates and he client ed. Thes	subcontrac f such lose terms will	tors. It as ies are du be enforc	signs sta to circu ed unless	It assigns standard terms and conditions due to circumstances beyond the contro forced unless previously negotiated.	ms and o beyond by negot	ondition the contrated.	0.						
	(Signature)		Received by:	d by: /Śignature)	ire)		Dat	Date/Time		Relin	Relinquished by: (Signature)	by (Si	gnature		Re	Received by: (Signature)	by: (S	ignatu	<u>e</u>		Date/Time	ime
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	Work
880-9413 Chain of Custody	

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12/21/2021

Revised Date 05012020 Rev 2020 1

## **Login Sample Receipt Checklist**

Client: NT Global Job Number: 880-9413-1 SDG Number: Eddy Co, NM

Login Number: 9413 List Source: Eurofins Xenco, Midland

List Number: 1 Creator: Teel, Brianna

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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March 11, 2022

CONNER MOEHRING
CARMONA RESOURCES
310 W WALL ST SUITE 415
MIDLAND, TX 79701

RE: BLUE THUNDER 5 FED #4H

Enclosed are the results of analyses for samples received by the laboratory on 03/10/22 11:56.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accred certif.html.

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

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

Accreditation applies to public drinking water matrices.

Celey D. Keene

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Reported: 03/11/2022

Project Name: BLUE THUNDER 5 FED #4H

Project Number: 1019 (12.04.21)
Project Location: COG - EDDY CO NM

Sampling Date: 03/10/2022

Sampling Type: Soil

Sampling Condition: \*\* (See Notes)
Sample Received By: Tamara Oldaker

#### Sample ID: CS - 1 ( 1.5' ) (H220963-01)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	1.93	96.6	2.00	8.82	
Toluene*	<0.050	0.050	03/10/2022	ND	1.94	96.9	2.00	9.06	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	1.86	93.0	2.00	9.38	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	5.73	95.5	6.00	9.56	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/11/2022	ND	432	108	400	7.69	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2022	ND	202	101	200	18.5	
DRO >C10-C28*	14.4	10.0	03/10/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/10/2022	ND					
Surrogate: 1-Chlorooctane	102	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	103	% 59.5-14	2						

#### Cardinal Laboratories \*=Accredited Analyte

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Celeg & Freene



#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Reported: 03/11/2022

BLUE THUNDER 5 FED #4H

Project Name: Project Number: 1019 (12.04.21) COG - EDDY CO NM Project Location:

Sampling Date: 03/10/2022

Sampling Type: Soil Sampling Condition: \*\* (See Notes)

Sample Received By: Tamara Oldaker

#### Sample ID: CS - 2 ( 1.5' ) (H220963-02)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	1.93	96.6	2.00	8.82	
Toluene*	<0.050	0.050	03/10/2022	ND	1.94	96.9	2.00	9.06	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	1.86	93.0	2.00	9.38	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	5.73	95.5	6.00	9.56	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/11/2022	ND	432	108	400	7.69	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2022	ND	202	101	200	18.5	
DRO >C10-C28*	10.2	10.0	03/10/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/10/2022	ND					
Surrogate: 1-Chlorooctane	86.9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	84.7	% 59.5-14	2						

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Celeg D. Keene



#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Reported: 03/11/2022

BLUE THUNDER 5 FED #4H 1019 (12.04.21)

Project Location: COG - EDDY CO NM Sampling Date: 03/10/2022

Sampling Type: Soil

Sampling Condition: \*\* (See Notes) Sample Received By: Tamara Oldaker

#### Sample ID: CS - 3 ( 1.5' ) (H220963-03)

Project Name:

Project Number:

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	1.93	96.6	2.00	8.82	
Toluene*	<0.050	0.050	03/10/2022	ND	1.94	96.9	2.00	9.06	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	1.86	93.0	2.00	9.38	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	5.73	95.5	6.00	9.56	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	69.9-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/11/2022	ND	432	108	400	7.69	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2022	ND	202	101	200	18.5	
DRO >C10-C28*	<10.0	10.0	03/10/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/10/2022	ND					
Surrogate: 1-Chlorooctane	115 %	66.9-13	6						
Surrogate: 1-Chlorooctadecane	114 9	6 59.5-14	2						

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Celey D. Keine



#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Reported: 03/11/2022

BLUE THUNDER 5 FED #4H

Project Name: Project Number: 1019 (12.04.21) Project Location: COG - EDDY CO NM

Sampling Date: 03/10/2022

Sampling Type: Soil

Sampling Condition: \*\* (See Notes) Sample Received By: Tamara Oldaker

#### Sample ID: CS - 4 ( 1.5' ) (H220963-04)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	1.93	96.6	2.00	8.82	
Toluene*	<0.050	0.050	03/10/2022	ND	1.94	96.9	2.00	9.06	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	1.86	93.0	2.00	9.38	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	5.73	95.5	6.00	9.56	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/11/2022	ND	432	108	400	7.69	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2022	ND	202	101	200	18.5	
DRO >C10-C28*	<10.0	10.0	03/10/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/10/2022	ND					
Surrogate: 1-Chlorooctane	95.4	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	94.8	% 59.5-14	22						

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Celeg D. Freene



03/10/2022

Soil

#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Sampling Date: Reported: 03/11/2022 Sampling Type:

mg/kg

Project Name: BLUE THUNDER 5 FED #4H Sampling Condition: \*\* (See Notes)
Project Number: 1019 (12.04.21) Sample Received By: Tamara Oldaker

Analyzed By: MS

Project Location: COG - EDDY CO NM

#### Sample ID: CS - 5 ( 1.5' ) (H220963-05)

BTEX 8021B

DIEX GOZID	11197	- Kg	Allulyzo	a by. 1-15					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	1.93	96.6	2.00	8.82	
Toluene*	<0.050	0.050	03/10/2022	ND	1.94	96.9	2.00	9.06	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	1.86	93.0	2.00	9.38	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	5.73	95.5	6.00	9.56	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	ed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/11/2022	ND	432	108	400	7.69	
TPH 8015M	mg,	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2022	ND	202	101	200	18.5	
DRO >C10-C28*	<10.0	10.0	03/10/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/10/2022	ND					
Surrogate: 1-Chlorooctane	95.8	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	92.1	% 59.5-14	2						

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Celey & Keene



#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Reported: 03/11/2022

BLUE THUNDER 5 FED #4H

Project Number: 1019 (12.04.21)
Project Location: COG - EDDY CO NM

Sampling Date: 03/10/2022

Sampling Type: Soil
Sampling Condition: \*\* (See Notes)

Sample Received By: Tamara Oldaker

## Sample ID: CS - 6 ( 1.5' ) (H220963-06)

Project Name:

BTEX 8021B	mg/kg		Analyze	Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	1.93	96.6	2.00	8.82	
Toluene*	<0.050	0.050	03/10/2022	ND	1.94	96.9	2.00	9.06	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	1.86	93.0	2.00	9.38	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	5.73	95.5	6.00	9.56	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/11/2022	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	03/10/2022	ND	202	101	200	18.5	
DRO >C10-C28*	<10.0	10.0	03/10/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/10/2022	ND					
Surrogate: 1-Chlorooctane	97.1	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	97.2	% 59.5-14	2						

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#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Reported: 03/11/2022

BLUE THUNDER 5 FED #4H

Project Name: Project Number: 1019 (12.04.21) Project Location: COG - EDDY CO NM

Sampling Date: 03/10/2022

Sampling Type: Soil \*\* (See Notes)

Sampling Condition: Sample Received By: Tamara Oldaker

### Sample ID: CS - 7 ( 1.5' ) (H220963-07)

BTEX 8021B	mg/kg		Analyze	Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	1.93	96.6	2.00	8.82	
Toluene*	<0.050	0.050	03/10/2022	ND	1.94	96.9	2.00	9.06	
Ethylbenzene*	< 0.050	0.050	03/10/2022	ND	1.86	93.0	2.00	9.38	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	5.73	95.5	6.00	9.56	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 69.9-14	40						
Chloride, SM4500CI-B	mg	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/11/2022	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	03/10/2022	ND	202	101	200	18.5	
DRO >C10-C28*	<10.0	10.0	03/10/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/10/2022	ND					
Surrogate: 1-Chlorooctane	90.0	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	87.9	% 59.5-14	2						

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#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Reported: 03/11/2022

BLUE THUNDER 5 FED #4H

Project Name: Project Number: 1019 (12.04.21) Project Location: COG - EDDY CO NM

Sampling Date: 03/10/2022

Sampling Type: Soil

Sampling Condition: \*\* (See Notes) Sample Received By: Tamara Oldaker

#### Sample ID: CS - 8 ( 1.5' ) (H220963-08)

BTEX 8021B	mg/kg		Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	1.93	96.6	2.00	8.82	
Toluene*	<0.050	0.050	03/10/2022	ND	1.94	96.9	2.00	9.06	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	1.86	93.0	2.00	9.38	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	5.73	95.5	6.00	9.56	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104 9	69.9-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/11/2022	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2022	ND	202	101	200	18.5	
DRO >C10-C28*	<10.0	10.0	03/10/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/10/2022	ND					
Surrogate: 1-Chlorooctane	89.5	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	87.1	% 59.5-14	2						

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03/10/2022

Soil

#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Sampling Date:

Reported: 03/11/2022 Sampling Type:

Project Name: BLUE THUNDER 5 FED #4H Sampling Condition: \*\* (See Notes)
Project Number: 1019 (12.04.21) Sample Received By: Tamara Oldaker

Project Location: COG - EDDY CO NM

#### Sample ID: SW - 1 ( 1.5' ) (H220963-09)

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	03/10/2022	ND	2.01	101	2.00	8.51	
Toluene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.90	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.82	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	6.18	103	6.00	8.31	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/11/2022	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	03/10/2022	ND	202	101	200	18.5	
DRO >C10-C28*	<10.0	10.0	03/10/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/10/2022	ND					
Surrogate: 1-Chlorooctane	76.5	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	73.4	% 59.5-14	2						

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#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Reported: 03/11/2022

Project Name: BLUE THUNDER 5 FED #4H
Project Number: 1019 ( 12.04.21 )

Project Location: COG - EDDY CO NM

Sampling Date: 03/10/2022

Sampling Type: Soil

Sampling Condition: \*\* (See Notes)
Sample Received By: Tamara Oldaker

#### Sample ID: SW - 2 ( 1.5' ) (H220963-10)

BTEX 8021B	mg/kg		Analyze	Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	2.01	101	2.00	8.51	
Toluene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.90	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.82	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	6.18	103	6.00	8.31	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 69.9-14	40						
Chloride, SM4500CI-B	mg	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/11/2022	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	03/10/2022	ND	202	101	200	18.5	
DRO >C10-C28*	<10.0	10.0	03/10/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/10/2022	ND					
Surrogate: 1-Chlorooctane	88.0	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	85.2	% 59.5-14	2						

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#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Reported: 03/11/2022

BLUE THUNDER 5 FED #4H

Project Number: 1019 (12.04.21) Project Location: COG - EDDY CO NM

Sampling Date: 03/10/2022

Sampling Type: Soil

Sampling Condition: \*\* (See Notes) Tamara Oldaker Sample Received By:

#### Sample ID: SW - 3 ( 1.5' ) (H220963-11)

Project Name:

BTEX 8021B	mg/kg		Analyze	d By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	2.01	101	2.00	8.51	
Toluene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.90	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.82	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	6.18	103	6.00	8.31	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	69.9-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/11/2022	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2022	ND	202	101	200	18.5	
DRO >C10-C28*	<10.0	10.0	03/10/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/10/2022	ND					
Surrogate: 1-Chlorooctane	94.5	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	94.3	% 59.5-14	2						

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#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Sampling Date: 03/10/2022

Reported: 03/11/2022 Sampling Type: Soil

Project Name: BLUE THUNDER 5 FED #4H Sampling Condition: \*\* (See Notes)

Project Number: 1019 (12.04.21) Sample Received By: Tamara Oldaker

Applyzod By: MC\

Project Location: COG - EDDY CO NM

#### Sample ID: SW - 4 ( 1.5' ) (H220963-12)

RTFY 8021R

BIEX 8021B	тд/кд		Anaiyze	Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	2.01	101	2.00	8.51	
Toluene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.90	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.82	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	6.18	103	6.00	8.31	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/11/2022	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	03/10/2022	ND	202	101	200	18.5	
DRO >C10-C28*	<10.0	10.0	03/10/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/10/2022	ND					
Surrogate: 1-Chlorooctane	93.4	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	90.2	% 59.5-14	2						

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#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Reported: 03/11/2022

BLUE THUNDER 5 FED #4H

Project Name: BLUE THUNDER 5 FED
Project Number: 1019 (12.04.21)
Project Location: COG - EDDY CO NM

Sampling Date: 03/10/2022

Sampling Type: Soil

Sampling Condition: \*\* (See Notes)
Sample Received By: Tamara Oldaker

#### Sample ID: SW - 5 ( 1.5' ) (H220963-13)

Analyte         Result         Reporting Limit         Analyzed         Method Blank         BS           Benzene*         <0.050         0.050         03/10/2022         ND         2.01           Toluene*         <0.050         0.050         03/10/2022         ND         2.00	% Recovery 101 99.9	True Value QC 2.00 2.00	RPD 8.51	Qualifier
• •			8.51	
Toluene* <0.050 0.050 03/10/2022 ND 2.00	99.9	2.00		
10,000 0,000 00,10,2022 100 2,000		2.00	8.90	
Ethylbenzene* <0.050 0.050 03/10/2022 ND 2.00	99.9	2.00	8.82	
Total Xylenes* <0.150 0.150 03/10/2022 ND 6.18	103	6.00	8.31	
Total BTEX <0.300 0.300 03/10/2022 ND				
Surrogate: 4-Bromofluorobenzene (PID 105 % 69.9-140				
Chloride, SM4500Cl-B mg/kg Analyzed By: GM				
Analyte Result Reporting Limit Analyzed Method Blank BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride 16.0</b> 16.0 03/11/2022 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 03/11/2022 ND 202	101	200	18.5	
DRO >C10-C28* <10.0 10.0 03/11/2022 ND 191	95.5	200	19.6	
EXT DRO >C28-C36 <10.0 10.0 03/11/2022 ND				
Surrogate: 1-Chlorooctane 67.4 % 66.9-136				
Surrogate: 1-Chlorooctadecane 65.4 % 59.5-142				

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#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Reported: 03/11/2022

Project Name: BLUE THUNDER 5 FED #4H Project Number: 1019 (12.04.21)

Project Location: COG - EDDY CO NM Sampling Date: 03/10/2022

Sampling Type: Soil Sampling Condition: \*\* (See Notes)

Tamara Oldaker Sample Received By:

#### Sample ID: SW - 6 ( 1.5' ) (H220963-14)

BTEX 8021B	mg/kg		Analyze	d By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	2.01	101	2.00	8.51	
Toluene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.90	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.82	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	6.18	103	6.00	8.31	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	69.9-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/11/2022	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/10/2022	ND	202	101	200	18.5	
DRO >C10-C28*	<10.0	10.0	03/10/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/10/2022	ND					
Surrogate: 1-Chlorooctane	91.6	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	88.5	% 59.5-14	2						

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#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Reported: 03/11/2022

Project Name: BLUE THUNDER 5 FED #4H Project Number: 1019 (12.04.21)

Project Location: COG - EDDY CO NM Sampling Date: 03/10/2022

Sampling Type: Soil Sampling Condition: \*\* (See Notes)

Tamara Oldaker Sample Received By:

#### Sample ID: SW - 7 ( 1.5' ) (H220963-15)

BTEX 8021B	mg/kg		Analyze	Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	2.01	101	2.00	8.51	
Toluene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.90	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.82	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	6.18	103	6.00	8.31	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 69.9-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/11/2022	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	03/11/2022	ND	202	101	200	18.5	
DRO >C10-C28*	<10.0	10.0	03/11/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/11/2022	ND					
Surrogate: 1-Chlorooctane	86.4	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	86.2	% 59.5-14	2						

Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keene



#### Analytical Results For:

CARMONA RESOURCES CONNER MOEHRING 310 W WALL ST SUITE 415 MIDLAND TX, 79701 Fax To:

Received: 03/10/2022 Reported: 03/11/2022

BLUE THUNDER 5 FED #4H

Project Number: 1019 (12.04.21) Project Location: COG - EDDY CO NM

Sampling Date: 03/10/2022

Sampling Type: Soil Sampling Condition:

\*\* (See Notes) Tamara Oldaker Sample Received By:

#### Sample ID: SW - 8 ( 1.5' ) (H220963-16)

Project Name:

BTEX 8021B	mg/kg		Analyze	d By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/10/2022	ND	2.01	101	2.00	8.51	
Toluene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.90	
Ethylbenzene*	<0.050	0.050	03/10/2022	ND	2.00	99.9	2.00	8.82	
Total Xylenes*	<0.150	0.150	03/10/2022	ND	6.18	103	6.00	8.31	
Total BTEX	<0.300	0.300	03/10/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	69.9-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/11/2022	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/11/2022	ND	202	101	200	18.5	
DRO >C10-C28*	<10.0	10.0	03/11/2022	ND	191	95.5	200	19.6	
EXT DRO >C28-C36	<10.0	10.0	03/11/2022	ND					
Surrogate: 1-Chlorooctane	88.2	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	85.1	% 59.5-14	2						

#### Cardinal Laboratories \*=Accredited Analyte

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Celey D. Keine



#### **Notes and Definitions**

QR-04 The RPD for the BS/BSD was outside of historical limits.

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  $6^{\circ}\text{C}$ 

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

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PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Relinquished by: (Signature)

Received by:

(Signature)

3-10-22

1156

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

05012020 Rev. 2020.

Comments:

SW-2 (1.5') SW-1 (1.5")

3/10/2022 3/10/2022

90016UEM N

CS-7 (1.5') CS-6 (1.5') CS-5 (1.5") CS-4 (1.5") CS-3 (1.5") CS-2 (1.5') CS-1 (1.5')

CS-8 (1.5")

3/10/2022 3/10/2022 3/10/2022 3/10/2022 3/10/2022 3/10/2022

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SAMPLE RECEIPT

Cooler Custody Seals:

Yès Yes

No N/A No NIA

Correction Factor: Temperature Reading:

18,7 18.2

Corrected Temperature

Thermometer ID:

Yes

No

Wet loe:

Yes

20

**Parameters** 

**BTEX 8021B** 

TPH 8015M ( GRO + DRO + MRO)

Chloride 4500

HOLD

NaHSO<sub>4</sub>: NABIS

NaOH+Ascorbic Acid: SAPC Zn Acetate+NaOH: Zn Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>: NaSO<sub>3</sub>

Sample Comments

Cool: Cool

None: NO

DI Water: H<sub>2</sub>O

**Preservative Codes** 

H<sub>2</sub>S0<sub>4</sub>: H<sub>2</sub> H3PO4 HP

> NaOH: Na HNO3: HN MeOH: Me

Yes Temp Blank:

No

ceived Intact:

ample Custody Seals:

otal Containers:

Sample Identification

Date

Time

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Water

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3/10/2022 3/10/2022

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roject Location

Eddy Co, NM

Due Date:

24Hrs

Routine

Pres.

Turn Around ✓ Rush

Email: jacquiharris@conocophillips.com

M. Ke Connes Clint

ANALYSIS REQUEST

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

CM

roject Number

oject Name:

Blue Thunder 5 Fed #4H (12.04.21)

1019

Project Manager:

Company Name:

City, State ZIP:

Midland, TX 79701 432-813-6823

ddress:

Midland, TX 79701 City, State ZIP: Loving, NM 88256	310 West Wall Ste. 415 Address: 15 W Loving Rd	Company Name: COG	por Mochring Bill to: (if different) Jacqui Harris				Chain of Custody
7 ×	ng Rd State of Froject.  Reporting:Level III ☐ Level III ☐ ST/UST ☐ TRRP ☐ Level IV ☐	Program: USTIPST LIPRY Litrownillerus Livro Lapronnillerus		Page1 of2 F	°age	Work Order No: H220463	

Released to Imaging: 7/13/2022 2:31:45 PM

# **Chain of Custody**

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Company Name:   Conner Mochring   Company Name:   Congany Name:   Company Na	
Company Name	Relinquished by: (Signature)
Conner Moehring	
Toget Manager:   Conner Mochning   Sall to: (# afferent)   Sangle ZIP:   Company Name:   Company Name:   Codd	
Date   Post	
Dampary Name:   Conner Moehring	-
Date   Conner Moehring	
Project Manager   Conner Moehring   Sample Company Name:   Conner Moehring   Carmona Resources   Company Name:   Coddress:   Coddress:   Site ZIP:   Midland, TX 79701   Email:	3
Digit Manager:   Conner Moehring   Company Name:   Company N	
Conner Moehring	+
Conner Moehring	
Conner Moehring	+
Conner Moehring  Carmona Resources  Carmona Resources  Company Name:  CoG  Cog  Cog  Rodress:  15 W Loving Rd  Address:  15 W Loving Rd  City, State ZIP:  Loving, NM 88256  Midland, TX 79701  Email:   acquilharris@conocophillips.com  Feddy Co, NM    Eddy Co, NM    Code  Code  CEIPT    Temp Blank:   Yes No NAM    Seals:   Yes No NAM    Correction Factor:   Yes No NAM    Seals:   Yes No NAM    Corrected Temperature:   /8-7    Seals:   Yes No NAM    Seals:	
Conner Moehring  Carmona Resources  Carmona Resources  Company Name:  CoG  Company Name:  CoG  Cogannor Moehring  Address:  15 W Loving Rd  Address:  15 W Loving Rd  City, State ZIP:  Loving, NM 88256  Pres.  Code  Fres.  CEIPT  Temp Blank:  Yes No NA NA Correction Factor:  Yes No NA NA Correction Factor:  Yes No NA NA Temperature Reading:  Yes No NA NA Temperature Reading:  Yes No Gi die	
Conner Moehring	
Conner Moehring	7
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Conner Moehring  Carmona Resources  Carmona Resources  310 West Wall Ste. 415  Midland, TX 79701  432-813-6823  Blue Thunder 5 Fed #4H (12.04.21)  Eddy Co, NM  CM  TAT starts the day received by the lab, if received by 4:30pm  Eddy Co, NM  TAT starts the day received by 4:30pm  Eddy Co, NM  TAT starts the day received by 4:30pm  Eddy Co, NM  TAT starts the day received by 4:30pm  Eddy Co, NM  TAT starts the day received by 4:30pm  Eddy Co, NM  TAT starts the day received by 4:30pm  Eddy Co, NM  TAT starts the day received by 4:30pm  Eddy Co, NM  TAT starts the day received by 4:30pm  Eddy Co, NM  TAT starts the day received by 4:30pm  Eddy Co, NM  TAT starts the day received by 4:30pm  Eddy Co, NM  TAT starts the day received by 4:30pm  Eddy Co, NM  TAT starts the day received by 4:30pm	
Conner Moehring	
Conner Moehring     Bill to: (if different)     Jacqui Harris       Carmona Resources     Company Name:     COG       310 West Wall Ste. 415     Address:     15 W Loving Rd       Midland, TX 79701     City, State ZIP:     Loving,NM 88256       432-813-6823     Email: jacquiharris@conocophillips.com	
Conner Moehring  Carmona Resources  310 West Wall Ste. 415  Midland, TX 79701  Email: jacquiharris@conocophill	ANALYSIS REQUEST
Conner Moehring  Carmona Resources  310 West Wall Ste. 415  City, State ZIP:	Dellverables, Loo
Conner Moehring  Carmona Resources  Carmona Resources  Carmona Resources  Address:	Nepo
Conner Moehring  Carmona Resources  Bill to: (if different)  Company Name:	Reporting Level III Level III PST/UST
Conner Moehring Bill to: (if different)	State of Project:
	Program: UST/PST   PRP   Brownfields   RRC

Page 20 of 20

<b>Received by OCD: 6/8</b>	8/2022 12:36:03 PM
Form C-141	State of New Mexico
Page 6	Oil Conservation Division

	Page 99 of 100
Incident ID	
District RP	
Facility ID	
Application ID	

# Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.				
☐ A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC			
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)				
Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)				
☐ Description of remediation activities				
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of	ntions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in			
	Title:			
Signature: _ Paqui Provis	Date: 6/8/2022			
	Telephone:			
OCD Only				
Received by: Robert Hamlet	Date: 7/13/2022			
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.				
Closure Approved by: Robert Hamlet	Date: 7/13/2022			
Printed Name: Robert Hamlet	Title: Environmental Specialist - Advanced			

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

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

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

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

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

CONDITIONS

Action 115060

#### **CONDITIONS**

Operator:	OGRID:
COG OPERATING LLC	229137
600 W Illinois Ave	Action Number:
Midland, TX 79701	115060
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

rhamlet	We have received your closure report and final C-141 for Incident #NAPP2201126212 BLUE THUNDER 5 FEDERAL 004H, thank you. This closure is	7/13/2022
	approved.	