ENSOLUM

December 6, 2023

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

Re: Closure Request
Rojo 10-13 Tank Battery
Incident Number NRM2022745673
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of BTA Oil Producers, LLC (BTA), has prepared this *Closure Request* to document delineation and soil sampling activities performed at the Rojo 10-13 Tank Battery (Site). The purpose of the Site assessment, delineation, and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of produced water. Based on field observations, delineation activities, and soil sample laboratory analytical results, BTA is submitting this *Closure Request*, describing Site assessment and delineation activities that have occurred and requesting no further action and closure for Incident Number NRM2022745673.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit A, Section 27, Township 25 South, Range 33 East, in Lea County, New Mexico (32.10846°, -103.55289°) and is associated with oil and gas exploration and production operations on private land owned by KAML Limited.

On August 12, 2020, a hammer union on the water transfer line failed, resulting in the release of approximately 40 barrels (bbls) of produced water; no fluids were recovered. BTA reported the release to the New Mexico Oil Conservation Division (NMOCD) via a Release Notification Form C-141 (Form C-141) on August 13, 2020. The release was assigned Incident Number NRM2022745673.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on a Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be between 51 feet to 100 feet below ground surface (bgs) based on the closest groundwater well data. The closest groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NM OSE) well number C-04698-POD 1, located approximately 0.5 miles west of the Site. On January 3, 2023, a field geologist logged and described soils continuously to a total depth of 60 feet bgs. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing

groundwater, it was confirmed that groundwater beneath the Site is greater than 60 feet bgs. The borehole was properly abandoned using drill cuttings and hydrated bentonite chips. Based on the soil boring, depth to groundwater at the Site is confirmed to be between 51 feet and 100 feet bgs. All wells used for depth to groundwater determination are depicted on Figure 1 and the referenced well record is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is an irrigation canal, located approximately 4,246 feet southeast 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.

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
- Total TPH: 2,500 mg/kg
- Chloride: 10,000 mg/kg

DELINEATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On August 1 and August 2, 2023, Ensolum personnel were at the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. No visible indications of the historical release were observed during the Site visit. Seven delineation soil samples (SS01 through SS07) were collected around the release extent at a depth of 0.5 feet below ground surface (bgs) to confirm the lateral extent of the release. Five boreholes (BH01 through BH05) were advanced via hand auger within the release extent to assess for the presence or absence of impacted soil resulting from the release. The boreholes were advanced to depths ranging from 1-foot to 4 feet bgs. Discrete delineation soil samples were collected from the boreholes at depths ranging from 0.5 feet to 4 feet bgs. Field screening results and observations were logged on lithologic/soil sampling logs, which are included in Appendix B. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included as Appendix C.

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 constituents 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 Standard Method SM4500.

Laboratory analytical results for delineation soil samples SS01 through SS07, collected around the release extent, and the delineation samples from boreholes BH01 through BH05, collected within the release extent, indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria and confirmed the absence of impacted soil within and around the release area. Laboratory

analytical results are summarized in Table 1 and the complete analytical reports are included as Appendix D.

CLOSURE REQUEST

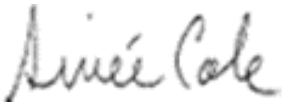
Site assessment and delineation activities were conducted at the Site to assess for the presence or absence of impacted soil resulting from the August 12, 2020, release of produced water. Laboratory analytical results for the delineation soil samples, collected within and around the release extent, indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria. Based on laboratory analytical results, no impacted soil was identified, and no further remediation is required.

No visible indications of the release were observed. Initial response efforts and natural attenuation have mitigated impacts at this Site. BTA believes the remedial actions completed are protective of human health, the environment, and groundwater. As such, BTA respectfully requests closure for Incident Number NRM2022745673. Notifications submitted to the NMOCD are included in Appendix E and the final Form C-141 is included as Appendix F.

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

Sincerely,
Ensolum, LLC

Hadlie Green
Project Geologist



Aimee Cole
Senior Managing Scientist

cc: Kelton Beaird, BTA
KAML Limited

Appendices:

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

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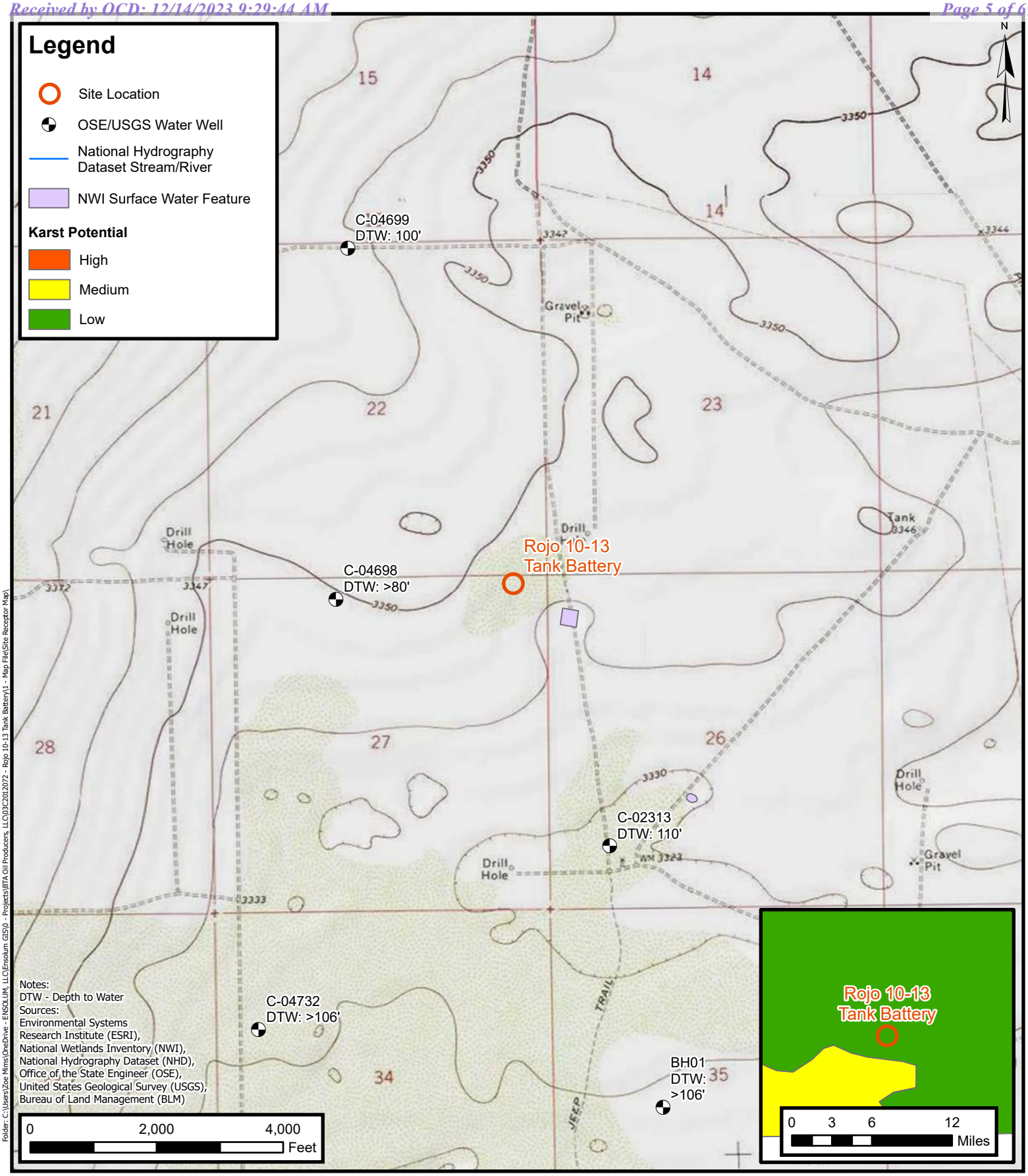
FIGURES



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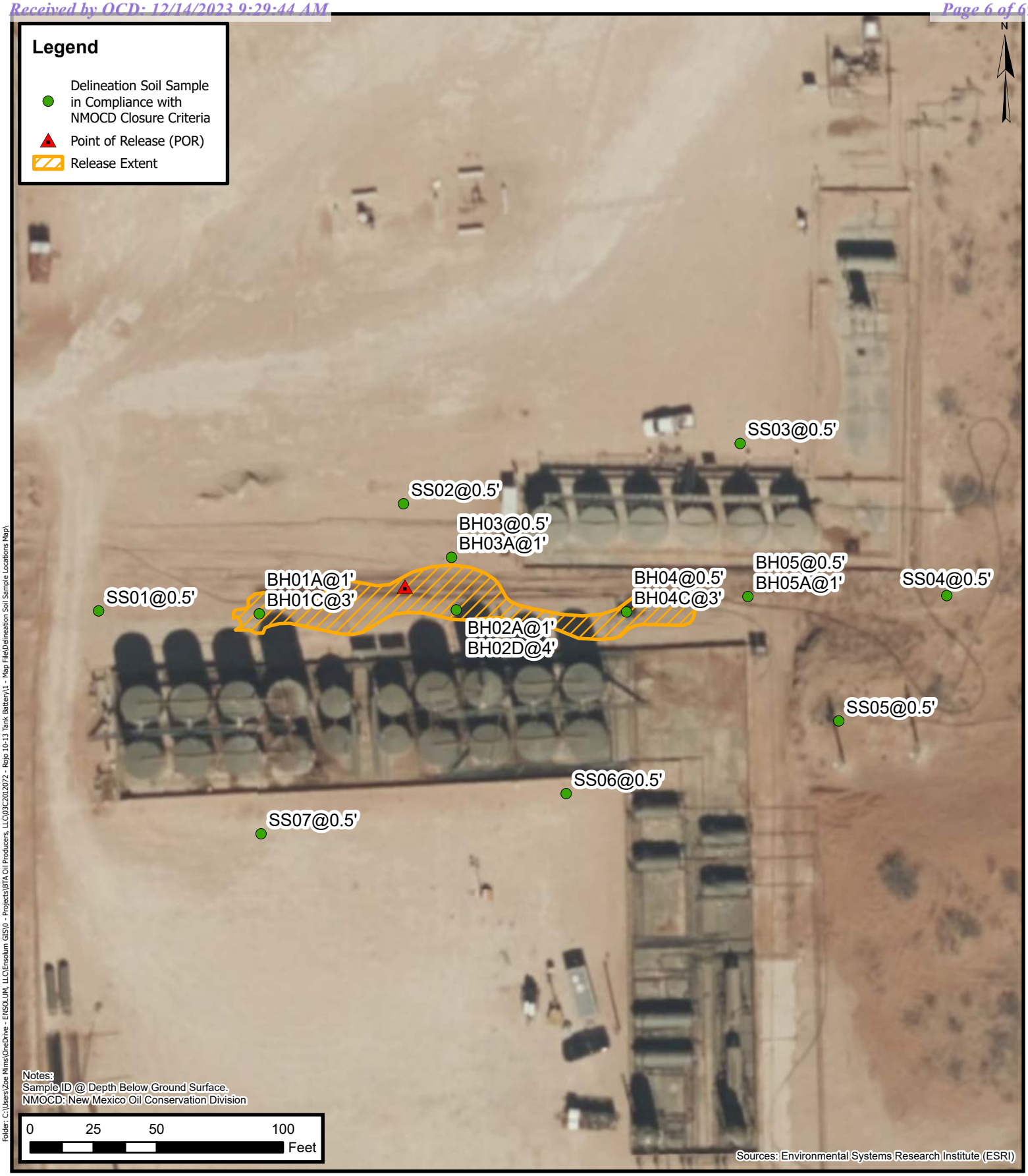
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

BTA Oil Producers, LLC
Rojo 10-13 Tank Battery
Incident Number: NRM2022745673
Unit A, Sec 27, T25S, R33E
Lea County, New Mexico

FIGURE 1



Folder: C:\Users\Zoe Mims\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\BTA Oil Producers, LLC\03C2012072 - Rojo 10-13 Tank Battery\1 - Map File\Delineation Soil Sample Locations Map\

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Environmental, Engineering and Hydrogeologic Consultants

Delineation Soil Sample Locations

BTA Oil Producers, LLC
Rojo 10-13 Tank Battery
Incident Number: NRM2022745673
Unit A, Sec 27, T25S, R33E
Lea County, New Mexico

FIGURE 2

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Rojo 10-13 Tank Battery
BTA Oil Producers, LLC
Lea County, New Mexico

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 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Delineation Soil Samples										
SS01	08/02/2023	0.5	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	16.0
SS02	08/02/2023	0.5	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	16.0
SS03	08/02/2023	0.5	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	16.0
SS04	08/02/2023	0.5	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	16.0
SS05	08/02/2023	0.5	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	16.0
SS06	08/02/2023	0.5	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	<16.0
SS07	08/02/2023	0.5	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	<16.0
BH01A	08/01/2023	1	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	16.0
BH01C	08/01/2023	3	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	48.0
BH02A	08/01/2023	1	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	128
BH02D	08/01/2023	4	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	320
BH03	08/02/2023	0.5	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	32.0
BH03A	08/02/2023	1	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	48.0
BH04	08/02/2023	0.5	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	96.0
BH04C	08/02/2023	3	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	48.0
BH05	08/02/2023	0.5	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	16.0
BH05A	08/02/2023	1	<0.025	<0.275	<25.0	<25.0	<25.0	<25.0	<25.0	16.0

Notes:

bgs: below ground surface
mg/kg: milligrams per kilogram
NMOCD: New Mexico Oil Conservation Division
NMAC: New Mexico Administrative Code
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
Concentrations in **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

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APPENDIX A

Referenced Well Records

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	Sample Name: BH01 / C-04698	Date: 1/3/2023
	Site Name: Rojo 26 Oil Dump Valve Failure	
	Incident Number: nAPP2224256412	
	Job Number: 03C2012006	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS / MR	Method: Air Rotary
Coordinates: 32.107784, -103.562235	Hole Diameter: 6"	Total Depth: 60'

Comments: Soil boring was advanced to a total depth of 60' bgs. No water was observed within the soil boring after at least 72 hours. On 1/16/2023 the soil boring was plugged and abandoned using hydrated bentonite chips.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE	(0-30'), CALICHE, coarse grain, well graded, white to tan, dry, no stain or odor.
Dry	-	-	N	-	-	10		
Dry	-	-	N	-	-	20		@20' color change to pink/tan
Dry	-	-	N	-	-	30	SP-SM	(30-78'), SAND, medium to fine grain, poorly graded with trace caliche nodules, red to orange, dry, no stain, no odor.
Dry	-	-	N	-	-	40		
Dry	-	-	N	-	-	50		@50', slightly cohesive with trace clay
Dry	-	-	N	-	-	60		NOTE: refusal @ 60' using air rotary drill rig due to abundant sand.

Total Depth @ 60 feet bgs

WELL PLUGGING PLAN OF OPERATIONS

NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging. This form may be used to plug a single well, or if you are plugging multiple monitoring wells on the same site using the same plugging methodology.

Alert! Your well may be eligible to participate in the Aquifer Mapping Program (AMP)-NM Bureau of Geology geoinfo.nmt.edu/resources/water/cgmn/ if within an area of interest and meets the minimum construction requirements, such as there is still water in your well, and the well construction reflected in a well record and log is not compromised, contact AMP at 575-835-5038 or -6951, or by email nmbg-waterlevels@nmt.edu, prior to completing this prior form. Showing proof to the OSE that your well was accepted in this program, may delay the plugging of your well until a later date.

I. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP: ☐ Check here if proposing one plan for multiple monitoring wells on the same site and attaching WD-08m

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: ~~BH01~~ C-4698-POD1

Name of well owner: BTA Oil Producers, LLC

Mailing address: 104 S. Pecos Street County:

City: Midland State: TX Zip code: 79701

Phone number: 432-682-3753 E-mail: bhall@btaoil.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: West Texas Drilling Services

New Mexico Well Driller License No.: WD #1184 Expiration Date: 10/31/2023

IV. WELL INFORMATION: ☐ **Check here if this plan describes method for plugging multiple monitoring wells on the same site and attach supplemental form WD-08m and skip to #2 in this section.**

Note: A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 32 deg, 6 min, 28.0224 sec
Longitude: 103 deg, 33 min, 44.046 sec, NAD 83

2) Reason(s) for plugging well(s):

Soil boring

3) Was well used for any type of monitoring program? No If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? NA If yes, provide additional detail, including analytical results and/or laboratory report(s):

5) Static water level: >100 feet below land surface / feet above land surface (circle one)

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6) Depth of the well: 110 feet

7) Inside diameter of innermost casing: 2 inches.

8) Casing material: Temporary PVC SCF 40

9) The well was constructed with:

☐ an open-hole production interval, state the open interval: NA

☐ a well screen or perforated pipe, state the screened interval(s): NA

10) What annular interval surrounding the artesian casing of this well is cement-grouted? NA

11) Was the well built with surface casing? No If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? _____ If yes, please describe:

12) Has all pumping equipment and associated piping been removed from the well? _____ If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

☐ **If plugging method differs between multiple wells on same site, a separate form must be completed for each method.**

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.

Also, if this planned plugging plan requires a variance to 19.27.4 NMAC, attach a detailed variance request signed by the applicant.

1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well:

The temporary 2" we;; material will be removed. If no water is encountered, drill cuttings will be used to ten feet below ground surface (bgs) and plugged using hydrated bentonite. If groundwater is encountered the boring will be plugged, tremie from bottom to a slurry of Portland Type I/II Neat cement in lifts.

2) Will well head be cut-off below land surface after plugging? NA

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant. Attach a copy of the batch mix recipe from the cement company and/or product description for specialty cement mixes or any sealant that deviates from the list of OSE approved sealants.

1) For plugging intervals that employ cement grout, complete and attach Table A.

2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.

3) Theoretical volume of grout required to plug the well to land surface: 287

4) Type of Cement proposed: Type I/II

5) Proposed cement grout mix: <6.0 gallons of water per 94 pound sack of Portland cement.

6) Will the grout be: _____ batch-mixed and delivered to the site

X mixed on site

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7) Grout additives requested, and percent by dry weight relative to cement:

NA

8) Additional notes and calculations:

NA

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

NA

VIII. SIGNATURE:

I, BOB HALL, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

BC Hall — Signature of Applicant

01/09/2023 — Date

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

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X Approved subject to the attached conditions.

_____ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 20th day of January, 2023

Mike A. Hamman P.E., New Mexico State Engineer

By: K. Parekh

KASHYAP PAREKH

W.R.M.I

GREAT SEAL OF THE STATE OF NEW MEXICO 1912

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)	NA	NA	0
Bottom of proposed interval of grout placement (ft bgl)	NA	NA	100
Theoretical volume of grout required per interval (gallons)	NA	NA	287
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement	NA	NA	<6.0
Mixed on-site or batch-mixed and delivered?	NA	NA	onsite
Grout additive 1 requested	NA	NA	NA
Additive 1 percent by dry weight relative to cement	NA	NA	NA
Grout additive 2 requested	NA	NA	NA
Additive 2 percent by dry weight relative to cement	NA	NA	NA

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TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)	NA	NA	0
Bottom of proposed sealant of grout placement (ft bgl)	NA	NA	10
Theoretical volume of sealant required per interval (gallons)	NA	NA	26
Proposed abandonment sealant (manufacturer and trade name)	NA	NA	Bariod Hole Plug

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STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
ROSWELL
1900 West Second St.
Roswell, New Mexico 88201
Phone: (575) 622-6521
Fax: (575) 623- 8559

Applicant has identified wells, listed below, to be plugged. West Texas Drilling Services (WD-1184) will perform the plugging.

Permittee: BTA Oil Producers, LLC
NMOSE Permit Number: C-4698-POD1

NMOSE File	Casing diameter (inches)	Well depth (feet bgl)	Approximate static water level (feet bgl)	Latitude	Longitude
C-4698-POD1	2.0 (Soil Boring)	110	100	32° 6' 28.0224"	103° 33' 44.046''

Specific Plugging Conditions of Approval for Well located in Lea County, New Mexico.

1. Water well drilling and well drilling activities, including well plugging, are regulated under 19.27.4 NMAC, which requires any person engaged in the business of well drilling within New Mexico to obtain a Well Driller License issued by the New Mexico Office of the State Engineer (NMOSE). Therefore, the firm of a New Mexico licensed Well Driller shall perform the well plugging.

2. Ground Water encountered: The total Theoretical volume of sealant required for abandonment of soil boring well is approximately 17.94 gallons. Total minimum volume of necessary sealant shall be calculated upon sounding the actual pluggable depth of well, which is estimated at 110 feet.

3. Dry Hole: The total Theoretical volume of sealant required for abandonment of soil boring well is approximately 1.63 gallons. Total minimum volume of necessary sealant shall be calculated upon sounding the actual pluggable depth of well, which is estimated at 10 feet.

4. Ground Water encountered: Type I/II Portland cement mixed with 5.2 to 6.0 gallons of fresh water per 94-lb sack of cement is approved for the plugging the well.

5. Dry Hole: (a) Drill cuttings up to ten feet of land surface. (b) 10 feet to 0 feet – Hydrated bentonite. The bentonite shall be hydrated separately with its required increments of water prior to being mixed into the cement slurry.

6. Sealant shall be placed by pumping through a tremie pipe extended to near well bottom and kept below top of the slurry column as the well is plugged from bottom-upwards in a manner that displaces the standing water column upwards from below. Tremie pipe may be pulled as necessary to retain minimal submergence in the advancing column of sealant.

7. Should cement "shrinks-back" occur in the well, use of a tremie for topping off is required for cement placement deeper than 20 feet below land surface or if water is present in the casing. The approved sealant for topping off is identified in condition 3. and 4. of these Specific Conditions of Approval.

8. Any open annulus encountered surrounding the casing shall also be sealed by the placement of the approved sealant. When plugging shallow wells with no construction or environmental concerns, and if the well record on a well to be plugged shows a proper 20-foot annular seal, a plugging plan can propose the use of clean fill material to a nominal 30 feet bgs, then placing an OSE approved sealant to surface. Lacking that information, we would require an excavation of at least 2-feet which shall then be filled in its entirety with sealant to surface.

9. Should the NMED, or another regulatory agency sharing jurisdiction of the project authorize, or by regulation require a more stringent well plugging procedure than herein acknowledged, the more-stringent procedure should be followed. This, in part, includes provisions regarding pre-authorization to proceed, contaminant remediation, inspection, pulling/perforating of casing, or prohibition of free discharge of any fluid from the borehole during or related to the plugging process.

10. NMOSE witnessing of the plugging of the soil boring will not be required.

11. Any deviation from this plan must obtain an approved variance from this office prior to implementation.

12. A Well Plugging Record itemizing actual abandonment process and materials used shall be filed with the State Engineer within 30 days after completion of well plugging. For the plugging record, please resurvey coordinate location for well and note coordinate system for GPS unit. Please attach a copy of these plugging conditions.

The NMOSE Well Plugging Plan of Operations is hereby approved with the aforesaid conditions applied.

Witness my hand and seal this 20th day of January 2023

Mike A. Hamman, P.E. State Engineer

By: K. Parekh

Kashyap Parekh
Water Resources Manager I

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
ROSWELL

Mike A. Hamman, P.E.
State Engineer

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
Phone: (575) 622-6521
Fax: (575) 623-8559

January 20, 2023

BTA Oil Producers, LLC
104 S. Pecos Street
Midland, TX 79701

RE: Well Plugging Plan of Operations for well no. C-4698-POD1

Greetings:

Enclosed is your copy of the Well Plugging Plan of Operations for the above referenced well subject to the attached Conditions of Approval. The proposed method of operation is found to be acceptable and in accordance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted June 30, 2017 by the State Engineer. subject to the attached Conditions of Approval.

Well Plugging Plan of Operations form (WD-08) has been updated. Current form can be found on the OSE website at the following link https://www.ose.state.nm.us/Statewide/wdForms.php.

Within 30 days after the well is plugged, the well driller is required to file a complete plugging record with the OSE and the permit holder.

Sincerely,

K. Parekh

Kashyap Parekh
Water Resources Manager I

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APPENDIX B

Lithologic Soil Sampling Logs

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	Sample Name: BH01	Date: 8/1/23
	Site Name: Rojo 10-13 Tank Battery	
	Incident Number: NRM2022745673	
	Job Number: 03C2012072	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Tabitha Guadin	Method: Handauger
Coordinates: 32.108463, -103.553357	Hole Diameter: 2in	Total Depth: 3 ft bgs

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	257	0.9	N	BH01		0.5	SP	SAND, brown, poorly sorted, no odor, no staining
Dry	132.6	244.7	N	BH01A	1	1	SP	SAND, red, brown, poorly sorted, no odor, no staining
Dry	102.5	347.8	N	BH01B		2	SP	SAA
Dry	207.7	417.3	N	BH01C	3	3	SP	SAA
								Refusal @ 3 feet bgs
								TD at 3 ft bgs

ENSOLUM

	Sample Name: BH02	Date: 8/1/23
	Site Name: Rojo 10-13 Tank Battery	
	Incident Number: NRM2022745673	
	Job Number: 03C2012072	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Tabitha Guadin	Method: Handauger
Coordinates: 32.108472, -103.553105	Hole Diameter: 2in	Total Depth: 4 ft bgs

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	429.5	0.4	N	BH02		0.5	CCHE	Caliche, sand, gray, brown, no staining, no odor
Moist	461.5	201.3	N	BH02A	1	1	SW	SAND, reddish brown, well sorted, no staining, no odor
Moist	428.2	273.8	N	BH02B		2	SP	SAND, reddish brown, poorly sorted, no staining, no odor
Moist	572.4	142.2	N	BH02C		3	SP	SAA
Moist	875	108.7	N	BH02D	4	4	SW	Caliche, sand, white, gray, brown, well sorted, no staining, no odor TD at 4 ft bgs

ENSOLUM

	Sample Name: BH03	Date: 8/2/23
	Site Name: Rojo 10-13 Tank Battery	
	Incident Number: NRM2022745673	
	Job Number: 03C2012072	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Tabitha Guadin	Method: Handauger
Coordinates: 32.108533, -103.553112	Hole Diameter: 2in	Total Depth: 1 ft bg

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	118.6	116.5	N	BH03	0.5	0.5	CCHE	CALICHE, white, tan, well-sorted, no staining, no odor
Dry	134.6	442.2	N	BH03A	1	1	SAA	SAA (Same as above)
								Refusal at 1 ft bgs
								TD at 1 ft bg

ENSOLUM

	Sample Name: BH04	Date: 8/2/23
	Site Name: Rojo 10-13 Tank Battery	
	Incident Number: NRM2022745673	
	Job Number: 03C2012072	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Tabitha Guadin	Method: Handauger
Coordinates: 32.108467, -103.552885	Hole Diameter: 2in	Total Depth: 4 ft bgs

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Moist	312.8	272.3	N	BH04	0.5	0.5	SW	SAND, brown, well sorted, no staining, no odor
Moist	298.1	241	N	BH04A		1	SAA	SAA no staining
Moist	232	285.2	N	BH04B		2	SW	SAND, reddish-brown, white, well-sorted, no staining, no odor
Moist	322.5	432.4	N	BH04C	3	3	SW	SAND, caliche, well sorted, no staining, no odor, brown, white
								Refusal at 3 ft bgs TD at 3 ft bgs

ENSOLUM

	Sample Name: BH05	Date: 8/2/23
	Site Name: Rojo 10-13 Tank Battery	
	Incident Number: NRM2022745673	
	Job Number: 03C2012072	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Tabitha Guadin	Method: Handauger
Coordinates: 32.108493, -103.552700	Hole Diameter: 2in	Total Depth: 1 ft bg

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	79.5	19.4	N	BH05	0.5	0.5	SP	SAND, light brown, poorly sorted, no staining, no odor
Dry	109	35.3	N	BH05A	1	1	SW	SAND, light brown, rocky, well sorted, no staining, no odor Refusal @ 1 ft bgs TD at 1 ft bg

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APPENDIX C

Photographic Log

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Photographic Log
BTA Oil Producers
Rojo 10-13 Tank Battery
Incident Number NRM2022745673

Photograph 1 Date: August 1, 2023

Description: View of release extent during delineation activities, facing east.

Photograph 1 Date: August 1, 2023

Description: View of release extent during delineation activities, facing west.

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

CARDINAL Laboratories

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

August 09, 2023

HADLIE GREEN

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: ROJO 7811 27 FEDERAL COM 13H

Enclosed are the results of analyses for samples received by the laboratory on 08/02/23 15:25.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/01/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: BH 01 A 1' (H234093-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	08/07/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/07/2023	ND	165	82.4	200	5.29	
DRO >C12-C28	<25.0	25.0	08/07/2023	ND	151	75.5	200	6.43	
DRO >C28-C35	<25.0	25.0	08/07/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/07/2023	ND	317	79.2	400	5.80	

Surrogate: 1-Chlorooctane *83.8 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *84.8 %* *41.4-161*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/01/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: BH 01 C 3' (H234093-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	08/07/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/07/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/07/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/07/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/07/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *95.0 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *104 %* *41.4-161*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/01/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: BH 02 A 1' (H234093-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	08/07/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/07/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/07/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/07/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/07/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *101 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *110 %* *41.4-161*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/01/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: BH 02 D 4' (H234093-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**320**	16.0	08/07/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/07/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/07/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/07/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/07/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *94.1 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *99.9 %* *41.4-161*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/02/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: BH 03 .5' (H234093-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.5 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	08/07/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/07/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/07/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/07/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/07/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *96.8 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *105 %* *41.4-161*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/02/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: BH 03 A 1' (H234093-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	08/07/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/07/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/07/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/07/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/07/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *91.1 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *101 %* *41.4-161*

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/02/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: BH 04 .5' (H234093-07)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	08/07/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/07/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/07/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/07/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/07/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *89.3 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *95.5 %* *41.4-161*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/02/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: BH 04 C 3' (H234093-08)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	08/07/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/07/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/07/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/07/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/07/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *98.6 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *106 %* *41.4-161*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/02/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: BH 05 .5' (H234093-09)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	08/07/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/07/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/07/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/07/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/07/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *93.3 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *99.4 %* *41.4-161*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/02/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: BH 05 A 1' (H234093-10)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	08/07/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/07/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/07/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/07/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/07/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *101 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *108 %* *41.4-161*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Notes and Definitions

BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC
Project Manager:	Hadlie Green
Address:	601 N. Marienfeld St. STE 400
City:	Midland State: TX Zip: 79701
Phone #:	432-557-8895 Fax #:
Project #:	03C2012045 Project Owner:
Project Name:	Rojo 7811 27 Federal Com 131H
Project Location:	
Sampler Name:	Tabitha Guadian

BILL TO

P.O. #:	
Company:	BTA Oil
Attn:	Kelton Beaird
Address:	104 S Pecos St
City:	Midland
State:	TX Zip: 79701
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX 8021	TPH 1005	Chlorides 300.0 4500 Pi 8/2/23	NFE 8/2/23	TAT
H234093																				
1	BH01A	1	G	1			X							8/1/23	1213	X	X	X		
2	BH01C	3	G	1			X							8/1/23	1217	X	X	X		
3	BH02A	1	G	1			X							8/1/23	1345	X	X	X		
4	BH02D	4	G	1			X							8/1/23	1400	X	X	X		
5	BH03	.5	G	1			X							8/2/23	1150	X	X	X		
6	BH03A	1	G	1			X							8/2/23	1155	X	X	X		
7	BH04	.5	G	1			X							8/2/23	1200	X	X	X		
8	BH04C	3	G	1			X							8/2/23	1215	X	X	X		
9	BH05	.5	G	1			X							8/2/23	1220	X	X	X		
10	BH05A	1	G	1			X							8/2/23	1225	X	X	X		

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Relinquished By:	Date: 8/2/23	Received By:	
	Time: 1525		
Relinquished By:	Date:	Received By:	
	Time:		

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

All Results are emailed. Please provide Email address:

BJennings@ensolum.com / hgreen@ensolum.com

REMARKS:

5 day TAT

Delivered By: (Circle One)	Observed Temp. °C 27	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☑ Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp. °C			Thermometer ID #113 #140 Correction Factor 0.5°C To 8/2/23

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

FORM-006 R 3.2 10/07/21

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

Received by OCD: 12/14/2023 9:29:44 AM

Released to Imaging: 2/28/2024 3:59:42 PM

CARDINAL Laboratories

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

August 09, 2023

HADLIE GREEN

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: ROJO 7811 27 FEDERAL COM 13H

Enclosed are the results of analyses for samples received by the laboratory on 08/02/23 15:25.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/02/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: SS 01 .5' (H234094-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	08/07/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/08/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/08/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/08/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/08/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *109 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *117 %* *41.4-161*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/02/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: SS 02 .5' (H234094-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	08/07/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/08/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/08/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/08/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/08/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *99.2 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *105 %* *41.4-161*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/02/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: SS 03 .5' (H234094-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	08/07/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/08/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/08/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/08/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/08/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *97.9 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *106 %* *41.4-161*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/02/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: SS 04 .5' (H234094-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.08	104	2.00	2.45	
Toluene*	<0.050	0.050	08/08/2023	ND	1.99	99.7	2.00	2.50	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	2.02	101	2.00	1.57	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	6.06	101	6.00	1.70	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	08/08/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/08/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/08/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/08/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/08/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *103 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *112 %* *41.4-161*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/02/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: SS 05 .5' (H234094-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.20	110	2.00	1.05	
Toluene*	<0.050	0.050	08/08/2023	ND	2.10	105	2.00	1.54	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	1.98	99.2	2.00	1.76	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	5.94	99.0	6.00	2.36	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *93.0 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	08/08/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/08/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/08/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/08/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/08/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *101 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *109 %* *41.4-161*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/02/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: SS 06 .5' (H234094-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.20	110	2.00	1.05	
Toluene*	<0.050	0.050	08/08/2023	ND	2.10	105	2.00	1.54	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	1.98	99.2	2.00	1.76	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	5.94	99.0	6.00	2.36	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *92.4 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/08/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/08/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/08/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/08/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/08/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *107 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *115 %* *41.4-161*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	08/02/2023	Sampling Date:	08/02/2023
Reported:	08/09/2023	Sampling Type:	Soil
Project Name:	ROJO 7811 27 FEDERAL COM 13H	Sampling Condition:	Cool & Intact
Project Number:	03C2012045	Sample Received By:	Tamara Oldaker
Project Location:	BTA		

Sample ID: SS 07 .5' (H234094-07)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	08/08/2023	ND	2.20	110	2.00	1.05	
Toluene*	<0.050	0.050	08/08/2023	ND	2.10	105	2.00	1.54	
Ethylbenzene*	<0.050	0.050	08/08/2023	ND	1.98	99.2	2.00	1.76	
Total Xylenes*	<0.150	0.150	08/08/2023	ND	5.94	99.0	6.00	2.36	
Total BTEX	<0.275	0.275	08/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *93.5 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/08/2023	ND	432	108	400	0.00	

TPH TX1005 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C12	<25.0	25.0	08/08/2023	ND	154	77.2	200	1.31	
DRO >C12-C28	<25.0	25.0	08/08/2023	ND	174	87.1	200	2.17	
DRO >C28-C35	<25.0	25.0	08/08/2023	ND					
Total TPH C6-C35*	<25.0	25.0	08/08/2023	ND	331	82.8	400	1.74	

Surrogate: 1-Chlorooctane *105 %* *44.9-134*

Surrogate: 1-Chlorooctadecane *113 %* *41.4-161*

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
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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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC
Project Manager:	Hadlie Green
Address:	601 N. Marienfeld St. STE 400
City:	Midland State: TX Zip: 79701
Phone #:	432-557-8895 Fax #:
Project #:	03C2012045 Project Owner:
Project Name:	Rojo 7811 27 Federal com 13H
Project Location:	
Sampler Name:	Tabitha Guadian

BILL TO

P.O. #:	
Company:	BTA Oil
Attn:	Kelton Beaird
Address:	104 S Pecos St
City:	Midland
State: TX	Zip: 79701
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	BTEX 8021	TPH 1005	Chlorides 4500 Cl- TP 8/2/23
H234094																		
1	SS01	.5	G	1			X							8/2/23	0951	X	X	X
2	SS02	.5	G	1			X							8/2/23	0956	X	X	X
3	SS03	.5	G	1			X							8/2/23	1001	X	X	X
4	SS04	.5	G	1			X							8/2/23	1006	X	X	X
5	SS05	.5	G	1			X							8/2/23	1011	X	X	X
6	SS06	.5	G	1			X							8/2/23	1016	X	X	X
7	SS07	.5	G	1			X							8/2/23	1022	X	X	X
	NFE										8/2/23							TAT

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Relinquished By:	Date: 8/2/23	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1525		All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	BJennings@ensolum.com / hgreen@ensolum.com
	Time:		REMARKS:
Delivered By: (Circle One)	Observed Temp. °C 2.7	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	Corrected Temp. °C		

5 day TAT

Turnaround Time: Standard ☑ Rush ☐

Thermometer ID ~~#113~~ #140 Correction Factor ~~0.5°C~~ T. 8/2/23

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

FORM-006 R 3.2 10/07/21

Received by OCD: 12/14/2023 9:29:44 AM

Released to Imaging: 2/28/2024 3:59:42 PM

ENSOLUM

APPENDIX E

NMOCD Notifications

From: Velez, Nelson, EMNRD
To: Hadlie Green
Cc: Tacoma Morrissey; Aimee Cole; Maxwell, Ashley, EMNRD
Subject: Re: [EXTERNAL] BTA - Sampling Notification Variance - Rojo 10-13 Tank Battery (Incident Number NRM2022745673)
Date: Friday, December 1, 2023 10:02:42 AM
Attachments: image002.png
image003.png
image004.png
image005.png
image006.png
image007.png
Outlook-z4szomdc.png

[**EXTERNAL EMAIL**]
Hadlie,

After reviewing, I now comprehend and approve your variance request.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

Thanks again and have a safe day!

Regards,

Nelson Velez • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Hadlie Green <hgreen@ensolum.com>
Sent: Friday, December 1, 2023 8:49 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Tacoma Morrissey <tmorrissey@ensolum.com>; Aimee Cole <acole@ensolum.com>; Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Subject: RE: [EXTERNAL] BTA - Sampling Notification Variance - Rojo 10-13 Tank Battery (Incident Number NRM2022745673)

Good morning Nelson,

Please see the attached table including the three delineation points within the NRM2022745673 release that occurred in August 2020. Boreholes BH01, BH02, and BH04 are within the release.

Please let me know if you have any questions or need any additional information.

Thank you,

Hadlie Green
Project Geologist
432-557-8895
hgreen@ensolum.com
Ensolum, LLC

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Friday, December 1, 2023 9:44 AM
To: Hadlie Green <hgreen@ensolum.com>
Cc: Tacoma Morrissey <tmorrissey@ensolum.com>; Aimee Cole <acole@ensolum.com>; Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Subject: Re: [EXTERNAL] BTA - Sampling Notification Variance - Rojo 10-13 Tank Battery (Incident Number NRM2022745673)

[**EXTERNAL EMAIL**]
Good morning Hadlie,

Thank you for your request. Please provide the lab analysis for the three (3) samples collected from the most recent release (NRM2022745673). Once verified, OCD will pronounce its determination toward the variance.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

Nelson Velez ● Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Hadlie Green <hgreen@ensolum.com>
Sent: Thursday, November 30, 2023 4:29 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Tacoma Morrissey <tmorrissey@ensolum.com>; Aimee Cole <acole@ensolum.com>
Subject: [EXTERNAL] BTA - Sampling Notification Variance - Rojo 10-13 Tank Battery (Incident Number NRM2022745673)

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

Good afternoon Nelson,

I'd like to request a Sampling Notification Variance for a historical incident that occurred on August 12, 2020 at the BTA Oil Producers, LLC (BTA) Rojo 10-13 Tank Battery (Incident Number NRM2022745673: 32.10846, -103.55289). A hammer union on the water transfer line failed, resulting in the release of approximately 40 barrels (bbls) or produced water off pad. There were no free-standing fluids recovered.

Ensolum, on behalf of BTA, completed delineation activities for a separate historical incident that occurred on November 13, 2018 at the BTA Rojo 7811 27 Federal Com 13H (Incident Number NCH1834763224: 32.108100, -103.552960). A diesel transfer pump failed, resulting in the release of approximately 30 bbls of produced water off pad. There were no free-standing fluids recovered. Delineation activities confirmed the absence of impacted soil within the release extent and a Closure Request was submitted to the NMOCD on September 18, 2023 and was approved on September 19, 2023.

Upon further investigation of the Rojo 10-13 Tank Battery (Incident Number NRM2022745673; marked in blue in the below snip) release, we determined that the release extent overlays the NCH1834763224 release extent previously approved and closed. I'd like to submit a Closure Request for the NRM2022745673 release using the same data collected for Incident NCH1834763224. The NMOCD notifications submitted were for the NCH1834763224 release and I would like to request a variance to use these same confirmation samples and notifications for the NRM2022745673 release.

Please let me know if you have any questions or need any additional information.

Thank you,

Hadlie Green
Project Geologist
432-557-8895
hgreen@ensolum.com
Ensolum, LLC

ENSOLUM

APPENDIX F

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	NRM2022745673
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: **32.10846°** Longitude: **-103.55289°**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: **Rojo 10-13 Tank Battery**	Site Type: **Tank Battery**
Date Release Discovered: **8/12/2020**	API# *(if applicable)* Nearest well: **Rojo 7811 27 Federal Com #13H API #30-025-44296**

Unit Letter	Section	Township	Range	County
~~B~~ A	**27**	**25S**	**33E**	**Lea**

NOT ACCEPTED

Surface Owner: ~~☒ State~~ ☐ Federal ☐ Tribal ☒ Private (*Name:* KAML Limited)

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)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) **40 BBL**	Volume Recovered (bbls) **0 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

A hammer union (located outside of secondary containment) on the water transfer line failed, allowing produced water to be released outside of the secondary containment of the battery. Please note – the field foreman provided an estimate of the volume released as 40 BBL of produced water, no recovery. There has been a delay in getting an aerial photo of the wetted area to use for a calculation as it approaches the end of the 24-hour required notification period. I will make that part of the subsequent report for the assessment and clean-up of the release.

State of New Mexico
Oil Conservation Division

Incident ID	NRM2022745673
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? **The spill volume was greater than 25 BBL, which the NMOCD Rules define as a major release.**

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Notice is provided within 24hours of discovery by the filing of this C-141 Report and distribution via email to NMOCD personnel: Mike Bratcher, Robert Hamlet, Victoria Venegas, and Jim Griswold.

Initial Response

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

☒ The source of the release has been stopped.
☒ 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: Bob Hall Date: **8/13/2020**

email: **bhall@btaoil.com** Telephone: **432-682-3753**

OCD Only

Received by: Ramona Marcus Date: 8/14/2020 *NOT ACCEPTED*

State of New Mexico
Oil Conservation Division

Incident ID	NRM2022745673
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?	>60 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ 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 ID	NRM2022745673
District RP	
Facility ID	
Application ID	

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: __Kelton Beaird_____ Title: __Environmental Manager_____

Signature:_____ Date: _____12/6/2023_____

email: __KBeaird@btaoil.com_____ Telephone: ___432-312-2203_____

OCD Only

Received by: _____ Date**:** _____

State of New Mexico
Oil Conservation Division

Incident ID	NRM2022745673
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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

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

☒ Description of remediation activities

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

Printed Name: __Kelton Beaird_____ Title: _Environmental Manager_____

Signature: _____ Date: _____12/6/2023_____

email: __KBeaird@btaoil.com_____ Telephone: ___432-312-2203_____

OCD Only

Received by: _____ Date**:** _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date**:** _____

Printed Name: _____ Title: _____

__

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

QUESTIONS

Action 294574

QUESTIONS

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 294574
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nRM2022745673**
Incident Name	**NRM2022745673 ROJO 10-13 TANK BATTERY @ 30-025-44296**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Closure Report Received**
Incident Well	**[30-025-44296] ROJO 7811 27 FEDERAL COM #013H**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	ROJO 10-13 TANK BATTERY
Date Release Discovered	08/12/2020
Surface Owner	State

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Equipment Failure | Other (Specify) | Produced Water | Released: 40 BBL | Recovered: 0 BBL | Lost: 40 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 294574
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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

I hereby agree and sign off to the above statement	Name: BTA ENSOLUM Title: Environmental Manager Email: kbeaird@btaoil.com Date: 12/14/2023

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QUESTIONS (continued)

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 294574
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 500 and 1000 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	320
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	08/01/2023
On what date will (or did) the final sampling or liner inspection occur	08/02/2023
On what date will (or was) the remediation complete(d)	08/02/2023
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	0
What is the estimated volume (in cubic yards) that will be remediated	0
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 294574
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	No
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	Yes
Other Non-listed Remedial Process. Please specify	Delineation only, no impacted soil identified
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: BTA ENSOLUM Title: Environmental Manager Email: kbeaird@btaoil.com Date: 12/14/2023
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 294574
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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QUESTIONS (continued)

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 294574
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**294566**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**08/01/2023**
What was the (estimated) number of samples that were to be gathered	**17**
What was the sampling surface area in square feet	**2389**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Was this release entirely contained within a lined containment area	**No**
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	0
What was the total volume (cubic yards) remediated	0
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	delineation only; no impacted soil identified

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

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

I hereby agree and sign off to the above statement	Name: BTA ENSOLUM Title: Environmental Manager Email: kbeaird@btaoil.com Date: 12/14/2023

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

QUESTIONS (continued)

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 294574
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 294574

CONDITIONS

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 294574
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	2/28/2024