🖻 ENSOLUM

May 31, 2023

New Mexico Oil Conservation Division New Mexico Energy, Minerals, and Natural Resources Department 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re: Closure Request Rojo 18 ELL and Rojo 18/19 & 38/39 Tank Battery Incident Numbers nAPP2222753156 and nAPP2123047003 Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of BTA Oil Producers, LLC (BTA), has prepared this *Closure Request* to document excavation, and soil sampling activities performed at the Rojo 18 ELL and Rojo 18/19 & 38/39 Tank Battery (collectively referred to as the Site), in accordance with an approved *Remediation Work Plan (Work Plan)* submitted February 14, 2023. The *Work Plan* detailed Site assessment activities and proposed the installation of a soil boring to confirm depth to water; delineation of the releases; and excavation of identified impacted soil. Based on the excavation activities completed and laboratory analytical results from the soil sampling events in accordance with the *Work Plan*, BTA is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Numbers nAPP2222753156 and nAPP2123047003.

BACKGROUND

The Site is located in Unit F, Section 34, Township 25 South, Range 33 East, in Lea County, New Mexico (32.08958°, -103.56642°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

nAPP2222753156

On August 14, 2022, a fitting failed on the separator resulting in the release of approximately 43 barrels (bbls) of produced water onto the well pad. A vacuum truck was dispatched to the Site to recover freestanding fluids; approximately 35 bbls of produced water were recovered. BTA reported the release immediately to the New Mexico Oil Conservation Division (NMOCD) on August 14, 2022 and submitted a *Release Notification Form C-141* (Form C-141) on August 15, 2022. The release was assigned Incident Number nAPP2222753156.

nAPP2123047003

On August 17, 2022, a piping tee connected under the separator washed out, resulting in the release of approximately 17 bbls of produced water and 8 bbls of crude oil onto the well pad. A vacuum truck was dispatched to the Site to recover free-standing fluids; approximately 14 bbls of produced water and 6 bbls of crude oil were recovered. BTA reported the release immediately to the NMOCD on August 17,

BTA Oil Producers, LLC Closure Request Rojo 18 ELL and Rojo 18/19 & 38/39 Tank Battery

2022 and submitted a Form C-141 on August 18, 2022. The release was assigned Incident Number nAPP2123047003.

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Based on the results of the Site Characterization reported in the October 2022 *Work Plan*, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

Site assessment and soil sampling activities were completed in October 2022. A *Work Plan* was submitted to the NMOCD on February 14, 2023 proposing the following:

- Additional evaluation of the regional depth to groundwater via installation of a soil boring;
- Delineation within the release extent; and
- Excavation of impacted soil identified.

The *Work Plan* was approved February 24, 2023 and the following details the remediation activities completed.

DEPTH TO WATER CONFIRMATION

On April 19, 2023, a borehole (C-04732) was advanced to a depth of 106 feet below ground surface (bgs) via hollow stem auger rig. The borehole was located approximately 205 feet south of the Site and is depicted on Figure 1. A field geologist logged and described soils continuously. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 100 feet bgs. The borehole was properly abandoned using drill cuttings and hydrated bentonite chips. Based on the soil boring depth to groundwater at the Site is confirmed to be greater than 100 feet below ground surface (bgs). All wells used for depth to water determination are depicted on Figure 1 and the referenced well records are included in Appendix A.

Based on the results of depth to water beneath the Site and the absence of any other sensitive receptors, the Site-specific Closure Criteria listed above appears appropriate to apply to the the two Incident Numbers associated with the Site.

DELINEATION ACTIVITIES AND ANALYTICAL RESULTS

Between October 24, 2022, and April 25, 2023, Ensolum personnel were at the Site to evaluate the release extents based on information provided on the Form C-141s and visual observations. Seven delineation soil samples (SS01 through SS07) were collected within and around the release extents at depths ranging from approximately 0.5 feet to 1-foot bgs to assess lateral and vertical extent of the release. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach[®] chloride QuanTab[®] test



strips. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix B.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method SM4500.

Laboratory analytical results for delineation soil sample SS02, collected within the release extents, indicated TPH concentrations exceeded the Closure Criteria. Laboratory analytical results for delineation soil samples SS01/SS01A, SS03 through SS06, and SS07/SS07A, indicated all COC concentrations were compliant with the Closure Criteria and successfully defined the lateral and vertical extent of the release to the strictest Table I Closure Criteria. Based on visible staining in the release areas in the vicinity of soil sample SS02 and analytical results, excavation activities appeared to be warranted.

EXCAVATION ACTIVITIES AND ANALYTICAL RESULTS

On April 25, 2023, Ensolum personnel were at the Site to oversee excavation activities. Impacted soil was excavated as indicated by laboratory analytical results for preliminary soil sample SS02. Excavation activities were performed via hand shoveling. To direct excavation activities, soil was screened for VOCs and chloride. The excavation was completed to a depth of 1-foot bgs.

Following the excavation activities, a 5-point composite sample was collected from the floor of the excavation. The 5-point composite sample was collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil sample FS01 was collected from the floor of the excavation at a depth of 1-foot bgs. Due to the shallow depth of the excavation, soil from the sidewalls was incorporated into the floor sample. The soil sample was collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS unit and are depicted on Figure 3. A photographic log of the excavation is included as Appendix B.

Laboratory analytical results for excavation soil sample FS01, collected from the final excavation extent, indicated concentrations of all COCs were compliant with the Site Closure Criteria. The laboratory analytical results are summarized on Table 1 and the complete laboratory analytical reports are included as Appendix C.

The excavation measured approximately 90 square feet in areal extent. A total of approximately 4 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Disposal Facility located in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was secured with fencing.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address impacted soil resulting from two release events at the Site. Laboratory analytical results for excavation floor soil sample FS01 indicated all COC concentrations were compliant with the Site Closure Criteria. Delineation samples meet the strictest Closure Criteria confirming the lateral and vertical extent of the release. Based on the soil sample analytical results, no further remediation appears to be required.



BTA Oil Producers, LLC Closure Request Rojo 18 ELL and Rojo 18/19 & 38/39 Tank Battery

Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extents. BTA believes these remedial actions are protective of human health, the environment, and groundwater. As such, BTA respectfully requests closure for Incident Numbers nAPP2222753156 and nAPP2123047003. The Form C-141 is included as Appendix E.

If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or tmorrissey@ensolum.com.

Sincerely, Ensolum, LLC

adie Streen

Hadlie Green Project Geologist

Mouissey

Tacoma Morrissey Senior Geologist

cc: Nathan Sirgo, BTA Kelton Beaird, BTA Kevin Jones, BTA Bureau of Land Management

Appendices:

- Figure 1 Site Receptor Map
- Figure 2 Delineation Soil Sample Locations
- Figure 3 Excavation Soil Sample Locations
- Table 1
 Soil Sample Analytical Results
- Appendix A Referenced Well Records
- Appendix B Photographic Log
- Appendix C Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix D NMOCD Notifications
- Appendix E Final C-141







FIGURES

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Received by OCD: 6/1/2023 12:53:52 PM







Received by OCD: 6/1/2023 12:53:52 PM





TABLES

.

<10.0

<10.0

<10.0

<10.0

<10.0

216

32.0

48.0

48.0

32.0

16.0

10,000

				SOIL SAMP Rojo 18 ELL and BTA Lea	TABLE 1 PLE ANALYTIC I Rojo 18/19 & A Oil Producer County, New I	CAL RESULTS 38/39 Tank Bat s, LLC Mexico	tery			
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I C	losure Criteria (l	NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Deli	neation Soil Sa	mples				
SS01	10/24/2022	0.5	<0.050	<0.300	<10.0	46.0	13.8	46.0	46.0	480
SS01A	04/25/2023	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
SS02	10/24/2022	0.5	< 0.050	<0.300	71.9	2,690	573	2,690	2,690	7,200
SS03	10/24/2022	0.5	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0

<10.0

<10.0

<10.0

<10.0

<10.0

Excavation Soil Samples

<10.0

<10.0

<10.0

<10.0

<10.0

<10.0

148

<10.0

<10.0

<10.0

<10.0

<10.0

67.6

<10.0

<10.0

<10.0

<10.0

<10.0

216

N I	- 4
IN	ntes.
	0100.

bgs: below ground surface

SS04

SS05

SS06

SS07

SS07A

FS01

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Adminstrative Code

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation

standard where applicable.

Gray text represents samples that have been excavated

10/24/2022

10/24/2022

10/24/2022

04/25/2023

04/25/2023

04/25/2023

GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics TPH: Total Petroleum Hydrocarbon

< 0.300

< 0.300

< 0.300

< 0.300

<0.300

< 0.300

< 0.050

< 0.050

< 0.050

< 0.050

<0.050

< 0.050

0.5

0.5

0.5

0.5

1

1

.



APPENDIX A

Referenced Well Records

•

								Sample Name: C-04732	Date: 04/19/2023
			N	C			RЛ	Site Name: Rojo 18 ELL	
								Incident Number: nAPP22227531	56
								Job Number: 03C2012007	
		LITHOL	OGI	C / SOIL S	SAMPLING	i LOG		Logged By: J.falcomata	Method: Air Rotary
Coord	inates: 3	2.089035	, -103	.566486				Hole Diameter: 5"	Total Depth: 106'
Comm On 04	nents: So /24/2023	il boring v 3 the soil	vas ao borin	dvanced to g was plug	a total depti ged and abar	h of 106' bgs ndoned using	s. No wate g hydrateo	r was observed within the soil bori I bentonite chips.	ng after at least 72 hours.
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic De	scriptions
					1 - -	L - -		Note: Driller injected well with a wate help stabilize well and prevent cave in 102' with 2" polypipe casing.	r and soap mixture @ 55' to . Due to collapse, well cased @
Dry	-	-	Ν	-		10	SP-SM	(10') SAND: fine grained - m amounts small gravel, poor	edium grained, trace ly graded, tan, no odor,
Dry	-	-	N	-		20	SP-SM	non plastic non cohesive (20') SAND: fine grained, si	lty, poorly graded,
Dry	-	-	N	-	- - -	30	SP-SM	medium brown, no odor, no cohesive. (30') SAND: fine - medium g	on plastic, non grained, silty, trace
Dry	-	-	N	-		40	SP-SM	amount small gravel, poorly no odor, non plastic, non cc (40') SAND: fine grained, sil ⁻ to orangish brown, no odor	<i>r</i> graded, light brown, phesive ty, poorly graded, light
Dry	-	-	N	-	- 	50	SP-SM	cohesive (50') SAND: fine grained, sil ⁻ to orangish brown, no odor	ty, poorly graded, light , non plastic, non
Dry	-	-	Ν	-		- 60	SP-SM	cohesive (60') SAND: fine grained, sil [.] orangish brown, wet from i	ty, poorly graded, njection, no odor, non
Dry	-	-	Ν	-		70	SP-SM	plastic, non cohesive (70') SAND: fine grained, sil [.] medium brown, wet from iı	ty, poorly graded, njection, no odor, non
Dry	-	-	Ν	-		80	SP-SM	plastic, non cohesive (80') SAND: fine grained, sil [.] medium brown, wet from iı	ty, poorly graded, njection, no odor, non
Dry	-	-	N	-		90	SP-SM	plastic, non cohesive (90') SAND: fine grained, sil [.] orangish brown, wet from i	ty, poorly graded, niection, no odor, non
Dry	-	-	N	-		100	SP-SM	plastic, non cohesive (100') SAND: fine grained, s wet from injection, no odor	ilty, poorly graded, tan,
Dry	-	_	N	-		106	SP-SM	cohesive AA	,
						Fotal Dept	:h @ 106	5 feet bgs	



New Mexico Office of the State Engineer **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)						
(quarters are smallest to largest) (NAD83 UTM in meters)						
Well Tag POD Number	Q64 Q16 Q4 Sec Tws Rng	X Y				
C 02313	2 3 3 26 25S 33E	636971 3552098* 😜				
x Driller License:	Driller Company:					
Driller Name: UNKNOWN						
Drill Start Date: 01/01/1925	Drill Finish Date: 06/30/1925	Plug Date:				
Log File Date:	PCW Rcv Date:	Source:				
Pump Type:	Pipe Discharge Size:	Estimated Yield: 60 GPM				
Casing Size: 6.88	Depth Well: 150 feet	Depth Water: 110 feet				

*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.

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POINT OF DIVERSION SUMMARY



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USGS Water Resources

Data	Category:	
Site	Information	

Geographic Area: **United States**

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- Full News

USGS 320407103331001 26S.33E.03.444110

Available data for this site SUMMARY OF ALL AVAILABLE DATA V GO

Well Site

DESCRIPTION:

Latitude 32°04'07", Longitude 103°33'10" NAD27 Lea County, New Mexico , Hydrologic Unit 13070007 Well depth: 180 feet Land surface altitude: 3,311 feet above NAVD88. Well completed in "Other aquifers" (N9999OTHER) national aquifer. Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1954-07-23	1954-07-23	1
Revisions	Unavailable (site:0) (timese	eries:0)

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center Email questions about this site to New Mexico Water Science Center Water-Data **Inquiries**

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U.S. Department of the Interior | U.S. Geological Survey Title: NWIS Site Information for USA: Site Inventory URL: https://waterdata.usgs.gov/nwis/inventory? agency_code=USGS&site_no=320407103331001

Page Contact Information: <u>New Mexico Water Data Support Team</u> Page Last Modified: 2022-10-10 17:07:57 EDT 0.26 0.26 caww01





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National Water Information System: Web Interface

USGS Water Resources

 Data Category:
 Geographic Area:

 Groundwater
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Search Results -- 1 sites found

Agency code = usgs site_no list =

• 320407103331001

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320407103331001 26S.33E.03.444110

Lea County, New Mexico Latitude 32°04'07", Longitude 103°33'10" NAD27 Land-surface elevation 3,311 feet above NAVD88 The depth of the well is 180 feet below land surface. This well is completed in the Other aquifers (N9999OTHER) national aquifer. This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

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

Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1954-07-23		D	62610		3206.62	NGVD29	1	Z		
1954-07-23		D	62611		3208.20	NAVD88	1	Z		
1954-07-23		D	72019	102.80			1	Z		

Explanation

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

Released to Imaging: 8/28/2023 2:39:53 PM

Received by OCD: 6/1/2023 12:53:52 PM

Section	Code	Description
Source of measurement		Not determined
Water-level approval status	А	Approved for publication Processing and review completed.

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U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2022-10-10 17:09:01 EDT 0.32 0.28 nadww01 USA.gov



APPENDIX B

Photographic Log





APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation



October 31, 2022

HADLIE GREEN

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: ROJO 18 ELL

Enclosed are the results of analyses for samples received by the laboratory on 10/24/22 14:22.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



		ENSOLUM, LLC		
		HADLIE GREEN		
		705 W WADLEY AVE.		
		MIDLAND TX, 79705		
		Fax To:		
Received:	10/24/2022		Sampling Date:	10/20/2022
Reported:	10/31/2022		Sampling Type:	Soil
Project Name:	ROJO 18 ELL		Sampling Condition:	Cool & Intact
Project Number:	03C2012007		Sample Received By:	Shalyn Rodriguez
Project Location:	BTA			

Sample ID: SS 01 .5' (H224991-01)

BTEX 8021B	mg/	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2022	ND	1.95	97.7	2.00	11.3	
Toluene*	<0.050	0.050	10/30/2022	ND	2.12	106	2.00	11.9	
Ethylbenzene*	<0.050	0.050	10/30/2022	ND	2.10	105	2.00	12.5	
Total Xylenes*	<0.150	0.150	10/30/2022	ND	6.28	105	6.00	12.4	
Total BTEX	<0.300	0.300	10/30/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	90.8	% 69.9-14	0						
Chloride, SM4500CI-B	mg/	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	10/27/2022	ND	400	100	400	11.3	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/28/2022	ND	191	95.5	200	1.86	
DRO >C10-C28*	46.0	10.0	10/28/2022	ND	192	96.1	200	2.07	
EXT DRO >C28-C36	13.8	10.0	10/28/2022	ND					
Surrogate: 1-Chlorooctane	87.5	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	89.2	% 46.3-17	8						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and clent's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatscever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including whose of use, or loss of profits incurred by client, its subsidiaries, affiliates or successor arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		ENSOLUM, LLC		
		HADLIE GREEN		
		705 W WADLEY AVE.		
		MIDLAND TX, 79705		
		Fax To:		
Received:	10/24/2022		Sampling Date:	10/20/2022
Reported:	10/31/2022		Sampling Type:	Soil
Project Name:	ROJO 18 ELL		Sampling Condition:	Cool & Intact
Project Number:	03C2012007		Sample Received By:	Shalyn Rodriguez
Project Location:	BTA			

Sample ID: SS 02 .5' (H224991-02)

BTEX 8021B	mg/	'kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2022	ND	1.95	97.7	2.00	11.3	
Toluene*	<0.050	0.050	10/30/2022	ND	2.12	106	2.00	11.9	
Ethylbenzene*	<0.050	0.050	10/30/2022	ND	2.10	105	2.00	12.5	
Total Xylenes*	<0.150	0.150	10/30/2022	ND	6.28	105	6.00	12.4	
Total BTEX	<0.300	0.300	10/30/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	108 9	% 69.9-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7200	16.0	10/27/2022	ND	400	100	400	11.3	
TPH 8015M	mg/	'kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	71.9	10.0	10/28/2022	ND	191	95.5	200	1.86	
DRO >C10-C28*	2690	10.0	10/28/2022	ND	192	96.1	200	2.07	
EXT DRO >C28-C36	573	10.0	10/28/2022	ND					
Surrogate: 1-Chlorooctane	114 %	45.3-16	1						
Surrogate: 1-Chlorooctadecane	101 9	46.3-17	8						

Cardinal Laboratories

*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Received by OCD: 6/1/2023 12:53:52 PM



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 5 of 5

101	East	Marland	Hob	bs, NI	A 88240
10	75) 2	02 2226	EAV (5751 3	03.2476

	(575) 393-2326 F/	AX (575) 393-24	176			_	-	_	_		_	_			_						FOU	FOT		
Company Name:	Ensolum, LLC										B	IL.	LTO		_			ANA	ALYS	IS R	EQU	EST	1	
Project Manager	"Hadlic Green								P.0), #:														
Address: 601	N. Marienfeld St. STE	400							Co	mpa	iny:	31	Aoil											
City: Midland		State: TX	Zip):	7970	1			Att	n: [306	H	all											
Phone #: 432-1	557-8895	Fax #:							Ad	dres	s: 10	04	1 S Pee	os St.						1				
Project #: 030	(2012007	Project Owner	r: È	STA	t				Cit	y: /	1:01	lar	20									1		
Project Name:	Roja 18 ELL								Sta	ite:	TX	Z	ip: 797	01										
Project Location	1:								Ph	one	#:4	32	-312-2	2203										
Sampler Name:	Connor White	~~~							Fax	x #:														
FOR LAB USE ONLY				Γ	-	M	ATRI	X	-	PRE	SER	V.	SAMP	PLING										
Lab I.D. H22 499 1	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OM	# CONTAINERS	GROUNDWATER	WASTEWATER	SUIL	SLUDGE	OTHER :	ACID/BASE.	ICE / COOL	OTHER .	DATE	TIME	BTEX	TPH	Chloride							
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PLEASE NOTE: Liability an analyses. All claims include	nd Damages. Cardinal's liability and cl ng those for negligence and any other	Sent's exclusive ramedy for a r cause whatsoever shall be overtal damagest includes	eny clai deemo	ien acie ed wah	ng whet	ther bat	sed in c le in wit	ontract	or tort d recei	, shall wed by	be limite Cardina e loss of	nd to t al with profil	the amount paid hin 30 days after its incurred by d) 5 by the client fo r completion of 1 lient, its subsidia	r the he applicat	sle		- the						
affiliates or successors arbit	ng out of or related to the performance	e of services hereunder by C	R	d regi	ved	Ry:	ner much	dialan	is bas	ed upp	n any of	the a	above stated rea	Verbal R	esult:	C Ye	IS DIN	lo Add	l'I Phon	ie #:				
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P.O.R.W-006 R 3.2 10/07/21

Corrected Temp. C TO. 10/24/22 No Corrected Temp. C
 Corrected Temp. C TO. 10/24/22 No Corrected Temp. C
 Corrected Temp. C



November 04, 2022

HADLIE GREEN

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: ROJO 18 ELL

Enclosed are the results of analyses for samples received by the laboratory on 10/24/22 14:22.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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,

Whe Singh

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



		ENSOLUM, LLC		
		HADLIE GREEN		
		705 W WADLEY AVE.		
		MIDLAND TX, 79705		
		Fax To:		
Received:	10/24/2022		Sampling Date:	10/20/2022
Reported:	11/04/2022		Sampling Type:	Soil
Project Name:	ROJO 18 ELL		Sampling Condition:	Cool & Intact
Project Number:	03C2012007		Sample Received By:	Shalyn Rodriguez
Project Location:	BTA			

Sample ID: SS 03 .5' (H224992-01)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2022	ND	1.95	97.7	2.00	11.3	
Toluene*	<0.050	0.050	10/30/2022	ND	2.12	106	2.00	11.9	
Ethylbenzene*	<0.050	0.050	10/30/2022	ND	2.10	105	2.00	12.5	
Total Xylenes*	<0.150	0.150	10/30/2022	ND	6.28	105	6.00	12.4	
Total BTEX	<0.300	0.300	10/30/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	90.7	% 69.9-14	0						
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/27/2022	ND	400	100	400	11.3	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/31/2022	ND	191	95.5	200	1.86	
DRO >C10-C28*	<10.0	10.0	10/31/2022	ND	192	96.1	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	10/31/2022	ND					
Surrogate: 1-Chlorooctane	86.4	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	105	<i>46.3-17</i>	8						

Cardinal Laboratories

*=Accredited Analyte

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Mite Sugar

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



		ENSOLUM, LLC		
		HADLIE GREEN		
		705 W WADLEY AVE.		
		MIDLAND TX, 79705		
		Fax To:		
Received:	10/24/2022		Sampling Date:	10/20/2022
Reported:	11/04/2022		Sampling Type:	Soil
Project Name:	ROJO 18 ELL		Sampling Condition:	Cool & Intact
Project Number:	03C2012007		Sample Received By:	Shalyn Rodriguez
Project Location:	BTA			

Sample ID: SS 04 .5' (H224992-02)

BTEX 8021B	mg/	kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2022	ND	1.95	97.7	2.00	11.3	
Toluene*	<0.050	0.050	10/30/2022	ND	2.12	106	2.00	11.9	
Ethylbenzene*	<0.050	0.050	10/30/2022	ND	2.10	105	2.00	12.5	
Total Xylenes*	<0.150	0.150	10/30/2022	ND	6.28	105	6.00	12.4	
Total BTEX	<0.300	0.300	10/30/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	92.8 9	% 69.9-14	0						
Chloride, SM4500CI-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	10/27/2022	ND	400	100	400	11.3	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/28/2022	ND	191	95.5	200	1.86	
DRO >C10-C28*	<10.0	10.0	10/28/2022	ND	192	96.1	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	10/28/2022	ND					
Surrogate: 1-Chlorooctane	78.5 9	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	80.3 9	46.3-17	8						

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Mite Sugar

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



		ENSOLUM, LLC		
		HADLIE GREEN		
		705 W WADLEY AVE.		
		MIDLAND TX, 79705		
		Fax To:		
Received:	10/24/2022		Sampling Date:	10/20/2022
Reported:	11/04/2022		Sampling Type:	Soil
Project Name:	ROJO 18 ELL		Sampling Condition:	Cool & Intact
Project Number:	03C2012007		Sample Received By:	Shalyn Rodriguez
Project Location:	BTA			

Sample ID: SS 05 .5' (H224992-03)

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	10/30/2022	ND	1.95	97.7	2.00	11.3	
Toluene*	<0.050	0.050	10/30/2022	ND	2.12	106	2.00	11.9	
Ethylbenzene*	<0.050	0.050	10/30/2022	ND	2.10	105	2.00	12.5	
Total Xylenes*	<0.150	0.150	10/30/2022	ND	6.28	105	6.00	12.4	
Total BTEX	<0.300	0.300	10/30/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	90.8 9	% 69.9-14	0						
Chloride, SM4500CI-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	10/27/2022	ND	400	100	400	11.3	
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	10/28/2022	ND	191	95.5	200	1.86	
DRO >C10-C28*	<10.0	10.0	10/28/2022	ND	192	96.1	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	10/28/2022	ND					
Surrogate: 1-Chlorooctane	88.1 9	45.3-16	1						
Surrogate: 1-Chlorooctadecane	86.6 9	46.3-17	8						

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Mite Sugar

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



		ENSOLUM, LLC		
		HADLIE GREEN		
		705 W WADLEY AVE.		
		MIDLAND TX, 79705		
		Fax To:		
Received:	10/24/2022		Sampling Date:	10/20/2022
Reported:	11/04/2022		Sampling Type:	Soil
Project Name:	ROJO 18 ELL		Sampling Condition:	Cool & Intact
Project Number:	03C2012007		Sample Received By:	Shalyn Rodriguez
Project Location:	BTA			

Sample ID: SS 06 .5' (H224992-04)

BTEX 8021B	mg/	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2022	ND	1.95	97.7	2.00	11.3	
Toluene*	<0.050	0.050	10/30/2022	ND	2.12	106	2.00	11.9	
Ethylbenzene*	<0.050	0.050	10/30/2022	ND	2.10	105	2.00	12.5	
Total Xylenes*	<0.150	0.150	10/30/2022	ND	6.28	105	6.00	12.4	
Total BTEX	<0.300	0.300	10/30/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	90.3	% 69.9-14	0						
Chloride, SM4500CI-B	mg/	′kg	Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/27/2022	ND	400	100	400	11.3	
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	10/28/2022	ND	191	95.5	200	1.86	
DRO >C10-C28*	<10.0	10.0	10/28/2022	ND	192	96.1	200	2.07	
EXT DRO >C28-C36	<10.0	10.0	10/28/2022	ND					
Surrogate: 1-Chlorooctane	80.7	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	79.9	% 46.3-17	8						

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Mite Sugar

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



Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and matrix interference's.						
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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Mite Sugar

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



101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476	BILL TO	ANALYSIS REQUEST
Company Name: Ensolum, LLC	PO #	
Project Manager: Jadlie Graco	BTA QU	
Address: 601 N. Mailenfeld St. STE 400	Company: DIA On	
City: Midland State: TX Zip: 79701	Attn: 506 Hall	
432-557-8815 805 708 2608 Fax #:	Address: 104 5 Pecos St.	
Project #: 03C2012007 Project Owner: 374.01	City: Midland	
Project Name: Rojo 18 ELL	State: 7 X Zip: 79701	
Project Location:	Phone #: 432-3 2-2403	
Sampler Name: Connor Whitemon	Fax #:	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
FOR LAB USE ONLY	PRESERV. SAMPLING	
Lab I.D. Sample I.D. Sample Depth (feet) O(3) HO REALINATION H224992 1 550573 .5' G 1 1 1 550573 .5' G 1 1 1 2 550575 .5' G 1 1 1 3 550755 .5' G 1 1 1 4 55057 .5' G 1 1 1 4 5057 .5' G 1 1 1 4 5057 .5' G 1 1 1 4 5057 .5' G 1 1 1	В 1000 HE TIME Stribber В 1000 HE TIME DATE TIME 00120/22 H1300 10120/22 H1300 10120/20 10120/22 H1300 10120/22 H1300 10120/20 101200/20 10120/20 1000/20 1000/20 1000/20 1000/20 1	PTEX PTPH CLIONIC
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any client arising whether based in co	interminent tort, shall be limited to the amount paid by the client it ing and received by Carolinal within 38 days after completion of the second profile instants of profile instances by client, its subsidi	ter the applicable finites.
service. In no event shall Cardinal be liable for locidental or consequential damages, including whost limitation, ausiness interrupt afflictes or successors arising out of or related to the performance of services hereageder by Cardinal, reportiens of whether such Relinquished By: Relinquished By: Relinquished By: Date: Received By:	claim is based upon any of the above stated reasons or other Verbal R All Resul BJenn REMAR	Result: Yes No Add'l Phone #: Its are emailed. Please provide Email address: ings@ensolum.com KS: hg/ccn@ensolvm.com
Time: Delivered By: (Circle One) On served Temp. *C 1.2 Sample Cr Cool Interved Temp. *C 1.2 Cool	act (Inffibils)	und Time: Standard Rush Bacteria (only) Sample Condition Cool Intact Observed Temp. °C
Sampler - UPS - Bus - Other: Corrected Tamp. C Q.Q No	No Correcus	celey.keene@cardinallabsnm.com



May 16, 2023

HADLIE GREEN ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD, NM 88220

RE: ROJO 18EU

Enclosed are the results of analyses for samples received by the laboratory on 04/26/23 13:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	F Pi	Project: Project Number: roject Manager: Fax To:	ROJO 18EU 03C2012007 (32.08958-103.1566 HADLIE GREEN	Reported: 16-May-23 16:25
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received

FS 01 @ 1'	H232031-01	Soil	25-Apr-23 09:30	26-Apr-23 13:40	
SS 01 @ 1'	H232031-02	Soil	25-Apr-23 09:35	26-Apr-23 13:40	
SS 07 @ 0.5'	H232031-03	Soil	25-Apr-23 09:40	26-Apr-23 13:40	
SS 07 A @ 1'	H232031-04	Soil	25-Apr-23 09:45	26-Apr-23 13:40	

05/16/23 - Client requested sample ID changes (see COC). This is the revised report and will replace the one sent on 05/02/23.

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

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

Analytical Results For:

ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project: ROJO 18EU Project Number: 03C2012007 (32.08958-103.1566 Project Manager: HADLIE GREEN Fax To:					Reported: 16-May-23 16:25		
			FS		,					
			П2520	51-01 (50))					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds										
Chloride	10000		16.0	mg/kg	4	3042745	AC	28-Apr-23	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			106 %	71.5	-134	3042634	JH/	28-Apr-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3042632	MS	26-Apr-23	8015B	
DRO >C10-C28*	148		10.0	mg/kg	1	3042632	MS	26-Apr-23	8015B	
EXT DRO >C28-C36	67.6		10.0	mg/kg	1	3042632	MS	26-Apr-23	8015B	
Surrogate: 1-Chlorooctane			88.0 %	48.2	-134	3042632	MS	26-Apr-23	8015B	
Surrogate: 1-Chlorooctadecane			102 %	49.1	-148	3042632	MS	26-Apr-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Project: ROJO 18EU Project Number: 03C2012007 (32.08958-103.1566 Project Manager: HADLIE GREEN Fax To:					Reported: 16-May-23 16:25		
			SS H232(01 @ 1')31-02 (Se	vil)					
			11252(51 02 (50	,,					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	96.0		16.0	mg/kg	4	3042745	AC	28-Apr-23	4500-Cl-B	
Volatile Organic Compounds by	EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			105 %	71.5	-134	3042634	JH/	28-Apr-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3042632	MS	26-Apr-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3042632	MS	26-Apr-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3042632	MS	26-Apr-23	8015B	
Surrogate: 1-Chlorooctane			96.0 %	48.2	-134	3042632	MS	26-Apr-23	8015B	
Surrogate: 1-Chlorooctadecane			102 %	49.1	-148	3042632	MS	26-Apr-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220			Proj Project Num Project Mana Fax	Project: ROJO 18EU umber: 03C2012007 (32.08958-103.1566 anager: HADLIE GREEN Fax To:				Reported: 16-May-23 16:25		
			SS 0 H2320	07 @ 0.5	5' 51)					
			11252(51-05 (50	,m)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	32.0		16.0	mg/kg	4	3042745	AC	28-Apr-23	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	3042634	JH/	28-Apr-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			105 %	71.5	-134	3042634	JH/	28-Apr-23	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	3042632	MS	26-Apr-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3042632	MS	26-Apr-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3042632	MS	26-Apr-23	8015B	
Surrogate: 1-Chlorooctane			97.1 %	48.2	-134	3042632	MS	26-Apr-23	8015B	
Surrogate: 1-Chlorooctadecane			103 %	49.1	-148	3042632	MS	26-Apr-23	8015B	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: ROJO 18EU Project Number: 03C2012007 (32.08958-103.1566 Project Manager: HADLIE GREEN Fax To:							Reported: 16-May-23 16:25			
			SS 0 H2320	7 A @ 1	[' \						
			11252(51-07 (50	, iii,						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
Inorganic Compounds											
Chloride	16.0		16.0	mg/kg	4	3042745	AC	28-Apr-23	4500-Cl-B		
Volatile Organic Compounds by	EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	3042634	JH/	28-Apr-23	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	3042634	JH/	28-Apr-23	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	3042634	JH/	28-Apr-23	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	3042634	JH/	28-Apr-23	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	3042634	JH/	28-Apr-23	8021B		
Surrogate: 4-Bromofluorobenzene (PID)			103 %	71.5	-134	3042634	JH/	28-Apr-23	8021B		
Petroleum Hydrocarbons by GC	FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	3042632	MS	26-Apr-23	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3042632	MS	26-Apr-23	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3042632	MS	26-Apr-23	8015B		
Surrogate: 1-Chlorooctane			95.5 %	48.2	-134	3042632	MS	26-Apr-23	8015B		
Surrogate: 1-Chlorooctadecane			101 %	49.1	-148	3042632	MS	26-Apr-23	8015B		

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Inorganic Compounds - Quality Control

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		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 3042745 - 1:4 DI Water										
Blank (3042745-BLK1)	Prepared: 27-Apr-23 Analyzed: 28-Apr-23									
Chloride	ND	16.0	mg/kg							
LCS (3042745-BS1)				Prepared: 27-Apr-23 Analyzed: 28-Apr-23						
Chloride	384	16.0	mg/kg	400		96.0	80-120			
LCS Dup (3042745-BSD1)				Prepared: 27-Apr-23 Analyzed: 28-Apr-23						
Chloride	416	16.0	mg/kg	400		104	80-120	8.00	20	

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: ROJO 18EU Project Number: 03C2012007 (32.08958-103.1566 Project Manager: HADLIE GREEN Fax To:	Reported: 16-May-23 16:25
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 3042634 - Volatiles										
Blank (3042634-BLK1)				Prepared: 2	26-Apr-23 A	Analyzed: 2	8-Apr-23			
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0537		mg/kg	0.0500		107	71.5-134			
LCS (3042634-BS1)		Prepared: 26-Apr-23 Analyzed: 28-Apr-23								
Benzene	2.17	0.050	mg/kg	2.00		108	81.4-118			
Toluene	2.24	0.050	mg/kg	2.00		112	88.7-121			
Ethylbenzene	2.20	0.050	mg/kg	2.00		110	86.1-120			
m,p-Xylene	4.63	0.100	mg/kg	4.00		116	88.2-124			
o-Xylene	2.16	0.050	mg/kg	2.00		108	84.9-118			
Total Xylenes	6.80	0.150	mg/kg	6.00		113	87.3-122			
Surrogate: 4-Bromofluorobenzene (PID)	0.0515		mg/kg	0.0500		103	71.5-134			
LCS Dup (3042634-BSD1)				Prepared: 2	26-Apr-23 A	Analyzed: 2	8-Apr-23			
Benzene	1.95	0.050	mg/kg	2.00		97.4	81.4-118	10.7	15.8	
Toluene	2.01	0.050	mg/kg	2.00		100	88.7-121	11.2	15.9	
Ethylbenzene	1.97	0.050	mg/kg	2.00		98.4	86.1-120	10.9	16	
m,p-Xylene	4.15	0.100	mg/kg	4.00		104	88.2-124	11.0	16.2	
o-Xylene	1.96	0.050	mg/kg	2.00		98.0	84.9-118	9.87	16.7	
Total Xylenes	6.11	0.150	mg/kg	6.00		102	87.3-122	10.6	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0521		mg/kg	0.0500		104	71.5-134			

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ENSOLUM 3122 NATIONAL PARKS HWY CARLSBAD NM, 88220	Project: ROJO 18EU Project Number: 03C2012007 (32.08958-103.156 Project Manager: HADLIE GREEN Fax To:	Reported: 6 ² 16-May-23 16:25
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Petroleum Hydrocarbons by GC FID - Quality Control

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
	rtebuit	Diiiit	omio	20101	ittouit	, on the o	Linno	iu b	2	110100
Batch 3042632 - General Prep - Organics										
Blank (3042632-BLK1)				Prepared: 2	26-Apr-23 A	Analyzed: 2	7-Apr-23			
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	42.4		mg/kg	49.6		85.6	48.2-134			
Surrogate: 1-Chlorooctadecane	45.5		mg/kg	50.0		90.9	49.1-148			
LCS (3042632-BS1)	Prepared: 26-Apr-23 Analyzed: 27-Apr-23									
GRO C6-C10	199	10.0	mg/kg	200		99.7	78.5-124			
DRO >C10-C28	188	10.0	mg/kg	200		93.9	72.5-126			
Total TPH C6-C28	387	10.0	mg/kg	400		96.8	77.6-123			
Surrogate: 1-Chlorooctane	49.9		mg/kg	49.6		101	48.2-134			
Surrogate: 1-Chlorooctadecane	50.2		mg/kg	50.0		100	49.1-148			
LCS Dup (3042632-BSD1)				Prepared: 2	26-Apr-23 A	Analyzed: 2	7-Apr-23			
GRO C6-C10	201	10.0	mg/kg	200		100	78.5-124	0.671	17.7	
DRO >C10-C28	189	10.0	mg/kg	200		94.4	72.5-126	0.459	21	
Total TPH C6-C28	390	10.0	mg/kg	400		97.4	77.6-123	0.568	18.5	
Surrogate: 1-Chlorooctane	50.1		mg/kg	49.6		101	48.2-134			
Surrogate: 1-Chlorooctadecane	50.6		mg/kg	50.0		101	49.1-148			

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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 SM4500CI-B does not require samples be received at or below 6°C

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

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Project Manager: How Market P.0. #: Address: Company: Ext Project Market Company: Project Manne: Project Market Address: Project Market Project Manne: Project Market Address: Project Market Project Market Project Market Project Market Project Market Sampler Name: Market Project Market Project Market Sampler Name: Market Project Market Project Market Market Project Market Project Market Project Market Sampler Name: Market Presserv SAMPLING Project Market Project Market Presserv SAMPLING H2332631 GOI O 1 1 GI I I I I I I I I I I I I I I I I I I	Company Name:	6 ASALIM	1/0					1		2	B	ILL T	0					A	NAL	YSIS	RE	QUES	бT		
Address: State: Million State: Million City: Multicle of the state: Million Address: Million Project Mane: Project Owner: City: Million State: Million Project Mane: Million State: Type: Million Million Project Location: State: Million State: Type: Million Sampler Name: Million Million Million Face: Million Lab I.D. Sample I.D. Million Org. Million Million Million Million H332631 Million	Project Manager:	- Hadle C	INPOR			-			P.0	. #:	-		. · · ·				1					-	-		1.1-4
City::::::::::::::::::::::::::::::::::::	Address: 317	2 Nati P	arbs Hus	4					Con	npa	ny:	BITA	DIL				1.		-		-				
Phone #: IP: Strest #: Address: IP: Strest #: Address: IP: Strest #: Project 0::::::::::::::::::::::::::::::::::::	City: DOUVE	boid	State: NM	Zip:	356	21	0		Attn	:f	ob	Ha	20												
Project #: Build and the state: Difference of the state:	Phone #: USP	-551-88	015 Fax #:						Add	res	s: 10	1451	2005	St											
Project Name: Image: State: Training of the state	Project #: DBC	901900	Project Owne	r: BT	A				City	:W	lid	lein	1												
Project Location: Quarter in the status Phone #: 442-34-765 Sampler Name: Quarter in the status Prove #: 442-34-765 Lab I.D. Sample I.D. With With With Millington With Status Prove #: 442-34-765 H23-2631 With With With With Millington With Status Prove #: 442-34-765 Prove #: 442-34-765 H23-2631 With With With With With With With With	Project Name:	DID 18ELL	. (D					Stat	e:	TX	Zip:	phi	10	÷.										
Sampler Name: Marrix Fax f: Figure 1 Figure 1 <t< th=""><th>Project Location</th><th>:32,0406</th><th>8,-108 5</th><th>10/04</th><th>2</th><th></th><th></th><th></th><th>Pho</th><th>ne</th><th>#: 4</th><th>132-2</th><th>12-2</th><th>28</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	Project Location	:32,0406	8,-108 5	10/04	2				Pho	ne	#: 4	132-2	12-2	28											
POR LAB USE CREY SAMPLING PRESERV SAMPLING Lab 1.D. Sample 1.D. Big Big VL 1000 Big Big VL 1000 Big Big VL 1000 Big Big Big VL 1000 Big	Sampler Name:	will anno	Falcor	not	a				Fax	#:							2								
Lab I.D. Sample I.D. Big HW1000000 Big HW10000000 Big HW10000000 Big HW100000000 Big HW1000000000 Big HW10000000000 Big HW1000000000000000000000000000000000000	FOR LAB USE ONLY		1		Т	N	IATRI	X		PRE	SERV	. S	AMPLIN	IG			8								
Lab I.D. Sample I.D. Image of the second secon	I			OMP ~	E.							1			X	4	T.								
Lab 1. J. Sample 1. J. Image: Construction of the second sec		Commis	ID.	(C)	NATI	ATER				١	_				121	12	0								
H23.2631 B) B B B B B B B B B B B B B B B B B B	Lab I.D.	Sample	÷ 1.D.	B OI	INDI	IEW/		GE	Ω.	BAS	200				to	E	5	2			-				
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Annuales or successors analy out of related to the perioditative of served Received By: Date: Date: Date: Preceived By: All Result: Yes No Add'l Phone #: Relinquished By: Date: Time: Time: Preceived By: Received By: <td>analyses. All claims including service. In no event shall Ca</td> <td>g those for negligence and any or rdinal be liable for incidental or of</td> <td>consequental damages, includi</td> <td>ng without li</td> <td>mitation,</td> <td>busines</td> <td>s interru</td> <td>ptions, h claim</td> <td>loss of a</td> <td>sse, or d upor</td> <td>loss of</td> <td>profits incurre</td> <td>d by client, ted reasons</td> <td>its subsidie or otherw</td> <td>aries, rise.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>*:</td> <td></td> <td></td>	analyses. All claims including service. In no event shall Ca	g those for negligence and any or rdinal be liable for incidental or of	consequental damages, includi	ng without li	mitation,	busines	s interru	ptions, h claim	loss of a	sse, or d upor	loss of	profits incurre	d by client, ted reasons	its subsidie or otherw	aries, rise.								*:		
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† Cardinal cannot accept verbal

Received by OCD: 6/1/2023 12:53:52 PM



APPENDIX D

NMOCD Notifications

Released to Imaging: 8/28/2023 2:39:53 PM

From:	OCDOnline@state.nm.us
To:	Bob Hall
Subject:	The Oil Conservation Division (OCD) has approved the application, Application ID: 186129
Date:	Friday, February 24, 2023 10:51:19 AM

***** EXTERNAL EMAIL - Please use caution and **DO NOT** open attachments or click links from unknown or unexpected emails. *****

To whom it may concern (c/o Bob Hall for BTA OIL PRODUCERS, LLC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2222753156, with the following conditions:

• Remediation Plan Approved with Conditions. During excavation activities, sidewall samples should be delineated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release, regardless of depth to groundwater.

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you, Jennifer Nobui Environmental Specialist-Advanced 505-470-3407 Jennifer.Nobui@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, NM 87505



APPENDIX E

Final C-141

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District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources Department

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

Incident ID	nAPP2222753156
District RP	
Facility ID	fAPP2135653071
Application ID	

Release Notification

Responsible Party

Responsible Party: BTA Oil Producers, LLC	OGRID: 260297					
Contact Name: Bob Hall	Contact Telephone: 432-682-3753					
Contact email: bhall@btaoil.com	Incident # (assigned by OCD) nAPP2222753156					
Contact mailing address: 104 S. Pecos St., Midland, TX 79701						

Location of Release Source

Latitude: 32.08958 Longitude: -103.56642

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Rojo 18 ELL	Site Type: Tank Battery
Date Release Discovered: 8/14/2022	API# (if applicable) Nearest well:

Unit Letter	Section	Township	Range	County
F	34	255	33E	Lea

Surface Owner: State Federal Tribal Private (*Name:*)

Nature and Volume of Release

Material	Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)			
Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)		
Produced Water	Volume Released (bbls) 43 BBL	Volume Recovered (bbls) 35 BBL		
	Is the concentration of dissolved chloride in the	Yes No		
	produced water >10,000 mg/l?			
Condensate	Volume Released (bbls)	Volume Recovered (bbls)		
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)		
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)		

Cause of Release

Fitting Failure. An ell on the bottom of the separator washed out. Produced water released under the vessel into unlined containment area. Recovered 35 BW with vacuum truck. Spill volume calculation is included.

orm C-141	State of New Mexico	r		400000750450
	Oil Conservation Division	-	Incident ID	nAPP2222753156
sed	on conservation presion	-	Eacility ID	fAPP2130022003
to I		ŀ	Application ID	1/11/2/00022000
ma		L	1 (ppineution in)	
Was this a major	If YES, for what reason(s) does the respon	sible party consider t	his a major release?	
release as defined by				
2 19.15.29.7(A) NMAC?	Yes – Release greater than 25 BBL.			
Yes 🗌 No				
3 2:				
39				
If VES was immediate no	otice given to the OCD? By whom? To wh	om? When and by w	hat means (phone.)	email. etc)?
Yes, by filing a Notice	of Release (NOR) on the NMOCD P	ermitting website	on 8/15/2022. 1	The Incident ID listed
above was assigned a	fter the NOR was acknowledged by	the NMOCD.		
	Initial D	nanon sa		
	Initial R	esponse		
The responsible p	party must undertake the following actions immediated	y unless they could create	a safety hazard that wou	ld result in injury
\square The source of the rele	ase has been stopped.			
The immediated area ha	a been secured to protect human health and	the onvironment		
	s been secured to protect numan nearly and			. 1 .
Released materials ha	we been contained via the use of berms or o	likes, absorbent pads,	or other containme	nt devices.
All free liquids and re	coverable materials have been removed an	d managed appropriat	tely.	
If all the actions described	l above have <u>not</u> been undertaken, explain	why:		
Der 10 15 20 8 B (4) NM	AC the responsible party may commence t	remediation immediat	elv after discovery	of a release If remediation
has begun, please attach	a narrative of actions to date. If remedial	efforts have been suc	ccessfully complete	d or if the release occurred
within a lined containment	nt area (see 19.15.29.11(A)(5)(a) NMAC), j	please attach all inform	mation needed for c	losure evaluation.
I hereby certify that the info	rmation given above is true and complete to the	best of my knowledge a	and understand that pu	rsuant to OCD rules and
regulations all operators are	required to report and/or file certain release not	ifications and perform c	orrective actions for re	eleases which may endanger
public health or the environi	nent. The acceptance of a C-141 report by the (ate and remediate contamination that pose a three	OCD does not relieve the	e operator of hability acce water, human heal	th or the environment. In
addition, OCD acceptance o	f a C-141 report does not relieve the operator of	responsibility for comp	liance with any other	federal, state, or local laws
and/or regulations.				
Printed Name Roh Hal	Title: Environmental Manager			
Signature: Blild Date: 8/15/2022				
email: bhall@btaoil.c	om Telephone: 432-682-3	753		
OCD Only				
Received by: Jocely	n Harimon	Date: 08/15/20	22	

•

Page 48 0662

Location Rojo #18 Separator API # Spill Date 8/14/2022

Spill Dimensions

ENTER - Length of Spill ENTER - Width of Spill ENTER - Saturation Depth of Spill

ENTER - F	Porosity	Factor
-----------	----------	--------

1 feet	2
1 feet	2
6 inches	



0.001 99.999 0.00001

BBL

35 BBL

Oil Cut - Well Test / Vessel Throughput or Contents	
Oil	
Water	
Calculated Oil Cut	

Volume Recovered in Truck / Containment ENTER - Recovered Oil

ENTER - Recovered Water

Calcul	lated	Val	lues
--------	-------	-----	------

Release of Oil in Soil - Unrecovered Release of Water in Soil - Unrecovered Unrecovered Total Release

calculated		
0	BBL	
8	BBL	
8	BBL	

Calculated	Values
Tatal Dalas	

Total Release of Oil Total Release of Water Total Release

calculated		
0	BBL	
43	BBL	
43	BBL	

Types of Soil	Porosity Factor
Gravel	0.25
Sand	0.20
Clay/silt/sand Mix	0.15
Clay	0.05
Caliche	0.03
Unknown	0.25

(Length X Width X Depth X 1 ft/12 in) X Porosity 5.615 ft³ / BBL

Х

Oil Cut (or Water Cut)

Rojo 18 ELL 8/14/2022

Incident #nAPP2222753156



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

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

District III

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

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

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

CONDITIONS

Operator:	OGRID:
BTA OIL PRODUCERS, LLC	260297
104 S Pecos	Action Number:
Midland, TX 79701	134191
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	8/15/2022

CONDITIONS

Page 51 562

Action 134191

Received by OCD: 6/1/2023 12:53:52 PM Form C-141 State of New Mexico

Oil Conservation Division

	Page 52 of 6.
Incident ID	nAPP2222753156
District RP	
Facility ID	fAPP2135653071
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>106</u> (ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🛛 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🛛 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas not on an exploration, development, production, or storage site?	🗌 Yes 🛛 No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- \square Depth to water determination
- Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release
- \boxtimes Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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

Page 3

form C-141	State of New Mexico		Incident ID	nAPP2123047003
age 4	Oil Conservation Division	Oil Conservation Division		
•			Facility ID	
			Application ID	
regulations all operators as public health or the enviro failed to adequately invest addition, OCD acceptance and/or regulations. Printed Name:Kelton Signature: email:KBeaird@btaoi	Pre-required to report and/or the certain release in nment. The acceptance of a C-141 report by the igate and remediate contamination that pose a the of a C-141 report does not relieve the operator Beaird	e OCD does not relieve th hreat to groundwater, surf of responsibility for comp Title:Environmen Date:5/31/202 Telephone:432-3	tal Manager	<pre>cases which may choose have nould their operations have n or the environment. In ederal, state, or local laws</pre>

Received by OCD: 6/1/2023 12:53:52 PM

Form C-141 Page 6 State of New Mexico Oil Conservation Division

Incident ID	nAPP2123047003
District RP	
Facility ID	
Application ID	

Closure

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

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

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

Description of remediation activities

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

Printed Name:Kelton Beaird	Title: _Environmental Manager	
Signature:	Date:5/31/2023	
email:KBeaird@btaoil.com	Telephone:432-312-2203	
OCD Only		
Received by: Jocelyn Harimon	Date:06/05/2023	
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.		
Closure Approved by:	Date:	
Printed Name:	Title:	

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources Department

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

Incident ID	nAPP2123047003
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: BTA Oil Producers, LLC	OGRID: 260297
Contact Name: Bob Hall	Contact Telephone: 432-682-3753
Contact email: bhall@btaoil.com	Incident # (assigned by OCD)
Contact mailing address: 104 S. Pecos St., Midland, TX 79701	

Location of Release Source

Latitude: 32.08975 Longitude: -103.56641

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Rojo 18/19 & 38/39 Tank Battery	Site Type: Tank Battery
Date Release Discovered: 8/17/2021	API# (if applicable) Nearest well: Rojo 7811 34-27 Federal
	#019H API #30-025-44298

Unit Letter	Section	Township	Range	County
E	34	255	33E	Lea

Surface Owner: State Federal Tribal Private (Name:)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

Crude Oil	Volume Released (bbls) 8 BBL	Volume Recovered (bbls) 6 BBL
Produced Water	Volume Released (bbls) 17 BBL	Volume Recovered (bbls) 14 BBL
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		

Piping Failure.

A piping tee connected under the separator for the Rojo 34-27 Federal #019H washed out and allowed a release of oil and water from the separator onto the caliche pad area surrounding the production equipment. A total of 25 BBL fluid (8 BO + 17 BW) was released. A vacuum truck was used to recover a total of 20 BBL fluid (6 BO + 14 BW).

(See attached spill calculation spreadsheet.)

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Oil Conservation Division

Incident ID	nAPP2123047003	
District RP		
Facility ID		
Application ID		

Was this a major release as defined by	If YES, for what reason(s) does the responsible party consider this a major release?	
19.15.29.7(A) NMAC?	The spill volume was at least 25 BBL, which the NMOCD Rules define as a major release.	
🛛 Yes 🗌 No		
If YES, was immediate no Yes, a Notification of assigned Incident #	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Release was filed via the NMOCD E-Permitting System on 8/18/2021. The release was	

Initial Response

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

 \square The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

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

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.

Printed Name: Bob Hall Title: Environmental Manager

email: bhall@btaoil.com

Telephone: 432-682-3753

OCD Only

Received by: Ramona Marcus

Date: 8/20/2021

Date: 8/18/2021

 Location
 Rojo 34-27 Fed Com 18/19 & 38/39 Tank Battery

 API #
 30-025-44298

 Spill Date
 8/17/2021

Spill Dimensions

ENTER - Length of Spill ENTER - Width of Spill ENTER - Saturation Depth of Spill

ENTER - Porosity Factor	

45	feet
45	feet
6	inches



0.4 0.6 0.4

BBL

BBL

Oil Cut - Well Test / Vessel Throughput or Contents
Oil
Water
Calculated Oil Cut

Volume Recovered in Truck / Containment ENTER - Recovered Oil

ENTER - Recovered Water

Release of Oil in Soil - Unrecovered
Release of Water in Soil - Unrecovered
Unrecovered Total Release

ulated	_
2 BBL	
3 BBL	
5 BBL	

Calculated Values
Total Release of Oil
Total Release of Water
Total Release

calculated	
8	BBL
17	BBL
25	BBL

Types of Soil	Porosity Factor
Gravel	0.25
Sand	0.20
Clay/silt/sand Mix	0.15
Clay	0.05
Caliche	0.03
Unknown	0.25

(Length X Width X Depth X 1 ft/12 in) X Porosity 5.615 ft³ / BBL

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Oil Cut (or Water Cut)

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

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

District III

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

District IV

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

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

CONDITIONS

Operator:	OGRID:
BTA OIL PRODUCERS, LLC	260297
104 S Pecos	Action Number:
Midland, TX 79701	43000
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	8/20/2021

CONDITIONS

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Action 43000

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Oil Conservation Division

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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>106</u> (ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🛛 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🛛 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas not on an exploration, development, production, or storage site?	🗌 Yes 🔀 No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- \square Depth to water determination
- Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release
- \boxtimes Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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

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Form C-141	State of New Mexico		Incident ID	nAPP2123047003
Page 4	Oil Conservation Division	n	District RP	
0			Facility ID	
			Application ID	
regulations all operators are public health or the environ failed to adequately investi addition, OCD acceptance and/or regulations. Printed Name:Kelton Signature: email:KBeaird@btaoil	Beaird	e OCD does not relieve th hreat to groundwater, surf of responsibility for comp Title:Environmen Date:5/31/202 Telephone:432-3	e operator of liability shace water, human health bliance with any other fe tal Manager 23 12-2203	ould their operations have a or the environment. In deral, state, or local laws

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Application ID	

Closure

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

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

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

Description of remediation activities

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

Printed Name:Kelton Beaird	Title: _Environmental Manager		
Signature:	Date:5/31/2023		
email:KBeaird@btaoil.com	Telephone:432-312-2203		
OCD Only			
Received by:	Date:		
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.			
Closure Approved by:	Date: 08/28/2023		
Printed Name: Nelson Velez	Title: Environmental Specialist - Adv		

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CONDITIONS

Operator:	OGRID:
BTA OIL PRODUCERS, LLC	260297
104 S Pecos	Action Number:
Midland, TX 79701	222867
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	8/28/2023

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