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www.atkinseng.com

June 09, 2024

NMOCD District 1  
1625 N. French Dr.,  
Hobbs, New Mexico 88240

SUBJECT: Remediation Closure Report for the Emma No. 4 Release (nAPP2410135571), Eddy County, New Mexico

Dear NMOCD District 1,

On behalf of Frontier Field Services, LLC, Atkins Engineering Associates INC. (AEA) has prepared this Remediation Closure Report that describes the remediation of a release of liquids related to gas pipeline activities at the Emma No.4. The site is in Unit J, Section 33, Township 19S, Range 24E, Eddy County, New Mexico, on Private land. Figure 1 illustrates the vicinity and site location on an USGS 7.5-minute quadrangle map.

Table 1 summarizes release information and Closure Criteria.

Table 1: Release Information and Closure Criteria			
Name	A-Dagger Draw Emma #4	Company	Frontier Field Services, LLC
API Number	N/A	Location	32.614518 -104.591967
Incident Number	nAPP2410135571		
Estimated Date of Release	3/22/2024	Date Reported to NMOCD	4/10/2024
Land Owner	Private	Reported To	NMOCD
Source of Release	Corrosion		
Released Volume	1 BBLS <b>11 MCF</b>	Released Material	Condensate <b>Gas</b>
Recovered Volume	0	Net Release	1 BBLS <b>11 MCF Gas</b>
NMOCD Closure Criteria	<50 feet to Groundwater		
AEA Response Dates	4/12, 4/19, 5/1, 5/3, 5/8/24		

## **1.0 Background**

On March 22, 2024, a release was discovered at the Emma No. 4 pipeline due to internal corrosion. Initial response activities were conducted by the operator, and included source elimination by means of repair and immediate site stabilization and release recovery. Figures 1 and 2 illustrate the vicinity and site location, Figure 3 illustrates the release location. The C-141 forms are included in Appendix A.

## **2.0 Site Information and Closure Criteria**

The Emma No. 4 is located approximately 19.25 miles southwest of Artesia, New Mexico on privately-owned land at an elevation of approximately 3787 feet above mean sea level (amsl).

Based upon the New Mexico Office of the State Engineers (NMOSE) online water well database, (Appendix B), depth to groundwater in the area is undeterminable due to no water well information. There are no known water sources within ½-mile of the location, according to the NMOSE database. ([https://gis.ose.state.nm.us/gisapps/ose\\_pod\\_locations/](https://gis.ose.state.nm.us/gisapps/ose_pod_locations/); accessed 11/14/2023). The nearest significant watercourse is unnamed draw/stream, located approximately 1,710 feet southeast of the location. Figure 2 illustrates the site with 200 and 300-foot radii to indicate that it does not lie within a sensitive area as described in 19.15.29.12.C(4) NMAC.

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of less than 50 feet bgs. The site has been restored to meet the standards of Table I of 19.15.29.12 NMAC.

Table 2 demonstrates the Closure Criteria applicable to this location. Pertinent well data is attached in Appendix B.

## **3.0 Release Characterization and Remediation Activities**

On March 22, 2024, Frontier Field Services, LLC personnel arrived on site in response to the release associated with Emma #4 pipeline. AEA performed site sampling activities on April 12, 2024 and by collecting soil samples around the release site. Soil samples were field screened for chloride using an electrical conductivity (EC) meter. Sample locations (B1-B2, SW1-SW6) were investigated using a hand-auger, samples were collected at 4 feet bgs of the exposed pipeline.

AEA returned to the site to oversee the excavation of contaminated soil near and on the pipeline. AEA guided the excavation activities by collecting soil samples for field screening. The walls and base were excavated until field screening results indicated that the NMOCD Closure Criteria would be met. NMOCD was notified on April 16, 2024, that closure samples were expected to be collected in two (2) business days. A copy of this notification is included in Appendix E.

On April 19, 2024 AEA began conducting confirmation sampling of the walls and base of the excavation. The area around sample locations CB1-CB2, which included CSW1-CSW6 were excavated to a depth of 6 feet bgs. A total of eight (8) samples were collected for laboratory analysis for total chloride using EPA Method 300.0., EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D.

The confirmation samples were comprised of representative wall and base 5-point composite samples, each representing 200 ft<sup>2</sup> of exposed excavation of the base (CB1-CB2) and walls (CSW1-CSW6).

On April 26, 2024, AEA received lab confirmation that all samples were below NMOCD closure criteria, except sample location CB1. On April 26, 2024, NMOCD was notified that closure samples were expected to be collected in two (2) business days. A copy of this notification is included in Appendix E.

On May 1, 2024 AEA returned to site to continue excavation of contaminated soil surrounding area of sample location CB1. The area was excavated with an additional two (2) feet bgs. One (1) sample was collected for laboratory analysis for total chloride using EPA Method 300.0., EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D.

On May 2, 2024, AEA received lab confirmation that sample CB1 was still in exceedance of NMOCD closure criteria. AEA returned to the site to further excavate the area surrounding CB1. AEA further excavated until field screens indicated that NMOCD closure criteria would be met. On May 3, 2024, NMOCD was notified that closure samples were expected to be collected in two (2) business days. A copy of this notification is included in Appendix E.

On May 13, 2024, AEA received lab confirmation that all samples were below NMOCD closure criteria. All samples were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Cardinal Laboratories in Hobbs, New Mexico (Appendix D).

Figure 3 shows the extent of the excavation and sample locations. All laboratory results are summarized in Table 3. Laboratory reports are included in Appendix D.

Approximately 234 cubic yards of contaminated soil was removed and hauled to a NMOCD approved facility (waste manifest available upon request). The contaminated soil was transported and disposed of at Lea Land, near Hobbs, NM.

#### **4.0 Reclamation Report and Revegetation Plan**

Following confirmation sampling, the excavated area was backfilled with locally sourced “like-kind” material. The impacted areas was re-contoured and compacted to achieve erosion control, stability and preservation of surface water erosion to the extent practicable. Photographs of the area following backfill and reclamation are included in Appendix E.

The affected area was reseeded on June 5, 2024 with landowner-approved seed mixture of approximately 0.01 acre rate of XX seed blend by grain drilled method. Figure 3 illustrates the area that was reclaimed and reseeded.

Regular surveys will be conducted quarterly to monitor the health and growth of the vegetation. Once the vegetative growth meets the life-form ratio of plus or minus 50% of pre-disturbance levels and a total plant percentage cover of at least 70% of pre-disturbance levels, excluding noxious weeds (NMAC 19.15.29.13D(3)), a site-specific Revegetation Report will be completed. The Revegetation Report will include:

- An executive summary of the revegetation activities
- A scaled site map of the revegetated areas

Emma No. 4 Remediation Closure Report (nAPP2410135571)  
June 20, 2024

Page 4 of 4

- Revegetation inspection detailing the life-form ratio / no noxious weeds
- Photographs

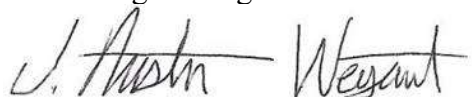
## **5.0 Scope and Limitations**

The scope of our services included: assessment sampling; verifying release stabilization; regulatory liaison; remediation; and preparing this closure report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact Austin Weyant at 575-626-3993

Submitted by:

Atkins Engineering Associates INC



Austin Weyant  
Geoscientist

## **ATTACHMENTS:**

### **Figures:**

Figure 1: Hydrology Setbacks Map

Figure 2: Karst and NMOSE PODs Map

Figure 3: Site Characterization Map

### **Tables:**

Table 2: NMOCD Closure Criteria Justification

Table 3: Summary of Sample Results

### **Appendices:**

Appendix A: NMOSE Wells Report

Appendix B: Notification of Sampling

Appendix C: Laboratory Analytical Reports

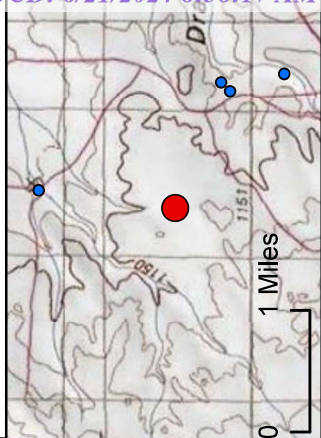
Appendix D: Open Excavation Photo Log

Appendix E: Reclamation Photo Log



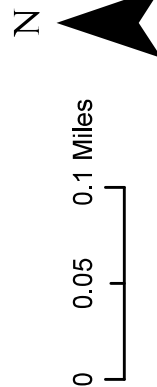
# FIGURES

FIGURE 1  
Hydrology Setbacks  
Durango Emma #4



### Legend

- Location
- OSE\_PODs
- Excavation Area
- FEMA\_Flood\_Zones\_201
- Rivers
- Springs\_Seeps
- Lakes\_Plays
- Streams\_Canals
- Buffer 500 ft



32°37'2.99" -104°35'47.00"W

DRAWN LCM

DATE DRAWN: 6/20/2024

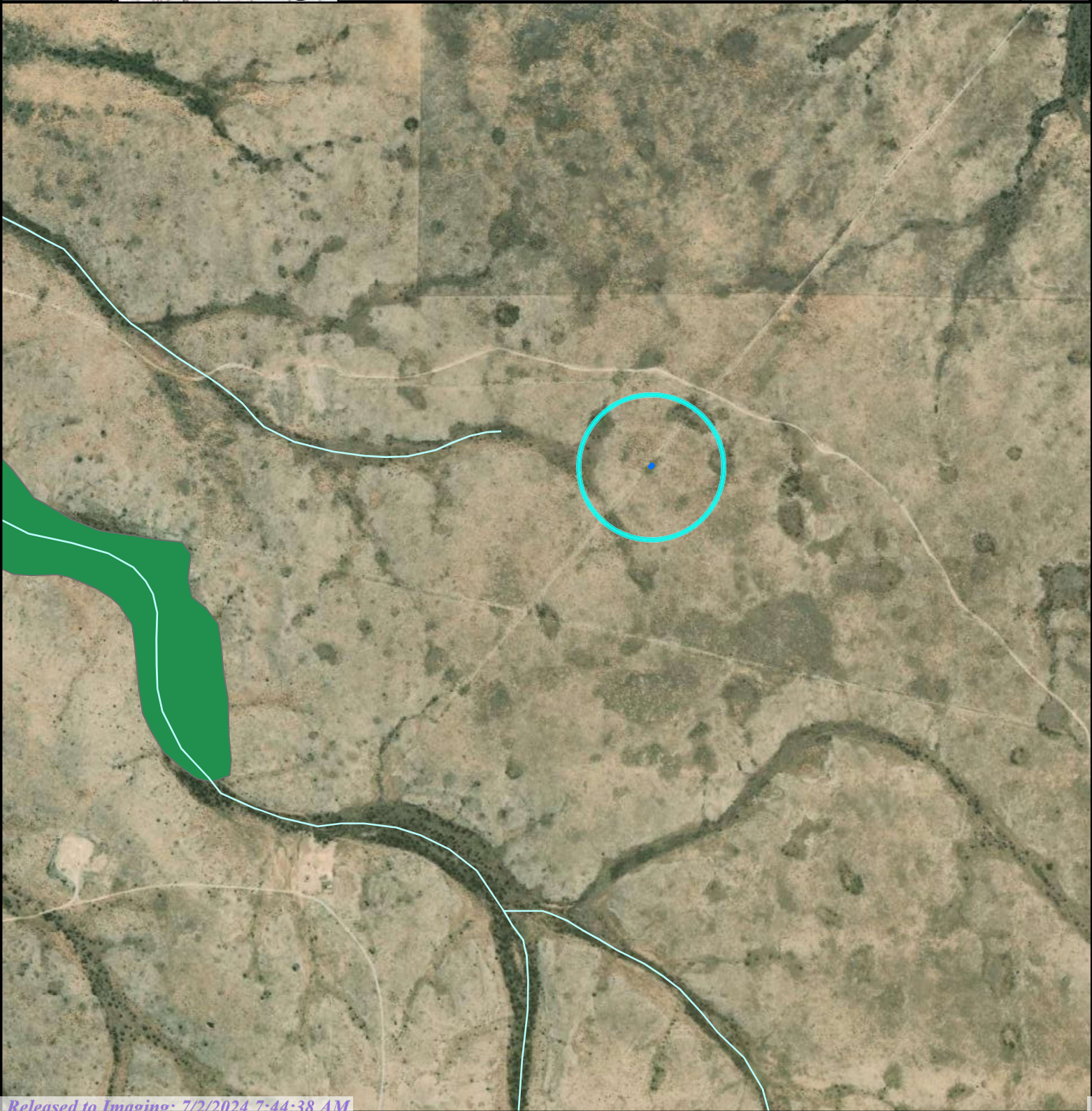
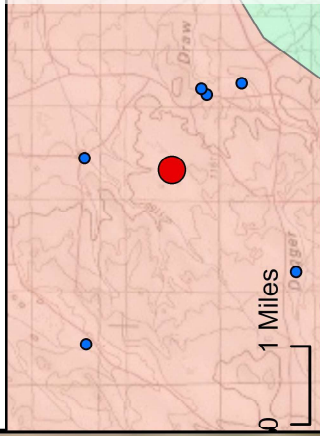


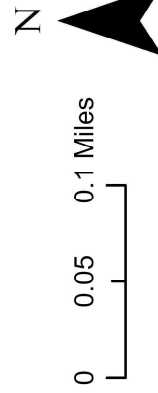


FIGURE 2  
Karst and NMOSE PODS  
Durango Emma #4



**Legend**

- Location
- Karst Potential
  - High
  - Low
  - Medium
- OSE\_PODS
- Sample Locations
- Excavation Area
- Pipeline
- Springs\_Seeps



32°37'2.99" -104°35'47.00"W

DRAWN LCM

DATE DRAWN: 6/20/2024

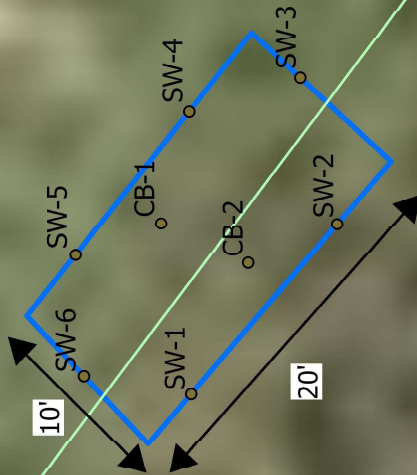
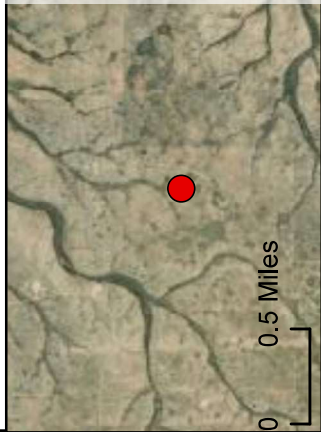


FIGURE 3  
Sample Map  
Durango Emma #4



### Legend

- Sample Locations
- ReleaseArea
- Pipeline
- Location

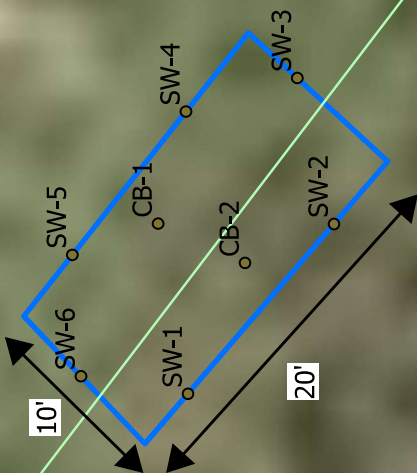


0 0.05 0.1 Miles

32°37'2.99" -104°35'47.00"W

DRAWN LCM

DATE DRAWN: 6/20/2024



# TABLES

Table 2:  
NMOCD Closure Criteria

Frontier Field Services  
Emma #4 - nAPP2410135571

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes
Depth to Groundwater (feet bgs)	270	New Mexico Office of the State Engineer
Horizontal Distance From All Water Sources Within 1/2 Mile (ft)	>1/2 Mile	United States Geological Survey Topographical Map
Horizontal Distance to Nearest Significant Watercourse (ft)	959	United States Geological Survey Topographical Map

Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)						
Depth to Groundwater	Closure Criteria (units in mg/kg)					
	Chloride *numerical limit or background, whichever is greater	TPH	GRO + DRO	BTEX	Benzene	
	600	100		50	10	
	10000	2500	1000	50	10	
	20000	2500	1000	50	10	
Surface Water	yes or no	if yes, then				
<300' from continuously flowing watercourse or other significant watercourse?	No	600	100	50	10	
<200' from lakebed, sinkhole or playa lake?	No					
Water Well or Water Source						
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	No					
<1000' from fresh water well or spring?	No					
Human and Other Areas						
<300' from an occupied permanent residence, school, hospital, institution or church?	No					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	No					
<100' from wetland?	No					
within area overlying a subsurface mine	No					
within an unstable area?	No (Med. Karst)					
within a 100-year floodplain?	No					

AEA #

Table 3:

Summary of Sample Results

Frontier Field Services  
Emma #4 - nAPP2410135571

Sample ID	Sample Date	Depth (feet bgs)	Proposed Action	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl- mg/Kg
NMED Closure Criteria				50	10				100	600
B1	4/12/2024	4	Excavate	6.8	<0.050	62.9	79.3	<10	142.2	16
B2	4/12/2024	4	Excavate	69.3	0.434	387	820	21.5	1228.5	32
SW1	4/12/2024	4	Excavate	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
SW2	4/12/2024	4	Excavate	<0.300	<0.030	<10.0	<10.0	<10.0	<30.0	32
SW3	4/12/2024	4	Excavate	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
SW4	4/12/2024	4	Excavate	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
SW5	4/12/2024	4	Excavate	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
SW6	4/12/2024	4	Excavate	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
Confirmation Sampling										
CB1	4/19/2024	6	Excavate	<0.300	<0.050	<10.0	13.2	170	183.2	32
	5/1/2024	8	Excavate	26.9	0.516	140	174	<10.0	314	16
	5/8/2024	8.5	In-situ	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
CB2	4/19/2024	6	In-situ	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	<16.0
CSW1	4/19/2024	0-6	In-situ	<0.300	<0.050	<10.0	31.1	<10.0	31.1	<16.0
CSW2	4/19/2024	0-6	In-situ	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
CSW3	4/19/2024	0-6	In-situ	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
CSW4	4/19/2024	0-6	In-situ	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
CSW5	4/19/2024	0-6	In-situ	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
CSW6	4/19/2024	0-6	In-situ	<0.300	<0.050	11.8	84.6	<10.0	96.4	32
Topsoil Pit (Backfill)	5/1/2024	-	In-situ	<0.300	<0.050	<10	<10	<10	<30	16

"--" = Not Analyzed



# APPENDIX A

## NMOSE WELLS REPORT



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

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

(R=POD has been replaced,  
O=orphaned,  
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest)      (NAD83 UTM in meters)      (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tw	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
<a href="#">RA 05723</a>		RA	ED	3	3	34	19S	24E		539170	3608353*	1439	310	270	40
<a href="#">RA 05676</a>		RA	ED	2	2	3	28	19S	24E	538058	3610471*	1519	600	558	42
Average Depth to Water:														414 feet	
Minimum Depth:														270 feet	
Maximum Depth:														558 feet	

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 537865.98      Northing (Y): 3608963.8      Radius: 1609

\*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.

# APPENDIX B

## NOTIFICATION OF SAMPLING

OCD Permitting

Home    Operator Data    Action Status    Action Search Results    Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID:	334036	Districts:	Artesia
Operator:	[221115] FRONTIER FIELD SERVICES, LLC	Counties:	Eddy
Description:	FRONTIER FIELD SERVICES, LLC [221115] , A-Dagger Draw Emma #4-8-S-03222024 , nAPP2410135571		
Status:	APPROVED		
Status Date:	04/16/2024		
References (1):	nAPP2410135571		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2410135571
Incident Name	NAPP2410135571 A-DAGGER DRAW EMMA #4-8-S-03222024 @ 0
Incident Type	Release Other
Incident Status	Notification Accepted

Location of Release Source

Site Name	A-Dagger Draw Emma #4-8-S-03222024
Date Release Discovered	03/22/2024
Surface Owner	Private

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	1,000
What is the estimated number of samples that will be gathered	8
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19,15,29.12 NMAC	04/19/2024
Time sampling will commence	09:00 AM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	Lynn Acosta (505) 516-7469
Please provide any information necessary for navigation to sampling site	32.617569,-104.596396

Comments

No comments found for this submission.

Conditions

**Summary:**                      *gcarrasco (4/16/2024)*, Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

Reasons

No reasons found for this submission.

Go Back

OCD Permitting

Home    Operator Data    Action Status    Action Search Results    Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID:	337907	Districts:	Artesia
Operator:	[221115] FRONTIER FIELD SERVICES, LLC	Counties:	Eddy
Description:	FRONTIER FIELD SERVICES, LLC [221115] , A-Dagger Draw Emma #4-8-S-03222024 , nAPP2410135571		
Status:	APPROVED		
Status Date:	04/26/2024		
References (1):	nAPP2410135571		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2410135571
Incident Name	NAPP2410135571 A-DAGGER DRAW EMMA #4-8-S-03222024 @ 0
Incident Type	Release Other
Incident Status	Notification Accepted

Location of Release Source

Site Name	A-Dagger Draw Emma #4-8-S-03222024
Date Release Discovered	03/22/2024
Surface Owner	Private

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	200
What is the estimated number of samples that will be gathered	1
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19,15,29.12 NMAC	05/01/2024
Time sampling will commence	09:30 AM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	Lynn Acosta (505) 516-7469
Please provide any information necessary for navigation to sampling site	32.617569,-104.596396

Comments

No comments found for this submission.

Conditions

**Summary:**                      *gcarrasco (4/26/2024)*, Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

Reasons

No reasons found for this submission.

Go Back



OCD Permitting

Home    Operator Data    Action Status    Action Search Results    Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID:	339455	Districts:	Artesia
Operator:	[221115] FRONTIER FIELD SERVICES, LLC	Counties:	Eddy
Description:	FRONTIER FIELD SERVICES, LLC [221115] , A-Dagger Draw Emma #4-8-S-03222024 , nAPP2410135571		
Status:	APPROVED		
Status Date:	05/01/2024		
References (1):	nAPP2410135571		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2410135571
Incident Name	NAPP2410135571 A-DAGGER DRAW EMMA #4-8-S-03222024 @ 0
Incident Type	Release Other
Incident Status	Notification Accepted

Location of Release Source

Site Name	A-Dagger Draw Emma #4-8-S-03222024
Date Release Discovered	03/22/2024
Surface Owner	Private

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	100
What is the estimated number of samples that will be gathered	6
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19,15,29.12 NMAC	05/03/2024
Time sampling will commence	09:30 AM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	Carmona Resources Miranda 432-813-9652
Please provide any information necessary for navigation to sampling site	Arrowhead Compressor Station 32.756342,-104.064622

Comments

No comments found for this submission.

Conditions

**Summary:**                      *gcarrasco (5/1/2024)*, Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

Reasons

No reasons found for this submission.

Go Back

OCD Permitting

Home    Operator Data    Action Status    Action Search Results    Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID:	340602	Districts:	Artesia
Operator:	[221115] FRONTIER FIELD SERVICES, LLC	Counties:	Eddy
Description:	FRONTIER FIELD SERVICES, LLC [221115] , A-Dagger Draw Emma #4-8-S-03222024 , nAPP2410135571		
Status:	APPROVED		
Status Date:	05/03/2024		
References (1):	nAPP2410135571		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2410135571
Incident Name	NAPP2410135571 A-DAGGER DRAW EMMA #4-8-S-03222024 @ 0
Incident Type	Release Other
Incident Status	Notification Accepted

Location of Release Source

Site Name	A-Dagger Draw Emma #4-8-S-03222024
Date Release Discovered	03/22/2024
Surface Owner	Private

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	200
What is the estimated number of samples that will be gathered	1
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19,15,29.12 NMAC	05/08/2024
Time sampling will commence	01:30 PM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	Lynn Acosta 505-516-7469
Please provide any information necessary for navigation to sampling site	32.614518-104.591967 Gate combo: 4202

Comments

No comments found for this submission.

Conditions

**Summary:**                      *sorozco (5/3/2024)*, Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

Reasons

No reasons found for this submission.

Go Back

# APPENDIX C

## LABORATORY ANALYTICAL RESULTS



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

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April 16, 2024

AUSTIN WEYANT

ATKINS ENGINEERING

2904 W. 2ND STREET

ROSWELL, NM 88203

RE: EMMA #4

Enclosed are the results of analyses for samples received by the laboratory on 04/12/24 13:00.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/12/2024  
Reported: 04/16/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: NONE GIVEN

Sampling Date: 04/12/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: B 1 (H241933-01)**

BTEx 8021B		mg/kg	Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/15/2024	ND	2.15	107	2.00	0.842	
<b>Toluene*</b>	<b>0.722</b>	0.050	04/15/2024	ND	2.08	104	2.00	0.892	
<b>Ethylbenzene*</b>	<b>0.548</b>	0.050	04/15/2024	ND	2.02	101	2.00	0.945	
<b>Total Xylenes*</b>	<b>5.53</b>	0.150	04/15/2024	ND	5.89	98.2	6.00	0.858	QM-07
<b>Total BTEx</b>	<b>6.80</b>	0.300	04/15/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg	Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>16.0</b>	16.0	04/15/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>62.9</b>	10.0	04/12/2024	ND	198	99.0	200	1.15	
<b>DRO &gt;C10-C28*</b>	<b>79.3</b>	10.0	04/12/2024	ND	198	98.8	200	3.53	
EXT DRO >C28-C36	<10.0	10.0	04/12/2024	ND					

Surrogate: 1-Chlorooctane 90.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.4 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/12/2024  
Reported: 04/16/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: NONE GIVEN

Sampling Date: 04/12/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: B 2 (H241933-02)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.434	0.200	04/15/2024	ND	2.15	107	2.00	0.842	
Toluene*	13.2	0.200	04/15/2024	ND	2.08	104	2.00	0.892	
Ethylbenzene*	5.26	0.200	04/15/2024	ND	2.02	101	2.00	0.945	
Total Xylenes*	50.5	0.600	04/15/2024	ND	5.89	98.2	6.00	0.858	
Total BTEX	69.3	1.20	04/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PI) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/15/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	387	10.0	04/12/2024	ND	198	99.0	200	1.15	
DRO >C10-C28*	820	10.0	04/12/2024	ND	198	98.8	200	3.53	
EXT DRO >C28-C36	21.5	10.0	04/12/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/12/2024  
Reported: 04/16/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: NONE GIVEN

Sampling Date: 04/12/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SW 1 (H241933-03)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/15/2024	ND	2.15	107	2.00	0.842		
Toluene*	<0.050	0.050	04/15/2024	ND	2.08	104	2.00	0.892		
Ethylbenzene*	<0.050	0.050	04/15/2024	ND	2.02	101	2.00	0.945		
Total Xylenes*	<0.150	0.150	04/15/2024	ND	5.89	98.2	6.00	0.858		
Total BTEX	<0.300	0.300	04/15/2024	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 89.0 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	04/15/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/12/2024	ND	198	99.0	200	1.15	
DRO >C10-C28*	<10.0	10.0	04/12/2024	ND	198	98.8	200	3.53	
EXT DRO >C28-C36	<10.0	10.0	04/12/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/12/2024  
Reported: 04/16/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: NONE GIVEN

Sampling Date: 04/12/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SW 2 (H241933-04)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/15/2024	ND	2.15	107	2.00	0.842	
<b>Toluene*</b>	<b>0.062</b>	0.050	04/15/2024	ND	2.08	104	2.00	0.892	
Ethylbenzene*	<0.050	0.050	04/15/2024	ND	2.02	101	2.00	0.945	
Total Xylenes*	<0.150	0.150	04/15/2024	ND	5.89	98.2	6.00	0.858	
Total BTEX	<0.300	0.300	04/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 90.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/15/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/12/2024	ND	198	99.0	200	1.15	
DRO >C10-C28*	<10.0	10.0	04/12/2024	ND	198	98.8	200	3.53	
EXT DRO >C28-C36	<10.0	10.0	04/12/2024	ND					

Surrogate: 1-Chlorooctane 83.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 78.4 % 49.1-148

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**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/12/2024  
Reported: 04/16/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: NONE GIVEN

Sampling Date: 04/12/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SW 3 (H241933-05)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/15/2024	ND	2.15	107	2.00	0.842	
Toluene*	<0.050	0.050	04/15/2024	ND	2.08	104	2.00	0.892	
Ethylbenzene*	<0.050	0.050	04/15/2024	ND	2.02	101	2.00	0.945	
Total Xylenes*	<0.150	0.150	04/15/2024	ND	5.89	98.2	6.00	0.858	
Total BTEX	<0.300	0.300	04/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 91.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/15/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/12/2024	ND	198	99.0	200	1.15	
DRO >C10-C28*	<10.0	10.0	04/12/2024	ND	198	98.8	200	3.53	
EXT DRO >C28-C36	<10.0	10.0	04/12/2024	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.8 % 49.1-148

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Analytical Results For:

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received:	04/12/2024	Sampling Date:	04/12/2024
Reported:	04/16/2024	Sampling Type:	Soil
Project Name:	EMMA #4	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: SW 4 (H241933-06)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/15/2024	ND	2.15	107	2.00	0.842	
Toluene*	<0.050	0.050	04/15/2024	ND	2.08	104	2.00	0.892	
Ethylbenzene*	<0.050	0.050	04/15/2024	ND	2.02	101	2.00	0.945	
Total Xylenes*	<0.150	0.150	04/15/2024	ND	5.89	98.2	6.00	0.858	
Total BTEX	<0.300	0.300	04/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 90.9 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/15/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/12/2024	ND	198	99.0	200	1.15	
DRO >C10-C28*	<10.0	10.0	04/12/2024	ND	198	98.8	200	3.53	
EXT DRO >C28-C36	<10.0	10.0	04/12/2024	ND					

Surrogate: 1-Chlorooctane 93.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.5 % 49.1-148

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/12/2024  
Reported: 04/16/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: NONE GIVEN

Sampling Date: 04/12/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SW 5 (H241933-07)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/15/2024	ND	2.15	107	2.00	0.842		
Toluene*	<0.050	0.050	04/15/2024	ND	2.08	104	2.00	0.892		
Ethylbenzene*	<0.050	0.050	04/15/2024	ND	2.02	101	2.00	0.945		
Total Xylenes*	<0.150	0.150	04/15/2024	ND	5.89	98.2	6.00	0.858		
Total BTEx	<0.300	0.300	04/15/2024	ND						

Surrogate: 4-Bromofluorobenzene (PI) 91.7 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/15/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/12/2024	ND	198	99.0	200	1.15	
DRO >C10-C28*	<10.0	10.0	04/12/2024	ND	198	98.8	200	3.53	
EXT DRO >C28-C36	<10.0	10.0	04/12/2024	ND					

Surrogate: 1-Chlorooctane 94.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/12/2024  
Reported: 04/16/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: NONE GIVEN

Sampling Date: 04/12/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Tamara Oldaker

**Sample ID: SW 6 (H241933-08)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/15/2024	ND	2.15	107	2.00	0.842		
Toluene*	<0.050	0.050	04/15/2024	ND	2.08	104	2.00	0.892		
Ethylbenzene*	<0.050	0.050	04/15/2024	ND	2.02	101	2.00	0.945		
Total Xylenes*	<0.150	0.150	04/15/2024	ND	5.89	98.2	6.00	0.858		
Total BTEx	<0.300	0.300	04/15/2024	ND						

Surrogate: 4-Bromofluorobenzene (PI) 90.3 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	04/15/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/12/2024	ND	198	99.0	200	1.15	
DRO >C10-C28*	13.3	10.0	04/12/2024	ND	198	98.8	200	3.53	
EXT DRO >C28-C36	<10.0	10.0	04/12/2024	ND					

Surrogate: 1-Chlorooctane 88.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.3 % 49.1-148

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Notes and Definitions

- QM-07      The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND      Analyte NOT DETECTED at or above the reporting limit
- RPD      Relative Percent Difference
- \*\*      Samples not received at proper temperature of 6°C or below.
- \*\*\*      Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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

Celey D. Keene, Lab Director/Quality Manager

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



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

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April 25, 2024

AUSTIN WEYANT

ATKINS ENGINEERING

2904 W. 2ND STREET

ROSWELL, NM 88203

RE: EMMA #4

Enclosed are the results of analyses for samples received by the laboratory on 04/19/24 15:50.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/19/2024  
Reported: 04/25/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: DURANGO

Sampling Date: 04/19/2024  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Tamara Oldaker

**Sample ID: CB 1 (H242121-01)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/23/2024	ND	2.04	102	2.00	8.98	
Toluene*	<0.050	0.050	04/23/2024	ND	1.99	99.6	2.00	8.93	
Ethylbenzene*	<0.050	0.050	04/23/2024	ND	1.96	98.1	2.00	8.17	
<b>Total Xylenes*</b>	<b>0.252</b>	0.150	04/23/2024	ND	5.76	96.0	6.00	8.42	
Total BTEX	<0.300	0.300	04/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 91.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/23/2024	ND	416	104	400	7.41		

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	13.2	10.0	04/22/2024	ND	196	98.1	200	1.83	
DRO >C10-C28*	170	10.0	04/22/2024	ND	199	99.5	200	3.81	
EXT DRO >C28-C36	<10.0	10.0	04/22/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.7 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/19/2024  
Reported: 04/25/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: DURANGO

Sampling Date: 04/19/2024  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Tamara Oldaker

**Sample ID: CB 2 (H242121-02)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/23/2024	ND	2.04	102	2.00	8.98	
Toluene*	0.053	0.050	04/23/2024	ND	1.99	99.6	2.00	8.93	
Ethylbenzene*	<0.050	0.050	04/23/2024	ND	1.96	98.1	2.00	8.17	
Total Xylenes*	0.151	0.150	04/23/2024	ND	5.76	96.0	6.00	8.42	
Total BTEX	<0.300	0.300	04/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 92.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/23/2024	ND	416	104	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/22/2024	ND	196	98.1	200	1.83	
DRO >C10-C28*	<10.0	10.0	04/22/2024	ND	199	99.5	200	3.81	
EXT DRO >C28-C36	<10.0	10.0	04/22/2024	ND					

Surrogate: 1-Chlorooctane 86.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.5 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/19/2024  
Reported: 04/25/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: DURANGO

Sampling Date: 04/19/2024  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Tamara Oldaker

**Sample ID: CSW 1 (H242121-03)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/23/2024	ND	2.04	102	2.00	8.98	
Toluene*	<0.050	0.050	04/23/2024	ND	1.99	99.6	2.00	8.93	
Ethylbenzene*	<0.050	0.050	04/23/2024	ND	1.96	98.1	2.00	8.17	
Total Xylenes*	<0.150	0.150	04/23/2024	ND	5.76	96.0	6.00	8.42	
Total BTEX	<0.300	0.300	04/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PI) 93.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/23/2024	ND	416	104	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/22/2024	ND	196	98.1	200	1.83	
<b>DRO &gt;C10-C28*</b>	<b>31.1</b>	10.0	04/22/2024	ND	199	99.5	200	3.81	
EXT DRO >C28-C36	<10.0	10.0	04/22/2024	ND					

Surrogate: 1-Chlorooctane 83.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 74.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/19/2024  
Reported: 04/25/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: DURANGO

Sampling Date: 04/19/2024  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Tamara Oldaker

**Sample ID: CSW 2 (H242121-04)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/23/2024	ND	1.99	99.4	2.00	7.06	
Toluene*	<0.050	0.050	04/23/2024	ND	2.01	100	2.00	7.27	
Ethylbenzene*	<0.050	0.050	04/23/2024	ND	1.93	96.7	2.00	7.61	
Total Xylenes*	<0.150	0.150	04/23/2024	ND	5.90	98.4	6.00	6.60	
Total BTEX	<0.300	0.300	04/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 91.6 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	04/23/2024	ND	416	104	400	7.41		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/22/2024	ND	196	98.1	200	1.83	
DRO >C10-C28*	<10.0	10.0	04/22/2024	ND	199	99.5	200	3.81	
EXT DRO >C28-C36	<10.0	10.0	04/22/2024	ND					

Surrogate: 1-Chlorooctane 85.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 74.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/19/2024  
Reported: 04/25/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: DURANGO

Sampling Date: 04/19/2024  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Tamara Oldaker

**Sample ID: CSW 3 (H242121-05)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/23/2024	ND	1.99	99.4	2.00	7.06	
Toluene*	<0.050	0.050	04/23/2024	ND	2.01	100	2.00	7.27	
Ethylbenzene*	<0.050	0.050	04/23/2024	ND	1.93	96.7	2.00	7.61	
Total Xylenes*	<0.150	0.150	04/23/2024	ND	5.90	98.4	6.00	6.60	
Total BTEX	<0.300	0.300	04/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 93.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	04/23/2024	ND	416	104	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/22/2024	ND	196	98.1	200	1.83	
DRO >C10-C28*	<10.0	10.0	04/22/2024	ND	199	99.5	200	3.81	
EXT DRO >C28-C36	<10.0	10.0	04/22/2024	ND					

Surrogate: 1-Chlorooctane 98.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/19/2024  
Reported: 04/25/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: DURANGO

Sampling Date: 04/19/2024  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Tamara Oldaker

**Sample ID: CSW 4 (H242121-06)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/23/2024	ND	1.99	99.4	2.00	7.06		
Toluene*	<0.050	0.050	04/23/2024	ND	2.01	100	2.00	7.27		
Ethylbenzene*	<0.050	0.050	04/23/2024	ND	1.93	96.7	2.00	7.61		
Total Xylenes*	<0.150	0.150	04/23/2024	ND	5.90	98.4	6.00	6.60		
Total BTEX	<0.300	0.300	04/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 93.0 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/23/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/22/2024	ND	196	98.1	200	1.83	
DRO >C10-C28*	<10.0	10.0	04/22/2024	ND	199	99.5	200	3.81	
EXT DRO >C28-C36	<10.0	10.0	04/22/2024	ND					

Surrogate: 1-Chlorooctane 78.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 67.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ATKINS ENGINEERING  
 AUSTIN WEYANT  
 2904 W. 2ND STREET  
 ROSWELL NM, 88203  
 Fax To:

Received: 04/19/2024  
 Reported: 04/25/2024  
 Project Name: EMMA #4  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 04/19/2024  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Tamara Oldaker

**Sample ID: CSW 5 (H242121-07)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/23/2024	ND	1.99	99.4	2.00	7.06	
Toluene*	<0.050	0.050	04/23/2024	ND	2.01	100	2.00	7.27	
Ethylbenzene*	<0.050	0.050	04/23/2024	ND	1.93	96.7	2.00	7.61	
Total Xylenes*	<0.150	0.150	04/23/2024	ND	5.90	98.4	6.00	6.60	
Total BTEX	<0.300	0.300	04/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 93.5 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/23/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/22/2024	ND	196	98.1	200	1.83	
DRO >C10-C28*	<10.0	10.0	04/22/2024	ND	199	99.5	200	3.81	
EXT DRO >C28-C36	<10.0	10.0	04/22/2024	ND					

Surrogate: 1-Chlorooctane 75.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 66.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 04/19/2024  
Reported: 04/25/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: DURANGO

Sampling Date: 04/19/2024  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Tamara Oldaker

**Sample ID: CSW 6 (H242121-08)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/23/2024	ND	1.99	99.4	2.00	7.06		
Toluene*	<0.050	0.050	04/23/2024	ND	2.01	100	2.00	7.27		
Ethylbenzene*	<0.050	0.050	04/23/2024	ND	1.93	96.7	2.00	7.61		
Total Xylenes*	<0.150	0.150	04/23/2024	ND	5.90	98.4	6.00	6.60		
Total BTEX	<0.300	0.300	04/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PI) 94.3 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	04/23/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	11.8	10.0	04/22/2024	ND	196	98.1	200	1.83	
DRO >C10-C28*	84.6	10.0	04/22/2024	ND	199	99.5	200	3.81	
EXT DRO >C28-C36	<10.0	10.0	04/22/2024	ND					

Surrogate: 1-Chlorooctane 81.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.0 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- QM-07      The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND      Analyte NOT DETECTED at or above the reporting limit
- RPD      Relative Percent Difference
- \*\*      Samples not received at proper temperature of 6°C or below.
- \*\*\*      Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

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*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager



## Page 11 of 11

*Released to Imaging: 7/2/2024 7:44:38 AM*



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May 02, 2024

AUSTIN WEYANT

ATKINS ENGINEERING

2904 W. 2ND STREET

ROSWELL, NM 88203

RE: EMMA #4

Enclosed are the results of analyses for samples received by the laboratory on 05/01/24 12:07.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 05/01/2024  
Reported: 05/02/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: DURANGO

Sampling Date: 05/01/2024  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Tamara Oldaker

**Sample ID: CB 1 (H242331-01)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.516</b>	0.200	05/01/2024	ND	2.03	102	2.00	3.80	
<b>Toluene*</b>	<b>10.1</b>	0.200	05/01/2024	ND	2.08	104	2.00	8.89	
<b>Ethylbenzene*</b>	<b>1.69</b>	0.200	05/01/2024	ND	2.17	109	2.00	12.3	
<b>Total Xylenes*</b>	<b>14.6</b>	0.600	05/01/2024	ND	6.53	109	6.00	12.8	
<b>Total BTX</b>	<b>26.9</b>	1.20	05/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 95.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>16.0</b>	16.0	05/02/2024	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>140</b>	10.0	05/01/2024	ND	203	102	200	1.30	
<b>DRO &gt;C10-C28*</b>	<b>174</b>	10.0	05/01/2024	ND	221	110	200	4.24	
EXT DRO >C28-C36	<10.0	10.0	05/01/2024	ND					

Surrogate: 1-Chlorooctane 86.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.0 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

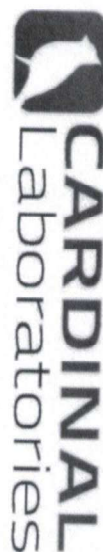
\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager





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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



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

---

May 07, 2024

AUSTIN WEYANT

ATKINS ENGINEERING

2904 W. 2ND STREET

ROSWELL, NM 88203

RE: EMMA #4

Enclosed are the results of analyses for samples received by the laboratory on 05/01/24 12:07.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received:	05/01/2024	Sampling Date:	05/01/2024
Reported:	05/07/2024	Sampling Type:	Soil
Project Name:	EMMA #4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	DURANGO		

Sample ID: TOPSOIL PIT (H242330-01)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/03/2024	ND	2.08	104	2.00	1.45	
Toluene*	<0.050	0.050	05/03/2024	ND	2.03	101	2.00	1.95	
Ethylbenzene*	<0.050	0.050	05/03/2024	ND	1.98	99.2	2.00	1.81	
Total Xylenes*	<0.150	0.150	05/03/2024	ND	5.82	96.9	6.00	1.64	
Total BTEX	<0.300	0.300	05/03/2024	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 90.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	05/04/2024	ND	416	104	400	7.41	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/03/2024	ND	192	96.2	200	0.810	
DRO >C10-C28*	<10.0	10.0	05/03/2024	ND	196	97.9	200	1.62	
EXT DRO >C28-C36	<10.0	10.0	05/03/2024	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

Cardinal Laboratories \*=Accredited Analyte

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\_\_\_\_\_  
Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager





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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> <u>Atkins Engineering</u> <b>Project Manager:</b> <u>Hastin Wright</u> <b>Address:</b> <u>2904 W. 2nd Street</u> <b>City:</b> <u>Des Moines</u> <b>State:</b> <u>IA</u> <b>Zip:</b> <u>50319</u> <b>Phone #:</b> _____ <b>Fax #:</b> _____ <b>Project #:</b> _____ <b>Project Owner:</b> _____ <b>Project Name:</b> <u>Emma #4</u> <b>Project Location:</b> _____ <b>Sampler Name:</b> <u>L. Haste</u> <small>FOR LAB USE ONLY</small>				<b>BILL TO</b> <b>P.O. #:</b> _____ <b>Company:</b> <u>Frontier Field Services</u> <b>Attn:</b> <u>Logan Carrasco</u> <b>Address:</b> _____ <b>City:</b> _____ <b>State:</b> _____ <b>Zip:</b> _____ <b>Phone #:</b> _____ <b>Fax #:</b> _____				<b>ANALYSIS REQUEST</b>			
<b>Lab I.D.</b> <u>11242300</u> <b>Sample I.D.</b> _____ <b>Date:</b> <u>5/1/04</u> <b>Time:</b> _____ <b>Relinquished By:</b> _____				<b>Matrix:</b> <input checked="" type="checkbox"/> (G)RAB OR (C)OMP. <input type="checkbox"/> # CONTAINERS <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> WASTEWATER <input type="checkbox"/> SOIL <input type="checkbox"/> OIL <input type="checkbox"/> SLUDGE <input type="checkbox"/> OTHER: _____ <input checked="" type="checkbox"/> ACID/BASE: _____ <input type="checkbox"/> ICE / COOL <input type="checkbox"/> OTHER: _____ <b>DATE</b> <u>5/1/04</u> <b>TIME</b> _____				<b>Verbal Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: _____ <b>All Results are emailed. Please provide Email address:</b> _____ <b>Remarks:</b> <u>Logan@atkinsengineering.com</u>			
<b>Delivered By:</b> (Circle One) <u>Observed Temp. °C</u> <u>6.4°C</u> <b>Sampler - UPS - Bus - Other:</b> _____ <b>Corrected Temp. °C</b> _____ <b>Time:</b> _____ <b>Received By:</b> <u>Logan</u> <b>Date:</b> _____ <b>Received By:</b> _____				<b>Sample Condition</b> <input type="checkbox"/> Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Checked By:</b> <u>HP</u> <b>Turnaround Time:</b> _____ <b>Standard</b> <input checked="" type="checkbox"/> <input type="checkbox"/> Rush <b>Thermometer ID:</b> <u>147</u> <b>Bacteria (only)</b> <input type="checkbox"/> <input checked="" type="checkbox"/> Bacteria <b>Correction Factor:</b> _____ <b>Cool Intact</b> <input type="checkbox"/> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Observed Temp. °C</b> _____ <b>Corrected Temp. °C</b> _____							



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

---

May 13, 2024

AUSTIN WEYANT

ATKINS ENGINEERING

2904 W. 2ND STREET

ROSWELL, NM 88203

RE: EMMA #4

Enclosed are the results of analyses for samples received by the laboratory on 05/09/24 13:20.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ATKINS ENGINEERING  
AUSTIN WEYANT  
2904 W. 2ND STREET  
ROSWELL NM, 88203  
Fax To:

Received: 05/09/2024  
Reported: 05/13/2024  
Project Name: EMMA #4  
Project Number: NONE GIVEN  
Project Location: DURANGO

Sampling Date: 05/08/2024  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: CB 1 (H242525-01)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/10/2024	ND	2.03	101	2.00	1.57	
Toluene*	<0.050	0.050	05/10/2024	ND	2.06	103	2.00	0.906	
Ethylbenzene*	<0.050	0.050	05/10/2024	ND	2.06	103	2.00	1.86	
Total Xylenes*	<0.150	0.150	05/10/2024	ND	6.71	112	6.00	1.91	
Total BTEX	<0.300	0.300	05/10/2024	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	05/10/2024	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/10/2024	ND	190	94.9	200	2.04	
DRO >C10-C28*	<10.0	10.0	05/10/2024	ND	187	93.5	200	0.00589	
EXT DRO >C28-C36	<10.0	10.0	05/10/2024	ND					

Surrogate: 1-Chlorooctane 98.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.9 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- QM-07      The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND          Analyte NOT DETECTED at or above the reporting limit
- RPD        Relative Percent Difference
- \*\*          Samples not received at proper temperature of 6°C or below.
- \*\*\*        Insufficient time to reach temperature.
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Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager





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

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> ATKINS Engineering						<b>BILL TO</b>						<b>ANALYSIS REQUEST</b>					
<b>Project Manager:</b> Austin Bryant						<b>P.O. #:</b>											
<b>Address:</b>						<b>Company:</b> Frontier Field Serv											
<b>City:</b>						<b>Attn:</b> Lope Carrasco											
<b>Phone #:</b>						<b>Address:</b>											
<b>Fax #:</b>						<b>City:</b>											
<b>Project #:</b>						<b>State:</b>											
<b>Project Owner:</b>						<b>Zip:</b>											
<b>Project Location:</b> Emma #4						<b>Phone #:</b>											
<b>Sampler Name:</b> Aisha L.						<b>Fax #:</b>											
<small>FOR LAB USE ONLY</small>																	
<b>Lab I.D.</b>	<b>Sample I.D.</b>	(G)RAB OR (C)OMP.	# CONTAINERS	<b>MATRIX</b>		<b>PRESERV.</b>	<b>SAMPLING</b>										
H43535	CBI			GROUNDWATER				DATE	TIME	X BTEX	X TPH	X CI-					
				WASTEWATER				5/4/04	13:52								
				SOIL	X												
				OIL													
				SLUDGE													
				OTHER :													
				ACID/BASE:													
				ICE / COOL													
				OTHER :													

**PLEASE NOTE:** Liability and Damages. Cardinal's liability and clients exclusive remedy for any claim arising whether based in contract or tort shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other causes whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

<b>Relinquished By:</b>	<b>Date:</b> 5/19/04	<b>Received By:</b>	<b>Date:</b> 5/19/04
<i>[Signature]</i>		<i>[Signature]</i>	
<b>Relinquished By:</b>	<b>Date:</b>	<b>Received By:</b>	<b>Date:</b>

**REMARKS:** 48 hr TAT

<b>Delivered By: (Circle One)</b>	<b>Observed Temp., °C</b>	<b>Corrected Temp., °C</b>	<b>Sample Condition</b>	<b>CHECKED BY:</b>	<b>Turnaround Time:</b>	<b>Standard</b>	<b>Bacteria (only)</b>	<b>Sample Condition</b>
Sampler - UPS - Bus - Other:	55	55	Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>[Signature]</i>	48 hr TAT	Rush <input checked="" type="checkbox"/>	Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	Observed Temp., °C
								Corrected Temp., °C

**Verbal Result:** ☐ Yes ☐ No    **Add'l Phone #:**

**All Results are emailed:- Please provide Email address:** Lynn@atkinseng.com

**Thermometer ID - #449**    **Correction Factor - .05°C**    **#140**

# APPENDIX D

## OPEN EXCAVATION PHOTO LOG



Emma No. 4 Open Excavation Photo Log







# APPENDIX E RECLAMATION PHOTO LOG



Emma No. 4 Reclamation Photolog



**District I**  
1625 N. French Dr., Hobbs, NM 88240  
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State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

QUESTIONS

Action 356485

QUESTIONS

Operator: FRONTIER FIELD SERVICES, LLC 10077 Grogans Mill Rd. The Woodlands, TX 77380	OGRID:
	221115
	Action Number:
	356485
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2410135571
Incident Name	NAPP2410135571 A-DAGGER DRAW EMMA #4-8-S-03222024 @ 0
Incident Type	Release Other
Incident Status	Reclamation Report Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	A-Dagger Draw Emma #4-8-S-03222024
Date Release Discovered	03/22/2024
Surface Owner	Private

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Cause: Corrosion   Pipeline (Any)   Condensate   Released: 1 BBL   Recovered: 0 BBL   Lost: 1 BBL.
Natural Gas Vented (Mcf) Details	Cause: Corrosion   Pipeline (Any)   Natural Gas Vented   Released: 11 MCF   Recovered: 0 MCF   Lost: 11 MCF.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 356485

QUESTIONS (continued)

Operator: FRONTIER FIELD SERVICES, LLC 10077 Grogans Mill Rd. The Woodlands, TX 77380	OGRID:
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Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	Yes, according to supplied volumes this will be treated as a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Unavailable.
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

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

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

I hereby agree and sign off to the above statement	Name: Sebastian Orozco Title: Sr. Environmental Specialist Email: sorozco@durangomidstream.com Date: 06/10/2024
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QUESTIONS, Page 3

Action 356485

**QUESTIONS (continued)**

Operator: FRONTIER FIELD SERVICES, LLC 10077 Grogans Mill Rd. The Woodlands, TX 77380	OGRID:
	221115
	Action Number:
	356485
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

**QUESTIONS****Site Characterization**

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

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

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

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

Chloride	(EPA 300.0 or SM4500 Cl B)	32
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	1228.5
GRO+DRO	(EPA SW-846 Method 8015M)	1207
BTEX	(EPA SW-846 Method 8021B or 8260B)	69.3
Benzene	(EPA SW-846 Method 8021B or 8260B)	0.5

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	03/22/2024
On what date will (or did) the final sampling or liner inspection occur	05/02/2024
On what date will (or was) the remediation complete(d)	06/05/2024
What is the estimated surface area (in square feet) that will be reclaimed	200
What is the estimated volume (in cubic yards) that will be reclaimed	234
What is the estimated surface area (in square feet) that will be remediated	200
What is the estimated volume (in cubic yards) that will be remediated	234

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

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

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QUESTIONS, Page 4  
Action 356485

QUESTIONS (continued)

Operator: FRONTIER FIELD SERVICES, LLC 10077 Grogans Mill Rd. The Woodlands, TX 77380	OGRID:	221115
	Action Number:	356485
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

<b>Remediation Plan (continued)</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	LEA LAND LANDFILL [fEEM0112342028]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Sebastian Orozco Title: Sr. Environmental Specialist Email: sorozco@durangomidstream.com Date: 06/21/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5  
  
Action 356485

QUESTIONS (continued)

Operator: FRONTIER FIELD SERVICES, LLC 10077 Grogans Mill Rd. The Woodlands, TX 77380	OGRID: 221115
	Action Number: 356485
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

<b>Deferral Requests Only</b>	
<i>Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 356485

**QUESTIONS (continued)**

Operator: FRONTIER FIELD SERVICES, LLC 10077 Grogans Mill Rd. The Woodlands, TX 77380	OGRID:
	221115
	Action Number:
	356485
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	340602
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/08/2024
What was the (estimated) number of samples that were to be gathered	1
What was the sampling surface area in square feet	200

**Remediation Closure Request**

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	200
What was the total volume (cubic yards) remediated	234
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	200
What was the total volume (in cubic yards) reclaimed	234
Summarize any additional remediation activities not included by answers (above)	n/a

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 (in .pdf format) 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.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Sebastian Orozco Title: Sr. Environmental Specialist Email: sorozco@durangomidstream.com Date: 06/21/2024
--	--

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QUESTIONS, Page 7

Action 356485

**QUESTIONS (continued)**

Operator: FRONTIER FIELD SERVICES, LLC 10077 Grogans Mill Rd. The Woodlands, TX 77380	OGRID:	221115
	Action Number:	356485
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS****Reclamation Report**

Only answer the questions in this group if all reclamation steps have been completed.

Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	200
What was the total volume of replacement material (in cubic yards) for this site	234

Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.

Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseedling commence(d)	06/05/2024

Summarize any additional reclamation activities not included by answers (above)	n/a
---	-----

The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseedling plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Sebastian Orozco Title: Sr. Environmental Specialist Email: sorozco@durangomidstream.com Date: 06/21/2024
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QUESTIONS, Page 8  
  
Action 356485

**QUESTIONS (continued)**

Operator:  FRONTIER FIELD SERVICES, LLC 10077 Grogans Mill Rd. The Woodlands, TX 77380	OGRID:
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	Action Number:
	356485
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

**QUESTIONS**

<b>Revegetation Report</b>	
<i>Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.</i>	
Requesting a restoration complete approval with this submission	No
<i>Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.</i>	

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CONDITIONS  
  
Action 356485

CONDITIONS

Operator: FRONTIER FIELD SERVICES, LLC 10077 Grogans Mill Rd. The Woodlands, TX 77380	OGRID: 221115
	Action Number: 356485
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2410135571 A-DAGGER DRAW EMMA #4-8-S-03222024, thank you. This Remediation Closure Report is approved.	7/2/2024