# ENSOLUM

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.



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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:

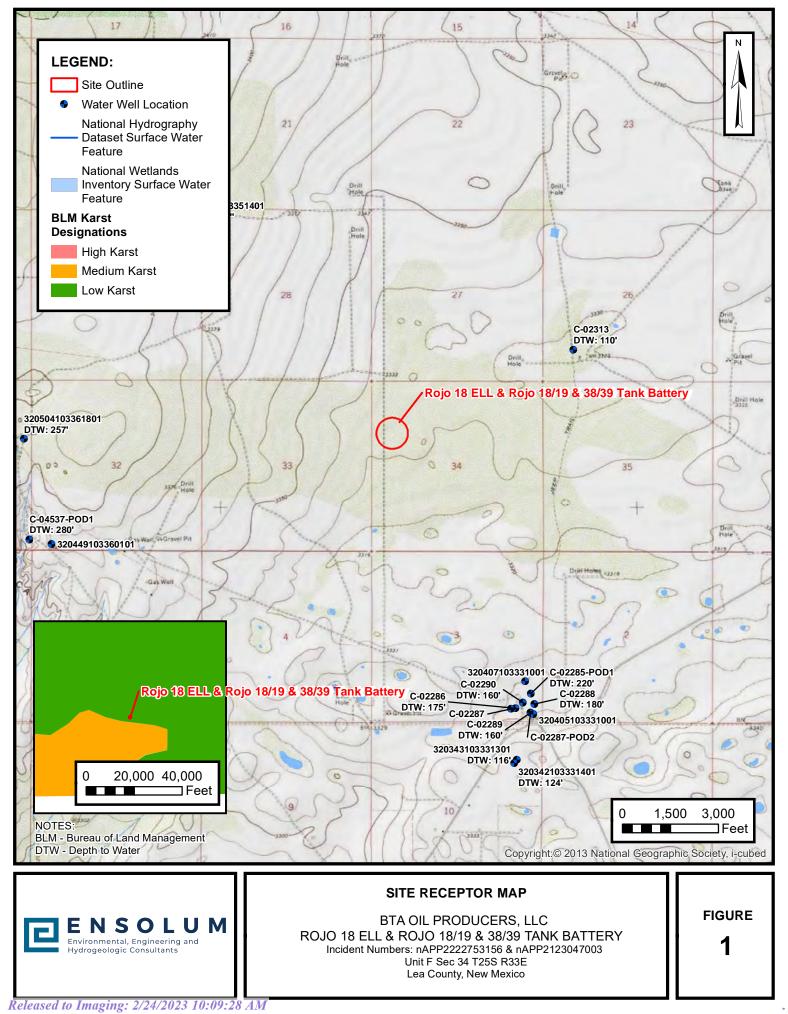
- Figure 1 Site Receptor Map
- Figure 2 Delineation Soil Sample Locations
- Table 1Soil Sample Analytical Results
- Appendix A Referenced Well Records
- Appendix B Photographic Log
- Appendix C Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix D NMOCD Notifications
- Appendix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

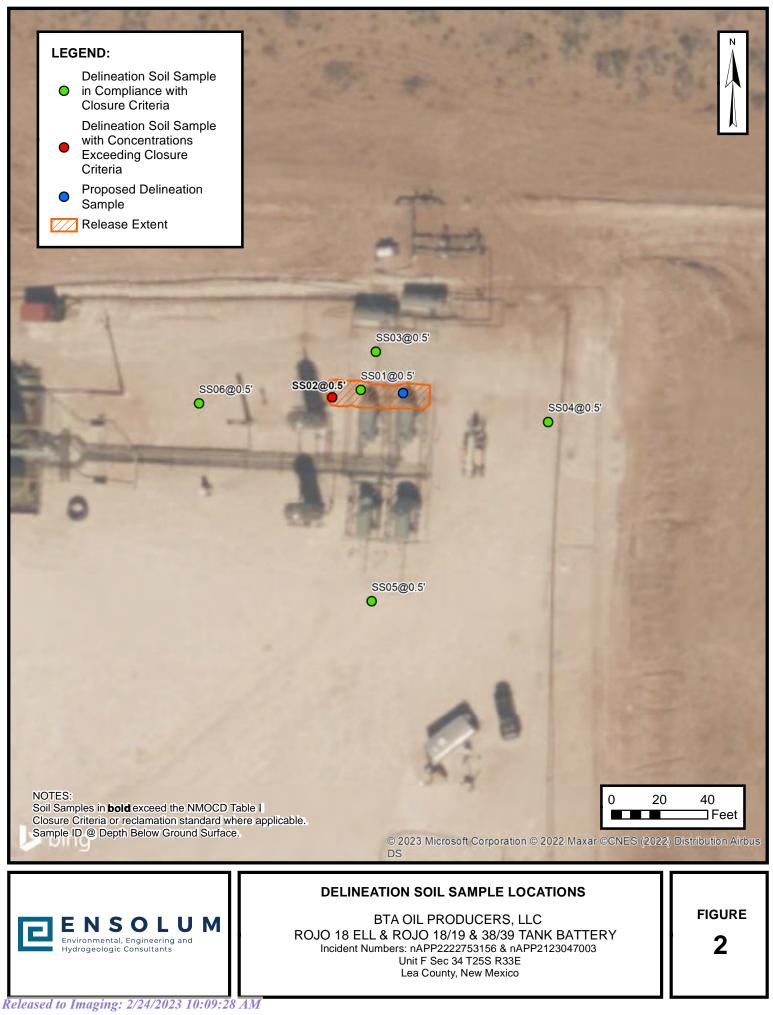




**FIGURES** 

Received by OCD: 2/14/2023 1:48:37 PM







# TABLES

# ENSOLUM

				Rojo 18 El BTA	TABLE 1 LE ANALYTIC LL and Rojo 18 Oil Producers County, New M	3/19 & 38/39 s, 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	MAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Delii	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
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 (quarters are smal		,	(NAD83 UTM in meters)			
Well Tag	POD Number	Q64 Q16 Q4	Sec Tws R	Rng X	Y			
	C 02313	2 3 3	26 258 3	3E 636971	3552098* 🌍			
Driller Lic	ense:	Driller Compan	y:					
Driller Naı	me: UNKNOWN							
Drill Start	<b>Date:</b> 01/01/1925	Drill Finish Date	<b>e:</b> 06/3	30/1925 <b>Pl</b> u	ıg Date:			
Log File Da	ate:	PCW Rcv Date:		So	urce:			
Pump Type	e:	Pipe Discharge	Size:	Est	timated Yield:	60 GPM		
Casing Size	e: 6.88	Depth Well:	150	feet De	pth 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 10:09:28 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

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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

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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

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#### \*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

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ansatz (575) 393-2476     BILL TO     ANALYSIS       Solum. LLC     P.O. #:     P.O. #:     P.O. #:     Company: BTA O'I     Samalysis     Samalysis <td< td=""><td>TPH</td><td>TIME</td><td>THER : CID/BASE E / COOI THER :</td><td>ROUNDV /ASTEWA OIL</td><td>and the local data and the second</td><td>Sample I.D.</td><td></td></td<>	TPH	TIME	THER : CID/BASE E / COOI THER :	ROUNDV /ASTEWA OIL	and the local data and the second	Sample I.D.			
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BILL TO       ANALYSIS         solum. LLC       P.O. #:       P.O. #:       Infeld St. STE 400       Company: DTA 01       Infeld St. STE 400       Infeld St. STE 400 </td <td></td> <td>Pecos</td> <td>Address: 104</td> <td></td> <td>Fax #:</td> <td>01 862 208 208 - 7 25</td> <td>Phone #: 432-</td>		Pecos	Address: 104		Fax #:	01 862 208 208 - 7 25	Phone #: 432-		
BILL TO       ANALYSIS         anfeld St. STE 400       Company: BTA Oíl       ANALYSIS		11	Attn: Bob Ha		XT		City: Midland		
393-2326     FAX (575) 393-2476     BILL TO     ANALYSIS       solum. LLC     P.O. #:     P.O. #:     P.O. #:		1 oil	Company: BTA		00	601 N. Marienfeld St. STE 400	Address: 601		
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		10	BILL				Company Name:		
					X (575) 393-2476	(575) 393-2326 FA			
101 East Marland, Hobbs, NM 88240					obbs, NM 88240	101 East Marland, Ho			

**CARDINAL** Laboratories

Page 5 of 5

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/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,

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, 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						

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\*=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	% 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						

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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	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	0						

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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, 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						

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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/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

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

Mite Sugar

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

Defivered By: (Circle One) Sampler - UPS - Bus - Other:	Relinquished By:	service. In no event shall Cardinal be liable affiliates or successors arising out of or refared inquished By:	PLEASE NOTE: Liability and Damages. C: analyses. All claims including those for neg			4 550	2 550	1055 2	HCCALL SSO	Lab I.D. Sam				· Rain	Project #: 02/201	Dhone # 432-557-8895 and 768 768	Mid	601 N. Marienfeld St. STE 400		Company Name:
Observe	Time:	and be liable for incidential or consequential unitraryes, increases of who up of or related to the performance of services hereurouter by Caudinal, repardees of who up of or related to the performance of Services hereuron and the Services here and the Services he	EASE NOTE: Lability and Damages. Cardinal's liability and clent's exclusive remedy for any define arising we alyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived an alyses.	11/4/2Q	8	1 a 2, a 1	15 .2, 61	`	- #	Sample I.D. (feet) G)RAB OR (C)OI CONTAINERS GROUNDWATER	MP.	onnor Whitmen			2007 Project Owner: 374 Qi	Fax #:	State: TX Zip: 79701	eld St. STE 400		
a Temp. °C //2 Sample Condition CheckED BY: Turnaround Time: Standard Ba Cool Intact (Infibilis) Themometer ID #113 A Temp. °C Q/C No No No No	By:	of whether such claim is based upon any of the above stated reasons of o By: All Rea	PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daith arising whether based in confluent crut, shall be limited to the amount paid by the client for the applicable pLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daith arising whether based in confluent crut, shall be limited to the amount paid by the client for the applicable analyses. All claims including those for negligence and any other cause whatsoever shall be deemed valved unless made in writing and received by Cardinal within 30 days after completion of the applicable analyses. All claims including those for negligence and any other cause whatsoever shall be deemed valved unless interruptions, loss of use, or flots of profits incurred by client, its subadiaties.				SP.31	11:35	1 10/20/22	VASTEWATER SOIL DIL SLUDGE DTHER : ACID/BASE: ICE / COOL OTHER : DATE	MATRIX PRESERV.	Fax	Phone #: 432-3 12-2203	State:TX Zip: 79701	City: Midlend	Address: 104 5 Pecos St.		Company: BTA 0;1	P.O. #:	BILL TO
Turnaround Time:     Standard     Bacteria (only) Sample Consumer       Themometer ID #113     Image: Construction of the sector of	im, Co	All Result: Ves No Add'I Phone #: Verbal Result: Please provide Email address:	lent for the applicable of the							TPH Chlorid	*		3			ŗ				ANALYSIS REQUEST

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## Page 26 of 46

**CARDINAL** Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



# APPENDIX D

**NMOCD** Notifications

Released to Imaging: 2/24/2023 10:09:28 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:	image001.png
	image002.png
	image003.png
	image004.png

### [ \*\*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

.

**Released to Imaging: 2/24/2023 10:09:28 AM** 

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			
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 m Yes, by filing a Notice	Oil Conservation Division		ident ID strict RP	nAPP2222753156
			cility ID	fAPP2130022003
			plication ID	
		¥		
Was this a major	If YES, for what reason(s) does the responsi	ble party consider this a	a major release?	
release as defined by 19.15.29.7(A) NMAC?	Yes – Release greater than 25 BBL.			
	res neleuse greater than 25 bbe.			
🛛 Yes 🗌 No				
If YES, was immediate n	otice given to the OCD? By whom? To whom	•	· ·	
	e of Release (NOR) on the NMOCD Per after the NOR was acknowledged by th	•	8/15/2022. 1	ne inclaent ID listed
above was assigned				
	Initial Dag	Domeo		
	Initial Res	-		
The responsible	party must undertake the following actions immediately u	nless they could create a safe	ty hazard that wou	ld result in injury
$\square$ The source of the rel	ease has been stopped.			
The impacted area has	as been secured to protect human health and the	e environment.		
Released materials h	ave been contained via the use of berms or dik	es, absorbent pads, or o	ther containment	nt devices.
All free liquids and r	ecoverable materials have been removed and n	nanaged appropriately.		
If all the actions describe	d above have not been undertaken, explain wh	iy:		
Der 10 15 20 8 D (1) NA	IAC the responsible party may commence rem	adjution immediately a	fter discovery	faralassa Iframadistic
	a narrative of actions to date. If remedial eff			
	nt area (see 19.15.29.11(A)(5)(a) NMAC), plea			
	ormation given above is true and complete to the best			
	required to report and/or file certain release notific ment. The acceptance of a C-141 report by the OCI			
failed to adequately investig	gate and remediate contamination that pose a threat	to groundwater, surface w	ater, human heal	th or the environment. In
addition, OCD acceptance of and/or regulations.	of a C-141 report does not relieve the operator of res	sponsibility for complianc	e with any other t	federal, state, or local laws
una of regulations.				
Printed Name: Bob Ha	Title: Environmental Manager			
2	110	0/45/0000		
Signature:	Hall	Date: 8/15/2022		
email: bhall@btaoil.c	om Telephone: 432-682-375	3		
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
OCD Only				
		08/15/2022		
Received by: Jocely	n Harimon I	Date: 08/15/2022	-	

Page 32 0646

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 -	Porosity	Factor
---------	----------	--------

feet	21
feet	21
inches	6



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

### **Calculated Values**

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

calculat	ted	
	0	BBL
	8	BBL
	8	BBL

# Calculated Values

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 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 1:48:37 PM Form C-141 State of New Mexico

Oil Conservation Division

Incident ID	nAPP2222753156
District RP	
Facility ID	fAPP2130022003
Application ID	

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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>&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				Incident ID District RP Facility ID Application ID	nAPP2222753156 fAPP2130022003
regulations all operators public health or the envi failed to adequately inve	information given above is true and complete to the are required to report and/or file certain release not ronment. The acceptance of a C-141 report by the estigate and remediate contamination that pose a thru ce of a C-141 report does not relieve the operator of	ifications OCD does eat to gro	and perform co s not relieve the undwater, surfa	prective actions for rele operator of liability sho ce water, human health	eases which may endanger ould their operations have or the environment. In
Printed Name:Bob	Hall	Title:	Environment	al Manager	
Signature: Bel	ifall	Date:	2/14/2	023	
email:bhall@btaoil.	.com	Teleph	one: 432-31	2-2203	
OCD Only					
Received by:			Date:		

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Received by OCD: 2/14/2023 1:48:37 PM

Received by OCD: 2/14/2023 1:48:37 PM

Form C-141 Page 5	2-141 State of New Mexico Oil Conservation Division		nAPP2222753156
		Facility ID	fAPP2130022003
		Application ID	
Remediation Plan Che	<b>Remediation I</b> <u>cklist</u> : Each of the following items must be included in		
<ul> <li>Scaled sitemap with</li> <li>Estimated volume o</li> <li>Closure criteria is to</li> </ul>	of proposed remediation technique GPS coordinates showing delineation points f material to be remediated Table 1 specifications subject to 19.15.29.12(C)(4) NM for remediation (note if remediation plan timeline is mor		s required)
Deferral Requests Onl	<u>y</u> : Each of the following items must be confirmed as p	art of any request for deferral	of remediation.
Contamination must deconstruction.	t be in areas immediately under or around production eq	uipment where remediation cou	ld cause a major facility
Extents of contamin	ation 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: Bal Hall	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: I	Date:

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 ( <i>Name:</i>	)
------------------	-------	-----------	----------	------------------------	---

## 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.)

Received by OCD: 2/14/2023 1:48:37 PM Form C-141 State of New Mexico

P۹	σe	2

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	
	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

Date: 8/18/2021

email: bhall@btaoil.com

Telephone: 432-682-3753

OCD Only

Received by: Ramona Marcus

Date: 8/20/2021

 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

4	45 <b>feet</b>
4	45 <b>feet</b>
	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

calculated	
2 <b>B</b>	BL
3 <b>B</b>	BL
5 <b>B</b> I	BL

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

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

Page 42 6646

Action 43000

Received by OCD: 2/14/2023 1:48:37 PM Form C-141 State of New Mexico

Oil Conservation Division

	Page 43 of 4
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.

ceived by OCD: 2	2/14/2023 1:48:37 PM			Page 44 o
Form C-141	State of New Mexico		Incident ID	nAPP2123047003
Page 4 Oil Conservation Divisio		District RP		
			Facility ID	
			Application ID	
	Bob Hall	of responsibility for com	npliance with any other fe ental Manager	
	Be Hall	Date: 2/14/	2023	
email:	)btaoil.com	Telephone: 432-	312-2203	
OCD Only				
Received by: _	Jocelyn Harimon	Date:02	2/14/2023	

Received by OCD: 2/14/2023 1:48:37 PM

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: Bubifall	Date: 2/14/2023
email:bhall@btaoil.com Telephone:	432-312-2203.
OCD Only	
Received by: Jocelyn Harimon	Date: 02/14/2023
Approved Approved with Attached Conditions of A	pproval 🗌 Denied 🗌 Deferral Approved
Signature: Jennifer Nobui	Date: 02/24/2023

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: 0	OGRID:
BTA OIL PRODUCERS, LLC	260297
104 S Pecos	Action Number:
Midland, TX 79701	186158
	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 186158