



September 21, 2023

New Mexico Oil Conservation Division

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

**Re: Closure Request
North Brushy Draw Federal 35 #010H
Incident Number nAPP2230034708
Eddy County, New Mexico**

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of WPX Energy Permian, LLC. (WPX), has prepared this *Closure Request* to document additional excavation, and soil sampling activities performed at the North Brushy Draw Federal 35 #010H (Site) (Figure 1). The purpose of the excavation and soil sampling activities was to address remaining impacts to soil resulting from a release of produced water at the Site. On January 12, 2023, A *Closure Request* (CR), authored by Wescom, was submitted to the New Mexico Oil Conservation Division (NMOCD) for the release associated with Incident Number nAPP2230034708; however, the request was denied by NMOCD due to the presence of waste-containing soil located in confirmation sample area (CONF14) exceeding the reclamation requirement set forth in Title 19, Chapter 15, Part 29, Section 13 (19.15.29.13) of the New Mexico Administration Code (NMAC). The original CR and other supporting documents can be viewed on the NMOCD web portal.

Ensolum has prepared this *Closure Request* address NMOCD's concerns regarding waste-containing soil and based on the excavation activities and analytical results from the soil sampling events, WPX is requesting closure for Incident Number nAPP2230034708.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit O, Section 35, Township 25 South, Range 29 East, in Eddy County, New Mexico (32.079725° N, 103.9516162°W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On October 17, 2022, an above ground water transfer line developed a leak, which resulted in the release of approximately 8 barrels (bbls) of produced water onto the caliche pad and onto an area off-pad on the north side of the tank battery as well as the caliche road on the west side of the Site. WPX reported the release to the NMOCD on a Release Notification Form C-141 (Form C-141) on October 17, 2022, and the release was assigned Incident Number nAPP2230034708.

On October 24, 2022, WPX contracted Wescom, Inc. (Wescom) to assess the spill area and to conduct lateral and vertical delineation soil sampling to the strictest Closure Criteria per NMOCD Table I. On November 8, 2022, excavation of the on-pad spill area was completed with hand tools and a skid steer. Wescom personnel returned to the Site on November 21, 2022, to oversee the exaction of the off-pad spill area. A total of 940 cubic yards of waste-containing soil was removed from the off-pad spill area and hauled to an approved disposal facility. Confirmation sampling was completed at the conclusion of the excavation, and 39 composite confirmation soil samples were collected.

WPX Energy Permian, LLC.
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Laboratory analytical results indicated confirmation soil samples collected on-pad were all in compliance with the Closure Criteria for the Site. Confirmation soil samples collected from the off-pad spill area were all in compliance with the reclamation requirement except (CONF14), which was located within a 10-foot radius of an electric pole. Due to the hazards associated with excavating near live electrical lines, waste containing soil located in the vicinity of confirmation sample area (CONF14) was left in place.

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 19.15.29 NMAC. Results from the characterization desktop review are presented on page 3 of the Form C-141 (Appendix A), Site Assessment/Characterization. Potential Site receptors are identified on Figure 1.

The closest permitted groundwater well with depth to groundwater data is WPX well, MW-1, located onsite. The groundwater well has a reported depth to groundwater greater than 105 feet below ground surface (bgs) and a total depth of 105 feet bgs. There are no regional or Site-specific hydrological conditions, such as shallow surface water, karst features, wetlands, or vegetation that suggest the Site is conducive to shallower groundwater. The well used for depth to groundwater determination is presented on Figure 1. The referenced well record is included in Attachment B.

The closest continuously flowing or significant watercourse to the Site is a seasonal wetland, located approximately 431 feet North of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (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:

- 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

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the pasture area that was impacted by the release, per NMAC 19.15.29.13.D (1) for the top 4 feet of areas that will be reclaimed following remediation.

EXCAVATION SOIL SAMPLING ACTIVITIES

On August 25, 2023, Ensolum personnel were onsite to oversee the excavation of waste-containing soil in the vicinity of confirmation soil sample CONF14 as indicated by visible staining, laboratory analytical results, and field screening results. The electrical pole was moved 20 feet to the east in order to allow excavation activities to be performed using a backhoe and belly dump. The excavation occurred in the pasture area north of the well pad. To direct excavation activities, soil was screened for total petroleum

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hydrocarbons utilizing PetroFLAG® and the MOHR titration method for chloride. The excavation was completed to a depth of 4 feet bgs. Photographic documentation of the excavation activities is included in Appendix C.

Following removal of the waste-containing soil, a 5-point composite soil sample was collected from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil sample SW01 was collected from the sidewall of the excavation at depths ranging from the ground surface to 4 feet bgs. Composite soil sample FS01 was collected from the floor of the excavation at a depth of 4 feet bgs.

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 Envirotech, Inc. (Envirotech) in Farmington, New Mexico, for analysis of the following contaminants of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

The excavation area measured approximately 200 square feet. A total of approximately 90 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Red Bluff Facility, New Mexico. The excavation extent and excavation soil sample locations are presented in Figure 2.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for excavation sidewall sample SW01 and excavation floor sample FS01 indicated all COC concentrations were compliant with the Closure Criteria and compliant with the reclamation requirement. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Appendix D.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the October 17, 2022, release of produced water and issues stated in the denial of the report authored by Wescom. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and with the reclamation requirement. Based on the soil sample analytical results, no further remediation was required. WPX will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. The disturbed pasture area will be re-seeded with an approved BLM seed mixture.

Excavation of waste-containing soil has mitigated adverse effects at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. WPX believes these remedial actions are protective of human health, the environment, and groundwater. As such, WPX respectfully requests closure for Incident Number nAPP2230034708.

If you have any questions or comments, please contact Ms. Ashley Giovengo at (575) 988-0055 or agiovengo@ensolum.com.

WPX Energy Permian, LLC.
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Sincerely,
Ensolum, LLC

A handwritten signature in black ink, appearing to read 'Ashley Giovengo'.

Ashley Giovengo
Senior Engineer

A handwritten signature in black ink, appearing to read 'Daniel R. Moir'.

Daniel R. Moir, PG
Senior Managing Geologist

cc: Jim Raley, WPX
BLM

Appendices:

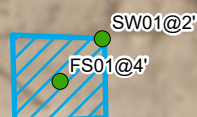
Figure 1	Site Location Map
Figure 2	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Form C-141
Appendix B	Referenced Wells
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix E	Email Correspondence



FIGURES

Legend

- Excavation Soil Sample
in Compliance with
Closure Criteria
- Excavation Extent



Notes:
Sample ID @ Depth Below Ground Surface.

0 12.5 25 50 75 100
Feet

Sources: Environmental Systems Research Institute (ESRI)



Confirmation Soil Sample Locations

WPX Energy Permian, LLC
North Brushy Draw Federal 35 #010H
Incident Number: nAPP2230034708
Unit O, Section 35, T 25S, R29E
Eddy County, New Mexico

FIGURE

2



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 WPX Energy Permian, LLC
 North Brush Draw Federal 35 #010H
 Eddy County, New Mexico

Sample Designation	Date	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
Excavation Soil Sample Analytical Results										
SW01	8/25/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	24.3
FS01	8/25/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<50.0	1,070

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

<": Laboratory Analytical result is less than reporting limit

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.

* Indicates sample was collected in area to be reclaimed after remediation is complete; reclamation for chloride in the top 4 feet is 600 mg/kg and total TPH is 100 mg/kg.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes



APPENDIX A

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 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	nAPP2230034708
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party WPX Energy Permain, LLC	OGRID 246289
Contact Name Jim Raley	Contact Telephone 575-689-7597
Contact email Jim.Raley@dvn.com	Incident # (assigned by OCD) nAPP2230034708
Contact mailing address 5315 Buena Vista Drive, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.079725 Longitude -103.9516162
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: NORTH BRUSHY DRAW FEDERAL 35 #010H	Site Type Oil Well
Date Release Discovered 10/17/2022	API# (if applicable) 30-015-43638

Unit Letter	Section	Township	Range	County
O	35	25S	29E	Eddy

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)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 8	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Above ground produced water transfer line developed leak, allowing for the release of approx. 8 bbls to pad surface and off pad.


$$bbl\ estimate = \frac{saturated\ soil\ volume\ (ft^3)}{4.21(bbl\ equivalent)} * estimated\ soil\ porosity(\%) + recovered\ fluids\ (bbl)$$

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Facility ID	
Application ID	

<p>Was this a major release as defined by 19.15.29.7(A) NMAC?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>If YES, for what reason(s) does the responsible party consider this a major release?</p>
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?</p>	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Jim Raley</u> Title: <u>Environmental Professional</u>	
Signature: <u></u> Date: <u>10/27/2022</u>	
email: <u>jim.raley@dvn.com</u> Telephone: <u>575-689-7597</u>	
<u>OCD Only</u>	
Received by: _____ Date: _____	

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 154296

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 154296
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	10/27/2022

Incident ID	nAPP2230034708
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>105</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2230034708
District RP	
Facility ID	
Application ID	

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

Printed Name: Jim Raley

Title: Environmental Specialist

Signature: _____

Date: 1/15/2023

email: jim.raley@dvn.com

Telephone: 575-689-7597

OCD Only

Received by: _____

Date: _____

Incident ID	nAPP2230034708
District RP	
Facility ID	
Application ID	

Closure

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


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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Jim Raley

Title: Environmental Specialist

Signature: 

Date: 01/15/2023

email: jim.raley@dm.com

Telephone: 575-689-7597

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: Scott Rodgers Date: 03/01/2024


Printed Name: Scott Rodgers

Title: Environmental Specialist Adv.



APPENDIX B

Referenced Wells

 HRL COMPLIANCE SOLUTIONS							BORING LOG/MONITORING WELL COMPLETION DIAGRAM					
							Boring/Well Number: MW-1		Location: North Brushy Federal 35 # 010H			
							Date: 12/8/2020		Client: WPX Energy			
Drilling Method: Air Rotary			Sampling Method: None			Logged By: J. Linn, PG			Drilled By: Talon LPE			
Gravel Pack Type: 10/20 Sand			Gravel Pack Depth Interval: 3 Bags			Seal Type: None		Seal Depth Interval: None		Latitude: 32.079909		
Casing Type: PVC		Diameter: 2-inch		Depth Interval: 0-100 feet bgs		Boring Total Depth (ft. BGS): 105			Longitude: -103.951386			
Screen Type: PVC		Slot: 0.010-inch		Diameter: 2-inch		Depth Interval: 100 - 105 ft		Well Total Depth (ft. BGS): 105		Depth to Water (ft. BTWC): > 105		
DTW Date: 12/16/2020												
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks		Well Completion	
0	NM	L	D	N	N	NM	CE	NS	Buff to pale pink caliche			
5												
10												
15												
20	NM	L	D	N	N	NM	SM	NS	Tan to pale red silty sand			
25												
30												
35												
40												
45												
50	NM	M	M	N	N	NM	ML	NS	Tan to pale red sandy silt with minor medium sand			
55												
60	NM	H	M	N	N	NM	CL	NS	Tan clay with minor gravel			
65												
70												
75	NM	L	D	N	N	NM	SP	NS	Pale red poorly graded fine sand with minor silt			
80												
85												
90	NM	H	D/SLM	N	N	NM	CL	NS	Grey sandy lean clay with minor medium sand and minor angular gravel			
95												
100												
90	NM	M/H	M	N	N	NM	CL	NS	Brown with orange sandy lean clay with minor medium sand and angular gravel - TD Boring: 105'			
95												
100												



APPENDIX C

Photographic Log



Photographic Log

WPX Energy Permian, LLC
North Brushy Draw Federal 35 #10H
nAPP2230034708



Photograph 1

Date: 10/24/2022

Description: Deferred area around electrical pole.

View: Northwest

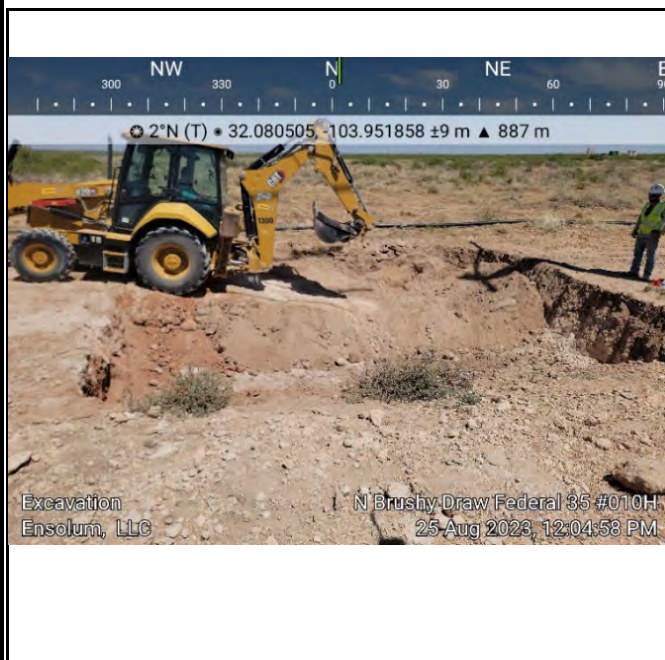


Photograph 2

Date: 8/25/2023

Description: Excavation of waste containing soil.

View: Northwest



Photograph 3

Date: 8/25/2023

Description: Excavation of waste containing soil.

View: North



Photograph 4

Date: 8/25/2023

Description: Excavated area.

View: Northwest



APPENDIX D

Laboratory Analytical Reports & Chain-of-Custody Documentation

Report to:

Ashley Giovengo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Ensolum, LLC

Project Name: North Brushy Draw Federal 35
#010H

Work Order: E308220

Job Number: 01058-0007

Received: 8/29/2023

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
9/1/23

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 9/1/23

Ashley Giovengo
3122 National Parks Hwy
Carlsbad, NM 88220



Project Name: North Brushy Draw Federal 35 #010H
Workorder: E308220
Date Received: 8/29/2023 8:15:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/29/2023 8:15:00AM, under the Project Name: North Brushy Draw Federal 35 #010H.

The analytical test results summarized in this report with the Project Name: North Brushy Draw Federal 35 #010H apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

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Sample Summary

Ensolum, LLC	Project Name:	North Brushy Draw Federal 35 #010H	Reported: 09/01/23 15:45
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS01 - 4'	E308220-01A	Soil	08/25/23	08/29/23	Glass Jar, 2 oz.
SW01 - 2'	E308220-02A	Soil	08/25/23	08/29/23	Glass Jar, 2 oz.



Sample Data

Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: North Brushy Draw Federal 35 #010H Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 9/1/2023 3:45:47PM
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FS01 - 4'

E308220-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2335042	
Benzene	ND	0.0250	1	08/29/23	08/30/23	
Ethylbenzene	ND	0.0250	1	08/29/23	08/30/23	
Toluene	ND	0.0250	1	08/29/23	08/30/23	
o-Xylene	ND	0.0250	1	08/29/23	08/30/23	
p,m-Xylene	ND	0.0500	1	08/29/23	08/30/23	
Total Xylenes	ND	0.0250	1	08/29/23	08/30/23	
Surrogate: 4-Bromochlorobenzene-PID	95.9 %	70-130		08/29/23	08/30/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2335042	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/29/23	08/30/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	90.9 %	70-130		08/29/23	08/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2335067	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/23	08/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/23	08/31/23	
Surrogate: n-Nonane	89.2 %	50-200		08/30/23	08/31/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2335039	
Chloride	1070	20.0	1	08/29/23	09/01/23	



Sample Data

Ensolum, LLC
3122 National Parks Hwy
Carlsbad NM, 88220

Project Name: North Brushy Draw Federal 35 #010H
Project Number: 01058-0007
Project Manager: Ashley Giovengo

Reported:
9/1/2023 3:45:47PM

SW01 - 2'

E308220-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2335042	
Benzene	ND	0.0250	1	08/29/23	08/30/23	
Ethylbenzene	ND	0.0250	1	08/29/23	08/30/23	
Toluene	ND	0.0250	1	08/29/23	08/30/23	
o-Xylene	ND	0.0250	1	08/29/23	08/30/23	
p,m-Xylene	ND	0.0500	1	08/29/23	08/30/23	
Total Xylenes	ND	0.0250	1	08/29/23	08/30/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.8 %	70-130		08/29/23	08/30/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2335042	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/29/23	08/30/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.6 %	70-130		08/29/23	08/30/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2335067	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/30/23	08/31/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/30/23	08/31/23	
<i>Surrogate: n-Nonane</i>						
	93.0 %	50-200		08/30/23	08/31/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: BA		Batch: 2335039	
Chloride	24.3	20.0	1	08/29/23	09/01/23	



QC Summary Data

Ensolum, LLC	Project Name:	North Brushy Draw Federal 35 #010H	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	9/1/2023 3:45:47PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2335042-BLK1) Prepared: 08/29/23 Analyzed: 08/30/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.60		8.00		95.0	70-130			

LCS (2335042-BS1) Prepared: 08/29/23 Analyzed: 08/30/23

Benzene	4.09	0.0250	5.00		81.9	70-130			
Ethylbenzene	4.54	0.0250	5.00		90.8	70-130			
Toluene	4.44	0.0250	5.00		88.8	70-130			
o-Xylene	4.61	0.0250	5.00		92.2	70-130			
p,m-Xylene	9.28	0.0500	10.0		92.8	70-130			
Total Xylenes	13.9	0.0250	15.0		92.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.62		8.00		95.2	70-130			

Matrix Spike (2335042-MS1) Source: E308218-07 Prepared: 08/29/23 Analyzed: 08/30/23

Benzene	3.81	0.0250	5.00	ND	76.2	54-133			
Ethylbenzene	4.24	0.0250	5.00	ND	84.7	61-133			
Toluene	4.14	0.0250	5.00	ND	82.9	61-130			
o-Xylene	4.30	0.0250	5.00	ND	86.0	63-131			
p,m-Xylene	8.66	0.0500	10.0	ND	86.6	63-131			
Total Xylenes	13.0	0.0250	15.0	ND	86.4	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.71		8.00		96.3	70-130			

Matrix Spike Dup (2335042-MSD1) Source: E308218-07 Prepared: 08/29/23 Analyzed: 08/30/23

Benzene	4.23	0.0250	5.00	ND	84.6	54-133	10.4	20	
Ethylbenzene	4.70	0.0250	5.00	ND	94.0	61-133	10.4	20	
Toluene	4.59	0.0250	5.00	ND	91.9	61-130	10.3	20	
o-Xylene	4.77	0.0250	5.00	ND	95.4	63-131	10.3	20	
p,m-Xylene	9.61	0.0500	10.0	ND	96.1	63-131	10.3	20	
Total Xylenes	14.4	0.0250	15.0	ND	95.8	63-131	10.3	20	
Surrogate: 4-Bromochlorobenzene-PID	7.68		8.00		96.0	70-130			



QC Summary Data

Ensolum, LLC	Project Name:	North Brushy Draw Federal 35 #010H	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	9/1/2023 3:45:47PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2335042-BLK1) Prepared: 08/29/23 Analyzed: 08/30/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.32		8.00		91.5	70-130			

LCS (2335042-BS2) Prepared: 08/29/23 Analyzed: 08/30/23

Gasoline Range Organics (C6-C10)	42.7	20.0	50.0		85.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.76		8.00		97.0	70-130			

Matrix Spike (2335042-MS2) Source: E308218-07 Prepared: 08/29/23 Analyzed: 08/30/23

Gasoline Range Organics (C6-C10)	40.4	20.0	50.0	ND	80.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.49		8.00		93.6	70-130			

Matrix Spike Dup (2335042-MSD2) Source: E308218-07 Prepared: 08/29/23 Analyzed: 08/30/23

Gasoline Range Organics (C6-C10)	43.9	20.0	50.0	ND	87.7	70-130	8.31	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.41		8.00		92.6	70-130			



QC Summary Data

Ensolum, LLC 3122 National Parks Hwy Carlsbad NM, 88220	Project Name: North Brushy Draw Federal 35 #010H Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 9/1/2023 3:45:47PM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2335067-BLK1)

Prepared: 08/30/23 Analyzed: 08/31/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	46.8		50.0		93.6	50-200			

LCS (2335067-BS1)

Prepared: 08/30/23 Analyzed: 08/31/23

Diesel Range Organics (C10-C28)	232	25.0	250		93.0	38-132			
Surrogate: n-Nonane	43.1		50.0		86.2	50-200			

Matrix Spike (2335067-MS1)

Source: E308211-01

Prepared: 08/30/23 Analyzed: 08/31/23

Diesel Range Organics (C10-C28)	253	25.0	250	ND	101	38-132			
Surrogate: n-Nonane	43.9		50.0		87.9	50-200			

Matrix Spike Dup (2335067-MSD1)

Source: E308211-01

Prepared: 08/30/23 Analyzed: 08/31/23

Diesel Range Organics (C10-C28)	257	25.0	250	ND	103	38-132	1.95	20	
Surrogate: n-Nonane	46.6		50.0		93.2	50-200			



QC Summary Data

Ensolum, LLC	Project Name:	North Brushy Draw Federal 35 #010H	Reported:
3122 National Parks Hwy	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	9/1/2023 3:45:47PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2335039-BLK1)					Prepared: 08/29/23 Analyzed: 08/31/23				
Chloride	ND	20.0							
LCS (2335039-BS1)					Prepared: 08/29/23 Analyzed: 08/31/23				
Chloride	240	20.0	250		96.2	90-110			
Matrix Spike (2335039-MS1)					Source: E308208-01		Prepared: 08/29/23 Analyzed: 08/31/23		
Chloride	699	20.0	250	412	114	80-120			
Matrix Spike Dup (2335039-MSD1)					Source: E308208-01		Prepared: 08/29/23 Analyzed: 08/31/23		
Chloride	662	20.0	250	412	100	80-120	5.33	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.
Therefore, hand calculated values may differ slightly.



Definitions and Notes

Ensolum, LLC	Project Name:	North Brushy Draw Federal 35 #010H	
3122 National Parks Hwy	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	09/01/23 15:45

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Envirotech Analytical Laboratory

Printed: 8/29/2023 9:32:51AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Ensolum, LLC	Date Received:	08/29/23 08:15	Work Order ID:	E308220
Phone:	(575) 988-0055	Date Logged In:	08/28/23 16:16	Logged In By:	Caitlin Mars
Email:	a.giovengo@ensolum.com	Due Date:	09/05/23 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.



APPENDIX E

Email Correspondence

From: [Ashley Giovengo](#)
To: [Enviro, OCD, EMNRD](#); [Morgan, Crisha A](#)
Cc: [Cole Burton](#); [Chad Hamilton](#); [Raley, Jim](#)
Subject: 48-hour Confirmation Sampling Notification Email - North Brushy Draw Federal 35 #010H - Incident Number nAPP2230034708
Date: Monday, August 21, 2023 2:36:25 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

Hello,

We intend to collect confirmation samples at Devon Energy's North Brushy Draw Federal 35 #010H site (nAPP2230034708) on Friday, August 25, 2023, at 09:00 am MST.

Please let us know if you plan to be onsite to oversee the sampling.

Thanks,



Ashley Giovengo

Senior Engineer

575-988-0055

Ensolum, LLC

in f 

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 269661

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 269661
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	This Remediation Closure Report is approved. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed. A report for reclamation and revegetation will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete".	3/1/2024