ENSOLUM

October 2, 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
Mesa 8105 JV-P #006
Incident Number nOY1814228433
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 Mesa 8105 JV-P #006 (Site), in accordance with an approved *Remediation Work Plan (Work Plan)* submitted June 9, 2023. The *Work Plan* proposed lateral and vertical delineation of the release. Based on the delineation activities completed and laboratory analytical results from the soil sampling events in accordance with the *Work Plan*, BTA is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Number nOY1814228433.

Details regarding the release, Site characterization, and proposed remediation activities can be referenced in the original *Work Plan* submitted on June 9, 2023. The *Work Plan* is included as Appendix A. On July 7, 2023, the New Mexico Oil Conservation Division (NMOCD) approved the *Work Plan* with the following conditions:

> *Workplan/Remediation Plan is approved with the following conditions: Please make sure the floor confirmation samples are delineated/excavated to meet closure criteria standards for proven depth to water determination. Sidewall samples should be delineated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. This application does not include the C-141 Remediation Pages. A Remediation Plan/ Closure report should be submitted no later than 10/05/2023.*

BACKGROUND

The Site is located in Unit B, Section 11, Township 26 South, Range 32 East, in Lea County, New Mexico (32.063978°, -103.643604°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On May 17, 2018, a produced water pipeline leak resulted in the release of approximately 80 barrels (bbls) of produced water. A vacuum truck was dispatched to the Site to recover free-standing fluids; approximately 50 bbls of produced water were recovered. BTA reported the release immediately to the NMOCD via email and submitted a Release Notification Form C-141 (Form C-141) on May 17, 2018. The release was assigned Incident Number nOY1814228433.

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Based on the results of the Site Characterization reported in the June 2023 *Work Plan* (Appendix A), the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

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

DELINEATION ACTIVITIES AND ANALYTICAL RESULTS

On August 11 and August 25, 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. Four delineation soil samples (SS01 through SS04) were collected around the inferred release extent at a depth of 0.5 feet below ground surface (bgs) to assess the lateral extent of chemicals of concern (COCs) resulting from the produced water release. Boreholes (BH01 through BH04) were advanced via hand auger within the inferred release extent to assess the vertical extent of the release. The boreholes were advanced to a depth of 4 feet bgs. Discrete delineation soil samples were collected from the boreholes at depths ranging from 1-foot to 4 feet bgs. 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. Field screening results and observations were logged on lithologic/soil sampling logs, which are included in Appendix B. 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 COCs: BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method SM4500.

Laboratory analytical results for delineation soil samples SS01 through SS04 and all delineation samples collected from boreholes BH01 through BH04, collected within and around the inferred release extent, respectively, 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 inferred 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 May 2018 release of produced water. Laboratory analytical results for the delineation soil samples 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/or natural attenuation appear to have mitigated potential impacts at this Site. BTA believes these remedial actions are protective of human health, the environment, and groundwater. As such, BTA respectfully requests closure for Incident Number nOY1814228433. 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

Daniel R. Moir, PG
Senior Managing Geologist

cc: Kelton Beaird, BTA
Bureau of Land Management

Appendices:

Figure 1	Delineation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Original Remediation Work Plan
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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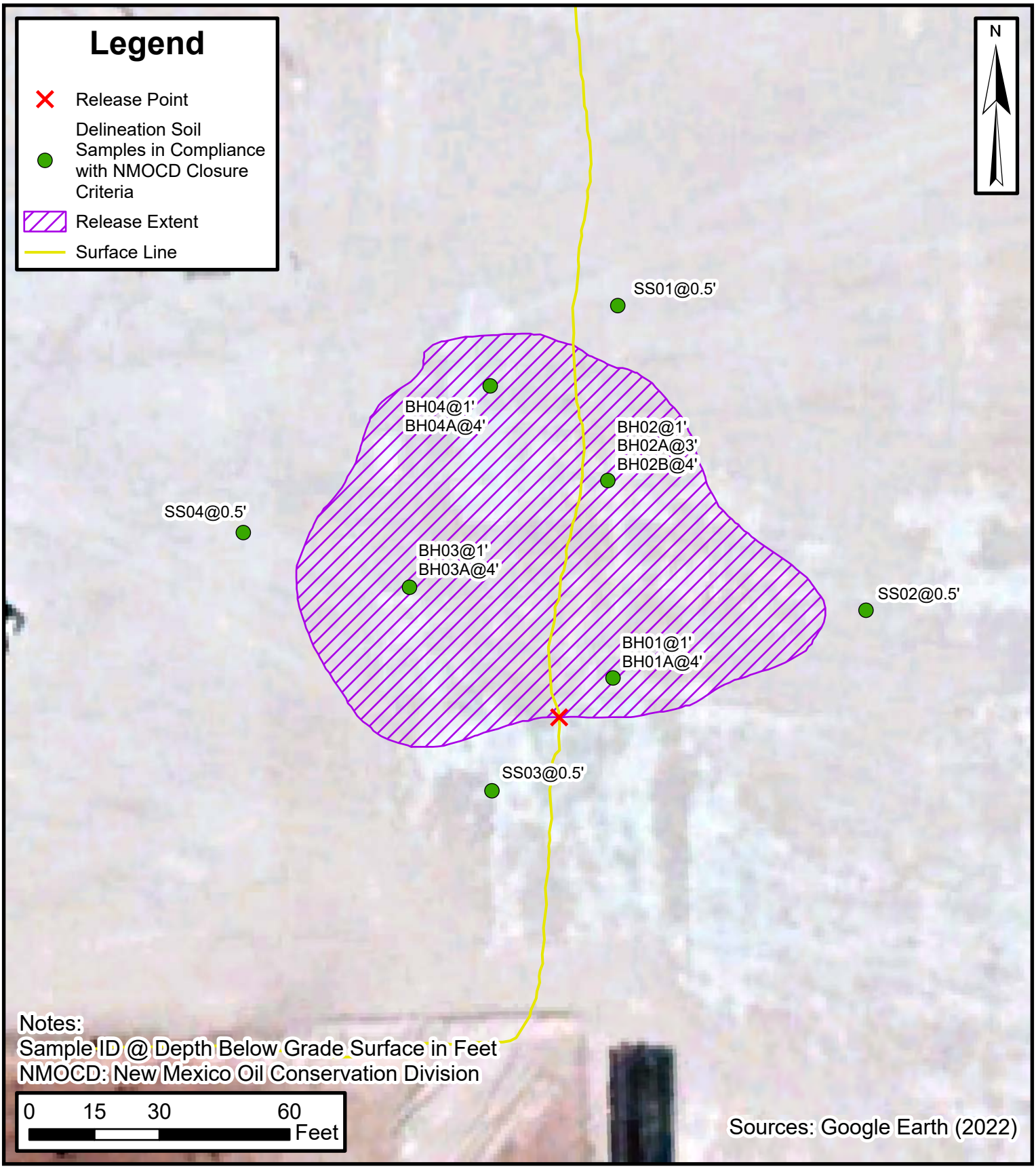
FIGURES



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Environmental, Engineering and Hydrogeologic Consultants

Delineation Soil Sample Locations

Mesa 8105 JV-P #006
BTA Oil Producers, LLC
Incident Number: nOY1814228433
Unit B, Sec 11, T26S, R32E
Lea County, New Mexico

FIGURE
1

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
MESA 8105 JV-P #006
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	20,000
Delineation Soil Samples										
SS01	08/11/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SS02	08/11/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256
SS03	08/11/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SS04	08/11/2023	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
BH01	08/11/2023	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
BH01A	08/25/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
BH02	08/11/2023	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
BH02A	08/11/2023	3	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	288
BH02B	08/11/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
BH03	08/11/2023	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
BH03A	08/11/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
BH04	08/11/2023	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
BH04A	08/11/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0

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

Original Remediation Work Plan

ENSOLUM

June 9, 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: Remediation Work Plan
Mesa 8105 JV-P #006
Incident Number nOY1814228433
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of BTA Oil Producers, LLC (BTA), has prepared the following *Remediation Work Plan* (*Work Plan*) to propose assessment and soil sampling activities to confirm the presence or absence of impacted soil at the Mesa 8105 JV-P #006 (Site). The purpose of the Site assessment and soil sampling activities is to determine if impacted soil is present and if so, delineate the lateral and vertical extent of impacted soil resulting from a historical release of produced water at the Site.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit B, Section 11, Township 26 South, Range 32 East, in Lea County, New Mexico (32.063978°, -103.643604°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On May 17, 2018, a produced water pipeline leak resulted in the release of approximately 80 barrels (bbls) of produced water. A vacuum truck was dispatched to the Site to recover free-standing fluids; approximately 50 bbls of produced water were recovered. BTA reported the release immediately to the New Mexico Oil Conservation Division (NMOCD) via email and submitted a Release Notification Form C-141 (Form C-141) on May 17, 2018. The release was assigned Incident Number nOY1814228433.

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 page 3 of the Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well is New Mexico Office of the State Engineer (NMOSE) well C-04549, located approximately 3,025 feet west of the Site. The well was drilled to a depth of 103 feet bgs during July 2021 and no groundwater was encountered. As such, depth to groundwater has been reasonably estimated to be greater than 100 feet bgs at the

Site. All wells used for depth to groundwater determination are depicted on Figure 1 and the referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a riverine, located approximately 880 feet east-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 underlain by stable geology (medium 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 for the following chemicals of concern (COCs):

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

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On May 30, 2023, Ensolum personnel completed a Site visit to evaluate the release extent based on information provided on the Form C-141 and visual observations; however, a drilling rig was actively operating on the pad, which obstructed Ensolum personnel from gathering analytical delineation samples due to health and safety concerns as well as the physical impedance of the drilling equipment relative to the release extent location. As such, no initial Site assessment or delineation soil samples were collected. The approximate surface area of the release was estimated from the perimeter of surficial visual impacts and mapped with a handheld Global Positioning System (GPS) unit. The release extent is shown on Figure 2. A photographic log of the Site is included in Appendix B.

PROPOSED REMEDIATION WORKPLAN

A total of approximately 30 bbls of produced water was unrecovered following the release at the Site on May 17, 2018. Delineation soil sampling could not be completed at the Site on May 30, 2023, due to the presence of an actively operating drilling rig on the pad. Surficial visual staining was mapped out to document the release extent. The surface area of the release is estimated to be 7,880 square feet with a perimeter of approximately 342 feet. BTA requests approval to complete the following delineation activities once drilling operations are complete and the release area can be accessed:

- Initial Site assessment sampling in order to confirm the presence or absence of impacted soil, which will include horizontally and vertically delineating the release extent. Ensolum will advance representative hand auger or backhoe borings within the release extent and advance them until 1-foot bgs or until field screening results indicate concentrations of COCs in soil are in compliance with the Site Closure Criteria. Two soil samples will be collected from each of the soil borings within the release extent: the soil sample exhibiting the highest field screening results and the terminus of the soil boring. Additional soil samples will be collected at 0.5 feet bgs outside of the release extent to confirm the lateral definition of the release. Proposed soil sample locations are depicted on Figure 2.

- Delineation samples will be field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and screened for chloride utilizing Hach® chloride QuanTab® test strips.

- Soil samples will be 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 will be transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of the following 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 Methods Committee (SMC) Standard Method (SM) SM4500.

BTA will begin the delineation activities described above within 90 days of the date of approval of this *Work Plan* by the NMOCD. If laboratory analytical results indicate concentrations of all COCs are in compliance with the Site Closure Criteria, a Closure Request will be prepared and submitted to the NMOCD for concurrence. If laboratory analytical results do indicate the presence of impacted soil, BTA will submit a *Revised Remediation Work Plan (RRWP)* to outline additional remedial actions to address those findings.

BTA believes the scope of work described above meets the requirements set forth in 19.15.29 NMAC and is protective of human health, the environment, and groundwater. As such, BTA respectfully requests approval of this *Work Plan* from NMOCD.

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

Sincerely,
Ensolum, LLC

Wes Weichert, PG
Project Geologist

Tacoma Morrissey
Senior Geologist

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

Appendices:

Figure 1	Site Location Map
Figure 2	Release Extent and Proposed Soil Sample Locations
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Form C-141

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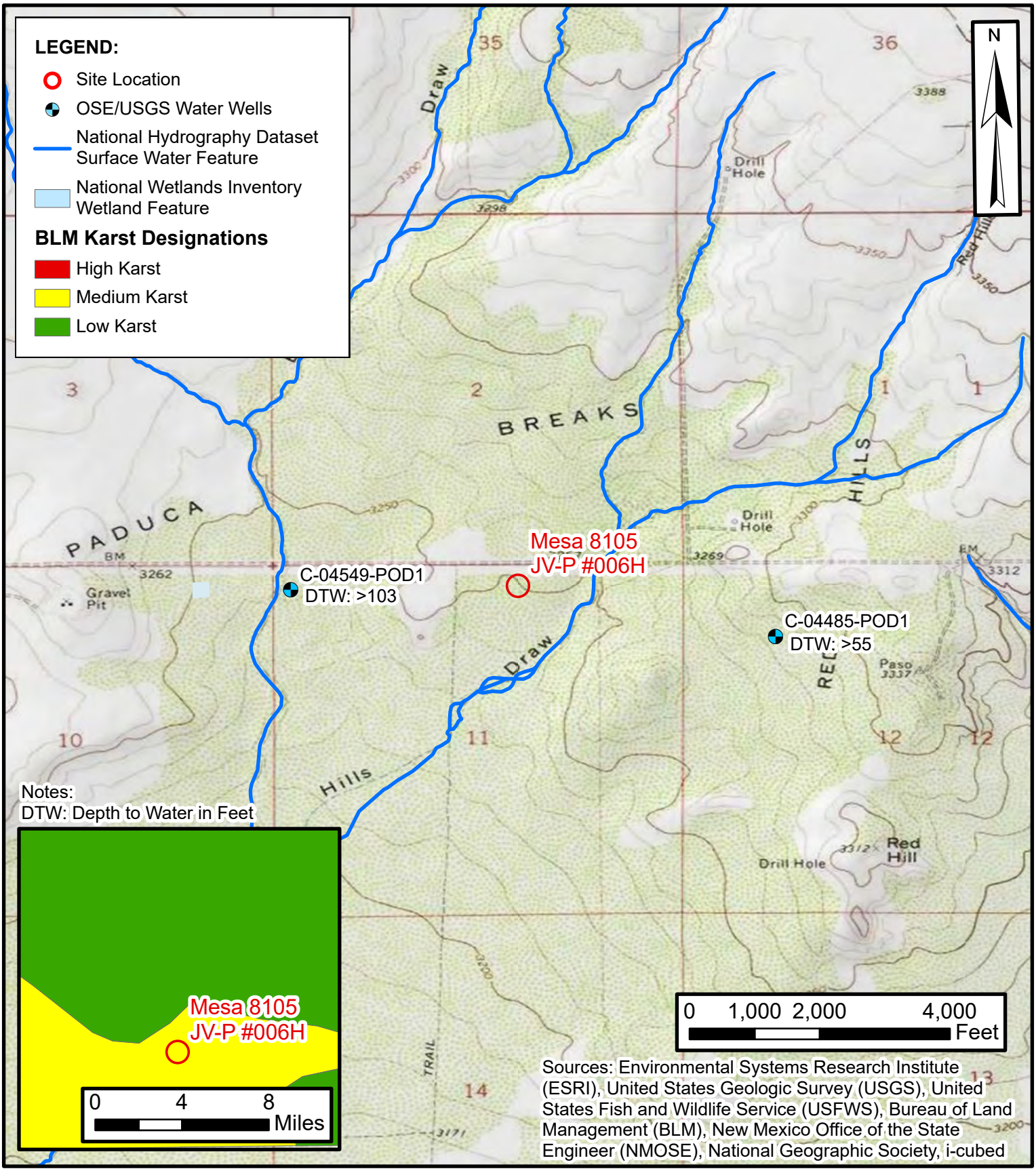
FIGURES



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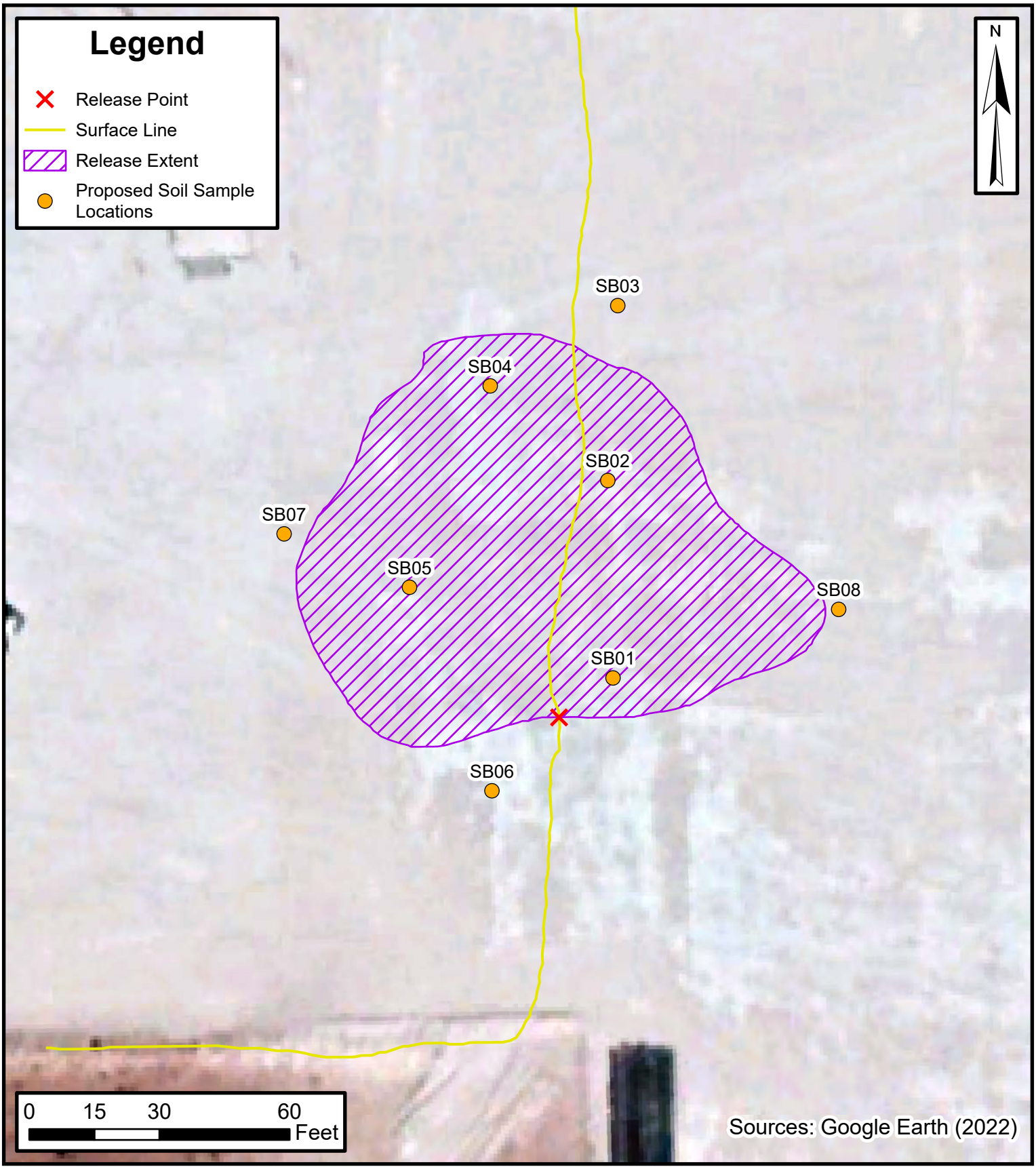
Site Location Map

Mesa 8105 JV-P #006H
BTA Oil Producers, LLC
Incident Number: nOY1814228433
Unit B, Sec 11, T26S, R32E
Lea County, New Mexico

FIGURE
1



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Environmental, Engineering and Hydrogeologic Consultants

Proposed Soil Sample Locations

Mesa 8105 JV-P #006H
BTA Oil Producers, LLC
Incident Number: nOY1814228433
Unit B, Sec 11, T26S, R32E
Lea County, New Mexico

FIGURE
2

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APPENDIX A

Referenced Well Records

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DIT AUG 2 2021 PM4:45

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
POD1 (MW-1)	n/a	C-4549

WELL OWNER NAME(S)	PHONE (OPTIONAL)
BTA Oil Producers	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
104 S. Pecos St.	Midland	TX	79701

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	4	40.92	N
	LONGITUDE	103	37	53.68	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

NW NW NW Sec. 11 T26S R32E

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1249	Jackie D. Atkins	Atkins Engineering Associates, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
07/14/2021	07/14/2021	temporary well material	103	n/a

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT): n/a

DRILLING FLUID: ☑ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☑ OTHER – SPECIFY: Hollow Stem Auger

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	103	±8.5	Boring- HSA	–	–	–	–

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO. C-4549	POD NO. 1	TRN NO. 698318	
LOCATION 26S-32E-11	1.1.1	WELL TAG ID NO. NA	PAGE 1 OF 2

OSE DIT AUG 2 2021 PM4:45

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	4	4	Caliche, Consolidated , White	Y ✓ N	
4	9	5	Caliche, Consolidated , with fine-grained, Tan	Y ✓ N	
9	14	5	Caliche, Consolidated , White	Y ✓ N	
14	19	5	Caliche, Consolidated , with fine-grained, Tan	Y ✓ N	
19	69	50	Sand, Fine-grained poorly graded, with caliche , Tanish Brown	Y ✓ N	
69	79	103	Clay, Stiff, High Plasticity, Dark Brown,	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface.

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Shane Eldridge, Cameron Pruitt, Carmelo Trevino

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

Jack Atkins — Jackie D. Atkins — 07/29/2021

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO. C-4549	POD NO. 1	TRN NO. 698318	
LOCATION 26S-32E-11	1.1.1	WELL TAG ID NO. NA	PAGE 2 OF 2

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APPENDIX B

Photographic Log

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Photographic Log
BTA Oil Producers, LLC
Mesa 8105 JV-P #006
Incident Number nOY1814228433

Photograph 1 Date: May 30, 2023

Description: View of historical release area and ongoing drilling operations

Photograph 2 Date: May 30, 2023

Description: View of historical release area and ongoing drilling operations

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APPENDIX C

Form 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

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company BTA OIL PRODUCERS, LLC	Contact KAYLA MCCONNELL
Address 104 SOUTH PECOS, MIDLAND TX, 79701	Telephone No. 432-682-3753
Facility Name MESA 8105 JV-P #6	Facility Type PRODUCED WATER PIPELINE

Surface Owner FEDERAL	Mineral Owner FEDERAL	API No. 30-025-42844

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	11	26S	32E	330	NORTH	2198	EAST	LEA

Latitude 32.063978 **Longitude** -103.643604 NAD83

NATURE OF RELEASE

Type of Release PRODUCED WATER	Volume of Release 80 BBL	Volume Recovered 50 BBL
Source of Release PIPELINE BURST	Date and Hour of Occurrence 5/17	Date and Hour of Discovery 5/17/18 6 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Olivia Yu - NMOCD Shelly Tucker - BLM	
By Whom? Kayla McConnell	Date and Hour 5/17/18 9:45 am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By Olivia Yu at 7:51 am, May 22, 2018

Describe Cause of Problem and Remedial Action Taken.*
Pipeline release carrying produced water was discovered early morning by field foremen. Vacuum truck was called in for cleanup, recovered estimated 50 bbl.

Describe Area Affected and Cleanup Action Taken.*
Vacuum truck was called in for cleanup, environmental group will be onsite 5/18/18 to evaluated the area.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: Kayla McConnell

Printed Name: Kayla McConnell

Title: Regulatory Analyst

E-mail Address: kmcconnell@btaoil.com

Date: 5/17/2018 Phone: 575-393-3117

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: DJ

Approval Date: 5/22/2018 Expiration Date:

Conditions of Approval: see attached directive

Attached ☑

* Attach Additional Sheets If Necessary

1RP-5067 nOY1814228433

pOY1814229961

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	nOY1814228433
District RP	1RP-5067
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party BTA Oil Producers, LL	OGRID 5380
Contact Name Kelton Beaird	Contact Telephone 432-312-2203
Contact email kbeaird@btaoil.com	Incident # *(assigned by OCD)*: nOY1814228433
Contact mailing address 104 S. Pecos St. Midland, TX 79701	

Location of Release Source

Latitude 32.063978 Longitude -103.643604
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Mesa 8105 JV-P #006	Site Type: Oil & Gas Production
Date Release Discovered: 05/17/2018	API# *(if applicable):* 30-025-42844

Unit Letter	Section	Township	Range	County
B	11	26S	32E	Lea

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls):	Volume Recovered (bbls):
☒ Produced Water	Volume Released (bbls): 80	Volume Recovered (bbls): 50
	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 produced water pipeline release was discovered early morning by the field foreman. A vacuum truck was called in for cleanup and recovered an estimated 50 bbls.

State of New Mexico
Oil Conservation Division

Incident ID	nOY1814228433
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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? Release greater than 25.0 bbls

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, immediate notice was given by Kayla McConnell (BTA) to Olivia Yu (NMOCD) and Shelly Tucker (BLM on May 17, 2018 at 9:45 am.

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:
N/A

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: Kelton Beaird Title: Environmental Manager

Signature: Date:

email: kbeaird@btaoil.com Telephone: 432-321-2203

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	nOY1814228433
District RP	1RP-5067
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?	>100 (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 2

State of New Mexico
Oil Conservation Division

Incident ID	nOY1814228433
District RP	1RP-5067
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? Release greater than 25.0 bbls
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, immediate notice was given by Kayla McConnell (BTA) to Olivia Yu (NMOCD) and Shelly Tucker (BLM on May 17, 2018 at 9:45 am.	

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.

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

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

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: Kelton Beaird Title: Environmental Manager

Signature: Date: 6-9-23

email: kbeaird@btaoil.com Telephone: 432-321-2203

OCD Only

Received by: Jocelyn Harimon Date: 06/09/2023

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	nOY1814228433
District RP	1RP-5067
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: 6-9-23

email: kbeaird@btaoil.com

Telephone: 432-312-2203

OCD Only

Received by: Jocelyn Harimon

Date: 06/09/2023

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 225770
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	• Workplan/Remediation Plan is approved with the following conditions: Please make sure the floor confirmation samples are delineated/excavated to meet closure criteria standards for proven depth to water determination. Sidewall samples should be delineated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. This application does not include the C-141 Remediation Pages. A Remediation Plan/ Closure report should be submitted no later than 10/05/2023.	7/7/2023

ENSOLUM

APPENDIX B

Lithologic Soil Sampling Logs

ENSOLUM	Sample Name: BH01	Date: 8/11/2023
	Site Name: Mesa 8105 JVP #006H	
	Incident Number: n0Y1814228433	
	Job Number: 03C2012050	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: M. O'Dell	Method: Hand Auger
Coordinates: 32.064055, -103.643546	Hole Diameter: 6"	Total Depth: 4'

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. All chloride measurements done with a + 40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	1,389	0.0	N			1	SP	Sandwith Caliche. Reddish brown, very fine , to fine grained, poorly graded, dry.
D	1,193	0.0	N			2	SP	Sand. Reddish brown, very fine to fine grained, poorly graded, dry.
D	1,193	0.0	N			3		
D	1,464	0.0	N	BH03	4	4		

Total Depth @ 4' bgs. Hand auger refusal at 4' bgs.

ENSOLUM	Sample Name: BH02	Date: 8/11/2023
	Site Name: Mesa 8105 JVP #006H	
	Incident Number: nOY1814228433	
	Job Number: 03C2012050	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: M. O'Dell	Method: Hand Auger
Coordinates: 32.064180, -103.643549	Hole Diameter: 6"	Total Depth: 4'

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. All chloride measurements done with a + 40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	1,389	0.0	N			1	SP	Sandwith Caliche. Reddish brown, very fine , to fine grained, poorly graded, dry.
D	1,193	0.0	N			2	SP	Sand. Reddish brown, very fine to fine grained, poorly graded, dry.
D	1,193	0.0	N			3		
D	1,464	0.0	N	BH03	4	4		

Total Depth @ 4' bgs. Hand auger refusal at 4' bgs.

ENSOLUM

	Sample Name: BH03	Date: 8/11/2023
	Site Name: Mesa 8105 JVP #006H	
	Incident Number: nOY1814228433	
	Job Number: 03C2012050	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: M. O'Dell	Method: Hand Auger
Coordinates: 32.064114, -103.643698	Hole Diameter: 6"	Total Depth: 4'

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. All chloride measurements done with a + 40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	1,389	0.0	N			1	SP	Sand. Reddish brown, very fine to fine grained, poorly graded, dry.
D	2,145	0.0	N			2		
D	1,193	0.0	N			3		
D	2,464	0.0	N	BH03	4	4		

Total Depth @ 4' bgs. Hand auger refusal at 4' bgs.

ENSOLUM

	Sample Name: BH02	Date: 8/11/2023
	Site Name: Mesa 8105 JVP #006H	
	Incident Number: nOY1814228433	
	Job Number: 03C2012050	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: M. O'Dell	Method: Hand Auger
Coordinates: 32.064242, -103.634636	Hole Diameter: 6"	Total Depth: 4'

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. All chloride measurements done with a + 40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	1,389	0	N			1	SP	Sand. Reddish brown, very fine to fine grained, poorly graded, dry.
D	1,193	0	N			2		
D	1,193	0	N			3		
D	1,464	0	N	BH03	4	4	SP	Sand with Caliche. Reddish brown, very fine to fine grained, poorly graded, dry.

Total Depth @ 4' bgs. Hand auger refusal at 4' bgs.

ENSOLUM

APPENDIX C

Photographic Log

Photographic Log
BTA Oil Producers, LLC
Mesa 8105 JV-P #006
Incident Number nOY1814228433

Photograph 1 Date: August 11, 2023

Description: Hand auger delineation activities at the location of BH02, facing southwest.

Photograph 2 Date: August 11, 2023

Description: Hand auger delineation activities at the location of BH03, facing northeast.

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

CARDINAL Laboratories

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

August 17, 2023

HADLIE GREEN

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MESA 8105 JVP #006H

Enclosed are the results of analyses for samples received by the laboratory on 08/14/23 11:04.

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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	08/14/2023	Sampling Date:	08/11/2023
Reported:	08/17/2023	Sampling Type:	Soil
Project Name:	MESA 8105 JVP #006H	Sampling Condition:	Cool & Intact
Project Number:	03C2012050	Sample Received By:	Tamara Oldaker
Project Location:	BTA (32.063978-103.643604)		

Sample ID: SS 01 0.5' (H234365-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/15/2023	ND	2.07	103	2.00	3.26	
Toluene*	<0.050	0.050	08/15/2023	ND	2.10	105	2.00	2.73	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	2.07	104	2.00	3.09	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	6.44	107	6.00	2.46	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.5 %* *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	**48.0**	16.0	08/15/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2023	ND	166	82.8	200	1.72	
DRO >C10-C28*	<10.0	10.0	08/15/2023	ND	164	82.2	200	1.22	
EXT DRO >C28-C36	<10.0	10.0	08/15/2023	ND					

Surrogate: 1-Chlorooctane *105 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *118 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	08/14/2023	Sampling Date:	08/11/2023
Reported:	08/17/2023	Sampling Type:	Soil
Project Name:	MESA 8105 JVP #006H	Sampling Condition:	Cool & Intact
Project Number:	03C2012050	Sample Received By:	Tamara Oldaker
Project Location:	BTA (32.063978-103.643604)		

Sample ID: SS 02 0.5' (H234365-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/15/2023	ND	2.07	103	2.00	3.26	
Toluene*	<0.050	0.050	08/15/2023	ND	2.10	105	2.00	2.73	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	2.07	104	2.00	3.09	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	6.44	107	6.00	2.46	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.8 %* *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	**256**	16.0	08/15/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2023	ND	166	82.8	200	1.72	
DRO >C10-C28*	<10.0	10.0	08/15/2023	ND	164	82.2	200	1.22	
EXT DRO >C28-C36	<10.0	10.0	08/15/2023	ND					

Surrogate: 1-Chlorooctane *97.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *108 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	08/14/2023	Sampling Date:	08/11/2023
Reported:	08/17/2023	Sampling Type:	Soil
Project Name:	MESA 8105 JVP #006H	Sampling Condition:	Cool & Intact
Project Number:	03C2012050	Sample Received By:	Tamara Oldaker
Project Location:	BTA (32.063978-103.643604)		

Sample ID: SS 03 0.5' (H234365-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/15/2023	ND	2.07	103	2.00	3.26	
Toluene*	<0.050	0.050	08/15/2023	ND	2.10	105	2.00	2.73	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	2.07	104	2.00	3.09	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	6.44	107	6.00	2.46	
Total BTEX	<0.300	0.300	08/15/2023	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	08/15/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2023	ND	166	82.9	200	2.25	
DRO >C10-C28*	<10.0	10.0	08/15/2023	ND	152	76.1	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	08/15/2023	ND					

Surrogate: 1-Chlorooctane *89.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *90.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

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
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	08/14/2023	Sampling Date:	08/11/2023
Reported:	08/17/2023	Sampling Type:	Soil
Project Name:	MESA 8105 JVP #006H	Sampling Condition:	Cool & Intact
Project Number:	03C2012050	Sample Received By:	Tamara Oldaker
Project Location:	BTA (32.063978-103.643604)		

Sample ID: SS 04 0.5' (H234365-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/15/2023	ND	2.07	103	2.00	3.26	
Toluene*	<0.050	0.050	08/15/2023	ND	2.10	105	2.00	2.73	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	2.07	104	2.00	3.09	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	6.44	107	6.00	2.46	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *92.5 %* *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	**96.0**	16.0	08/15/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2023	ND	166	82.9	200	2.25	
DRO >C10-C28*	<10.0	10.0	08/15/2023	ND	152	76.1	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	08/15/2023	ND					

Surrogate: 1-Chlorooctane *76.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *77.9 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

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 #400
City: Midland, State: TX Zip: 79701
Phone #: 432-557-8895 Fax #:
Project #: 03C2012050 Project Owner:
Project Name: Mesa 8105 JVP #006H
Project Location: 32.063978, -103.64316004
Sampler Name: Mariana O'Dell

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

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: TIME DATE	DATE TIME	ANALYSIS REQUEST: Chlorides	TPH	BTEX
H234365																		
SS 1	SS01	0.5	G	1			X					X		9:00	8/11/23	X	X	X
2	SS02	0.5	G	1			X					X		9:15	↓	↓	↓	↓
3	SS03	0.5	G	1			X					X		12:00				
4	SS04	0.5	G	1			X					X		12:05				

NO

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

Relinquished By: Date: 8/14/23 Time: 10:10 1104 Received By:
Relinquished By: Date: Time: Received By:

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address: hgreen@ensolum.com, modell@ensolum.com
REMARKS: incident #: nOY1814228433

Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C 6.0 Corrected Temp. °C
Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials) T.O.

Turnaround Time: Standard ☑ Rush ☐
Thermometer ID #113 Correction Factor -0.5°C 8/14/23 T.O.
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

CARDINAL Laboratories

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

August 17, 2023

HADLIE GREEN

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: MESA 8105 JVP #006H

Enclosed are the results of analyses for samples received by the laboratory on 08/14/23 11:04.

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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	08/14/2023	Sampling Date:	08/11/2023
Reported:	08/17/2023	Sampling Type:	Soil
Project Name:	MESA 8105 JVP #006H	Sampling Condition:	Cool & Intact
Project Number:	03C2012050	Sample Received By:	Tamara Oldaker
Project Location:	BTA (32.063978-103.643604)		

Sample ID: BH 04 1' (H234366-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/15/2023	ND	2.07	103	2.00	3.26	
Toluene*	<0.050	0.050	08/15/2023	ND	2.10	105	2.00	2.73	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	2.07	104	2.00	3.09	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	6.44	107	6.00	2.46	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.7 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	08/15/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2023	ND	166	82.9	200	2.25	
DRO >C10-C28*	<10.0	10.0	08/15/2023	ND	152	76.1	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	08/15/2023	ND					

Surrogate: 1-Chlorooctane *91.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	08/14/2023	Sampling Date:	08/11/2023
Reported:	08/17/2023	Sampling Type:	Soil
Project Name:	MESA 8105 JVP #006H	Sampling Condition:	Cool & Intact
Project Number:	03C2012050	Sample Received By:	Tamara Oldaker
Project Location:	BTA (32.063978-103.643604)		

Sample ID: BH 04A 4' (H234366-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/15/2023	ND	2.07	103	2.00	3.26	
Toluene*	<0.050	0.050	08/15/2023	ND	2.10	105	2.00	2.73	
Ethylbenzene*	<0.050	0.050	08/15/2023	ND	2.07	104	2.00	3.09	
Total Xylenes*	<0.150	0.150	08/15/2023	ND	6.44	107	6.00	2.46	
Total BTEX	<0.300	0.300	08/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *93.7 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	08/15/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2023	ND	166	82.9	200	2.25	
DRO >C10-C28*	<10.0	10.0	08/15/2023	ND	152	76.1	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	08/15/2023	ND					

Surrogate: 1-Chlorooctane *82.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

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
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	08/14/2023	Sampling Date:	08/11/2023
Reported:	08/17/2023	Sampling Type:	Soil
Project Name:	MESA 8105 JVP #006H	Sampling Condition:	Cool & Intact
Project Number:	03C2012050	Sample Received By:	Tamara Oldaker
Project Location:	BTA (32.063978-103.643604)		

Sample ID: BH 02 1' (H234366-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/16/2023	ND	2.07	103	2.00	3.26	
Toluene*	<0.050	0.050	08/16/2023	ND	2.10	105	2.00	2.73	
Ethylbenzene*	<0.050	0.050	08/16/2023	ND	2.07	104	2.00	3.09	
Total Xylenes*	<0.150	0.150	08/16/2023	ND	6.44	107	6.00	2.46	
Total BTEX	<0.300	0.300	08/16/2023	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	**80.0**	16.0	08/15/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2023	ND	166	82.9	200	2.25	
DRO >C10-C28*	<10.0	10.0	08/15/2023	ND	152	76.1	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	08/15/2023	ND					

Surrogate: 1-Chlorooctane *91.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	08/14/2023	Sampling Date:	08/11/2023
Reported:	08/17/2023	Sampling Type:	Soil
Project Name:	MESA 8105 JVP #006H	Sampling Condition:	Cool & Intact
Project Number:	03C2012050	Sample Received By:	Tamara Oldaker
Project Location:	BTA (32.063978-103.643604)		

Sample ID: BH 02A 3' (H234366-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/16/2023	ND	2.07	103	2.00	3.26	
Toluene*	<0.050	0.050	08/16/2023	ND	2.10	105	2.00	2.73	
Ethylbenzene*	<0.050	0.050	08/16/2023	ND	2.07	104	2.00	3.09	
Total Xylenes*	<0.150	0.150	08/16/2023	ND	6.44	107	6.00	2.46	
Total BTEX	<0.300	0.300	08/16/2023	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	**288**	16.0	08/15/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2023	ND	166	82.9	200	2.25	
DRO >C10-C28*	<10.0	10.0	08/15/2023	ND	152	76.1	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	08/15/2023	ND					

Surrogate: 1-Chlorooctane *82.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.7 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	08/14/2023	Sampling Date:	08/11/2023
Reported:	08/17/2023	Sampling Type:	Soil
Project Name:	MESA 8105 JVP #006H	Sampling Condition:	Cool & Intact
Project Number:	03C2012050	Sample Received By:	Tamara Oldaker
Project Location:	BTA (32.063978-103.643604)		

Sample ID: BH 02B 4' (H234366-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/16/2023	ND	2.07	103	2.00	3.26	
Toluene*	<0.050	0.050	08/16/2023	ND	2.10	105	2.00	2.73	
Ethylbenzene*	<0.050	0.050	08/16/2023	ND	2.07	104	2.00	3.09	
Total Xylenes*	<0.150	0.150	08/16/2023	ND	6.44	107	6.00	2.46	
Total BTEX	<0.300	0.300	08/16/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.4 %* *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	**176**	16.0	08/15/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2023	ND	166	82.9	200	2.25	
DRO >C10-C28*	<10.0	10.0	08/15/2023	ND	152	76.1	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	08/15/2023	ND					

Surrogate: 1-Chlorooctane *92.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	08/14/2023	Sampling Date:	08/11/2023
Reported:	08/17/2023	Sampling Type:	Soil
Project Name:	MESA 8105 JVP #006H	Sampling Condition:	Cool & Intact
Project Number:	03C2012050	Sample Received By:	Tamara Oldaker
Project Location:	BTA (32.063978-103.643604)		

Sample ID: BH 03 1' (H234366-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/16/2023	ND	2.07	103	2.00	3.26	
Toluene*	<0.050	0.050	08/16/2023	ND	2.10	105	2.00	2.73	
Ethylbenzene*	<0.050	0.050	08/16/2023	ND	2.07	104	2.00	3.09	
Total Xylenes*	<0.150	0.150	08/16/2023	ND	6.44	107	6.00	2.46	
Total BTEX	<0.300	0.300	08/16/2023	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	**48.0**	16.0	08/15/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2023	ND	166	82.9	200	2.25	
DRO >C10-C28*	<10.0	10.0	08/15/2023	ND	152	76.1	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	08/15/2023	ND					

Surrogate: 1-Chlorooctane *84.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *87.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	08/14/2023	Sampling Date:	08/11/2023
Reported:	08/17/2023	Sampling Type:	Soil
Project Name:	MESA 8105 JVP #006H	Sampling Condition:	Cool & Intact
Project Number:	03C2012050	Sample Received By:	Tamara Oldaker
Project Location:	BTA (32.063978-103.643604)		

Sample ID: BH 03A 4' (H234366-07)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/16/2023	ND	2.07	103	2.00	3.26	
Toluene*	<0.050	0.050	08/16/2023	ND	2.10	105	2.00	2.73	
Ethylbenzene*	<0.050	0.050	08/16/2023	ND	2.07	104	2.00	3.09	
Total Xylenes*	<0.150	0.150	08/16/2023	ND	6.44	107	6.00	2.46	
Total BTEX	<0.300	0.300	08/16/2023	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	**48.0**	16.0	08/15/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2023	ND	166	82.9	200	2.25	
DRO >C10-C28*	<10.0	10.0	08/15/2023	ND	152	76.1	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	08/15/2023	ND					

Surrogate: 1-Chlorooctane *89.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *90.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM
HADLIE GREEN
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	08/14/2023	Sampling Date:	08/11/2023
Reported:	08/17/2023	Sampling Type:	Soil
Project Name:	MESA 8105 JVP #006H	Sampling Condition:	Cool & Intact
Project Number:	03C2012050	Sample Received By:	Tamara Oldaker
Project Location:	BTA (32.063978-103.643604)		

Sample ID: BH 01 1' (H234366-08)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/16/2023	ND	2.07	103	2.00	3.26	
Toluene*	<0.050	0.050	08/16/2023	ND	2.10	105	2.00	2.73	
Ethylbenzene*	<0.050	0.050	08/16/2023	ND	2.07	104	2.00	3.09	
Total Xylenes*	<0.150	0.150	08/16/2023	ND	6.44	107	6.00	2.46	
Total BTEX	<0.300	0.300	08/16/2023	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	**176**	16.0	08/15/2023	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2023	ND	166	82.9	200	2.25	
DRO >C10-C28*	<10.0	10.0	08/15/2023	ND	152	76.1	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	08/15/2023	ND					

Surrogate: 1-Chlorooctane *83.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *83.7 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Hadlie Green	**P.O. #:**
Address: 601 N Marienfield St #400	**Company:** BTA Oil
City: Midland, ~~TX~~ MD **State:** TX **Zip:** 79701	**Attn:** Kelton Beaird
Phone #: 432-557-8895 **Fax #:**	**Address:** 104 S Pecos St
Project #: 03C2012050 **Project Owner:**	**City:** Midland
Project Name: Mesa 8105 JVP #006H	**State:** TX **Zip:** 79701
Project Location: 32.063978, -103.643604	**Phone #:**
Sampler Name: Mariana O'Dell	**Fax #:**

FOR LAB USE ONLY					MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST											
Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	TPH	BTEX									
H234366																											
1	BH04	1'	G	1			X					X		8/11/23	9:30	X	X	X									
2	BH04A	4'	G	1			X					X			9:50												
3	BH02	1'	G	1			X					X			10:15												
4	BH02A	3'	G	1			X					X			10:25												
5	BH02B	4'	G	1			X					X			10:30												
6	BH03	1'	G	1			X					X			11:10												
7	BH03A	4'	G	1			X					X			11:25												
8	BH01	1'	G	1			X					X			11:45												

Relinquished By: MO'Dell	**Date:** 8/12/23 **Time:** 11:04	**Received By:** Tamara Oldaker	**Verbal Result:** ☐ Yes ☐ No **Add'l Phone #:**
Relinquished By:	**Date:** **Time:**	**Received By:**	**All Results are emailed. Please provide Email address:** hgreen@ensolum.com, modell@ensolum.com
			REMARKS: Incident #: nOY1814228433
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	**Observed Temp. °C** 6.0 **Corrected Temp. °C**	**Sample Condition** Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	**CHECKED BY: (Initials)** TO
			Turnaround Time: Standard ☑ Rush ☐ **Thermometer ID** ~~#419~~ #14 **Correction Factor** ~~-0.5°C~~ 8/14/23 TO
			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

CARDINAL Laboratories

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

September 05, 2023

HADLIE GREEN

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: MESA 8105 JV P #006H

Enclosed are the results of analyses for samples received by the laboratory on 08/29/23 13:00.

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

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:	08/29/2023	Sampling Date:	08/25/2023
Reported:	09/05/2023	Sampling Type:	Soil
Project Name:	MESA 8105 JV P #006H	Sampling Condition:	Cool & Intact
Project Number:	03C2012050	Sample Received By:	Shalyn Rodriguez
Project Location:	32.063978,-103.643604		

Sample ID: BH 01 A 4' (H234684-01)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2023	ND	1.76	87.9	2.00	0.722	
Toluene*	<0.050	0.050	08/30/2023	ND	1.78	89.2	2.00	0.253	
Ethylbenzene*	<0.050	0.050	08/30/2023	ND	1.84	91.9	2.00	1.19	
Total Xylenes*	<0.150	0.150	08/30/2023	ND	5.40	90.0	6.00	2.13	
Total BTEX	<0.300	0.300	08/30/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *112 %* *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	08/30/2023	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2023	ND	223	112	200	2.90	
DRO >C10-C28*	<10.0	10.0	08/30/2023	ND	222	111	200	0.250	
EXT DRO >C28-C36	<10.0	10.0	08/30/2023	ND					

Surrogate: 1-Chlorooctane *104 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *122 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC	**BILL TO**
Project Manager: Hadlie Green	P.O. #:
Address: 601 N Marienfeld Street, Suite 400	Company: BTA Oil
City: Midland State: TX Zip: 79701	Attn: Kelton Beaird
Phone #: 432-557-8895 Fax #:	Address: 104 S Pecos St
Project #: 03C2012050 Project Owner:	City: Midland
Project Name: Mesa 8105 JV P #006H	State: TX Zip: 79701
Project Location: 32.063978,-103.643604	Phone #: 432-312-2203
Sampler Name: Peter Van Patten	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: TPH	BTEX	Chlorides
H234684-1	BH01A	4	C	1			✓					✓		8.25.23	850	x	x	x

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

Relinquished By:	Date: 8.27.23	Received By:	Verbal Result: ☐ Yes ☑ No Add'l Phone #:
	Time: 1300		All Results are emailed. Please provide Email address: hgreen@ensolum.com
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 0.3	Sample Condition Cool: ☑ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☑ Rush ☐ Thermometer ID #113 Correction Factor -0.5°C #140
	Corrected Temp. °C			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

ENSOLUM

APPENDIX E

NMOCD Notifications

From: Kelton Beaird
To: Tacoma Morrissey; Hadlie Green
Subject: FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 225770
Date: Monday, July 10, 2023 8:53:45 AM

[**EXTERNAL EMAIL**]

Kelton Beaird
Environmental Manager
BTA Oil Producers
104 S. Pecos
Midland, TX 79701
432-312-2203

From: Nathan Sirgo <nsirgo@btaoil.com>
Sent: Friday, July 7, 2023 5:33 PM
To: Kelton Beaird <KBeaird@btaoil.com>
Subject: Fwd: The Oil Conservation Division (OCD) has approved the application, Application ID: 225770

Nathan Sirgo
BTA Oil Producers
(432) 682-3753

Begin forwarded message:

> **From:** OCDOnline@state.nm.us
> **Date:** July 7, 2023 at 5:15:30 PM CDT
> **To:** Nathan Sirgo <nsirgo@btaoil.com>
> **Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 225770**
>
> ***** EXTERNAL EMAIL - Please use caution and **DO NOT** open attachments or click links from unknown or unexpected emails. *****
>
> ---
>
> To whom it may concern (c/o BTA ENV for BTA OIL PRODUCERS, LLC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nOY1814228433,
with the following conditions:

- **• Workplan/Remediation Plan is approved with the following conditions: Please make sure the floor confirmation samples are delineated/excavated to meet closure criteria standards for proven depth to water determination. Sidewall samples should be delineated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. This application does not include the C-141 Remediation Pages. A Remediation Plan/ Closure report should be submitted no later than 10/05/2023.**

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

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

Thank you,
Jocelyn Harimon
Environmental Specialist
575-748-1283
Jocelyn.Harimon@emnrd.nm.gov

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

From: Wells, Shelly, EMNRD
To: Hadlie Green
Cc: Bratcher, Michael, EMNRD; Maxwell, Ashley, EMNRD; Hamlet, Robert, EMNRD; Hall, Brittany, EMNRD; Harimon, Jocelyn, EMNRD
Subject: RE: [EXTERNAL] BTA - Sampling Notification - Week of 08/07/2023
Date: Thursday, August 3, 2023 2:47:10 PM
Attachments: image001.png
image002.png
image003.png
image004.png

[**EXTERNAL EMAIL**]

Hi Hadlie,

Notification requirements are **two business days**, per rule. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to ensure inclusion in the project file.

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Administrative Permitting Program
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Hadlie Green <hgreen@ensolum.com>
Sent: Thursday, August 3, 2023 1:36 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Kelton Beaird <KBeaird@btaoil.com>
Subject: [EXTERNAL] BTA - Sampling Notification - Week of 08/07/2023

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

All,

BTA anticipates collecting confirmation samples at the following locations the week of August 7, 2023.

- Mesa B #2 SWD / NOY1826826475
  - Sampling Date: 8/7-8/2023 @ 9:00 AM MST

- Mesa #2H Tank Battery / NRM2026945362
    - Sampling Date: 8/8/2023 @ 9:00 AM MST

- Vaca Draw 9418 JV-P 001 / nCH1835540209
    - Sampling Date: 8/10-11/2023 @ 9:00 AM MST

- Gem 4, 5, 7, 10 Battery, 8705 JV-P / NCH1903263128
    - Sampling Date: 8/10-11/2023 @ 9:00 AM MST

- Mesa 8105 JVP #006H / nOY1814228433
    - Sampling Date: 8/11/2023 @ 9:00 AM MST

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

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company BTA OIL PRODUCERS, LLC	Contact KAYLA MCCONNELL
Address 104 SOUTH PECOS, MIDLAND TX, 79701	Telephone No. 432-682-3753
Facility Name MESA 8105 JV-P #6	Facility Type PRODUCED WATER PIPELINE

Surface Owner FEDERAL	Mineral Owner FEDERAL	API No. 30-025-42844

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	11	26S	32E	330	NORTH	2198	EAST	LEA

Latitude 32.063978 **Longitude** -103.643604 NAD83

NATURE OF RELEASE

Type of Release PRODUCED WATER	Volume of Release 80 BBL	Volume Recovered 50 BBL
Source of Release PIPELINE BURST	Date and Hour of Occurrence 5/17	Date and Hour of Discovery 5/17/18 6 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Olivia Yu - NMOCD Shelly Tucker - BLM	
By Whom? Kayla McConnell	Date and Hour 5/17/18 9:45 am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By Olivia Yu at 7:51 am, May 22, 2018

Describe Cause of Problem and Remedial Action Taken.*
Pipeline release carrying produced water was discovered early morning by field foremen. Vacuum truck was called in for cleanup, recovered estimated 50 bbl.

Describe Area Affected and Cleanup Action Taken.*
Vacuum truck was called in for cleanup, environmental group will be onsite 5/18/18 to evaluated the area.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: Kayla McConnell

Printed Name: Kayla McConnell

Title: Regulatory Analyst

E-mail Address: kmcconnell@btaoil.com

Date: 5/17/2018 Phone: 575-393-3117

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: BJ

Approval Date: 5/22/2018 Expiration Date:

Conditions of Approval: see attached directive

Attached ☑

* Attach Additional Sheets If Necessary

1RP-5067 nOY1814228433

pOY1814229961

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	nOY1814228433
District RP	1RP-5067
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party BTA Oil Producers, LL	OGRID 5380
Contact Name Kelton Beaird	Contact Telephone 432-312-2203
Contact email kbeaird@btaoil.com	Incident # *(assigned by OCD)*: nOY1814228433
Contact mailing address 104 S. Pecos St. Midland, TX 79701	

Location of Release Source

Latitude 32.063978 Longitude -103.643604
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Mesa 8105 JV-P #006	Site Type: Oil & Gas Production
Date Release Discovered: 05/17/2018	API# *(if applicable):* 30-025-42844

Unit Letter	Section	Township	Range	County
B	11	26S	32E	Lea

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls):	Volume Recovered (bbls):
☒ Produced Water	Volume Released (bbls): 80	Volume Recovered (bbls): 50
	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 produced water pipeline release was discovered early morning by the field foreman. A vacuum truck was called in for cleanup and recovered an estimated 50 bbls.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nOY1814228433
District RP	1RP-5067
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? Release greater than 25.0 bbls

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, immediate notice was given by Kayla McConnell (BTA) to Olivia Yu (NMOCD) and Shelly Tucker (BLM on May 17, 2018 at 9:45 am.

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:
N/A

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: Kelton Beaird Title: Environmental Manager

Signature: Date:

email: kbeaird@btaoil.com Telephone: 432-321-2203

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	nOY1814228433
District RP	1RP-5067
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?	>>100 (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	nOY1814228433
District RP	1RP-5067
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: 10-3-23

email: kbeaird@btaoil.com Telephone: 432-312-2203

OCD Only

Received by: Date:

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	nOY1814228433
District RP	1RP-5067
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

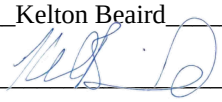
☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ 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: 10-3-23

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: 10/4/2023

Printed Name: Brittany Hall Title: Environmental Specialist

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 271947

CONDITIONS

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 271947
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	10/4/2023