District I
1625 N. French Dr., Hobbs, NM 88240
District II
2011 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505

# State of New Mexico Energy Minerals and Natural Resources

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Form C-141 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

			Rele	ease Notific	atio	n and Co	orrective A	ction				
						OPERA'	ГOR		☐ Initia	al Report	Final Repor	
Name of Co	mpany E	OG Resource	es, Inc.			Contact Zane Kurtz						
Address 550				TX 79706		Telephone l	No. (432) 686-3	667				
Facility Nan						Facility Type CTB						
Surface Own	ner	Fee		Mineral O	wner	r Fee API No. 30-025-42727						
Burrace Own	iici	ree							1111110	. 00 02	0 12121	
						N OF RE		- /**				
					North South	/South Line	Feet from the 460	East/V East	Vest Line	County Lea		
		L	atitude_	32.023207			-103.570207	NA	D83			
				NAT	URE	OF REL						
Type of Relea							Release 90 bbls			Recovered 70		
Source of Rel	ease 24" g	asket				unknown	Iour of Occurrenc	e	4/22/18	Hour of Disco	ivery	
Was Immedia	te Notice C	Given?				If YES, To	Whom?		4/22/10	1.50 um		
			Yes 🗵	No 🗌 Not Re	quired							
By Whom?						Date and F	Iour					
Was a Waterc	course Reac	ched?	Yes 🗵	] No		If YES, Vo	olume Impacting t	he Wate	ercourse.			
If a Watercou	rse was Im	pacted, Descri	be Fully.*	ķ								
Describe Caus	se of Proble	em and Remed	lial Action	n Taken.*								
The 24" gaske	et from the	flange to the r	nanual ga	te valve ruptured o	ausing	the flanged c	onnection to leak.	Impact	ted soil in t	he area of the	release will be	
excavated and	l soil sampl	les will be coll	ected for	laboratory analysi	s. Vert	ical and horiz	ontal delineation	of the in	npacted soi	l will be perfo	ormed and a work	
plan for remed	diation will	be prepared f	or approv	al by NMOCD.								
Describe Area	Affected a	and Cleanup A	ction Tak	en.*								
Area affected	is just east	of Thor CTB.	Impacted	d soils to be scrape	ed and	disposed of.						
I hereby certif	fy that the i	nformation gi	ven above	is true and compl	ete to t	he best of my	knowledge and u	nderstan	d that purs	uant to NMO	CD rules and	
regulations all	operators	are required to	report an	d/or file certain re	lease n	otifications ar	nd perform correct	tive acti	ons for rele	eases which m	ay endanger	
public health	or the envir	onment. The	acceptanc	e of a C-141 repor	rt by th	e NMOCD m	arked as "Final Re	eport" de	oes not reli	eve the operat	or of liability	
should their of	perations h	ave failed to a	dequatery CD accen	investigate and re tance of a C-141 r	mediai eport d	e contaminati oes not reliev	on that pose a three e the operator of r	esnonsil	bility for co	mpliance wate	h any other	
federal, state,				tance of a C-1411	орог  а	oes not renev	e the operator of i	Съропъл	onity for C	mphanee wa	ii uiij oiiioi	
		<u> </u>					OIL CONS	SERV	ATION	DIVISION	1	
	1 KB	randa	-1	0-016								
Signature: /	- ( 2)	-w.~	45	agent for	1		n .					
Approved by Environmental Specialist:  Printed Name: Zane Kurtz												
Title: Sr. Safe	ety Environ	mental Rep., l	EOG Reso	ources		Approval Dat	e:	E	Expiration I	Date:		
E-mail Addres	ss sane ku	rtz@enoresnu	rces.com			Conditions of	`Approval:					
)	bane_ku					2011410115 01				Attached		
Date: 4/23/2				Phone:432-425-20	)23							
Attach Additi	ional Shee	ts If Necessa	arv									

	Page 2 of 7	71
Incident ID		
District RP	1RP-5026	
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?	110 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes 🗹 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes 🗸 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes 🗸 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes 🗸 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes 🗾 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes 🗹 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes 🗹 No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes 🗹 No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes 🗹 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 ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil
Characterization Report Checklist: Each of the following items must be included in the report.	
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well. Field data	ls.
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	
✓ 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.

Received by OCD: 11/19/2021 9:33:47 AM Form C-141 State of New Mexico
Page 4 Oil Conservation Division

		Page 3 of 71
Incident ID		
District RP	1RP-5026	
Facility ID		

Application ID

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

Page 4 of 71

Incident ID	
District RP	1RP-5026
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.

Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
✓ Laboratory analyses of final sampling (Note: appropriate ODC	C 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
Printed Name: James Kennedy	Title: (432) 848-9146
Signature: Ames Kennedy	Date: <u>5/6/2021</u>
email: James_Kennedy@eogresources.com	Telephone: (432) 848-9146
OCD Only	
Received by:	Date:
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by: Nelson Velez	Date: 01/07/2022
Closure Approved by: Nelson Velez  Printed Name: Nelson Velez	Title: Environmental Specialist – Adv



## Site Information

Closure Report
Thor 21 CTB
Lea County, New Mexico
Unit P Sec 21 T26S R33E
1RP-5026
32.023206°, -103.570227°

Produced Water Release Source: Gasket failure on gate valve Release Date: 04/22/2018 Volume Released: 90 bbls/PW Volume Recovered: 70 bbls/PW

> Prepared for: EOG Resources 5509 Champions Dr. Midland, TX 79706

Prepared by:
NTG Environmental
701 Tradewinds Blvd
Suite C
Midland, TX 79706



# TABLE OF CONTENTS

## **FIGURES**

FIGURE 1	OVERVIEW MAP
FIGURE 2	TOPOGRAPHIC MAP
FIGURE 3	SITE LOCATION MAP

# TABLES/PHOTOLOG

TABLE 1	INITIAL SOIL ANALYTICAL RESULTS
PHOTOS	PHOTOLOG

# **APPENDICES**

APPENDIX A	C-141 INITIAL AND FINAL
APPENDIX B	GROUNDWATER RESEARCH
APPENDIX C	LABORATORY ANALYTICAL REPORTS



701 Tradewinds Boulevard, Suite C Midland, Texas 79706 Tel. 432.685.3898 www.ntglobal.com

May 6, 2021

Mr. Bradford Billings New Mexico Oil Conservation Division 5200 Oakland Ave N.E Suite100 Albuquerque, NM 87113

**Re:** Closure Report

Thor 21 CTB 1RP-5026 EOG Resources Inc. Site Location: Unit P, S21, T26S, R33E (Lat 32.023206°, Long -103.570207°)

Lea County, New Mexico

To whom it may concern:

On behalf of EOG Resources Inc. (EOG), New Tech Global Environmental, LLC (NTGE) has prepared this letter to document site assessment activities for the Thor 21 CTB 1RP-5026. The site is located at 32.023206°, -103.570207° within Unit P, S21, T26S, R33E, and approximately 22.79 miles southwest of Jal, New Mexico, in Lea County (Figures 1 and 2).

## **Background**

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the leak was discovered on April 22, 2018. It resulted in the release of approximately 90 barrels of produced water due to a gasket failure of the gate valve. A vac truck was utilized, and 70 barrels of fluids were recovered. The impacted area measured approximately 95' x 20', as shown on Figure 3. The initial C-141 form is attached in Appendix A.

## **Site Characterization**

The site is located within a low karst area. Based on a review of the New Mexico Office of State Engineer's and USGS databases, there are no known water sources within ½ miles radius of the location. The nearest identified well is located approximately 0.64 miles southeast of the site in S21, T26S, R33E. The well has a reported depth to groundwater of 110 feet below ground surface (ft bgs). A copy of the associated *Point of Diversion Summary* report is attached in Appendix B.

### **Regulatory Criteria**

In accordance with 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

### **Site Assessment**

On April 14, 2021, NTGE conducted site assessment activities to assess soil impacts resulting from the release. A total of nine sample points were advanced to depths ranging 0-0.5 ft bgs within and surrounding the release area to assess the vertical and horizontal extent of potential impacts. The soil sample locations are shown on figure 3.

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 Xenco Laboratories in Midland, Texas, for chemical analysis. 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 containing analytical methods, results, and chain-of-custody documents are attached in Appendix C. The analytical results are provided in Table 1.

All samples are below the NMOCD regulatory criteria for TPH, BTEX, and chlorides based on the analytical results.

## **Conclusions**

Based on the finding of the assessment and the analytical results, no further actions are required at the site. The final C-141 is attached, and EOG formally requests closure of the spill. If you have any questions regarding this report or need additional information, please contact us at 432-813-0263.

Sincerely,

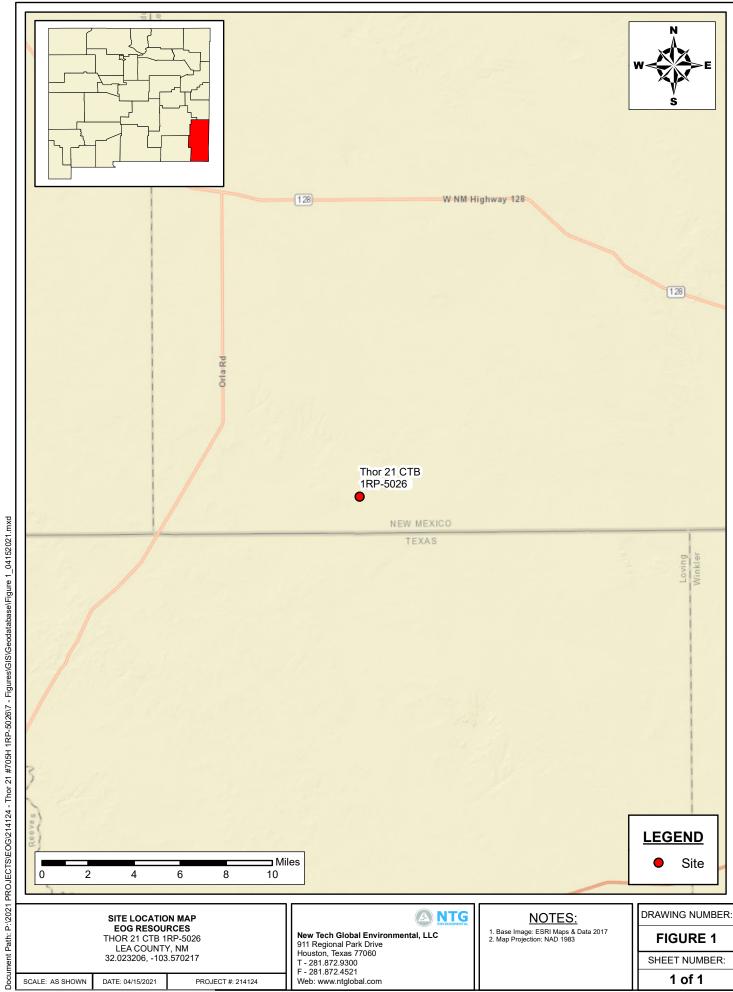
**NTG Environmental** 

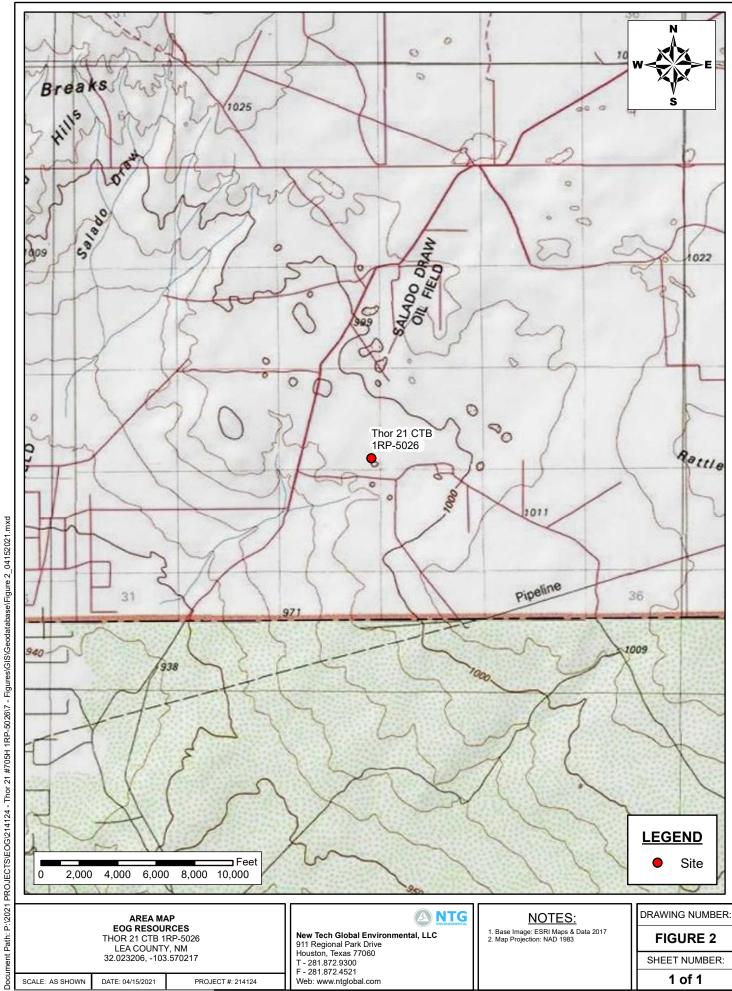
Mike Carmona

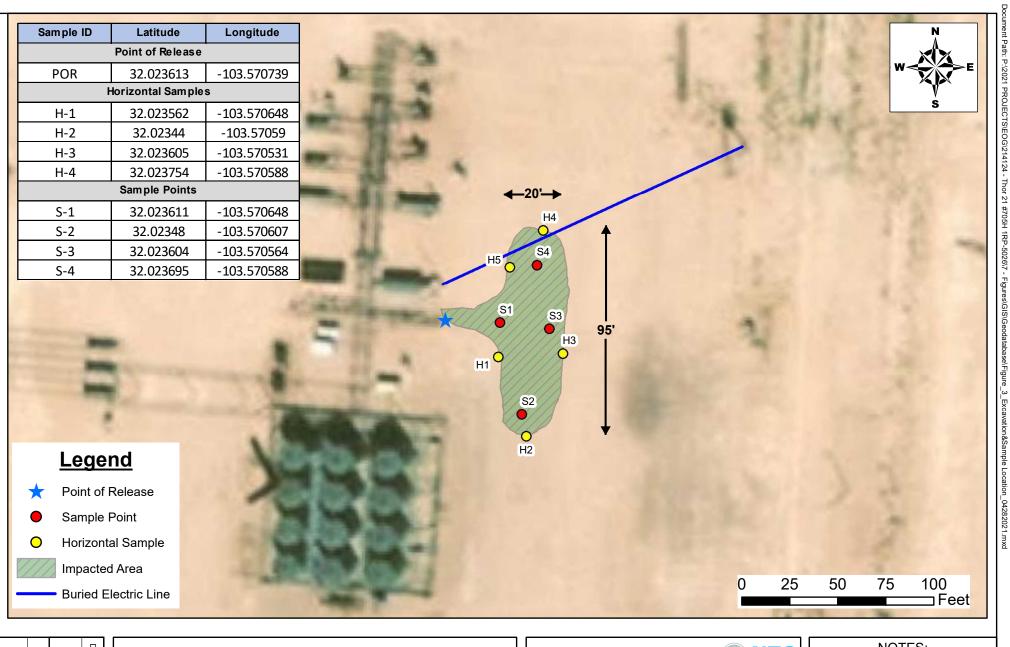
Senior Project Manager



# **Figures**







SHEET NUMBER

FIGURE 3

**SAMPLE LOCATION MAP** THOR 21 #705H 1RP-5026 EOG RESOURCES INC LEA COUNTY, NEW MEXICO

PROJECT #: 214124 DATE: 04/29/2021

New Tech Global Environmental, LLC 701 Tradewinds Blvd, Suite C Midland, Texas 79707

T - 432.685.3898 F - 281.872.4521

Web: www.ntglobal.com



## NOTES:

Base Image: ESRI Maps and Data 2017
(DigitalGlobe 2016 0.5m Digital Orthophoto)
 Map Projection: NAD 1983



**Tables** 

Table 1
EOG Resources
Thor 21 CTB
Lea County, New Mexico

	Date   Sample   TPH (mg/kg)	Sample		TP	H (mg/kg)		Benzene	Toluene	Ethlybenzene		Total BTEX	
Sample ID		Total	(mg/kg)	(mg/kg)	(mg/kg)	Xylene (mg/kg)	(mg/kg)	Chloride (mg/kg)				
S-1	4/14/2021	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	20.2
S-2	4/14/2021	0-0.5	<50.0	91.7	<50.0	91.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	250
S-3	4/14/2021	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	12.8
S-4	4/14/2021	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	26.7
H-1	4/14/2021	0-0.5	65.4	<50.0	<50.0	65.4	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	72.8
H-2	4/14/2021	0-0.5	<50.1	<50.1	<50.1	<50.1	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	113
H-3	4/14/2021	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	6.33
H-4	4/14/2021	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	31.0
H-5	4/14/2021	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	75.3
Regulate	ory Limits					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



Photo Log

# PHOTOGRAPHIC LOG

### **EOG Resources**

## Photograph No. 1

Facility: Thor 21 CTB 1RP-5026

County: Lea County, New Mexico

### **Description:**

View of sampled area at the point of release.



## Photograph No. 2

Facility: Thor 21 CTB 1RP-5026

County: Lea County, New Mexico

### **Description:**

View of sampled release area.



### Photograph No. 3

Facility: Thor 21 CTB 1RP-5026

County: Lea County, New Mexico

## Description:

View of sampled area at the point of release



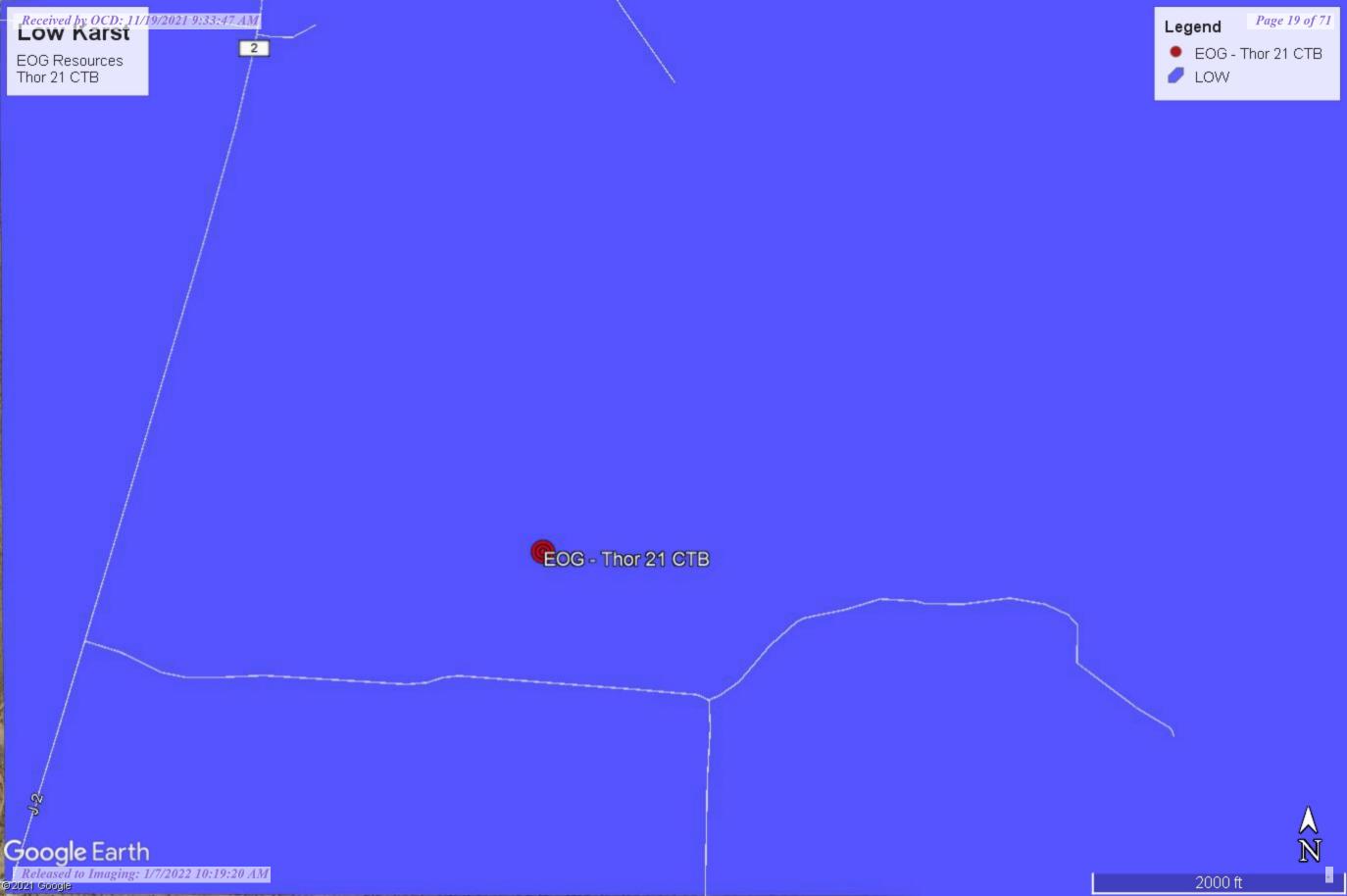
# Form C-141 moved to front of document - 01/07/2022 $\mathcal{N}V$



# Appendix A



Appendix B

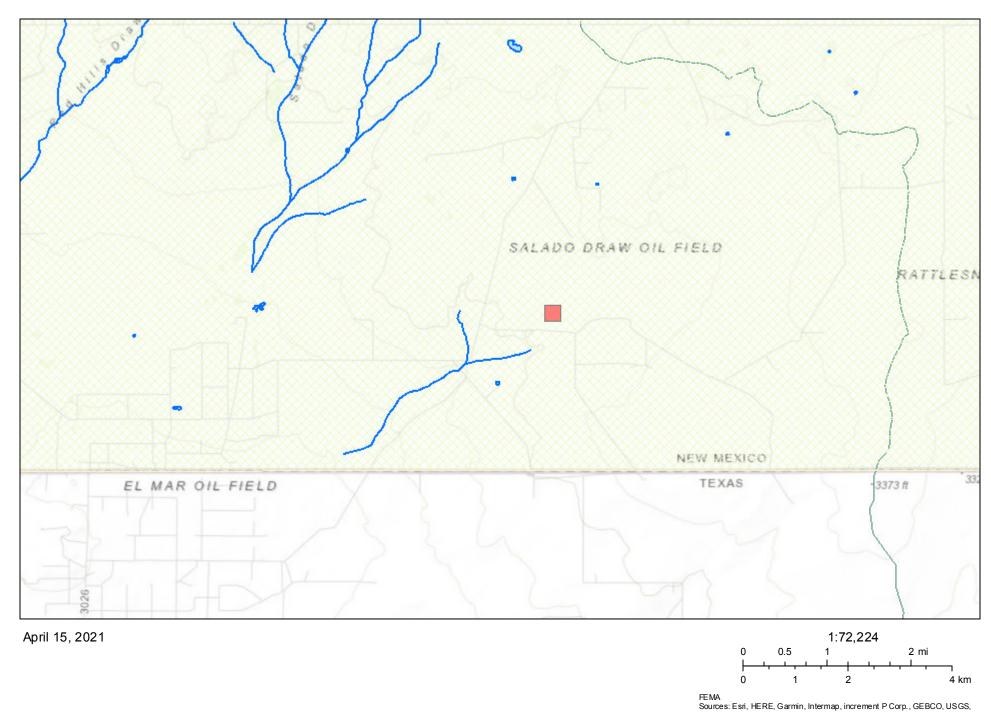


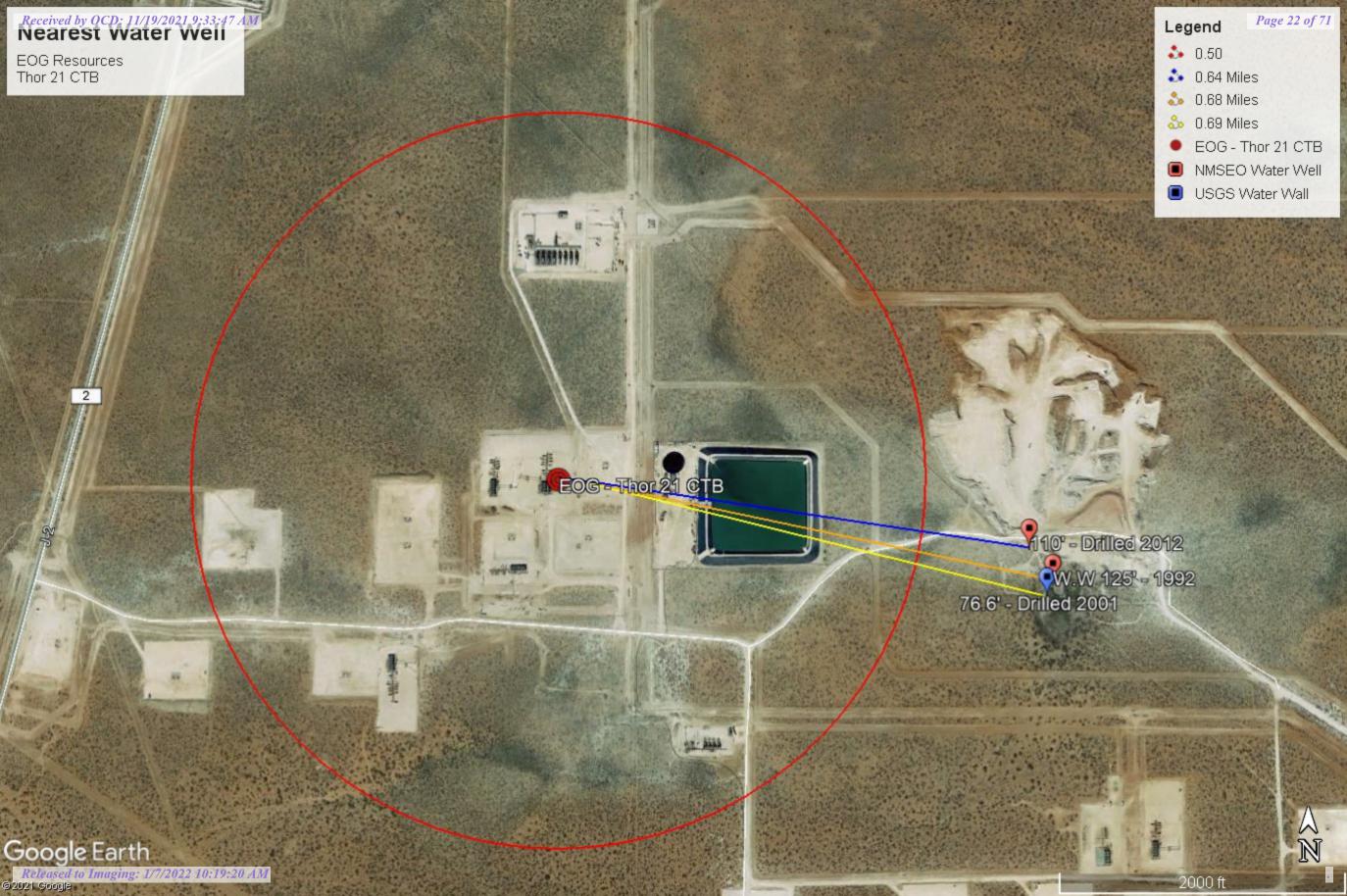


**National Water Information System: Mapper** 



# New Mexico NFHL Data







# 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,

closed)

C=the file is (quarters are 1=NW 2=NE 3=SW 4=SE)

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

(In feet)

	POD											
POD Number	Sub- Code basin	County	-	Q ( 16 4	-	: Tws	Rna	х	Υ	_	Depth Water	Water Column
C 02270	CUB	LE				26S		636063	3543722	150	125	25
<u>C 02273</u>	CUB	LE		1 2	21	26S	33E	634549	3545134* 🎒	160	120	40
C 02285 POD1	CUB	LE	1 4	4 4	03	26S	33E	636613	3548855 🎒	220	220	0
<u>C 02286</u>	CUB	LE	3 4	4 4	03	26S	33E	636470	3548714 🎒	220	175	45
C 02287	С	LE	3 4	4 4	03	26S	33E	636427	3548708 🎒	220		
C 02288	CUB	LE	4	4 4	03	26S	33E	636646	3548758 🎒	220	180	40
C 02289	CUB	LE	4	4 4	03	26S	33E	636612	3548675* 🌍	200	160	40
<u>C 02290</u>	CUB	LE	4	4 4	03	26S	33E	636538	3548770 🌕	200	160	40
C 02293	CUB	LE	2	2 1	14	26S	33E	637501	3546975 🌕	200	135	65
C 02294	CUB	LE	4	4 3	11	26S	33E	637465	3547003 🌕	200	145	55
C 02295	CUB	LE	2	2 4	12	26S	33E	639865	3547624 🌕	250	200	50
C 03577 POD1	CUB	LE	3 :	3 3	22	26S	33E	636010	3543771 🎒	750	110	640
C 03596 POD1	С	LE	3 :	3 4	22	26S	33E	636017	3543756	225		

Average Depth to Water: 157 feet

Minimum Depth: 110 feet

Maximum Depth: 220 feet

**DEPTH TO WATER** 

**Record Count:** 13

PLSS Search:

Township: 26S Range: 33E

\*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.



# 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

C 03577 POD1

22 26S 33E 636010 3543771

**Driller License:** 

1654 **Driller Company:**  NOT WORKING FOR HIRE--SIRMAN DRILLING

AND CONSTRUC

11/20/2012

**Driller Name: Drill Start Date:** 

11/19/2012

**Drill Finish Date:** 

Plug Date:

Log File Date:

Shallow

12/11/2012

**PCW Rcv Date:** 

Depth Well:

Source:

Pump Type: **Casing Size:** 

6.00

Pipe Discharge Size:

Estimated Yield: 35 GPM 750 feet **Depth Water:** 

110 feet

**Water Bearing Stratifications:** 

**Top Bottom Description** 

95 200

150 Sandstone/Gravel/Conglomerate 710 Sandstone/Gravel/Conglomerate

Top Bottom 180 200

690

750

**MASTERMETER** 

Meter Serial Number: 6985354

**Casing Perforations:** 

16570

Gallons

Meter Make: **Meter Multiplier:** 

100.0000

Number of Dials: 6

Meter Type:

Diversion

Unit of Measure: **Usage Multiplier:** 

**Meter Number:** 

**Return Flow Percent: Reading Frequency:** 

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

Read Date	Year M	Itr Reading	Fla	g Rdr Comment	Mtr Amount
04/01/2014	2014	123440	A	RPT	0
07/01/2014	2014	160772	A	RPT	11.457
10/01/2014	2014	193527	A	RPT	10.052
12/31/2014	2014	237836	A	RPT	13.598
02/01/2015	2015	247102	A	RPT	2.844
03/02/2015	2015	260095	A	RPT	3.987
04/01/2015	2015	268444	A	RPT	2.562
04/30/2015	2015	284991	A	RPT	5.078
05/31/2015	2015	296985	A	RPT	3.681
07/01/2015	2015	313077	A	RPT	4.938
08/01/2015	2015	321571	A	RPT	2.607
08/31/2015	2015	333738	A	RPT	3.734
10/01/2015	2015	340361	A	RPT	2.033
**YTD Met	er Amounts	: Year		Amount	
		2014		35.107	
		2015		31.464	



# New Mexico Office of the State Engineer

# **Point of Diversion Summary**

VAN NOY, W.L.

(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

27 26S 33E

X

3543722

C 02270 636063

**Driller Name:** UNKNOWN

208

**Driller License:** 

**Drill Start Date:** 08/28/1992 **Drill Finish Date:** 12/31/1910 Plug Date:

**Driller Company:** 

Log File Date: 10/28/1992 **PCW Rcv Date:** Source: Shallow Pump Type: Pipe Discharge Size: Estimated Yield: 15 GPM **Casing Size:** 8.00 Depth Well: 150 feet **Depth Water:** 125 feet

> **Water Bearing Stratifications: Top Bottom Description**

> > 225 265 Sandstone/Gravel/Conglomerate

**Casing Perforations:** Top **Bottom** 

205 265

**Meter Number:** 16561 Meter Make: **MASTERMETER** 

Meter Serial Number: 8112517 **Meter Multiplier:** 100.0000 **Number of Dials: Meter Type:** Diversion

**Unit of Measure:** Gallons **Return Flow Percent: Usage Multiplier: Reading Frequency:** 

### Meter Readings (in Acre-Feet)

Read Date	Year M	tr Reading	Flag	g Rdr Comment	Mtr Amount Online
04/01/2014	2014	132970	A	RPT	0
07/01/2014	2014	145195	A	RPT	3.752
10/01/2014	2014	153126	A	RPT	2.434
12/31/2014	2014	153126	A	RPT	0
02/01/2015	2015	153126	A	RPT	0
03/01/2015	2015	153126	A	RPT	0
04/01/2015	2015	153126	A	RPT	0
05/01/2015	2015	153126	A	RPT	0
05/31/2015	2015	153126	A	RPT	0
07/01/2015	2015	153126	A	RPT	0
08/01/2015	2015	153126	A	RPT	0
10/01/2015	2015	153216	A	RPT	0.028
**YTD Met	er Amounts:	Year		Amount	
		2014		6.186	
		2015		0.028	

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 USGS National Water Dashboard to access real-time data from over 13,500 stations nationwide.
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

\* IMPORTANT: Next Generation Station Page

### Search Results -- 1 sites found

Agency code = usgs site\_no list =

320059103333501

### Minimum number of levels = 1

Save file of selected sites to local disk for future upload

### USGS 320059103333501 26S.33E.27.21112

Lea County, New Mexico

Table of data Tab-separated data

Latitude 32°01'16.0", Longitude 103°33'33.9" NAD83

Land-surface elevation 3,252.00 feet above NGVD29

The depth of the well is 200 feet below land surface.

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

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

### **Output formats**

Graph of dat										
<u>leselect per</u>	<u>iod</u>									
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	? Sourcemeasi
1954-07-26	5	D	62610		3172.29	NGVD29	1	Z		
1954-07-26	5	D	62611		3173.87	NAVD88	1	Z		
1954-07-26	5	D	72019	79.71			1	Z		
1976-01-08	3	D	62610		3175.48	NGVD29	1	Z		
1976-01-08	3	D	62611		3177.06	NAVD88	1	Z		
1976-01-08	3	D	72019	76.52			1	Z		
1986-03-04	ļ.	D	62610		3174.86	NGVD29	1	Z		
1986-03-04	1	D	62611		3176.44	NAVD88	1	Z		
1986-03-04	ļ.	D	72019	77.14			1	Z		
1990-11-27	7	D	62610		3175.46	NGVD29	1	Z		
1990-11-27	7	D	62611		3177.04	NAVD88	1	Z		
1990-11-27	7	D	72019	76.54			1	Z		
1996-03-05	5	D	62610		3174.61	NGVD29	1	S		
1996-03-05	5	D	62611		3176.19	NAVD88	1	S		
1996-03-05	5	D	72019	77.39			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 measur
2001-02-27		D	62610		3175.40	NGVD29	1	9	5	
2001-02-27		D	62611		3176.98	NAVD88	1	9	5	
2001-02-27		D	72019	76.60			1	9	5	

#### 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.

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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: 2021-04-20 18:58:46 EDT

0.29 0.25 nadww02



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POINT OF DIVERSION SUMMARY



# Appendix C



# **Environment Testing America**

# **ANALYTICAL REPORT**

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

Laboratory Job ID: 880-1320-1

Laboratory Sample Delivery Group: Lea Co, NM

Client Project/Site: EOG - Thor 21 CTB

For:

NT Global 701 Tradewinds Blvd Midland, Texas 79706

Attn: Mike Carmona

JURAMER

Authorized for release by: 4/16/2021 6:57:53 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

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Released to Imaging: 1/7/2022 10:19:20 AM

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 Laboratory Job ID: 880-1320-1
Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

# **Table of Contents**

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	9
QC Sample Results	10
QC Association Summary	13
Lab Chronicle	15
Certification Summary	17
Method Summary	18
Sample Summary	19
Chain of Custody	20
Receipt Checklists	21

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# **Definitions/Glossary**

Client: NT Global Job ID: 880-1320-1 Project/Site: EOG - Thor 21 CTB

SDG: Lea Co, NM

**Qualifiers** 

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

F1 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

**HPLC/IC** 

Qualifier **Qualifier Description** 

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)

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

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

MDL Method Detection Limit Minimum Level (Dioxin) ML 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 Positive / Present POS

**PQL Practical Quantitation Limit** 

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

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

Eurofins Xenco, Midland

## **Case Narrative**

Client: NT Global Job ID: 880-1320-1
Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Job ID: 880-1320-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-1320-1

#### Receipt

The samples were received on 4/15/2021 10:56 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 3.5°C

### **GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-1825 and analytical batch 880-1833 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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: 880-1320-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Client Sample ID: H-1 (0-6") Lab Sample ID: 880-1320-1

Date Collected: 04/14/21 00:00 Matrix: Solid Date Received: 04/15/21 10:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199		mg/Kg		04/15/21 11:48	04/16/21 04:35	1
Toluene	<0.00199	U F1 F2	0.00199		mg/Kg		04/15/21 11:48	04/16/21 04:35	1
Ethylbenzene	<0.00199	U F1 F2	0.00199		mg/Kg		04/15/21 11:48	04/16/21 04:35	1
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.00398		mg/Kg		04/15/21 11:48	04/16/21 04:35	1
o-Xylene	<0.00199	U F1 F2	0.00199		mg/Kg		04/15/21 11:48	04/16/21 04:35	1
Xylenes, Total	<0.00398	U F1 F2	0.00398		mg/Kg		04/15/21 11:48	04/16/21 04:35	1
Total BTEX	<0.00398	U F1 F2	0.00398		mg/Kg		04/15/21 11:48	04/16/21 04:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				04/15/21 11:48	04/16/21 04:35	1
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr)	102 107		70 - 130 70 - 130				04/15/21 11:48 04/15/21 11:48	04/16/21 04:35 04/16/21 04:35	1 1
1,4-Difluorobenzene (Surr)	107	RO) (GC)							1
1,4-Difluorobenzene (Surr)  Method: 8015B NM - Diesel Rang	107 ge Organics (D	RO) (GC) Qualifier		MDL	Unit	D			
1,4-Difluorobenzene (Surr)  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	107 ge Organics (D	, , ,	70 - 130	MDL	Unit mg/Kg	<u>D</u>	04/15/21 11:48	04/16/21 04:35	
1,4-Difluorobenzene (Surr)  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (DI	Qualifier	70 - 130	MDL		<u>D</u>	04/15/21 11:48 Prepared	04/16/21 04:35 Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)  Method: 8015B NM - Diesel Rang Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (Di Result 65.4	<b>Qualifier</b> U	70 - 130  RL 50.0	MDL	mg/Kg	<u> </u>	04/15/21 11:48  Prepared 04/15/21 12:00	04/16/21 04:35  Analyzed 04/15/21 16:27	Dil Fac
,	107 ge Organics (Di Result 65.4 <50.0	<b>Qualifier</b> U	70 - 130  RL 50.0	MDL	mg/Kg	<u>D</u>	04/15/21 11:48  Prepared 04/15/21 12:00 04/15/21 12:00	Analyzed 04/15/21 16:27	1 1 Dil Fac
1,4-Difluorobenzene (Surr)  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (Di Result 65.4 <50.0	Qualifier  U	70 - 130  RL 50.0  50.0	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00	Analyzed 04/15/21 16:27 04/15/21 16:27	Dil Fac
1,4-Difluorobenzene (Surr)  Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH	ge Organics (Di Result 65.4 <50.0 <50.0	Qualifier  U	70 - 130  RL 50.0  50.0  50.0  50.0	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00	Analyzed 04/15/21 16:27 04/15/21 16:27 04/15/21 16:27 04/15/21 16:27	Dil Fac 1 1 1

Chloride	72.8	4.95	mg/Kg	04/16/21 13:06 1
Client Sample ID: H-2 (0-6")				Lab Sample ID: 880-1320-2

RL

MDL Unit

Prepared

Result Qualifier

Date Received: 04/15/21 10:56

Date Collected: 04/14/21 00:00

Analyte

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/15/21 11:48	04/16/21 04:55	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/15/21 11:48	04/16/21 04:55	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/15/21 11:48	04/16/21 04:55	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/15/21 11:48	04/16/21 04:55	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/15/21 11:48	04/16/21 04:55	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/15/21 11:48	04/16/21 04:55	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		04/15/21 11:48	04/16/21 04:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				04/15/21 11:48	04/16/21 04:55	1
1,4-Difluorobenzene (Surr)	109		70 - 130				04/15/21 11:48	04/16/21 04:55	1
Method: 8015B NM - Diesel Ra	ange Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		04/15/21 12:00	04/15/21 16:48	1

**Matrix: Solid** 

Dil Fac

Analyzed

Client: NT Global Job ID: 880-1320-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Client Sample ID: H-2 (0-6")

Lab Sample ID: 880-1320-2 Date Collected: 04/14/21 00:00

Matrix: Solid

Date Received: 04/15/21 10:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over	<50.1	U	50.1		mg/Kg		04/15/21 12:00	04/15/21 16:48	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		04/15/21 12:00	04/15/21 16:48	1
Total TPH	<50.1	U	50.1		mg/Kg		04/15/21 12:00	04/15/21 16:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				04/15/21 12:00	04/15/21 16:48	1
o-Terphenyl	98		70 - 130				04/15/21 12:00	04/15/21 16:48	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Amaluta	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Nosun								

Client Sample ID: H-3 (0-6") Lab Sample ID: 880-1320-3

Date Collected: 04/14/21 00:00 Matrix: Solid

Date Received: 04/15/21 10:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/15/21 11:48	04/16/21 05:15	1
Toluene	< 0.00199	U	0.00199		mg/Kg		04/15/21 11:48	04/16/21 05:15	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		04/15/21 11:48	04/16/21 05:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/15/21 11:48	04/16/21 05:15	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		04/15/21 11:48	04/16/21 05:15	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/15/21 11:48	04/16/21 05:15	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		04/15/21 11:48	04/16/21 05:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130				04/15/21 11:48	04/16/21 05:15	1
1,4-Difluorobenzene (Surr)	92		70 - 130				04/15/21 11:48	04/16/21 05:15	1
: Method: 8015B NM - Diesel Ranç Analyte	•	RO) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mothod: 8015B NM - Diocol Pane	no Organics (D	PO) (GC)							
Analyte	Result	Qualifier		MDL		<u>D</u>			Dil Fac
Analyte Gasoline Range Organics	•	Qualifier	RL 50.0	MDL	Unit mg/Kg	<u>D</u>	Prepared 04/15/21 12:00	Analyzed 04/15/21 17:30	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	Result < 50.0	Qualifier U	50.0	MDL	mg/Kg	<u>D</u>	04/15/21 12:00	04/15/21 17:30	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U		MDL		<u>D</u>			
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result < 50.0	Qualifier U	50.0	MDL	mg/Kg mg/Kg	<u> </u>	04/15/21 12:00 04/15/21 12:00	04/15/21 17:30 04/15/21 17:30	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0 <50.0	Qualifier U U	50.0	MDL	mg/Kg	<u>D</u>	04/15/21 12:00	04/15/21 17:30	1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH	Result   <50.0   <50.0   <50.0   <50.0   <50.0	Qualifier U U U U	50.0 50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	04/15/21 12:00 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00	04/15/21 17:30 04/15/21 17:30 04/15/21 17:30 04/15/21 17:30	1 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result   <50.0   <50.0   <50.0	Qualifier U U U U	50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	04/15/21 12:00 04/15/21 12:00 04/15/21 12:00	04/15/21 17:30 04/15/21 17:30 04/15/21 17:30	1 1 1 1 1 Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate	Result	Qualifier U U U U	50.0 50.0 50.0 50.0 Limits	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	04/15/21 12:00 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00 Prepared	04/15/21 17:30 04/15/21 17:30 04/15/21 17:30 04/15/21 17:30 Analyzed	1 1 1 1 1 Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U U Qualifier	50.0 50.0 50.0 50.0 <b>Limits</b> 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	04/15/21 12:00 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00 <b>Prepared</b> 04/15/21 12:00	04/15/21 17:30 04/15/21 17:30 04/15/21 17:30 04/15/21 17:30 Analyzed 04/15/21 17:30	1 1 1 1 1 1 1 Dil Fac 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane	Result	Qualifier U U U Qualifier	50.0 50.0 50.0 50.0 <b>Limits</b> 70 - 130	MDL	mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	04/15/21 12:00 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00 <b>Prepared</b> 04/15/21 12:00	04/15/21 17:30 04/15/21 17:30 04/15/21 17:30 04/15/21 17:30 Analyzed 04/15/21 17:30	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Eurofins Xenco, Midland

Client: NT Global Job ID: 880-1320-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Client Sample ID: H-4 (0-6") Lab Sample ID: 880-1320-4

Date Collected: 04/14/21 00:00 Matrix: Solid Date Received: 04/15/21 10:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/15/21 11:48	04/16/21 05:36	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/15/21 11:48	04/16/21 05:36	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/15/21 11:48	04/16/21 05:36	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		04/15/21 11:48	04/16/21 05:36	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/15/21 11:48	04/16/21 05:36	1
Xylenes, Total	< 0.00397	U	0.00397		mg/Kg		04/15/21 11:48	04/16/21 05:36	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		04/15/21 11:48	04/16/21 05:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				04/15/21 11:48	04/16/21 05:36	1
1,4-Difluorobenzene (Surr)	108		70 - 130				04/15/21 11:48	04/16/21 05:36	1
Method: 8015B NM - Diesel Ran		RO) (GC)	70 - 130				0 11 10 27 11.10	0 # 10 2 7 00.00	
			70 - 130				0 11 10 21 11.10	0 11 10/21 00:00	
	ge Organics (D	RO) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	Qualifier		MDL	Unit mg/Kg	<u>D</u>			Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (Di Result <50.0	Qualifier U	RL	MDL	mg/Kg	<u>D</u>	Prepared 04/15/21 12:00	<b>Analyzed</b> 04/15/21 17:51	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D	Qualifier U	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <50.0	Qualifier U	RL 50.0	MDL	mg/Kg	<u> </u>	Prepared 04/15/21 12:00 04/15/21 12:00	Analyzed 04/15/21 17:51 04/15/21 17:51	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D) Result <50.0 <50.0 <50.0	Qualifier U U	RL 50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00	Analyzed 04/15/21 17:51 04/15/21 17:51 04/15/21 17:51	1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <50.0	Qualifier U U	RL 50.0	MDL	mg/Kg	<u>D</u>	Prepared 04/15/21 12:00 04/15/21 12:00	Analyzed 04/15/21 17:51 04/15/21 17:51	Dil Fac 1 1 1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D) Result <50.0 <50.0 <50.0	Qualifier U U U U	RL 50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00	Analyzed 04/15/21 17:51 04/15/21 17:51 04/15/21 17:51	1 1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Total TPH	ge Organics (D) Result <50.0 <50.0 <50.0 <50.0	Qualifier U U U U	RL 50.0 50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00	Analyzed 04/15/21 17:51 04/15/21 17:51 04/15/21 17:51 04/15/21 17:51	1 1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate	ge Organics (D)  Result  <50.0  <50.0  <50.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0  <80.0	Qualifier U U U U	RL 50.0 50.0 50.0 50.0 <i>Limits</i>	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00 Prepared	Analyzed 04/15/21 17:51 04/15/21 17:51 04/15/21 17:51 04/15/21 17:51 Analyzed	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH  Surrogate 1-Chlorooctane	ge Organics (D)  Result  <50.0  <50.0  <50.0  <50.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0  <70.0	Qualifier U U U Qualifier	RL 50.0 50.0 50.0 50.0 Limits 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00  Prepared 04/15/21 12:00	Analyzed 04/15/21 17:51 04/15/21 17:51 04/15/21 17:51 04/15/21 17:51 Analyzed 04/15/21 17:51	1 1

Client Sample ID: H-5 (0-6") Lab Sample ID: 880-1320-5 Date Collected: 04/14/21 00:00 **Matrix: Solid** 

4.97

mg/Kg

31.0

Date Received: 04/15/21 10:56

Chloride

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/15/21 11:48	04/16/21 05:56	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/15/21 11:48	04/16/21 05:56	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/15/21 11:48	04/16/21 05:56	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/15/21 11:48	04/16/21 05:56	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/15/21 11:48	04/16/21 05:56	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/15/21 11:48	04/16/21 05:56	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		04/15/21 11:48	04/16/21 05:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				04/15/21 11:48	04/16/21 05:56	1
1,4-Difluorobenzene (Surr)	104		70 - 130				04/15/21 11:48	04/16/21 05:56	1
Method: 8015B NM - Diesel Ra	ange Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/15/21 12:00	04/15/21 18:13	1

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04/16/21 13:22

# **Client Sample Results**

Client: NT Global Job ID: 880-1320-1
Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Client Sample ID: H-5 (0-6")

Date Collected: 04/14/21 00:00
Date Received: 04/15/21 10:56

Lab Sample ID: 880-1320-5

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		04/15/21 12:00	04/15/21 18:13	1
C10-C28)									
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/15/21 12:00	04/15/21 18:13	1
Total TPH	<49.9	U	49.9		mg/Kg		04/15/21 12:00	04/15/21 18:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130				04/15/21 12:00	04/15/21 18:13	1
o-Terphenyl	108		70 - 130				04/15/21 12:00	04/15/21 18:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	75.3		4.98		mg/Kg			04/16/21 13:27	1

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9

3

5

7

8

4.0

11

13

# **Surrogate Summary**

Client: NT Global Job ID: 880-1320-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-1320-1	H-1 (0-6")	102	107
880-1320-1 MS	H-1 (0-6")	120	101
880-1320-1 MSD	H-1 (0-6")	115	101
880-1320-2	H-2 (0-6")	115	109
880-1320-3	H-3 (0-6")	119	92
880-1320-4	H-4 (0-6")	105	108
880-1320-5	H-5 (0-6")	114	104
LCS 880-1825/1-A	Lab Control Sample	103	105
LCSD 880-1825/2-A	Lab Control Sample Dup	100	106
MB 880-1825/5-A	Method Blank	99	102

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-1320-1	H-1 (0-6")	105	94	
880-1320-2	H-2 (0-6")	107	98	
880-1320-3	H-3 (0-6")	114	106	
880-1320-4	H-4 (0-6")	109	104	
880-1320-5	H-5 (0-6")	116	108	
LCS 880-1816/2-A	Lab Control Sample	108	93	
LCSD 880-1816/3-A	Lab Control Sample Dup	103	88	
MB 880-1816/1-A	Method Blank	101	99	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: NT Global Job ID: 880-1320-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1825/5-A

**Matrix: Solid** Analysis Batch: 1833

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

Prep Batch: 1825

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/15/21 11:48	04/16/21 04:06	
Toluene	<0.00200	U	0.00200		mg/Kg		04/15/21 11:48	04/16/21 04:06	•
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/15/21 11:48	04/16/21 04:06	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/15/21 11:48	04/16/21 04:06	
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/15/21 11:48	04/16/21 04:06	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/15/21 11:48	04/16/21 04:06	
Total BTEX	<0.00400	U	0.00400		mg/Kg		04/15/21 11:48	04/16/21 04:06	

MB MB

Surrogate	%Recovery G	Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99	70 - 13	04/15/21 11:48	04/16/21 04:06	1
1,4-Difluorobenzene (Surr)	102	70 - 13	0 04/15/21 11:48	04/16/21 04:06	1

**Client Sample ID: Lab Control Sample** 

**Matrix: Solid** 

Lab Sample ID: LCS 880-1825/1-A

Prep Type: Total/NA **Analysis Batch: 1833** Prep Batch: 1825

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08840		mg/Kg		88	70 - 130	
Toluene	0.100	0.09573		mg/Kg		96	70 - 130	
Ethylbenzene	0.100	0.09918		mg/Kg		99	70 - 130	
m-Xylene & p-Xylene	0.200	0.2011		mg/Kg		101	70 - 130	
o-Xylene	0.100	0.09991		mg/Kg		100	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	103	70 - 130
1.4-Difluorobenzene (Surr)	105	70 - 130

Lab Sample ID: LCSD 880-1825/2-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

**Analysis Batch: 1833** 

Prep Type: Total/NA Prep Batch: 1825

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.08970		mg/Kg		90	70 - 130	1	35	
Toluene	0.100	0.09431		mg/Kg		94	70 - 130	1	35	
Ethylbenzene	0.100	0.09733		mg/Kg		97	70 - 130	2	35	
m-Xylene & p-Xylene	0.200	0.1978		mg/Kg		99	70 - 130	2	35	
o-Xylene	0.100	0.09787		mg/Kg		98	70 - 130	2	35	

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	100	70 - 130
1.4-Difluorobenzene (Surr)	106	70 - 130

**Analysis Batch: 1833** 

Lab Sample ID: 880-1320-1 MS Client Sample ID: H-1 (0-6") Matrix: Solid Prep Type: Total/NA Prep Batch: 1825

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U F1	0.101	0.01428	F1	mg/Kg		14	70 - 130	 

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## QC Sample Results

Client: NT Global Job ID: 880-1320-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

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

Lab Sample ID: 880-1320-1 MS

**Analysis Batch: 1833** 

**Matrix: Solid** 

Client Sample ID: H-1 (0-6") Prep Type: Total/NA

Prep Batch: 1825

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits D Toluene <0.00199 U F1 F2 0.101 0.01201 F1 12 70 - 130 mg/Kg Ethylbenzene <0.00199 U F1 F2 0.101 0.01429 F1 mg/Kg 14 70 - 130 0.201 m-Xylene & p-Xylene <0.00398 U F1 F2 0.03424 F1 mg/Kg 17 70 - 130 o-Xylene <0.00199 UF1F2 0.101 0.02484 F1 mg/Kg 25 70 - 130

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Client Sample ID: H-1 (0-6") Lab Sample ID: 880-1320-1 MSD

**Matrix: Solid** 

**Analysis Batch: 1833** 

Prep Type: Total/NA

Prep Batch: 1825 RPD

MSD MSD %Rec. Sample Sample Spike Limit Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Benzene U F1 0.0990 0.01191 F1 35 <0.00199 mg/Kg 12 70 - 130 18 Toluene <0.00199 UF1F2 0.0990 0.007897 F1 F2 8 70 - 130 35 mg/Kg 41 Ethylbenzene <0.00199 U F1 F2 0.0990 8 70 - 130 0.007502 F1 F2 mg/Kg 62 35 m-Xylene & p-Xylene <0.00398 U F1 F2 0.198 0.01797 F1 F2 9 70 - 130 62 35 mg/Kg o-Xylene <0.00199 UF1F2 0.0990 0.01487 F1 F2 mg/Kg 15 70 - 130 50

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	115	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

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

Lab Sample ID: MB 880-1816/1-A

**Matrix: Solid** 

**Analysis Batch: 1818** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1816

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		04/15/21 10:01	04/15/21 11:52	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		04/15/21 10:01	04/15/21 11:52	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 10:01	04/15/21 11:52	1
Total TPH	<50.0	U	50.0		mg/Kg		04/15/21 10:01	04/15/21 11:52	1

MB MB

MD ME

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	04/15/21 10:01	04/15/21 11:52	1
o-Terphenyl	99		70 - 130	04/15/21 10:01	04/15/21 11:52	1

Lab Sample ID: LCS 880-1816/2-A

**Matrix: Solid** 

**Analysis Batch: 1818** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 1816

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 1241 124 70 - 130 mg/Kg

(GRO)-C6-C10

Client: NT Global Job ID: 880-1320-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

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

Lab Sample ID: LCS 880-1816/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 1818** Prep Batch: 1816 LCS LCS

Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits D 1000 1079 108 70 - 130 Diesel Range Organics (Over mg/Kg

C10-C28)

LCS LCS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 108 70 130 o-Terphenyl 93 70 - 130

Lab Sample ID: LCSD 880-1816/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 1818** Prep Batch: 1816

LCSD LCSD RPD Spike %Rec. Result Qualifier Limit Analyte Added Unit D %Rec Limits RPD 1000 1101 Gasoline Range Organics mg/Kg 110 70 - 130 12 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1010 mg/Kg 101 70 - 130 7 20 C10-C28)

LCSD LCSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 103 70 - 130 88 70 - 130 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1830/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 1851** 

мв мв Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed

<5.00 U 5.00 Chloride mg/Kg 04/16/21 12:05

Lab Sample ID: LCS 880-1830/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 1851** 

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 103 90 - 110 258.4 mg/Kg

Lab Sample ID: LCSD 880-1830/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid Prep Type: Soluble Analysis Batch: 1851** 

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

Chloride 250 256.4 103 mg/Kg 90 - 110

# **QC Association Summary**

Client: NT Global Job ID: 880-1320-1
Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

**GC VOA** 

## Prep Batch: 1825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1320-1	H-1 (0-6")	Total/NA	Solid	5035	
880-1320-2	H-2 (0-6")	Total/NA	Solid	5035	
880-1320-3	H-3 (0-6")	Total/NA	Solid	5035	
880-1320-4	H-4 (0-6")	Total/NA	Solid	5035	
880-1320-5	H-5 (0-6")	Total/NA	Solid	5035	
MB 880-1825/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1825/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1825/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-1320-1 MS	H-1 (0-6")	Total/NA	Solid	5035	
880-1320-1 MSD	H-1 (0-6")	Total/NA	Solid	5035	

## **Analysis Batch: 1833**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1320-1	H-1 (0-6")	Total/NA	Solid	8021B	1825
880-1320-2	H-2 (0-6")	Total/NA	Solid	8021B	1825
880-1320-3	H-3 (0-6")	Total/NA	Solid	8021B	1825
880-1320-4	H-4 (0-6")	Total/NA	Solid	8021B	1825
880-1320-5	H-5 (0-6")	Total/NA	Solid	8021B	1825
MB 880-1825/5-A	Method Blank	Total/NA	Solid	8021B	1825
LCS 880-1825/1-A	Lab Control Sample	Total/NA	Solid	8021B	1825
LCSD 880-1825/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1825
880-1320-1 MS	H-1 (0-6")	Total/NA	Solid	8021B	1825
880-1320-1 MSD	H-1 (0-6")	Total/NA	Solid	8021B	1825

## **GC Semi VOA**

## Prep Batch: 1816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1320-1	H-1 (0-6")	Total/NA	Solid	8015NM Prep	
880-1320-2	H-2 (0-6")	Total/NA	Solid	8015NM Prep	
880-1320-3	H-3 (0-6")	Total/NA	Solid	8015NM Prep	
880-1320-4	H-4 (0-6")	Total/NA	Solid	8015NM Prep	
880-1320-5	H-5 (0-6")	Total/NA	Solid	8015NM Prep	
MB 880-1816/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1816/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1816/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 1818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1320-1	H-1 (0-6")	Total/NA	Solid	8015B NM	1816
880-1320-2	H-2 (0-6")	Total/NA	Solid	8015B NM	1816
880-1320-3	H-3 (0-6")	Total/NA	Solid	8015B NM	1816
880-1320-4	H-4 (0-6")	Total/NA	Solid	8015B NM	1816
880-1320-5	H-5 (0-6")	Total/NA	Solid	8015B NM	1816
MB 880-1816/1-A	Method Blank	Total/NA	Solid	8015B NM	1816
LCS 880-1816/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1816
LCSD 880-1816/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1816

Eurofins Xenco, Midland

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# **QC Association Summary**

Client: NT Global Job ID: 880-1320-1
Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

HPLC/IC

Leach Batch: 1830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1320-1	H-1 (0-6")	Soluble	Solid	DI Leach	
880-1320-2	H-2 (0-6")	Soluble	Solid	DI Leach	
880-1320-3	H-3 (0-6")	Soluble	Solid	DI Leach	
880-1320-4	H-4 (0-6")	Soluble	Solid	DI Leach	
880-1320-5	H-5 (0-6")	Soluble	Solid	DI Leach	
MB 880-1830/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1830/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1830/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1320-1	H-1 (0-6")	Soluble	Solid	300.0	1830
880-1320-2	H-2 (0-6")	Soluble	Solid	300.0	1830
880-1320-3	H-3 (0-6")	Soluble	Solid	300.0	1830
880-1320-4	H-4 (0-6")	Soluble	Solid	300.0	1830
880-1320-5	H-5 (0-6")	Soluble	Solid	300.0	1830
MB 880-1830/1-A	Method Blank	Soluble	Solid	300.0	1830
LCS 880-1830/2-A	Lab Control Sample	Soluble	Solid	300.0	1830
LCSD 880-1830/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1830

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Job ID: 880-1320-1

Client: NT Global Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Client Sample ID: H-1 (0-6")

Date Collected: 04/14/21 00:00 Date Received: 04/15/21 10:56

Lab Sample ID: 880-1320-1

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1825	04/15/21 11:48	KL	XM
Total/NA	Analysis	8021B		1	1833	04/16/21 04:35	MR	XM
Total/NA	Prep	8015NM Prep			1816	04/15/21 12:00	DM	XM
Total/NA	Analysis	8015B NM		1	1818	04/15/21 16:27	AJ	XM
Soluble	Leach	DI Leach			1830	04/15/21 12:29	SC	XM
Soluble	Analysis	300.0		1	1851	04/16/21 13:06	SC	XM

Lab Sample ID: 880-1320-2

**Matrix: Solid** 

Date Collected: 04/14/21 00:00 Date Received: 04/15/21 10:56

Client Sample ID: H-2 (0-6")

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Total/NA Prep 5035 1825 04/15/21 11:48 KL XM 8021B Total/NA MR Analysis 1833 04/16/21 04:55 XM1 Total/NA Prep 8015NM Prep 04/15/21 12:00 ΧM 1816 DM Total/NA 8015B NM ΧM Analysis 1818 04/15/21 16:48 AJ Soluble ΧM Leach DI Leach 1830 04/15/21 12:29 SC 300.0 ΧM Soluble Analysis 1 1851 04/16/21 13:11 SC

Client Sample ID: H-3 (0-6") Lab Sample ID: 880-1320-3

Matrix: Solid

Date Collected: 04/14/21 00:00 Date Received: 04/15/21 10:56

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1825	04/15/21 11:48	KL	XM
Total/NA	Analysis	8021B		1	1833	04/16/21 05:15	MR	XM
Total/NA	Prep	8015NM Prep			1816	04/15/21 12:00	DM	XM
Total/NA	Analysis	8015B NM		1	1818	04/15/21 17:30	AJ	XM
Soluble	Leach	DI Leach			1830	04/15/21 12:29	SC	XM
Soluble	Analysis	300.0		1	1851	04/16/21 13:16	SC	XM

Client Sample ID: H-4 (0-6") Lab Sample ID: 880-1320-4 Date Collected: 04/14/21 00:00 Matrix: Solid

Date Received: 04/15/21 10:56

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1825	04/15/21 11:48	KL	XM
Total/NA	Analysis	8021B		1	1833	04/16/21 05:36	MR	XM
Total/NA	Prep	8015NM Prep			1816	04/15/21 12:00	DM	XM
Total/NA	Analysis	8015B NM		1	1818	04/15/21 17:51	AJ	XM
Soluble	Leach	DI Leach			1830	04/15/21 12:29	SC	XM
Soluble	Analysis	300.0		1	1851	04/16/21 13:22	SC	XM

## **Lab Chronicle**

Client: NT Global Job ID: 880-1320-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Client Sample ID: H-5 (0-6")

Analysis

Date Received: 04/15/21 10:56

Lab Sample ID: 880-1320-5 Date Collected: 04/14/21 00:00

1851 04/16/21 13:27 SC

XM

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1825	04/15/21 11:48	KL	XM
Total/NA	Analysis	8021B		1	1833	04/16/21 05:56	MR	XM
Total/NA	Prep	8015NM Prep			1816	04/15/21 12:00	DM	XM
Total/NA	Analysis	8015B NM		1	1818	04/15/21 18:13	AJ	XM
Soluble	Leach	DI Leach			1830	04/15/21 12:29	SC	XM

#### **Laboratory References:**

Soluble

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

300.0

## **Accreditation/Certification Summary**

Client: NT Global Job ID: 880-1320-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

## Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte	
8015B NM	8015NM Prep	Solid	Total TPH	
8021B	5035	Solid	Total BTEX	

## **Method Summary**

Client: NT Global Job ID: 880-1320-1 Project/Site: EOG - Thor 21 CTB

SDG: Lea Co, NM

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

#### **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.

#### Laboratory References:

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

# **Sample Summary**

Job ID: 880-1320-1 Client: NT Global Project/Site: EOG - Thor 21 CTB

v	OD	٠٠.	000	102	-0 .	
	SD	G:	Lea	Co.	NM	

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-1320-1	H-1 (0-6")	Solid	04/14/21 00:00	04/15/21 10:56	
880-1320-2	H-2 (0-6")	Solid	04/14/21 00:00	04/15/21 10:56	
880-1320-3	H-3 (0-6")	Solid	04/14/21 00:00	04/15/21 10:56	
880-1320-4	H-4 (0-6")	Solid	04/14/21 00:00	04/15/21 10:56	
880-1320-5	H-5 (0-6")	Solid	04/14/21 00:00	04/15/21 10:56	



Vork Order No:/	<u>_</u>
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4/16/2021

						Page (	of I
oject Manager	Mike Carmona		Bill to. (if different)	James Kennedy	Work (	Order Comments	
mpany Name.	NTG Environmental		Company Name	EOG Resources	Program: UST/PST PRP	Brownfields □RRC	uperfund
dress.	701 Tradewinds BLVD		Address.	5509 Champions Dr	State of Project.		
y, State ZIP	Midland, TX 79706		City, State ZIP	Midland, Tx 79706	Reporting Level II Level III	□ST/UST □RRP	Level IV
one.	432-813-0263	Email	James Kennedy	@eogresources	Deliverables EDD	ADaPT ☐ Other	
er en de la Maria en	Th. 04 07D						

Project Name.	T	hor 21 CTB		Turr	Around	·							ANAL	YSIS	REC	UES	ľ	1110711210-11-02-			ma all'ide males in cost (per	Pr	eserva	tive Codes	
Project Number		214124		Routine	✓ Rusi	1	Pres. Code													T	T	None N		DI Water	
Project Location Sampler's Name PO #:	L	ea Co, NM CRM		Due Date  TAT starts the lab, if rece	day receive				- MRO)													Cool C	С	MeOH Me	3
SAMPLE RECEI Received Intact: Cooler Custody Seal Sample Custody Sea Total Containers.	s Yes	mp Blank. es No No MIR No MIR	Total or the second of the second	eter ID		2.Ç/ .S	Parameters	BTEX 8021B	TPH 8015M ( GRO + DRO +	Chlordie 300 0											НОГР	H <sub>2</sub> S0 <sub>4</sub> . H <sub>3</sub> PO <sub>4</sub> NaHSO Na <sub>2</sub> S <sub>2</sub> O Zn Acei NaOH+	HP  4 NABI 3 NaSo cate+Na	)3	21
Sample Iden	ntification	Date	Time	Soil	Water	Grab/ Comp	# of Cont		Ę													Si	ample	Comments	8
H-1 (0	-6")	4/14/2021		Х		G	1	X	Х	Х						1			1	1	$\dagger$	<u> </u>	<del></del>		Page
H-2 (0	-6")	4/14/2021		Х		G	1	X	Х	X	1			<b> </b>	<del>                                     </del>	<del>                                     </del>	<del>                                     </del>	1	1	†	$\vdash$	<del>                                     </del>			—⊢ ≗
H-3 (0	-6")	4/14/2021		Х		G	1	X	X	X				<u> </u>	t —	<del>                                     </del>	<del>                                     </del>	_	†	†	<del>                                     </del>	<del> </del>		· · · · · · · · · · · · · · · · · · ·	
H-4 (0	-6")	4/14/2021		Х		G	1	X	X	X						<del>                                     </del>		<b> </b>	<del>                                     </del>	<del>                                     </del>	1	<b> </b>			-
H-5 (0	l <del>-</del> 6")	4/14/2021		Х		G	1	Х	Х	Х							<del>                                     </del>	$\vdash$		<del>                                     </del>	†			<del></del>	$\dashv$
Addito	inal Commen	ts:										<u></u>			L		L	L	<u> </u>	. <u>1</u>	<u> </u>				
Notice Signature of this of service. Xenco will be of Xenco. A minimum ch	ilable only for the	cost of samples :	and shall not	assume any resne	neihilitu fa	any incent		t		LL	-4 10								s rol						
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#### **Additoinal Comments:**

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Com mailing	KUL	4/15/21 1056	2	<del></del>	
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5			6		

4/16/2021

# **Login Sample Receipt Checklist**

Client: NT Global Job Number: 880-1320-1 SDG Number: Lea Co, NM

List Source: Eurofins Midland Login Number: 1320

List Number: 1

Creator: Phillips, Kerianna

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.	False	No date or time on COC or sample containers
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
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	

# **Environment Testing America**

# **ANALYTICAL REPORT**

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

Laboratory Job ID: 880-1319-1

Laboratory Sample Delivery Group: Lea Co, NM

Client Project/Site: EOG - Thor 21 CTB

For:

NT Global 701 Tradewinds Blvd Midland, Texas 79706

Attn: Mike Carmona

JURAMER

Authorized for release by: 4/16/2021 6:50:32 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: 1/7/2022 10:19:20 AM

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 Laboratory Job ID: 880-1319-1
Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

**Table of Contents** 

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	8
QC Sample Results	9
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Racaint Chacklists	19

3

4

6

8

40

11

12

## **Definitions/Glossary**

Client: NT Global Job ID: 880-1319-1 Project/Site: EOG - Thor 21 CTB

SDG: Lea Co, NM

**Qualifiers** 

**GC VOA** 

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

Qualifier Qualifier Description

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 Colony Forming Unit CFU **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) Limit of Quantitation (DoD/DOE) LOQ

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

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

**PQL** Practical Quantitation Limit **PRES** 

Presumptive QC **Quality Control** 

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

Toxicity Equivalent Factor (Dioxin) TFF Toxicity Equivalent Quotient (Dioxin) **TEQ** 

**TNTC** Too Numerous To Count

## **Case Narrative**

Client: NT Global Job ID: 880-1319-1 SDG: Lea Co, NM Project/Site: EOG - Thor 21 CTB

Job ID: 880-1319-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-1319-1

#### Receipt

The samples were received on 4/15/2021 10:56 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 3.5°C

#### **GC VOA**

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.

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

Date Received: 04/15/21 10:56

1,4-Difluorobenzene (Surr)

## **Client Sample Results**

Client: NT Global Job ID: 880-1319-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Client Sample ID: S-1 (0-6") Date Collected: 04/14/21 10:56

Lab Sample ID: 880-1319-1

04/15/21 23:56

04/15/21 11:36

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Motification Tolatile Organ	no compounds (	,							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/15/21 11:36	04/15/21 23:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/15/21 11:36	04/15/21 23:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/15/21 11:36	04/15/21 23:56	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/15/21 11:36	04/15/21 23:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/15/21 11:36	04/15/21 23:56	1
Xylenes, Total	< 0.00399	U	0.00399		mg/Kg		04/15/21 11:36	04/15/21 23:56	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		04/15/21 11:36	04/15/21 23:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				04/15/21 11:36	04/15/21 23:56	1

Method: 8015E	NM - Diasal	Range Organ	ice (DRO) (GC)
MICHIGA. OUTOL	I TINI - DICOCI	Italige Olgan	

109

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/15/21 12:00	04/15/21 15:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/15/21 12:00	04/15/21 15:03	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 12:00	04/15/21 15:03	1
Total TPH	<50.0	U	50.0		mg/Kg		04/15/21 12:00	04/15/21 15:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

70 - 130

1-Chlorooctane	117	70 - 130	04/15/21 12:00	04/15/21 15:03	1
o-Terphenyl	115	70 - 130	04/15/21 12:00	04/15/21 15:03	1
_					

Method: 300.0 - Anions,	Ion Chromatography - Soluble
Analyto	Popult Qualifier

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.2	5.04	mg/Kg			04/16/21 12:36	1

Client Sample ID: S-2 (0-6")

Date Collected: 04/14/21 10:56

Date Received: 04/15/21 10:56

Method: 8021B	- Volatile Organic	<b>Compounds</b>	(GC)
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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/15/21 11:36	04/16/21 00:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/15/21 11:36	04/16/21 00:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/15/21 11:36	04/16/21 00:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/15/21 11:36	04/16/21 00:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/15/21 11:36	04/16/21 00:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/15/21 11:36	04/16/21 00:16	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		04/15/21 11:36	04/16/21 00:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				04/15/21 11:36	04/16/21 00:16	1
1,4-Difluorobenzene (Surr)	110		70 - 130				04/15/21 11:36	04/16/21 00:16	1

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

Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac <50.0 U 50.0 04/15/21 12:00 04/15/21 15:24 Gasoline Range Organics mg/Kg

(GRO)-C6-C10

Eurofins Xenco, Midland

Lab Sample ID: 880-1319-2 **Matrix: Solid** 

Job ID: 880-1319-1

Client: NT Global Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Client Sample ID: S-2 (0-6")

Result Qualifier

Lab Sample ID: 880-1319-2 Date Collected: 04/14/21 10:56

Matrix: Solid Date Received: 04/15/21 10:56

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over	91.7		50.0		mg/Kg		04/15/21 12:00	04/15/21 15:24	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 12:00	04/15/21 15:24	1
Total TPH	91.7		50.0		mg/Kg		04/15/21 12:00	04/15/21 15:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130				04/15/21 12:00	04/15/21 15:24	1
o-Terphenyl	109		70 - 130				04/15/21 12:00	04/15/21 15:24	1

5.05 04/16/21 12:41 Chloride 250 mg/Kg

RL

MDL Unit

Prepared

Analyzed

D

Client Sample ID: S-3 (0-6") Lab Sample ID: 880-1319-3 Date Collected: 04/14/21 10:56 Matrix: Solid

Date Received: 04/15/21 10:56

Analyte

nic Compounds (	GC)							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200		mg/Kg		04/15/21 11:36	04/16/21 00:37	1
<0.00200	U	0.00200		mg/Kg		04/15/21 11:36	04/16/21 00:37	1
<0.00200	U	0.00200		mg/Kg		04/15/21 11:36	04/16/21 00:37	1
<0.00401	U	0.00401		mg/Kg		04/15/21 11:36	04/16/21 00:37	1
<0.00200	U	0.00200		mg/Kg		04/15/21 11:36	04/16/21 00:37	1
< 0.00401	U	0.00401		mg/Kg		04/15/21 11:36	04/16/21 00:37	1
<0.00401	U	0.00401		mg/Kg		04/15/21 11:36	04/16/21 00:37	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
107		70 - 130				04/15/21 11:36	04/16/21 00:37	1
107		70 - 130				04/15/21 11:36	04/16/21 00:37	1
	Result   <0.00200   <0.00200   <0.00200   <0.00401   <0.00401   <0.00401   <0.00401   <0.00401   <0.00401		Result         Qualifier         RL           <0.00200	Result         Qualifier         RL         MDL           <0.00200	Result         Qualifier         RL         MDL         Unit           <0.00200	Result         Qualifier         RL         MDL         Unit         D           <0.00200	Result         Qualifier         RL         MDL         Unit         D         Prepared           <0.00200	Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           <0.00200

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/15/21 12:00	04/15/21 15:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/15/21 12:00	04/15/21 15:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 12:00	04/15/21 15:45	1
Total TPH	<50.0	U	50.0		mg/Kg		04/15/21 12:00	04/15/21 15:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130				04/15/21 12:00	04/15/21 15:45	1
o-Terphenyl	122		70 - 130				04/15/21 12:00	04/15/21 15:45	1

Method. 300.0 - Allions, foli Chilon	iatograpity - 30	Jiubie						
Analyte	Result Q	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.8	4.98		mg/Kg			04/16/21 12:46	1

Eurofins Xenco, Midland

Dil Fac

# **Client Sample Results**

Client: NT Global Job ID: 880-1319-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Client Sample ID: S-4 (0-6")

Lab Sample ID: 880-1319-4 Date Collected: 04/14/21 10:56

Matrix: Solid

Method: 8021B - Volatile Organic	c Compounds (	GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00202	U	0.00202		mg/Kg		04/15/21 11:36	04/16/21 00:57	
Toluene	<0.00202	U	0.00202		mg/Kg		04/15/21 11:36	04/16/21 00:57	•
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/15/21 11:36	04/16/21 00:57	•
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		04/15/21 11:36	04/16/21 00:57	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/15/21 11:36	04/16/21 00:57	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		04/15/21 11:36	04/16/21 00:57	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		04/15/21 11:36	04/16/21 00:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				04/15/21 11:36	04/16/21 00:57	1
1,4-Difluorobenzene (Surr)	109		70 - 130				04/15/21 11:36	04/40/04 00:57	
1,4-Dilluoroberizerie (Surr)	109		70 - 130				04/15/21 11:36	04/16/21 00:57	7
		RO) (GC)	70 - 130				04/15/21 11:36	04/16/21 00:5/	7
Method: 8015B NM - Diesel Ranç Analyte	ge Organics (D	RO) (GC)  Qualifier	70 - 130 RL	MDL	Unit	D	Prepared	04/16/21 00:57  Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte	ge Organics (D	Qualifier		MDL	Unit mg/Kg	<u>D</u>			Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	Qualifier U	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DI Result <50.0	Qualifier U	RL 50.0	MDL	mg/Kg	<u> </u>	Prepared 04/15/21 12:00 04/15/21 12:00	Analyzed 04/15/21 16:06 04/15/21 16:06	·
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (Di Result <50.0	Qualifier U	RL	MDL	mg/Kg	<u>D</u>	Prepared 04/15/21 12:00	<b>Analyzed</b> 04/15/21 16:06	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DI Result <50.0	Qualifier U U	RL 50.0	MDL	mg/Kg	<u>D</u>	Prepared 04/15/21 12:00 04/15/21 12:00	Analyzed 04/15/21 16:06 04/15/21 16:06	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Total TPH	ge Organics (D) Result <50.0 <50.0 <50.0	Qualifier U U U U	RL 50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00	Analyzed 04/15/21 16:06 04/15/21 16:06 04/15/21 16:06	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D) Result <50.0 <50.0 <50.0 <50.0	Qualifier U U U U	RL 50.0 50.0 50.0 50.0	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00 04/15/21 12:00	Analyzed 04/15/21 16:06 04/15/21 16:06 04/15/21 16:06 04/15/21 16:06	Dil Fac 1 1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.7		4.95		mg/Kg			04/16/21 12:51	1

# **Surrogate Summary**

Client: NT Global Job ID: 880-1319-1
Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-1319-1	S-1 (0-6")	113	109
880-1319-2	S-2 (0-6")	111	110
880-1319-3	S-3 (0-6")	107	107
880-1319-4	S-4 (0-6")	110	109
LCS 880-1817/1-A	Lab Control Sample	98	106
LCSD 880-1817/2-A	Lab Control Sample Dup	98	106
MB 880-1817/5-A	Method Blank	98	101

BFB = 4-Bromofluorobenzene (Surr) DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

=			
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-1319-1	S-1 (0-6")	117	115
880-1319-2	S-2 (0-6")	118	109
880-1319-3	S-3 (0-6")	122	122
880-1319-4	S-4 (0-6")	115	103
LCS 880-1816/2-A	Lab Control Sample	108	93
LCSD 880-1816/3-A	Lab Control Sample Dup	103	88
MB 880-1816/1-A	Method Blank	101	99

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: NT Global Job ID: 880-1319-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1817/5-A

**Matrix: Solid** 

Analysis Batch: 1833

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

Prep Batch: 1817

	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/15/21 10:02	04/15/21 16:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/15/21 10:02	04/15/21 16:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/15/21 10:02	04/15/21 16:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/15/21 10:02	04/15/21 16:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/15/21 10:02	04/15/21 16:05	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/15/21 10:02	04/15/21 16:05	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		04/15/21 10:02	04/15/21 16:05	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	04/15/21 10:02	04/15/21 16:05	1
1,4-Difluorobenzene (Surr)	101		70 - 130	04/15/21 10:02	04/15/21 16:05	1

Lab Sample ID: LCS 880-1817/1-A

**Matrix: Solid** 

**Analysis Batch: 1833** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 1817

ı		Spike	LCS	LCS				%Rec.	
l	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
l	Benzene	0.100	0.09286		mg/Kg		93	70 - 130	
l	Toluene	0.100	0.09730		mg/Kg		97	70 - 130	
l	Ethylbenzene	0.100	0.1019		mg/Kg		102	70 - 130	
l	m-Xylene & p-Xylene	0.200	0.2076		mg/Kg		104	70 - 130	
l	o-Xylene	0.100	0.1020		mg/Kg		102	70 - 130	
н									

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	98	70 - 130
1 4-Difluorobenzene (Surr)	106	70 - 130

Lab Sample ID: LCSD 880-1817/2-A

**Matrix: Solid** 

**Analysis Batch: 1833** 

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

Prep Type: Total/NA

Prep Batch: 1817

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09169		mg/Kg		92	70 - 130	1	35
Toluene	0.100	0.09769		mg/Kg		98	70 - 130	0	35
Ethylbenzene	0.100	0.1030		mg/Kg		103	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2089		mg/Kg		104	70 - 130	1	35
o-Xylene	0.100	0.1020		mg/Kg		102	70 - 130	0	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1.4-Difluorobenzene (Surr)	106		70 - 130

## QC Sample Results

Client: NT Global Job ID: 880-1319-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

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

Lab Sample ID: MB 880-1816/1-A

**Matrix: Solid** 

**Analysis Batch: 1818** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1816

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		04/15/21 10:01	04/15/21 11:52	
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		04/15/21 10:01	04/15/21 11:52	
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/15/21 10:01	04/15/21 11:52	
Total TPH	<50.0	U	50.0		mg/Kg		04/15/21 10:01	04/15/21 11:52	

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	04/15/21 10:01	04/15/21 11:52	1
o-Terphenyl	99		70 - 130	04/15/21 10:01	04/15/21 11:52	1

Lab Sample ID: LCS 880-1816/2-A

**Analysis Batch: 1818** 

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

Prep Batch: 1816

	<b>Spike</b>	LCS LCS	•			%Rec.
Analyte	Added	Result Qua	alifier Unit	D	%Rec	Limits
Gasoline Range Organics	1000	1241	mg/Kg		124	70 - 130
(GRO)-C6-C10						
Diesel Range Organics (Over	1000	1079	mg/Kg		108	70 - 130
C10-C28)						

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: LCSD 880-1816/3-A

**Matrix: Solid** 

**Analysis Batch: 1818** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 1816

7 manyolo Batom 1010								p Date		
	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	1101		mg/Kg		110	70 - 130	12	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	1010		mg/Kg		101	70 - 130	7	20	
C10 C20)										

C10-C28)

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	88		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1830/1-A

Matrix: Solid

**Analysis Batch: 1851** 

Client Sample ID: Method Blank

**Prep Type: Soluble** 

MB MB

Prepared Analyte Result Qualifier RL MDL Unit D Dil Fac Analyzed Chloride <5.00 U 5.00 mg/Kg 04/16/21 12:05

# **QC Sample Results**

Client: NT Global Job ID: 880-1319-1 Project/Site: EOG - Thor 21 CTB

SDG: Lea Co, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-1830/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 1851** 

		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 	250	258.4		mg/Kg		103	90 - 110	

Lab Sample ID: LCSD 880-1830/3-A **Client Sample ID: Lab Control Sample Dup Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 1851** 

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	256.4		mg/Kg		103	90 - 110	1	20

# **QC Association Summary**

Client: NT Global Job ID: 880-1319-1 Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

**GC VOA** 

Prep Batch: 1817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1319-1	S-1 (0-6")	Total/NA	Solid	5035	
880-1319-2	S-2 (0-6")	Total/NA	Solid	5035	
880-1319-3	S-3 (0-6")	Total/NA	Solid	5035	
880-1319-4	S-4 (0-6")	Total/NA	Solid	5035	
MB 880-1817/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1817/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1817/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

**Analysis Batch: 1833** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1319-1	S-1 (0-6")	Total/NA	Solid	8021B	1817
880-1319-2	S-2 (0-6")	Total/NA	Solid	8021B	1817
880-1319-3	S-3 (0-6")	Total/NA	Solid	8021B	1817
880-1319-4	S-4 (0-6")	Total/NA	Solid	8021B	1817
MB 880-1817/5-A	Method Blank	Total/NA	Solid	8021B	1817
LCS 880-1817/1-A	Lab Control Sample	Total/NA	Solid	8021B	1817
LCSD 880-1817/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1817

**GC Semi VOA** 

Prep Batch: 1816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1319-1	S-1 (0-6")	Total/NA	Solid	8015NM Prep	
880-1319-2	S-2 (0-6")	Total/NA	Solid	8015NM Prep	
880-1319-3	S-3 (0-6")	Total/NA	Solid	8015NM Prep	
880-1319-4	S-4 (0-6")	Total/NA	Solid	8015NM Prep	
MB 880-1816/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1816/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1816/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 1818** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1319-1	S-1 (0-6")	Total/NA	Solid	8015B NM	1816
880-1319-2	S-2 (0-6")	Total/NA	Solid	8015B NM	1816
880-1319-3	S-3 (0-6")	Total/NA	Solid	8015B NM	1816
880-1319-4	S-4 (0-6")	Total/NA	Solid	8015B NM	1816
MB 880-1816/1-A	Method Blank	Total/NA	Solid	8015B NM	1816
LCS 880-1816/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1816
LCSD 880-1816/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1816

**HPLC/IC** 

Leach Batch: 1830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1319-1	S-1 (0-6")	Soluble	Solid	DI Leach	
880-1319-2	S-2 (0-6")	Soluble	Solid	DI Leach	
880-1319-3	S-3 (0-6")	Soluble	Solid	DI Leach	
880-1319-4	S-4 (0-6")	Soluble	Solid	DI Leach	
MB 880-1830/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1830/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1830/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Xenco, Midland

4/16/2021

# **QC Association Summary**

Client: NT Global Job ID: 880-1319-1
Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

## HPLC/IC

## **Analysis Batch: 1851**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-1319-1	S-1 (0-6")	Soluble	Solid	300.0	1830
880-1319-2	S-2 (0-6")	Soluble	Solid	300.0	1830
880-1319-3	S-3 (0-6")	Soluble	Solid	300.0	1830
880-1319-4	S-4 (0-6")	Soluble	Solid	300.0	1830
MB 880-1830/1-A	Method Blank	Soluble	Solid	300.0	1830
LCS 880-1830/2-A	Lab Control Sample	Soluble	Solid	300.0	1830
LCSD 880-1830/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1830

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Job ID: 880-1319-1

Client: NT Global Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

Client Sample ID: S-1 (0-6") Lab Sample ID: 880-1319-1 Date Collected: 04/14/21 10:56 Matrix: Solid Date Received: 04/15/21 10:56

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1817	04/15/21 11:36	MR	XM
Total/NA	Analysis	8021B		1	1833	04/15/21 23:56	MR	XM
Total/NA	Prep	8015NM Prep			1816	04/15/21 12:00	DM	XM
Total/NA	Analysis	8015B NM		1	1818	04/15/21 15:03	AJ	XM
Soluble	Leach	DI Leach			1830	04/15/21 12:29	SC	XM
Soluble	Analysis	300.0		1	1851	04/16/21 12:36	SC	XM

Client Sample ID: S-2 (0-6") Lab Sample ID: 880-1319-2 Matrix: Solid Date Collected: 04/14/21 10:56

Date Received: 04/15/21 10:56

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1817	04/15/21 11:36	MR	XM
Total/NA	Analysis	8021B		1	1833	04/16/21 00:16	MR	XM
Total/NA	Prep	8015NM Prep			1816	04/15/21 12:00	DM	XM
Total/NA	Analysis	8015B NM		1	1818	04/15/21 15:24	AJ	XM
Soluble	Leach	DI Leach			1830	04/15/21 12:29	SC	XM
Soluble	Analysis	300.0		1	1851	04/16/21 12:41	SC	XM

Client Sample ID: S-3 (0-6") Lab Sample ID: 880-1319-3

Date Collected: 04/14/21 10:56 Date Received: 04/15/21 10:56

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1817	04/15/21 11:36	MR	XM
Total/NA	Analysis	8021B		1	1833	04/16/21 00:37	MR	XM
Total/NA	Prep	8015NM Prep			1816	04/15/21 12:00	DM	XM
Total/NA	Analysis	8015B NM		1	1818	04/15/21 15:45	AJ	XM
Soluble	Leach	DI Leach			1830	04/15/21 12:29	SC	XM
Soluble	Analysis	300.0		1	1851	04/16/21 12:46	SC	XM

Client Sample ID: S-4 (0-6") Lab Sample ID: 880-1319-4 Date Collected: 04/14/21 10:56 **Matrix: Solid** 

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1817	04/15/21 11:36	MR	XM
Total/NA	Analysis	8021B		1	1833	04/16/21 00:57	MR	XM
Total/NA	Prep	8015NM Prep			1816	04/15/21 12:00	DM	XM
Total/NA	Analysis	8015B NM		1	1818	04/15/21 16:06	AJ	XM
Soluble	Leach	DI Leach			1830	04/15/21 12:29	SC	XM
Soluble	Analysis	300.0		1	1851	04/16/21 12:51	SC	XM

Laboratory References:

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

Eurofins Xenco, Midland

Date Received: 04/15/21 10:56

**Matrix: Solid** 

# **Accreditation/Certification Summary**

Client: NT Global Job ID: 880-1319-1
Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

## Laboratory: Eurofins Xenco, Midland

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

Authority	Pro	ogram	Identification Number	<b>Expiration Date</b>
Texas	NE	LAP	T104704400-20-21	06-30-21
The following analytes:	are included in this report, but	t the laboratory is not certifi	ied by the governing authority. This list ma	av ingluda analytaa far w
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## **Method Summary**

Client: NT Global Job ID: 880-1319-1 Project/Site: EOG - Thor 21 CTB

SDG: Lea Co, NM

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

#### **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.

#### Laboratory References:

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

# **Sample Summary**

Client: NT Global Job ID: 880-1319-1
Project/Site: EOG - Thor 21 CTB SDG: Lea Co, NM

ect/Site. EOG - 11101 21 CTB SDG. Lea Co, Nivi

Lab Sample ID         Client Sample ID           880-1319-1         S-1 (0-6")           880-1319-2         S-2 (0-6")           800-1340-0         S-2 (0-6")	Matrix Solid Solid	Collected 04/14/21 10:56 04/14/21 10:56	Received 04/15/21 10:56 04/15/21 10:56	Asset ID
880-1319-3 S-3 (0-6") 880-1319-4 S-4 (0-6")	Solid	04/14/21 10:56	04/15/21 10:56	

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Work Order No:	1319
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4/16/2021

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	### Aidland, TX 79 ### Aidland, TX 79 ### Aidland, TX 79 #### Aidland, TX 79 #### Aidland, TX 79 #### Lear #### Lear #### Yes #### Yes ####################################	### Annual Control of the Internal Control of the Inte	### Additional Correction   Table   Correction	## Annual Control of the Image	Thor 21 CTB  Turn Around  214124  Lea Co, NM  CRM  Themp Blank.  Yes No  Thermometer ID  Yes No  N/A  Temperature Reading  Corrected Temperature.  Indication  Time  Soil  Water  Wash  Water  Wash  Themporature Reading  Corrected Temperature.  Wash  Water  Wash  Time  Soil  Water  Wash  Water	Aidland, TX 79706  City, State ZIP  Routine  City, State Zie  Routine  Countine  Corrected Temperature  Corrected	Midland, TX 79706   City, State ZIP	Midland, TX 79706   City, State ZIP   Midland   Midla	Midland, TX 79706   City, State ZIP   Midland, Tx	City, State ZIP   Midland, Tx 79706   Midlan	City, State ZIP   Midland, Tx 79706	Midland, TX 79706   City, State ZIP   Midland, Tx 79706	City, State ZIP   Midland, Tx 79706   Size ZIP   Size ZIP   Midland, Tx 79706   Size ZIP   Size ZIP   Size ZIP   Size ZIP   Midland, Tx 79706   Size ZIP   Size Z	Midland, TX 79706   City, State ZIP   Midland, Tx 79706	Midland, TX 79706   City, State ZIP   Midland, Tx 79706	Midland, TX 79706   City, State ZIP   Midland, Tx 79706   Report	Reporting Let	Midland, TX 79706 City, State ZIP Midland, Tx 79706  City, State ZIP Midland, Tx 79706  City, State ZIP Midland, Tx 79706  Reporting Level II Deliverables EDD  Thor 21 CTB Turn Around ANALYSIS REQUEST  214124  Routine Reporting Level II Deliverables EDD  ANALYSIS REQUEST  TAT starts the day received by the lab, if received by 4 30pm TAT starts the day received by 4 30pm Yes No Wet Ice Yes No Wet Ice Yes No (M/A) Temperature Reading Corrected Temperature.  Time Soil Water Grab/ Comp Thermometer ID	Midland, TX 79706	Midland, TX 79706	Analysis Requires	Alidland, TX 79706

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1/ Bonn Marcy	IKIN	4/15/21 1056	2		
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Released to Imaging: 1/7/2022 10:19:20 AM

# **Login Sample Receipt Checklist**

Client: NT Global Job Number: 880-1319-1 SDG Number: Lea Co, NM

Login Number: 1319 List Source: Eurofins Midland

List Number: 1

Creator: Phillips, Kerianna

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.	True	
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	

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 62746

## **CONDITIONS**

Operator:	OGRID:
EOG RESOURCES INC	7377
P.O. Box 2267	Action Number:
Midland, TX 79702	62746
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By		Condition Date
nvelez	None	1/7/2022