# **E N S O L U M**

February 13, 2023

New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

#### Re: Remediation Work Plan 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 *Remediation Work Plan* (*Work Plan*) to document assessment and soil sampling activities performed at the Rojo 18 ELL and Rojo 18/19 & 38/39 Tank Battery (collectively referred to as the Site) and to detail remedial actions proposed for the Site. The purpose of the Site assessment and soil sampling activities was to address impacts to soil following two overlapping release events at the Site. Based on laboratory analytical results from the soil sampling events, BTA is submitting this *Work Plan*, describing remediation that has occurred and requesting to complete a soil boring to confirm depth to groundwater data as well as complete necessary excavation and proper disposal of impacted soil.

### SITE DESCRIPTION AND RELEASE SUMMARY

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 immediately dispatched to the Site to recover free-standing 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, located 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 immediately 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, 2022 and submitted a Form C-141 on August 18, 2022. The release was assigned Incident Number nAPP2123047003.

BTA Oil Producers, LLC Remediation Work Plan Rojo 18 ELL and Rojo 18/19 & 38/39 Tank Battery

### SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicablity 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). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on regional groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well C-02313, located approximately 1.15 miles northeast of the Site. The groundwater well has a reported depth to groundwater of 110 feet bgs and a total depth of 150 feet bgs. The reference well log is inclued in Appendix A.

The closest continuously flowing or significant watercourse to the Site is an intermittent riverine, located approximately 12,438 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

Conservatively based on the results of the Site Characterization, 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 ACTIVITIES AND ANALYTICAL RESULTS

On October 24, 2022, Ensolum personel were at the Site to evaluate the overlapping release extents based on information provided on the Form C-141s and visual observations. Six delineation soil samples (SS01 through SS06) were collected within and around the release extent at a depth of approximately 0.5 feet bgs to assess surficial soil associated with the releases. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach<sup>®</sup> chloride QuanTab<sup>®</sup> 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.



BTA Oil Producers, LLC Remediation Work Plan Rojo 18 ELL and Rojo 18/19 & 38/39 Tank Battery

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, collected within the release extent, indicated all COC concentrations were compliant with the Closure Criteria. Delination soil samples SS03 through SS06, collected around the release extent, indicated all COC concentrations were compliant with the Closure Criteria and the strictest Closure Criteria, successfully defining the lateral extent of the release. Soil analytical results are summarized on Table 1. The laboratory analytical report and chain of custody documentation is presented in Appendix C.

Based on visible staining in the release areas and laboratory analytical results of soil sample SS02, additional delineation and excavation activities appear to be warrented.

#### **REMEDIATION WORK PLAN**

Site assessment activities were conducted at the Site to address impacted soil resulting from two overlapping release events at the Site. Delineation soil samples collected around the release area met the strictest Closure Criteria, indicating the release area did not extend to the pasture. Based on the soil sample laboratory analytical results, BTA proposes the following remediation activities:

- BTA proposes to further evaluate depth to groundwater at the Site to verify the Site characterization. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent; however, accessible depth to groundwater data is neither current (data collected within the last 25 years) nor within 0.5 miles as preferred by the NMOCD. To confirm depth to groundwater is greater than 100 feet bgs in the vicinity of the Site, BTA will prepare and submit a Permit to Drill a Well with No Water Right (WR-07) to the NMOSE to advance a soil boring to a depth of at least 105 feet bgs and within 0.5 mile of the Site. The lithology and soil conditions for evidence of a water-bearing zone will be observed and documented throughout drilling activities. The boring will be allowed to stabilize for at least 72 hours post drilling activities and then checked for the presence or absence of water.
- Following confirmation of the depth to groundwater, BTA proposes to collect additional delineation within the release extent, at the location of SS01 and to the east of SS01, again within the release extent, to confirm the vertical extent soil impacts.
- Additionally, BTA proposes to excavate the impacted soil identified by soil sample SS02 at 0.5 feet bgs.

BTA believes the work completed and additional scope of work described above will meet requirements set forth in NMAC 19.15.29.13 and be protective of human health, the environment, and groundwater. As such, BTA respectfully requests approval of this *Work Plan* from NMOCD.

BTA will submit a *Closure Request* or *Remediation Work Plan* 90 days following receipt of final analytical laboratory reports or completion of the depth to water soil boring.



BTA Oil Producers, LLC Remediation Work Plan Rojo 18 ELL and Rojo 18/19 & 38/39 Tank Battery

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

tmorrissey@ensolum.com.

Sincerely, Ensolum, LLC

adrie Streen

Hadlie Green Staff Geologist

Monissey

Tacoma Morrissey Senior Geologist

cc: Bob Hall, BTA Oil Producers, LLC Bureau of Land Management

Appendices:

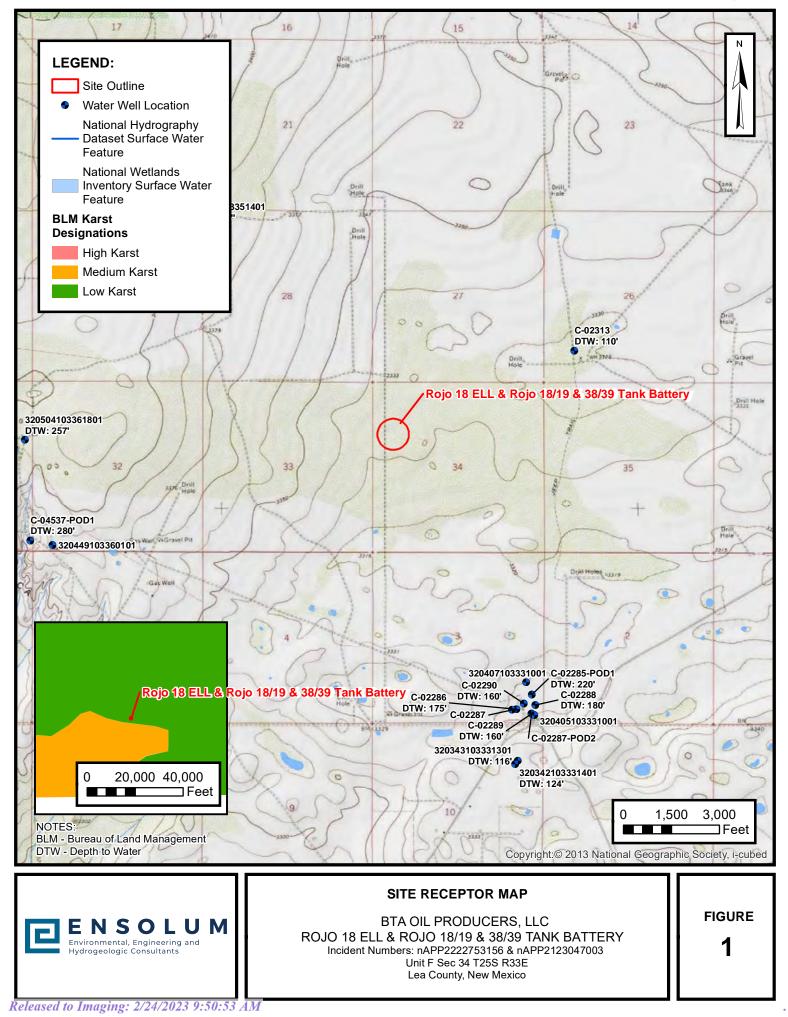
- Figure 1 Site Receptor Map
- Figure 2 Delineation Soil Sample Locations
- Table 1Soil Sample Analytical Results
- Appendix A Referenced Well Records
- Appendix B Photographic Log
- Appendix C Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix D NMOCD Notifications
- Appendix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

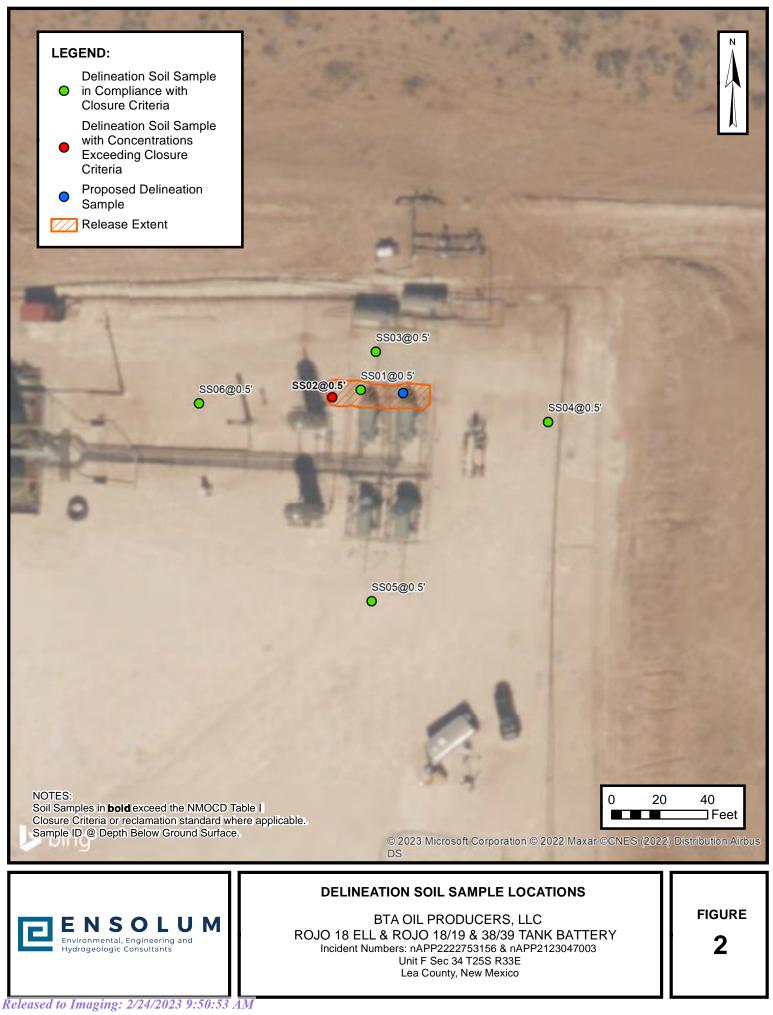




**FIGURES** 

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# TABLES

# ENSOLUM

				Rojo 18 El BTA	TABLE 1 LE ANALYTIC LL and Rojo 18 Oil Producers County, New M	8/19 & 38/39 5, LLC				
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 CI	osure Criteria (N	IMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Delii	neation Soil Sa	nples	•			
SS01	10/24/2022	0.5	<0.050	<0.300	<10.0	46.0	13.8	46.0	46.0	480
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
SS04	10/24/2022	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SS05	10/24/2022	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SS06	10/24/2022	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in  $\operatorname{\boldsymbol{bold}}$  exceed the NMOCD Table I Closure Criteria or reclamation

standard where applicable.

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



# APPENDIX A

Referenced Well Records



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

	(quarters are 1=NW 2=NE (quarters are smallest to 1	/	(NAD83 UTM in meters)	
Well Tag POD Number	Q64 Q16 Q4 Sec 7	Tws Rng	X Y	
C 02313	2 3 3 26	25S 33E	636971 3552098* 🌍	
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:		<b>Estimated Yield:</b>	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.

2/6/23 10:42 AM

POINT OF DIVERSION SUMMARY



# APPENDIX B

Photographic Log

Released to Imaging: 2/24/2023 9:50:53 AM





# 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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	Qualifie
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, SM4500Cl-B	mg/	'kg	Analyze	d 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

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	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d 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	Analyze	d 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 9	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	101	% 46.3-17	8						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg 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**

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Cardinal cannot accent verbal changes. Please email changes to celev keene@cardinallabsnm.com	nges to celey	des. Please email cha	cent verbal chan	annot a	+ Cardinal o	K 3.2 10/07/21	FURM-000
D #113 ar -0.1°C TO - i8/24/22   Ves Ves Ves Corrected Temp. °C,	Thermometer ID #113 Correction Factor -0.3°C	X	Ves Yes	0.4	rrecte	Bus - Other: C.	Sampler - UPS - Bus - Other:
Standard A Bacteria Rush Cool Inta	Turnaround Time:	on CHECKED BY:	Sample Condition	12	Observed Temp. °C		Delivered By: (Circle One)
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gensolum.com	BJennings@ensolum	Parm	AVINO	han là	ECH!	5	(-(MM
t:         Yes          No      Add'i Phone #: e emailed.  Please provide Email address:	All Results are emailed.		ed By:	Received By:	10-24-22		Relinquished By:
	asons or otherwise,	based upon any of the above stated re	es, including without limitation, business interruptions, loss or use, or loss or proms including but cardinal, regardless of whether such chains is based upon any of the above	ardinal, regard	equental damages, including of services hereunder by C	service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business international loss or use, or loss or proins incurred or creation is successioned and an application of the providence of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.	service. In no event shall Cu affiliates or successors arisi
plicable	after completion of the app	in writing and received by Cardinal within 30 days aft	y whether based in contract or d unless made in writing and r	ny claim arisin leerned waive	client's exclusive remedy for any claim arising whether b re cause whatsoever shall be deemed waived unless ma	PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the annutrit paid by the cremit or une analyses. All claims including those for negligence and any other cause whatboever shall be deemed waived unless made is writing and received by Cardinal within 30 days after complete the applicable	PLEASE NOTE: Liability an analyses. All claims includir
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BTEX TPH Chlorid	TIME	DTHER : CID/BASE: CE / COOL DTHER :	ROUNDWATER VASTEWATER SOIL DIL SLUDGE	G)RAB OR (C)O	Sample Depth (feet)	Sample I.D.	Lab I.D.
2			2	MP.			
	SAMPLING	ESERV.	MATRIX				FOR LAB USE ONLY
		Fax #:	-		3	Conner Whitman	Sampler Name:
	2203	Phone #:432-312-2203					Project Location:
	01	State: TX Zip: 79701				Roio 18 ELL	Project Name:
		city: Midland	0	BTA	Project Owner:	62012007	Project #: 0362012007
	Pecos St.	Address: 104 S Pe			Fax #:	432-557-8895 708 705 TOFax #:	Phone #: 432-1
		Attn: Bob Hall	79701	Zip: 7	State: TX		City: Midland
		Company: BTA Oil	0		00	601 N. Marienfeld St. STE 400	Address: 601
		P.O. #:	20			Project Manager: Had is Green	Project Manager
ANALYSIS REQUEST		BILL TO	81940			Ensolum, LLC	Company Name:
				76	VX (575) 393-24	(575) 393-2326 FAX (575) 393-2476	
				40	lobbs. NM 882	101 East Marland, Hobbs, NM 88240	

**CARDINAL** Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



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 <a href="https://www.tceq.texas.gov/field/qa/lab\_accred\_certif.html">www.tceq.texas.gov/field/qa/lab\_accred\_certif.html</a>.

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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	Qualifie
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, SM4500Cl-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 9	% 46.3-17	8						

#### Cardinal Laboratories

\*=Accredited Analyte

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	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d 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	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	80.3	% 46.3-17	8						

#### Cardinal Laboratories

\*=Accredited Analyte

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	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, SM4500Cl-B	mg/	'kg	Analyze	d 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	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	88.1	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	86.6	% 46.3-17	8						

#### Cardinal Laboratories

\*=Accredited Analyte

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, SM4500Cl-B	mg,	'kg	Analyze	d 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	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	80.7	% 45.3-16	1						
Surrogate: 1-Chlorooctadecane	79.9	% 46.3-17	8						

#### Cardinal Laboratories

\*=Accredited Analyte

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/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**

#### \*=Accredited Analyte

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

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	ia (only) Sample Condition ntact Observed Temp. °C Yes Corrected Temp. °C	899.	27				
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Released to 1	maging: 2/	′24/2023 9	:50:53 A	M			

FORM-000 R 3.2 10/07/21	Sampler - UPS - Bus - Other:		Relinquished By:	Contraction	Relinquished by:	service. In no events state on union of or related to the performance affiliates or successors arising out of or related to the performance	analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waiveg unless made in wrategrams recovery or the other profile incurred by client, its subadiaties, analyses. All claims including those for negligence and any other cause whatsoever shall be doemed waiveg unless, but claims including those for negligence and any other cause whatsoever shall be doemed waiveg unless, but claims including those for negligence and any other cause whatsoever shall be doemed waiveg unless, but claims including those for negligence and any other cause whatsoever shall be doemed waiveg unless including without limitation, business interruptions, loss of use of the other waiveg unless, and the other waiveg unless of t	and the sector states and Demana Cardinal's liability and die			06(H/I)	-0	A.	4 500 U	5 2022	+ 9055 7		- (042	H77 4997		Lab I.D. Sample I.D.		FOR LAB USE UNLY		FIDE STATES		me: Roin	Project #: 03C20 2007	Phone #: 432-331-2875 85 798 2608 Fax #	City: Midland	Address: 00000000000000000000000000000000000	601 N Marienfeld St. STE 400		Company Name: Encodem 11C	(575) 393-2326 FAX	101 East Marland, Hobbs, NM 88240
+ Cardinal cannot accept verbal c	Corrected Temp. C Q/6 Pres Artaci		Time:	NA Received	Bar	of services hereunder by Caudinal, regardless of whether such de	cause whatsoever shall be deemed waived unless made in writing quental damages, including without limitation, business interruptor	on's exclusive remedy for any claim arising whether based in contract or fort.						1 1 1 2	· 5 9 1	2	1	15, 3,	# CO			Sample Depth R (C)C NERS ATER		MATRIX				Project Owner: 5 A Q'I	Fax #:	di7 vi 3	TX	0			FAX (575) 393-2476	bbs, NM 88240
Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com	No Suntials) Thermom	ON CHECKED BY: Turnarol		REMAR	MUINN UN BJenni	im s based upor any or the wook of the Verbal Result:	In a pression of the shows stated reasons of otherw	act or tort, shall be limited to the amount paid by the client for the							54. <sup>11</sup>	0 line	1 1:35	10/20/22 H:30		HE ID/I HE	R : BAS			PRESERV. SAMPLING	Fax 弗:	Phone #: 432-3 12-220 5	State: X Zip: / J/UI	City: / Vidlend	Address IUT S Free ST	t> - 0 > 1/1 +	Amm. Rock Hall	Company: BTA O;1	P.O. #:	BILL IO		
celey.keene@cardinallabsnm.com		Turnaround Time: Standard Z Bacteria (only) Sample Condition	hgreen@ensolvmicom	KS:	BJennings@ensolum.com	Verbal Result: Ves I No Add'I Phone #:		or the applicable												B	TE PH Llo	7 X 7 7	)*												ANALYSIS REQUEST	

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# APPENDIX D

**NMOCD** Notifications

Released to Imaging: 2/24/2023 9:50:53 AM

From:	Nobui, Jennifer, EMNRD
To:	Tacoma Morrissey
Cc:	Bratcher, Michael, EMNRD; Harimon, Jocelyn, EMNRD; Hamlet, Robert, EMNRD
Subject:	FW: [EXTERNAL] BTA - Extension Request - Rojo 18 ELL (Incident Number nAPP2222753156)
Date:	Thursday, November 10, 2022 9:27:36 AM
Attachments:	<u>image001.png</u> <u>image002.png</u> <u>image003.png</u> <u>image004.png</u>

### [ \*\*EXTERNAL EMAIL\*\*]

Tacoma

OCD approves your request for a 90-day extension to February 10, 2023 to submit a remediation plan/closure report to the OCD portal. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks Jennifer Nobui

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Thursday, November 10, 2022 8:19 AM
To: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Nobui, Jennifer, EMNRD
<Jennifer.Nobui@emnrd.nm.gov>
Subject: FW: [EXTERNAL] BTA - Extension Request - Rojo 18 ELL (Incident Number nAPP2222753156)

Jocelyn Harimon • Environmental Specialist Environmental Bureau EMNRD - Oil Conservation Division 1220 South St. Francis Drive | Santa Fe, NM 87505 (505)469-2821 | Jocelyn.Harimon@state.nm.us http:// www.emnrd.nm.gov



From: Tacoma Morrissey <<u>tmorrissey@ensolum.com</u>>
Sent: Thursday, November 10, 2022 8:12 AM
To: Enviro, OCD, EMNRD <<u>OCD.Enviro@emnrd.nm.gov</u>>
Cc: Bob Hall <<u>BHall@btaoil.com</u>>; Hadlie Green <<u>hgreen@ensolum.com</u>>
Subject: [EXTERNAL] BTA - Extension Request - Rojo 18 ELL (Incident Number nAPP2222753156)

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

All,

BTA is requesting an extension for the current deadline of November 12, 2022 for submitting a remediation work plan or closure request required in 19.15.29.12.B.(1) NMAC at the Rojo 18 ELL (Incident Number nAPP2222753156). The release occurred on August 14, 2022. Initial assessment of the release has been completed and remediation is ongoing. In order to complete the remediation activities and submit a remediation work plan or closure request, BTA is requesting a 90-day extension until February 10, 2023.

Thank you,



Tacoma Morrissey Senior Geologist 337-257-8307 Ensolum, LLC



# APPENDIX E

Final C-141

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

Materia	al(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 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

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			ADD0000750450
orm C-141 age 2 Was this a major release as defined by 19.15.29.7(A) NMAC? Yes No If YES, was immediate n Yes, by filing a Notice	Oil Conservation Division		istrict RP	nAPP2222753156
-6			acility ID	fAPP2130022003
			pplication ID	
Was this a major	If YES, for what reason(s) does the response	ible party consider this	a major release?	,
release as defined by 19.15.29.7(A) NMAC?	Yes – Release greater than 25 BBL.			
19.19.29.7(11) 1001101	res – Release greater than 25 DBL.			
🛛 Yes 🗌 No				
If YES, was immediate n	otice given to the OCD? By whom? To who			
	of Release (NOR) on the NMOCD Per	-	n 8/15/2022. 1	The Incident ID listed
above was assigned a	after the NOR was acknowledged by t	he NMOCD.		
	Initial Res	sponse		
The responsible	party must undertake the following actions immediately u	unless they could create a sa	fety hazard that wou	ld result in injury
The source of the rele	ease has been stopped.			
	s been secured to protect human health and th	e environment		
-	we been contained via the use of berms or dik	,	other containme	nt devices
				in devices.
	ecoverable materials have been removed and n	• •	·	
If all the actions describe	d above have <u>not</u> been undertaken, explain wh	ny:		
Per 19.15.29.8 B. (4) NM	AC the responsible party may commence ren	nediation immediately	after discovery of	of a release. If remediation
has begun, please attach	a narrative of actions to date. If remedial ef	forts have been succes	ssfully completed	l or if the release occurred
within a lined containment	nt area (see 19.15.29.11(A)(5)(a) NMAC), ple	ease attach all informat	ion needed for cl	osure evaluation.
	rmation given above is true and complete to the be			
	required to report and/or file certain release notific ment. The acceptance of a C-141 report by the OC			
failed to adequately investig	ate and remediate contamination that pose a threat	to groundwater, surface	water, human healt	th or the environment. In
addition, OCD acceptance of and/or regulations.	f a C-141 report does not relieve the operator of re	sponsibility for complian	ce with any other f	federal, state, or local laws
and of regulations.				
Printed Name: Bob Hal	I Title: Environmental Manager			
0	1.0			
Signature:	htalf	Date: 8/15/2022		
		- 2		
email: bhall@btaoil.c	om Telephone: 432-682-375	5		
OCD Only				
OCD Only				
Received by:Jocely	n Harimon	Date: 08/15/2022		

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

21 feet 6 inches	21	feet
6 inches	21	feet
	6	inches



BBL

BBL 35

0.001 99.999 0.00001

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** 

calculat	ed	
	0	BBL
	8	BBL
	8	BBL

**Calculated Values** T Т

Total Release of Oil
Total Release of Water
Total Release

calculated
0 <b>BBL</b>
43 <b>BBL</b>
43 <b>BBL</b>

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 ft<sup>3</sup> / 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 35 5f46

.

Action 134191

Received by OCD: 2/14/2023 1:31:55 PM Form C-141 State of New Mexico

Oil Conservation Division

	Page 36 of 4	16
Incident ID	nAPP2222753156	
District RP		
Facility ID	fAPP2130022003	
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>&gt;100 (ft bgs)</u>
Did this release impact groundwater or surface water?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🛛 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🛛 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	🗌 Yes 🔀 No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and 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 <sup>1</sup>/<sub>2</sub>-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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

Form C-141 Page 4	State of New Mexico Oil Conservation Division		Incident I District R Facility I Applicati	D	nAPP2222753156 fAPP2130022003
regulations all operators are public health or the environm failed to adequately investig	rmation given above is true and complete to the required to report and/or file certain release not ment. The acceptance of a C-141 report by the 0 gate and remediate contamination that pose a thro of a C-141 report does not relieve the operator of	ifications and p OCD does not a eat to groundw	perform corrective action relieve the operator of list ater, surface water, hum	ns for rele iability sho nan health	ases which may endanger ould their operations have or the environment. In
Printed Name: Bob Ha	all	Title:	ironmental Manager		
Signature: Belifa	el	Date: 2	114/2023		
email:bhall@btaoil.cor	n	Telephone:	432-312-2203		
OCD Only Received by: Jocely	yn Harimon	Date	. 02/14/2023		

Page 37 of 46

Received by OCD: 2/14/2023 1:31:55 PM

Received by OCD: 2/14/2023 1:31:55 PM

State of New Mexico Oil Conservation Division

## **Remediation Plan**

 Remediation Plan Checklist: Each of the following items must be included in the plan.

 Image: Detailed description of proposed remediation technique

 Image: Scaled sitemap with GPS coordinates showing delineation points

 Image: Estimated volume of material to be remediated

 Image: Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC

 Image: Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.

Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

Extents of contamination must be fully delineated.

Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: <u>Bob Hall</u>	Title:
Signature: Baltfull	Date: 2/14/2023
email:bhall@btaoil.com Telepho	one: <u>432-312-2203</u>
OCD Only	
Received by: Jocelyn Harimon	Date: 02/14/2023
Approved Approved with Attached Conditions	of Approval Denied Deferral Approved
Signature: Jennifer Nobui	Date: 02/24/2023

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	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

Signature:	Belfel	1

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
---------	----------	--------

feet
feet
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

calculated
2 <b>BBL</b>
3 <b>BBL</b>
5 <b>BBL</b>

# Calculated Values

Total Release of Oil Total Release of Water Total Release

calculated
8 <b>BBL</b>
17 <b>BBL</b>
25 <b>BBL</b>

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 ft<sup>3</sup> / BBL

Х

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
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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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Incident ID	nAPP2123047003
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

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

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

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and 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 <sup>1</sup>/<sub>2</sub>-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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

Form C-141	State of New Mexico				
				Incident ID	nAPP2123047003
Page 4 Oil Conservation Div	Oil Conservation Division	L		District RP	
				Facility ID	
				Application ID	
and/or regulations.					
Printed Name: Bob I Signature: Bob I	Hall 2 Hall	Title: Date:	Environment	al Manager	
	2 Hall	Title: Date: Telept	Environment: <b>2/14/20</b> hone: 432-31	al Manager 0 <b>Z 3</b> 2-2203	
Signature: B	Hall 2 (fall om	_ Title: _ Date: Telep	Environment: <u> 2/14/20</u> hone: <u>432-31</u>	al Manager <b>723</b> 2-2203	

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State of New Mexico Oil Conservation Division

## **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan.

Detailed description of proposed remediation technique

Scaled sitemap with GPS coordinates showing delineation points

Estimated volume of material to be remediated

Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC

Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.

Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

Extents of contamination must be fully delineated.

Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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:
Signature: Bebefall	Date: 2/14/2023
email:bhall@btaoil.com Telephone:	432-312-2203.
OCD Only	
Received by:	Date:
Approved Approved with Attached Conditions of A	pproval 🗌 Denied 🗌 Deferral Approved
Signature:	Date:

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

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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

CONDITIONS

Operator:	OGRID:
BTA OIL PRODUCERS, LLC	260297
104 S Pecos	Action Number:
Midland, TX 79701	186129
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	Condition	Condition Date
jnobui	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.	2/24/2023

CONDITIONS

Action 186129