



August 31, 2023

**New Mexico Energy Minerals and Natural Resources Department**

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

**Re: Closure Request  
RDX Federal 28 #023  
Incident Number nAPP2316442083  
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 assessment and soil sampling activities performed at the RDX Federal 28 #023 (Site) in Unit G, Section 28, Township 26 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the Site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil resulting from a release of produced water within a lined containment and areas outside of containment. Based on field observations, field screening activities, and laboratory analytical results, WPX is submitting this *Closure Request* and requesting closure for Incident Number nAPP2316442083.

**SITE DESCRIPTION AND RELEASE SUMMARY**

The Site is located in Eddy County, New Mexico (32.0161209°, -103.8851547°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On June 7, 2023, a valve was inadvertently left open on a water transfer pump, which resulted in the release of approximately 158 barrels (bbls) of produced water into the lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids; 150 bbls of produced water was recovered from within the lined containment. Approximately 10 bbls leaked from a breach in the containment wall onto the pad surface. WPX reported the release to the New Mexico Oil and Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on June 8, 2023, and the release was assigned Incident Number nAPP2316442083 (see Appendix A).

A 48-hour advance notice of liner inspection was provided to NMOCD via email, and a liner integrity inspection was conducted by Ensolum personnel following fluid recovery. Upon inspection, the containment liner was determined to be insufficient and Ensolum personnel would return to the Site to conduct vertical delineation sampling beneath the tears in the liner.

## SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized according 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 greater than 105 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. On December 9, 2020, a soil boring (MW-1) was drilled at the RDX Federal Com 21-43 location utilizing a track-mounted hollow-stem auger rig. Soil boring MW-1 was drilled to a depth of 110 feet bgs. The location of the borehole is approximately 0.45 miles north of the release area and is depicted on Figure 1. A field geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 105 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. The Well Record and Log is included in Appendix B.

The closest continuously flowing or significant watercourse to the Site is an intermittent dry-wash, located approximately 365 feet south 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

## SITE ASSESSMENT ACTIVITIES

On June 21, 2023, Site assessment activities were conducted to evaluate the release extent based on information provided on the Form C-141 and visual observations. Four delineation soil samples (SS01 through SS04) were collected around the lined containment at ground surface to confirm the lateral extent of the release. Delineation soil sample SS05 was collected from an area of affected soil on the north side of the containment to verify the vertical extent of the release at ground surface. Ensolum personnel returned to the Site on June 28, 2023, to advance two boreholes (BH01 and BH02) via hand-auger at the locations of the tears in the liner identified during the liner integrity inspection. Five discrete delineation soil samples were collected from borehole (BH01) and four discrete delineation soil samples were collected from borehole (BH02) at depths ranging from the ground surface to 4 feet bgs. A borehole (BH03) was advanced to a depth of 2 feet bgs in the vicinity of delineation soil sample SS05 to verify the vertical extent of soil on the caliche pad.

Delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID), TPH utilizing a PetroFlag® soil analyzer system, and chloride using Hach® chloride QuanTab® test strips. Field screening results and observations from the boreholes were documented on a lithologic/soil sampling logs, which are included as Appendix C. The boreholes were backfilled with soil removed and an Ensolum representative repaired the tears in the liner. The boreholes and soil sample locations are depicted on Figure 2. Photographic documentation was collected and a photographic log is included in Appendix D.

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.

Laboratory analytical results for delineation soil samples SS01 through SS04 indicated all COC concentrations were in compliance with the strictest Closure Criteria per NMOCD Table I and with the Site Closure Criteria; however, laboratory analytical results indicated chloride concentrations exceeded both Closure Criteria in sample location SS05. Laboratory analytical results for discrete soil samples collected from boreholes BH01 and BH02 indicated all COC concentrations were in compliance with the Site Closure Criteria at depths ranging from ground surface to 4 ft bgs beneath the containment liner. Laboratory analytical results for borehole sample BH03@0' exceeded the Site Closure Criteria at ground surface, indicating remediation of the affected area on-pad was warranted. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Appendix E.

## EXCAVATION ACTIVITIES

On August 7 and August 8, 2023, Ensolum personnel were onsite to oversee the removal of impacted soil from the pad surface. Heavy equipment and hand tools were used to remove approximately 20 cubic yards of impacted soil from the pad surface. The impacted soil was transported and properly disposed of at the R360 Facility in Jal, New Mexico.

Following removal of impacted soil, Ensolum personnel collected 5-point composite confirmation soil samples every 200 square feet from the 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. Due to the shallow nature of the excavation, the composite samples included soil from sidewalls, excavation floors, and the edges of the lined containment wall. The confirmation soil samples were collected, handled, and analyzed following the same procedures as described above. Composite soil samples FS01 through FS15 were at 0.5 feet bgs and laboratory analytical results indicated all COC concentrations from the 15 confirmation samples were in compliance with the Closure Criteria for the Site. The excavation extent and confirmation soil sample locations are presented on Figure 3 and laboratory analytical results are summarized in Table 2.

## CLOSURE REQUEST

Following the failed liner integrity inspection at the Site, Ensolum personnel advanced two boreholes (BH01 and BH02) at the location of the tears in the liner to assess for the presence or absence of impacted soil resulting from the June 2023 produced water release within lined containment. Five discrete delineation soil samples were collected from borehole BH01, at depths ranging from the ground surface to 4 feet bgs and three discrete delineation soil samples were collected from boreholes BH02 and BH03, at depths of approximately the ground surface through 2 feet bgs. Laboratory analytical

results for the discrete soil samples collected from boreholes (BH01 and BH02) indicated all COC concentrations were compliant with the Site Closure Criteria. Additionally, laboratory analytical results for soil samples SS01 through SS04, collected around the containment, were compliant with the strictest Closure Criteria per NMOCD Table I. The tears in the liner were repaired by Ensolum personnel at the conclusion of delineation sampling.

Delineation soil sample SS05 and borehole sample BH03@0' both exceed the Site Closure Criteria at ground surface but were removed during excavation of impacted soils on-pad. Confirmation sampling was completed, and all confirmation soil samples were below the applicable Closure Criteria for the Site.

Based on delineation sampling and excavation efforts, depth to groundwater greater than 105 feet bgs, and soil sample laboratory analytical results compliant with the Closure Criteria directly beneath the tears in the liner and on pad, all remediation activities have been protective of human health, the environment, and groundwater. As such, WPX respectfully requests closure for Incident Number nAPP2316442083.

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

Sincerely,  
**Ensolum, LLC**



Ashley Giovengo  
Senior Engineer



Daniel R. Moir, P.G.  
Senior Managing Geologist

cc: Jim Raley, Devon Energy  
Crisha A. Morgan, BLM

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Confirmation Soil Sample Locations
Table 1	Delineation Soil Sample Analytical Results
Table 2	Confirmation Soil Sample Analytical Results
Appendix A	Form C-141
Appendix B	Well Record and Log
Appendix C	Lithologic Soil Sampling Logs
Appendix D	Photographic Log
Appendix E	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix F	NMOCD Sample Notification





FIGURES

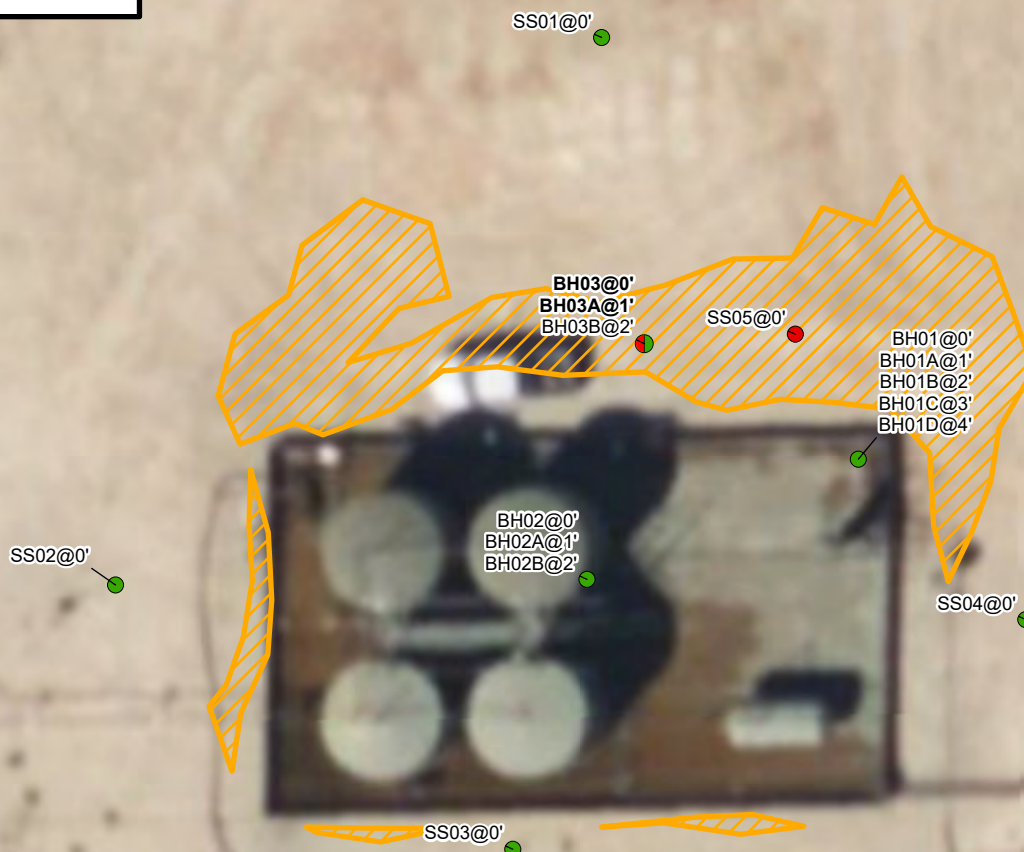
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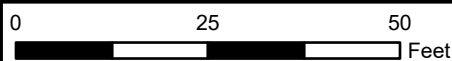


**Legend**

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Exceeding Closure Criteria
- Delineation Soil Sample with Concentrations Exceeding Closure Criteria
- Release Extent



Notes:  
 Sample ID @ Depth Below Ground/Surface.  
 Samples in bold indicate sample exceeded applicable closure criteria



Sources: Environmental Systems Research Institute (ESRI)

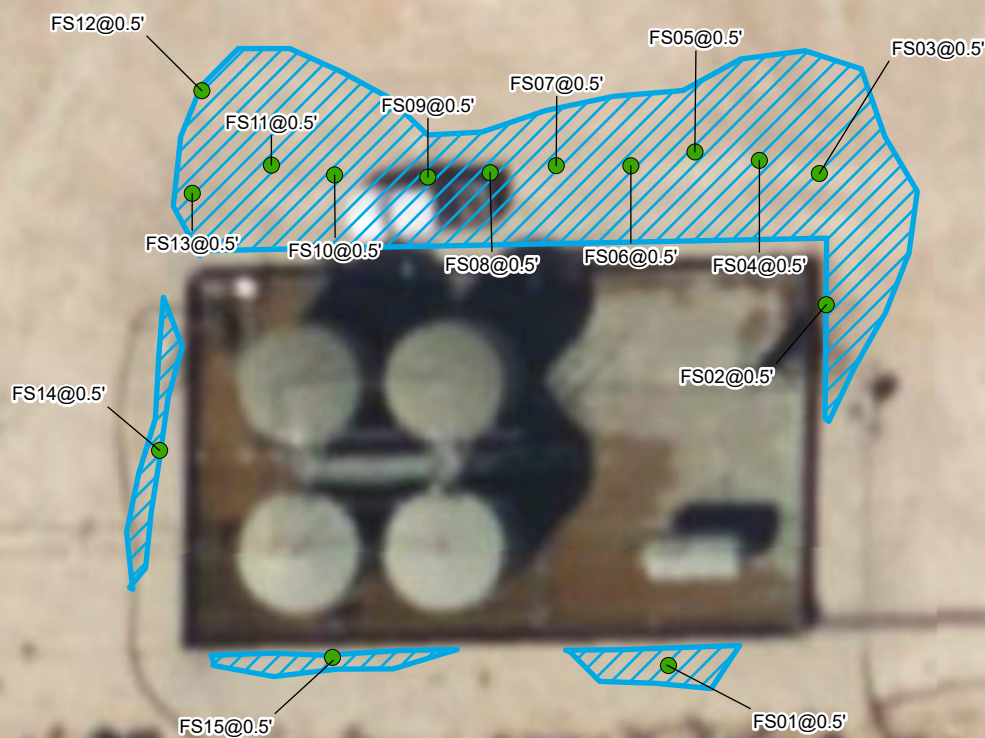
**Delineation Soil Sample Locations**

WPX Energy Permian, LLC  
 RDX Federal 28 #023  
 Incident Number: nAPP2316442083  
 Unit G, Section 28, T 26S, R 30E  
 New Mexico, 88220

**FIGURE****2**

**Legend**

- Excavation Floor Sample  
in Compliance with  
Closure Criteria
- ▨ Excavation Extent



Notes:  
 Sample ID @ Depth Below Ground/Surface.  
 Samples in bold indicate sample exceeded applicable  
 closure criteria

0 25 50  
 Feet

Sources: Environmental Systems Research Institute (ESRI)



## Confirmation Soil Sample Locations

WPX Energy Permian, LLC  
 RDX Federal 28 #023  
 Incident Number: nAPP2316442083  
 Unit G, Section 28, T 26S, R 30E  
 New Mexico, 88220

**FIGURE**

**3**



TABLES



**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**RDX Federal 28 #023**  
**WPX Energy Permian, LLC**  
**Eddy 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 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
SS01	06/21/2023	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	<20.0
SS02	06/21/2023	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	<20.0
SS03	06/21/2023	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	55.8
SS04	06/21/2023	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	97.6
SS05	06/21/2023	0	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	30,900
BH01	06/28/2023	0	<0.0250	<0.0250	<20.0	121	228	121	349	14,700
BH01A	06/28/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	17,900
BH01B	06/28/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	1,380
BH01C	06/28/2023	3	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	2,510
BH01D	06/28/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	160
BH02	06/28/2023	0	<0.0250	<0.0250	<20.0	719	1,120	719	1,839	8,580
BH02A	06/28/2023	1	<0.0250	<0.0250	<20.0	76.9	77.8	76.9	154.7	4,040
BH02B	06/28/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	57.7
BH03	06/28/2023	0	<0.0250	<0.0250	<20.0	279	557	279	836	34,000
BH03A	06/28/2023	1	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	3,170
BH03B	06/28/2023	2	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	206

## Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table 1 Closure Criteria or reclamation requirement where applicable.

NMAC: New Mexico Administrative Code

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

\*&lt;: Laboratory Analytical result is less than reporting limit

Grey text indicates soil sample removed during excavation activities





**TABLE 2**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**RDX Federal 28 #023**  
**WPX Energy Permian, LLC**  
**Eddy 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 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Confirmation Soil Samples										
FS01	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	19,400
FS02	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	5,720
FS03	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	4,770
FS04	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	1,150
FS05	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	179
FS06	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	2,090
FS07	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	5,850
FS08	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	670
FS09	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	7,370
FS10	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	1,980
FS11	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	6,940
FS12	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	667
FS13	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	658
FS14	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	8,820
FS15	08/08/2013	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0	<20.0	3,470

## Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table 1 Closure Criteria or reclamation requirement where applicable.

NMAC: New Mexico Administrative Code

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

\*&lt;: Laboratory Analytical result is less than reporting limit

Grey text indicates soil sample removed during excavation activities



APPENDIX A

C-141 Form

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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	nAPP2316442083
District RP	
Facility ID	
Application ID	

## Responsible Party

Responsible Party WPX Energy Permian, LLC	OGRID 246289
Contact Name Jim Raley	Contact Telephone 575-689-7597
Contact email Jim.Raley@dmv.com	Incident # (assigned by OCD) nAPP2316442083
Contact mailing address 5315 Buena Vista Drive, Carlsbad, NM 88220	

## Location of Release Source

Latitude 32.0161209 Longitude -103.8851547  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: RDX FEDERAL 28 #023	Site Type Oil Well
Date Release Discovered: 6/7/2023	API# (if applicable) 30-015-41985

Unit Letter	Section	Township	Range	County
G	28	26S	30E	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) 158	Volume Recovered (bbls) 150
	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: Valve was inadvertently left open on water transfer pump. This allowed the release of approx. 148 bbls produced water to lined secondary containment. Approx. 10 bbls leaked from breach in containment wall and impacted pad surface


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

Incident ID	nAPP2316442083
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Volume exceeded 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Email to Robert Hamlet and Rosa Romero on 6/8/2023	

### 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>6/13/2023</u>
email: <u>jim.raley@dvn.com</u>	Telephone: <u>575-689-7597</u>
<b><u>OCD Only</u></b>	
Received by: _____	Date: _____

Incident ID	nAPP2316442083
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?	> 105 (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 <b>not</b> 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

Page 4

Incident ID	nAPP2316442083
District RP	
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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: James Raley Title: Environmental ProfessionalSignature:  Date: 08/23/2023email: jim.raley@dvn.com Telephone: 575-689-7597**OCD Only**Received by: Shelly Wells Date: 9/1/2023



Incident ID	nAPP2316442083
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: James Raley Title: Environmental Professional

Signature:  Date: 08/23/2023

email: jim.raley@dvn.com Telephone: 575-689-7597

### OCD Only

Received by: Shelly Wells Date: 9/1/2023

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

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_


Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_



## APPENDIX B

### Well Log & Record

---


 <b>HRL COMPLIANCE SOLUTIONS</b>							BORING LOG/MONITORING WELL COMPLETION DIAGRAM												
Drilling Method: <b>Air Rotary</b>							Sampling Method: <b>None</b>			Boring/Well Number: <b>MW-1</b>			Location: <b>RDX Federal Com 21-43</b>						
Gravel Pack Type: <b>10/20 Sand</b>							Gravel Pack Depth Interval: <b>3 Bags</b>			Seal Type: <b>None</b>		Seal Depth Interval: <b>None</b>		Date: <b>12/9/2020</b>		Client: <b>WPX Energy</b>			
Casing Type: <b>PVC</b>							Diameter: <b>2-inch</b>		Depth Interval: <b>0-100 feet bgs</b>		Boring Total Depth (ft. BGS): <b>110</b>			Latitude: <b>32.022571</b>					
Screen Type: <b>PVC</b>							Slot: <b>0.010-inch</b>		Diameter: <b>2-inch</b>		Depth Interval: <b>100 - 105 ft</b>		Well Total Depth (ft. BGS): <b>105</b>			Longitude: <b>-103.884371</b>			
Screen Type: <b>PVC</b>							Slot: <b>0.010-inch</b>		Diameter: <b>2-inch</b>		Depth Interval: <b>100 - 105 ft</b>		Well Total Depth (ft. BGS): <b>105</b>			Depth to Water (ft. BTWC): <b>&gt; 105</b>		DTW Date: <b>12/16/2020</b>	
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	SP	NS	Pale orange to tan poorly graded fine sand										
5																			
10																			
15																			
20	NM	H	D	N	N	NM	CL	NS	Pale orange/tan/pale red clay, dry, with silt, fine sand, and minor caliche										
25																			
30																			
35																			
40	NM	L	D	N	N	NM	SP	NS	Pale orange to pale red poorly graded fine sand										
45																			
50																			
55																			
60	NM	L	D	N	N	NM	SP	NS	Golden yellow poorly graded fine sand with minor silt and clay										
65																			
70																			
75																			
80	NM	L	D	N	N	NM	SP	NS	Pale orange to pale red poorly graded fine sand with minor silt/clay										
85																			
90																			
95																			
100	NM	M	D	N	N	NM	SC	NS	Buff to orange color fine sand with medium sand and clay										
85																			
90																			
95																			
95	NM	H	D	N	N	NM	CL	NS	Brown orange clay with silt and fine sand										
100																			
105																			
105																			
100	NM	H	D	N	N	NM	SC	NS	Golden yellow and buff colored clay with fine sand - TD Boring: 110' BGS; Sand 110' - 105' BGS										
105																			




## APPENDIX C

### Lithologic Soil Sampling Logs

---

								Sample Name: BH01		Date: 6/28/23			
								Site Name: RDX Ferderal 28 #023					
								Incident Number: nAPP2316442083					
								Job Number: 03A1987087					
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: MR & CD		Method: Hand Auger			
Coordinates: 32.015728, -103.885085								Hole Diameter: 4"		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. No correction factors included.													
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions					
M	15,108	351.4	Y	BH01	0	0	CCHE	0-2' Caliche, med brown, poorly sorted, med/coarse grain, sub rounded grains, staining @ surface, Cl odor, moist					
M	18,026	190	N	BH01A	1	1							
M	772	224	N	BH01B	2	2	SP-SM	2-4' Sand w/silt, med brown, med to fine grain, poorly sorted, no stain, no odor, moist					
M	3,421	2.4	N	BH01C	3	3							
M	369	1.9	N	BH01D	4	4		Petroflag = 57ppm					
Total Depth = 4' bgs.													

								Sample Name: BH02		Date: 6/28/23			
								Site Name: RDX Ferderal 28 #023					
								Incident Number: nAPP2316442083					
								Job Number: 03A1987087					
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: MR & CD		Method: Hand Auger			
Coordinates: 32.015684, -103.885178								Hole Diameter: 4"		Total Depth: 2'			
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. No correction factors included.													
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions					
M	7,282	20.7	Y	BH02	0	0	CCHE	0-2' Caliche, yellow/brown, poorly sorted, sub rounded grains, no staining passed 0.5', Cl odor, moist  2' Sand w/silt, med brown to red/brown, med to fine grain, poorly sorted, no stain, no odor, moist  Petroflag = 29ppm					
M	5,280	10.8	N	BH02A	1	1							
M	324	1.5	N	BH02B	2	2	SP-SM						
Total Depth = 2' bgs.													





## APPENDIX D

### Photographic Log

**Photographic Log**

WPX Energy Permian, LLC

RDX Federal 28 #023H

Incident Number: nAPP2316442083



Photograph: 1  
Description: Initial Spill  
View: East

Date: 6/7/2023



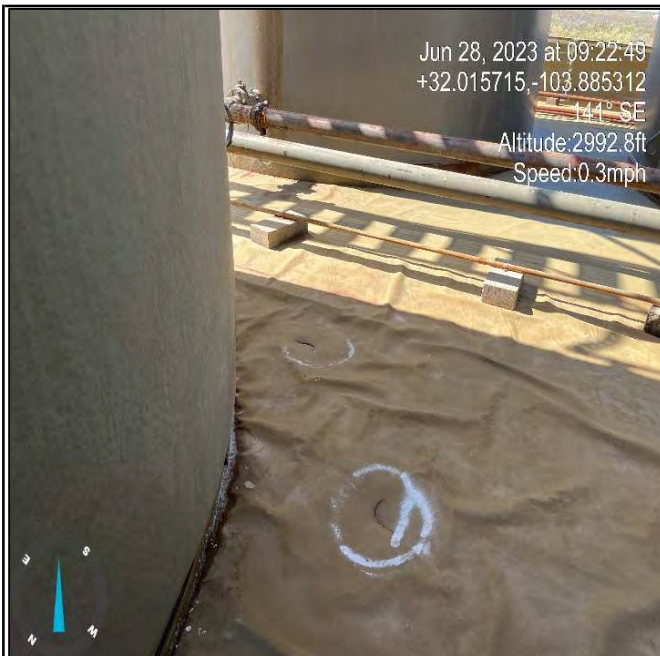
Photograph: 2  
Description: Initial Spill  
View: East

Date: 6/7/2023



Photograph: 3  
Description: Excavation activities  
View: Southwest

Date: 6/28/2023



Photograph: 4  
Description: Backfilling activities  
View: Southeast

Date: 6/28/2023





### Photographic Log

WPX Energy Permian, LLC

RDX Federal 28 #023H

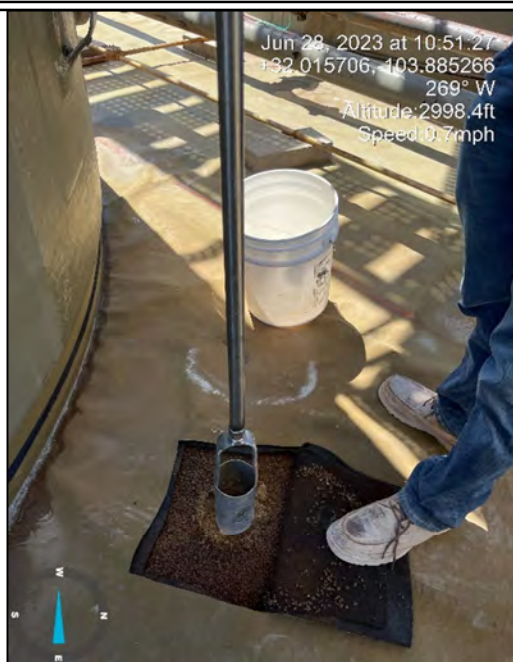
Incident Number: nAPP2316442083



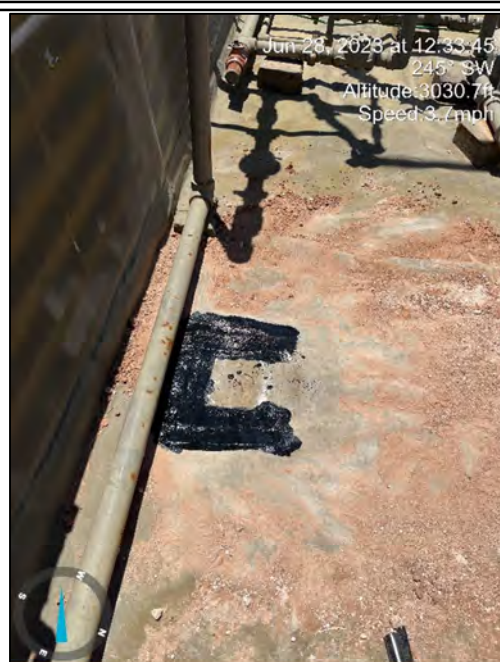
Photograph: 5 Date: 6/28/2023  
Description: Delineation Soil Sampling (BH01)  
View: Southeast



Photograph: 6 Date: 6/28/2023  
Description: Delineation Soil Sampling (BH01)  
View: Southeast



Photograph: 7 Date: 6/28/2023  
Description: Delineation Soil Sampling (BH02)  
View: Southwest



Photograph: 8 Date: 6/28/2023  
Description: Liner Patch (BH01)  
View: Southwest



**Photographic Log**

WPX Energy Permian, LLC

RDX Federal 28 #023H

Incident Number: nAPP2316442083



Photograph: 9 Date: 6/28/2023  
Description: Liner Patch (BH02)  
View: South



Photograph: 10 Date: 6/28/2023  
Description: Delineation Soil Sampling (BH03)  
View: Northwest



Photograph: 11 Date: 8/7/2023  
Description: Excavation  
View: West



Photograph: 12 Date: 8/7/2023  
Description: Excavation  
View: South





### Photographic Log

WPX Energy Permian, LLC

RDX Federal 28 #023H

Incident Number: nAPP2316442083

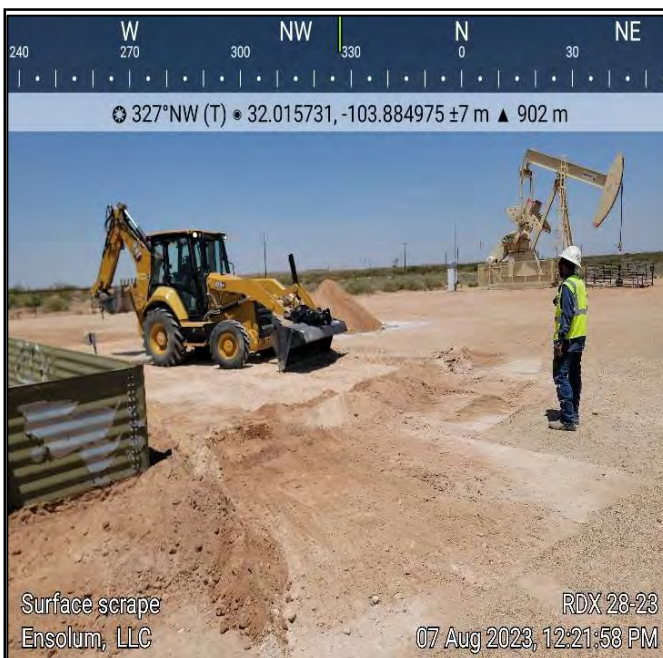


Photograph: 13

Date: 8/7/2023

Description: Excavation

View: West



Photograph: 14

Date: 8/7/2023

Description: Excavation

View: Northwest



Photograph: 15

Date: 8/8/2023

Description: Confirmation Sampling

View: South



Photograph: 16

Date: 8/8/2023

Description: Confirmation Sampling

View: West





# Photographic Log

WPX Energy Permian, LLC

RDX Federal 28 #023H

Incident Number: nAPP2316442083



Photograph: 17 Date: 8/8/2023  
Description: Confirmation Sampling  
View: Southwest



Photograph: 18 Date: 8/8/2023  
Description: Confirmation Sampling  
View: Northwest



Photograph: 19 Date: 8/8/2023  
Description: Confirmation Sampling  
View: Northeast



Photograph: 20 Date: 8/8/2023  
Description: Confirmation Sampling  
View: East





## APPENDIX E

### Laboratory Analytical Reports & Chain-of-Custody Documentation

---

Report to:

Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Devon Energy - Carlsbad

Project Name: RDX Federal 28 #023

Work Order: E306189

Job Number: 01058-0007

Received: 6/23/2023

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/29/23

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: 6/29/23

Ashley Giovengo  
6488 7 Rivers Hwy  
Artesia, NM 88210



Project Name: RDX Federal 28 #023  
Workorder: E306189  
Date Received: 6/23/2023 7:30:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/23/2023 7:30:00AM, under the Project Name: RDX Federal 28 #023.

The analytical test results summarized in this report with the Project Name: RDX Federal 28 #023 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,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
Office: 505-632-1881  
[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

**Alexa Michaels**  
Sample Custody Officer  
Office: 505-632-1881  
[labadmin@envirotech-inc.com](mailto:labadmin@envirotech-inc.com)

Field Offices:

**Southern New Mexico Area**  
**Lynn Jarboe**  
Technical Representative/Client Services  
Office: 505-421-LABS(5227)  
Cell: 505-320-4759  
[ljjarboe@envirotech-inc.com](mailto:ljjarboe@envirotech-inc.com)

**West Texas Midland/Odessa Area**  
**Rayny Hagan**  
Technical Representative  
Office: 505-421-LABS(5227)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

Devon Energy - Carlsbad	Project Name:	RDX Federal 28 #023	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/29/23 11:24

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01 - 0'	E306189-01A	Soil	06/21/23	06/23/23	Glass Jar, 2 oz.
SS02 - 0'	E306189-02A	Soil	06/21/23	06/23/23	Glass Jar, 2 oz.
SS03 - 0'	E306189-03A	Soil	06/21/23	06/23/23	Glass Jar, 2 oz.
SS04 - 0'	E306189-04A	Soil	06/21/23	06/23/23	Glass Jar, 2 oz.
SS05 - 0'	E306189-05A	Soil	06/21/23	06/23/23	Glass Jar, 2 oz.



## Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: RDX Federal 28 #023 Project Number: 01058-0007 Project Manager: Ashley Giovengo	<b>Reported:</b> 6/29/2023 11:24:24AM
---	---	--

SS01 - 0'

E306189-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2325072	
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	95.9 %	70-130		06/23/23	06/23/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2325072	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	85.2 %	70-130		06/23/23	06/23/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: JL		Batch: 2326020	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/27/23	06/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/27/23	06/28/23	
<i>Surrogate: n-Nonane</i>	89.4 %	50-200		06/27/23	06/28/23	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2325082	
Chloride	ND	20.0	1	06/23/23	06/27/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
6/29/2023 11:24:24AM

SS02 - 0'

E306189-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/23/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/23/23	
Toluene	ND	0.0250	1	06/23/23	06/23/23	
o-Xylene	ND	0.0250	1	06/23/23	06/23/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/23/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/23/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.1 %	70-130		06/23/23	06/23/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/23/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	84.9 %	70-130		06/23/23	06/23/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2326020
Diesel Range Organics (C10-C28)	ND	25.0	1	06/27/23	06/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/27/23	06/28/23	
<i>Surrogate: n-Nonane</i>						
	82.6 %	50-200		06/27/23	06/28/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2325082
Chloride	ND	20.0	1	06/23/23	06/27/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
6/29/2023 11:24:24AM

SS03 - 0'

E306189-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/24/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/24/23	
Toluene	ND	0.0250	1	06/23/23	06/24/23	
o-Xylene	ND	0.0250	1	06/23/23	06/24/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/24/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/24/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.0 %	70-130		06/23/23	06/24/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/24/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	84.9 %	70-130		06/23/23	06/24/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2326020
Diesel Range Organics (C10-C28)	ND	25.0	1	06/27/23	06/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/27/23	06/28/23	
<i>Surrogate: n-Nonane</i>						
	84.5 %	50-200		06/27/23	06/28/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2325082
Chloride	55.8	20.0	1	06/23/23	06/27/23	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
6/29/2023 11:24:24AM

SS04 - 0'

E306189-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/24/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/24/23	
Toluene	ND	0.0250	1	06/23/23	06/24/23	
o-Xylene	ND	0.0250	1	06/23/23	06/24/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/24/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/24/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.1 %	70-130		06/23/23	06/24/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/24/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	87.0 %	70-130		06/23/23	06/24/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2326020
Diesel Range Organics (C10-C28)	ND	25.0	1	06/27/23	06/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/27/23	06/28/23	
<i>Surrogate: n-Nonane</i>						
	75.8 %	50-200		06/27/23	06/28/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2325082
Chloride	97.6	20.0	1	06/23/23	06/27/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
6/29/2023 11:24:24AM

SS05 - 0'

E306189-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2325072
Benzene	ND	0.0250	1	06/23/23	06/24/23	
Ethylbenzene	ND	0.0250	1	06/23/23	06/24/23	
Toluene	ND	0.0250	1	06/23/23	06/24/23	
o-Xylene	ND	0.0250	1	06/23/23	06/24/23	
p,m-Xylene	ND	0.0500	1	06/23/23	06/24/23	
Total Xylenes	ND	0.0250	1	06/23/23	06/24/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.1 %	70-130		06/23/23	06/24/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2325072
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/23/23	06/24/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.7 %	70-130		06/23/23	06/24/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2326020
Diesel Range Organics (C10-C28)	ND	25.0	1	06/27/23	06/28/23	
Oil Range Organics (C28-C36)	ND	50.0	1	06/27/23	06/28/23	
<i>Surrogate: n-Nonane</i>						
	82.3 %	50-200		06/27/23	06/28/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2325082
Chloride	30900	400	20	06/23/23	06/27/23	



QC Summary Data

Devon Energy - Carlsbad	Project Name:	RDX Federal 28 #023	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/29/2023 11:24:24AM

Volatile Organics by EPA 8021B

Analyst: IY

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

Blank (2325072-BLK1) Prepared: 06/23/23 Analyzed: 06/23/23

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	7.74		8.00		96.8	70-130			

LCS (2325072-BS1) Prepared: 06/23/23 Analyzed: 06/23/23

Benzene	5.03	0.0250	5.00		101	70-130			
Ethylbenzene	4.85	0.0250	5.00		97.0	70-130			
Toluene	5.02	0.0250	5.00		100	70-130			
o-Xylene	4.97	0.0250	5.00		99.5	70-130			
p,m-Xylene	10.0	0.0500	10.0		100	70-130			
Total Xylenes	15.0	0.0250	15.0		100	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.73		8.00		96.6	70-130			

Matrix Spike (2325072-MS1) Source: E306180-01 Prepared: 06/23/23 Analyzed: 06/23/23

Benzene	4.98	0.0250	5.00	ND	99.5	54-133			
Ethylbenzene	4.78	0.0250	5.00	ND	95.6	61-133			
Toluene	4.97	0.0250	5.00	ND	99.4	61-130			
o-Xylene	4.91	0.0250	5.00	ND	98.1	63-131			
p,m-Xylene	9.89	0.0500	10.0	ND	98.9	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.7	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.66		8.00		95.7	70-130			

Matrix Spike Dup (2325072-MSD1) Source: E306180-01 Prepared: 06/23/23 Analyzed: 06/23/23

Benzene	5.07	0.0250	5.00	ND	101	54-133	1.84	20	
Ethylbenzene	4.88	0.0250	5.00	ND	97.7	61-133	2.11	20	
Toluene	5.07	0.0250	5.00	ND	101	61-130	1.94	20	
o-Xylene	4.99	0.0250	5.00	ND	99.9	63-131	1.80	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.98	20	
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131	1.92	20	
Surrogate: 4-Bromochlorobenzene-PID	7.60		8.00		95.0	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	RDX Federal 28 #023	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/29/2023 11:24:24AM

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 (2325072-BLK1) Prepared: 06/23/23 Analyzed: 06/23/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.92		8.00		86.5	70-130			

LCS (2325072-BS2) Prepared: 06/23/23 Analyzed: 06/23/23

Gasoline Range Organics (C6-C10)	46.0	20.0	50.0		92.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.10		8.00		88.7	70-130			

Matrix Spike (2325072-MS2) Source: E306180-01 Prepared: 06/23/23 Analyzed: 06/23/23

Gasoline Range Organics (C6-C10)	46.2	20.0	50.0	ND	92.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.03		8.00		87.9	70-130			

Matrix Spike Dup (2325072-MSD2) Source: E306180-01 Prepared: 06/23/23 Analyzed: 06/23/23

Gasoline Range Organics (C6-C10)	47.3	20.0	50.0	ND	94.7	70-130	2.45	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.11		8.00		88.9	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	RDX Federal 28 #023	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/29/2023 11:24:24AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

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 (2326020-BLK1)					Prepared: 06/27/23 Analyzed: 06/27/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.0		50.0		90.1	50-200			

LCS (2326020-BS1)					Prepared: 06/27/23 Analyzed: 06/27/23				
Diesel Range Organics (C10-C28)	251	25.0	250		101	38-132			
Surrogate: n-Nonane	38.9		50.0		77.8	50-200			

Matrix Spike (2326020-MS1)					Source: E306184-12		Prepared: 06/27/23 Analyzed: 06/27/23		
Diesel Range Organics (C10-C28)	267	25.0	250	ND	107	38-132			
Surrogate: n-Nonane	35.4		50.0		70.9	50-200			

Matrix Spike Dup (2326020-MSD1)					Source: E306184-12		Prepared: 06/27/23 Analyzed: 06/27/23		
Diesel Range Organics (C10-C28)	254	25.0	250	ND	102	38-132	4.87	20	
Surrogate: n-Nonane	36.0		50.0		72.0	50-200			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	RDX Federal 28 #023	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	6/29/2023 11:24:24AM

Anions by EPA 300.0/9056A

Analyst: RAS

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

Blank (2325082-BLK1)					Prepared: 06/23/23 Analyzed: 06/27/23				
Chloride	ND	20.0							
LCS (2325082-BS1)					Prepared: 06/23/23 Analyzed: 06/27/23				
Chloride	244	20.0	250		97.7	90-110			
Matrix Spike (2325082-MS1)					Source: E306184-01		Prepared: 06/23/23 Analyzed: 06/27/23		
Chloride	261	20.0	250	ND	105	80-120			
Matrix Spike Dup (2325082-MSD1)					Source: E306184-01		Prepared: 06/23/23 Analyzed: 06/27/23		
Chloride	261	20.0	250	ND	104	80-120	0.226	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

Devon Energy - Carlsbad	Project Name:	RDX Federal 28 #023	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	06/29/23 11:24

- 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.





Client: Devon Energy		Bill To		Lab Use Only		TAT		EPA Program					
Project: RDX Federal 28 #023		Attention: Jim Raley		Lab WO# E306189		Job Number 00580007		1D	2D	3D	Standard	CWA	SDWA
Project Manager: Ashley Giovengo		Address: 5315 Buena Vista Dr									x		
Address: 3122 National Parks Hwy		City, State, Zip: Carlsbad, NM 88220											RCRA
City, State, Zip: Carlsbad, NM 88220		Phone: 575-689-7597											
Phone: 575-988-0055		Email: jim.raley@dvn.com											
Email: agiovengo@ensolum.com													
Report due by:													

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	GDOC TX	Remarks
900	6/21/2023	S	1	SS01-0'	1						X		
945	6/21/2023	S	1	SS02-0'	2						X		
910	6/21/2023	S	1	SS03-0'	3						X		
915	6/21/2023	S	1	SS04-0'	4						X		
920	6/21/2023	S	1	SS05-0'	5						X		

## Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: Ronni Hayes

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: Y / N T1 _____ T2 _____ T3 _____ AVG Temp °C 4
Michelle Gayle	6/22/23	1000	Michelle Gayle	6/22/23	1000	
Michelle Gayle	6/22/23	1730	Michelle M7600	6/22/23	1845	
Michelle M7600	6/23/23	2400	Cathy Man	6/23/23	7:30	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.





## Envirotech Analytical Laboratory

Printed: 6/23/2023 10:40:42AM

## 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:	Devon Energy - Carlsbad	Date Received:	06/23/23 07:30	Work Order ID:	E306189
Phone:	(505) 382-1211	Date Logged In:	06/23/23 08:39	Logged In By:	Caitlin Mars
Email:	ashley.giovenego@wescominc.com	Due Date:	06/29/23 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? Yes

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.

Report to:  
Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: RDX FEDERAL 28 #023

Work Order: E306237

Job Number: 01058-0007

Received: 6/30/2023

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
7/10/23

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: 7/10/23

Ashley Giovengo  
5315 Buena Vista Dr  
Carlsbad, NM 88220



Project Name: RDX FEDERAL 28 #023  
Workorder: E306237  
Date Received: 6/30/2023 8:20:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/30/2023 8:20:00AM, under the Project Name: RDX FEDERAL 28 #023.

The analytical test results summarized in this report with the Project Name: RDX FEDERAL 28 #023 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,

**Walter Hinchman**  
Laboratory Director  
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Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

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**Alexa Michaels**  
Sample Custody Officer  
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**West Texas Midland/Odessa Area**  
**Rayny Hagan**  
Technical Representative  
Office: 505-421-LABS(5227)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

WPX Energy - Carlsbad	Project Name:	RDX FEDERAL 28 #023	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	07/10/23 15:10

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01 - 0'	E306237-01A	Soil	06/28/23	06/30/23	Glass Jar, 2 oz.
BH01A - 1'	E306237-02A	Soil	06/28/23	06/30/23	Glass Jar, 2 oz.
BH01B - 2'	E306237-03A	Soil	06/28/23	06/30/23	Glass Jar, 2 oz.
BH01C - 3'	E306237-04A	Soil	06/28/23	06/30/23	Glass Jar, 2 oz.
BH01D - 4'	E306237-05A	Soil	06/28/23	06/30/23	Glass Jar, 2 oz.
BH02 - 0'	E306237-06A	Soil	06/28/23	06/30/23	Glass Jar, 2 oz.
BH02A - 1'	E306237-07A	Soil	06/28/23	06/30/23	Glass Jar, 2 oz.
BH02B - 2'	E306237-08A	Soil	06/28/23	06/30/23	Glass Jar, 2 oz.
BH03 - 0'	E306237-09A	Soil	06/28/23	06/30/23	Glass Jar, 2 oz.
BH03A - 1'	E306237-10A	Soil	06/28/23	06/30/23	Glass Jar, 2 oz.
BH03B - 2'	E306237-11A	Soil	06/28/23	06/30/23	Glass Jar, 2 oz.



## Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: RDX FEDERAL 28 #023 Project Number: 01058-0007 Project Manager: Ashley Giovengo	<b>Reported:</b> 7/10/2023 3:10:23PM
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**BH01 - 0'**

**E306237-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2326080	
Benzene	ND	0.0250	1	06/30/23	07/03/23	
Ethylbenzene	ND	0.0250	1	06/30/23	07/03/23	
Toluene	ND	0.0250	1	06/30/23	07/03/23	
o-Xylene	ND	0.0250	1	06/30/23	07/03/23	
p,m-Xylene	ND	0.0500	1	06/30/23	07/03/23	
Total Xylenes	ND	0.0250	1	06/30/23	07/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	95.4 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2326080	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/30/23	07/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	85.4 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2327032	
Diesel Range Organics (C10-C28)	121	50.0	2	07/06/23	07/08/23	
Oil Range Organics (C28-C36)	228	100	2	07/06/23	07/08/23	
<i>Surrogate: n-Nonane</i>	114 %	50-200		07/06/23	07/08/23	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2327025	
Chloride	14700	400	20	07/06/23	07/07/23	





## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: RDX FEDERAL 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
7/10/2023 3:10:23PM

BH01A - 1'

E306237-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Benzene	ND	0.0250	1	06/30/23	07/03/23	
Ethylbenzene	ND	0.0250	1	06/30/23	07/03/23	
Toluene	ND	0.0250	1	06/30/23	07/03/23	
o-Xylene	ND	0.0250	1	06/30/23	07/03/23	
p,m-Xylene	ND	0.0500	1	06/30/23	07/03/23	
Total Xylenes	ND	0.0250	1	06/30/23	07/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.2 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/30/23	07/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	84.6 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2327032
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/23	07/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/23	07/08/23	
<i>Surrogate: n-Nonane</i>						
	111 %	50-200		07/06/23	07/08/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2327025
Chloride	17900	1000	50	07/06/23	07/07/23	



## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: RDX FEDERAL 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
7/10/2023 3:10:23PM

BH01B - 2 '

E306237-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Benzene	ND	0.0250	1	06/30/23	07/03/23	
Ethylbenzene	ND	0.0250	1	06/30/23	07/03/23	
Toluene	ND	0.0250	1	06/30/23	07/03/23	
o-Xylene	ND	0.0250	1	06/30/23	07/03/23	
p,m-Xylene	ND	0.0500	1	06/30/23	07/03/23	
Total Xylenes	ND	0.0250	1	06/30/23	07/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.7 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/30/23	07/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	83.9 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2327032
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/23	07/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/23	07/08/23	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		07/06/23	07/08/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2327025
Chloride	1380	20.0	1	07/06/23	07/07/23	



## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: RDX FEDERAL 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
7/10/2023 3:10:23PM

BH01C - 3'

E306237-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Benzene	ND	0.0250	1	06/30/23	07/03/23	
Ethylbenzene	ND	0.0250	1	06/30/23	07/03/23	
Toluene	ND	0.0250	1	06/30/23	07/03/23	
o-Xylene	ND	0.0250	1	06/30/23	07/03/23	
p,m-Xylene	ND	0.0500	1	06/30/23	07/03/23	
Total Xylenes	ND	0.0250	1	06/30/23	07/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.5 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/30/23	07/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.9 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2327032
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/23	07/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/23	07/08/23	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		07/06/23	07/08/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2327025
Chloride	2510	40.0	2	07/06/23	07/07/23	



## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: RDX FEDERAL 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
7/10/2023 3:10:23PM

## BHO1D - 4'

## E306237-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Benzene	ND	0.0250	1	06/30/23	07/03/23	
Ethylbenzene	ND	0.0250	1	06/30/23	07/03/23	
Toluene	ND	0.0250	1	06/30/23	07/03/23	
o-Xylene	ND	0.0250	1	06/30/23	07/03/23	
p,m-Xylene	ND	0.0500	1	06/30/23	07/03/23	
Total Xylenes	ND	0.0250	1	06/30/23	07/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.3 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/30/23	07/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.4 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2327032
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/23	07/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/23	07/08/23	
<i>Surrogate: n-Nonane</i>						
	116 %	50-200		07/06/23	07/08/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2327025
Chloride	160	20.0	1	07/06/23	07/07/23	



## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: RDX FEDERAL 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
7/10/2023 3:10:23PM

BH02 - 0'

E306237-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Benzene	ND	0.0250	1	06/30/23	07/03/23	
Ethylbenzene	ND	0.0250	1	06/30/23	07/03/23	
Toluene	ND	0.0250	1	06/30/23	07/03/23	
o-Xylene	ND	0.0250	1	06/30/23	07/03/23	
p,m-Xylene	ND	0.0500	1	06/30/23	07/03/23	
Total Xylenes	ND	0.0250	1	06/30/23	07/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.7 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/30/23	07/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.3 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2327032
Diesel Range Organics (C10-C28)	719	250	10	07/06/23	07/10/23	
Oil Range Organics (C28-C36)	1120	500	10	07/06/23	07/10/23	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		07/06/23	07/10/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2327025
Chloride	8580	100	5	07/06/23	07/07/23	



## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: RDX FEDERAL 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
7/10/2023 3:10:23PM

BH02A - 1'

E306237-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Benzene	ND	0.0250	1	06/30/23	07/03/23	
Ethylbenzene	ND	0.0250	1	06/30/23	07/03/23	
Toluene	ND	0.0250	1	06/30/23	07/03/23	
o-Xylene	ND	0.0250	1	06/30/23	07/03/23	
p,m-Xylene	ND	0.0500	1	06/30/23	07/03/23	
Total Xylenes	ND	0.0250	1	06/30/23	07/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.0 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/30/23	07/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	84.4 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2327032
Diesel Range Organics (C10-C28)	76.9	25.0	1	07/06/23	07/08/23	
Oil Range Organics (C28-C36)	77.8	50.0	1	07/06/23	07/08/23	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		07/06/23	07/08/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2327025
Chloride	4040	100	5	07/06/23	07/07/23	



## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: RDX FEDERAL 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
7/10/2023 3:10:23PM

## BH02B - 2'

## E306237-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2326080	
Benzene	ND	0.0250	1	06/30/23	07/03/23	
Ethylbenzene	ND	0.0250	1	06/30/23	07/03/23	
Toluene	ND	0.0250	1	06/30/23	07/03/23	
o-Xylene	ND	0.0250	1	06/30/23	07/03/23	
p,m-Xylene	ND	0.0500	1	06/30/23	07/03/23	
Total Xylenes	ND	0.0250	1	06/30/23	07/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.0 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2326080	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/30/23	07/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.5 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KM		Batch: 2327032	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/23	07/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/23	07/08/23	
<i>Surrogate: n-Nonane</i>						
	111 %	50-200		07/06/23	07/08/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2327025	
Chloride	57.7	20.0	1	07/06/23	07/07/23	





## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: RDX FEDERAL 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
7/10/2023 3:10:23PM

BH03 - 0'

E306237-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Benzene	ND	0.0250	1	06/30/23	07/03/23	
Ethylbenzene	ND	0.0250	1	06/30/23	07/03/23	
Toluene	ND	0.0250	1	06/30/23	07/03/23	
o-Xylene	ND	0.0250	1	06/30/23	07/03/23	
p,m-Xylene	ND	0.0500	1	06/30/23	07/03/23	
Total Xylenes	ND	0.0250	1	06/30/23	07/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.4 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2326080
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/30/23	07/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	84.9 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2327032
Diesel Range Organics (C10-C28)	279	25.0	1	07/06/23	07/08/23	
Oil Range Organics (C28-C36)	557	50.0	1	07/06/23	07/08/23	
<i>Surrogate: n-Nonane</i>						
	111 %	50-200		07/06/23	07/08/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2327025
Chloride	31000	2000	100	07/06/23	07/07/23	



Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: RDX FEDERAL 28 #023 Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 7/10/2023 3:10:23PM
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BH03A - 1'  
E306237-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2326080	
Benzene	ND	0.0250	1	06/30/23	07/03/23	
Ethylbenzene	ND	0.0250	1	06/30/23	07/03/23	
Toluene	ND	0.0250	1	06/30/23	07/03/23	
o-Xylene	ND	0.0250	1	06/30/23	07/03/23	
p,m-Xylene	ND	0.0500	1	06/30/23	07/03/23	
Total Xylenes	ND	0.0250	1	06/30/23	07/03/23	
Surrogate: 4-Bromochlorobenzene-PID	96.6 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2326080	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/30/23	07/03/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	85.5 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2327032	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/23	07/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/23	07/08/23	
Surrogate: n-Nonane	121 %	50-200		07/06/23	07/08/23	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2327025	
Chloride	3170	40.0	2	07/06/23	07/07/23	



Sample Data

WPX Energy - Carlsbad	Project Name:	RDX FEDERAL 28 #023	<b>Reported:</b> 7/10/2023 3:10:23PM
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	

BH03B - 2'  
E306237-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2326080	
Benzene	ND	0.0250	1	06/30/23	07/03/23	
Ethylbenzene	ND	0.0250	1	06/30/23	07/03/23	
Toluene	ND	0.0250	1	06/30/23	07/03/23	
o-Xylene	ND	0.0250	1	06/30/23	07/03/23	
p,m-Xylene	ND	0.0500	1	06/30/23	07/03/23	
Total Xylenes	ND	0.0250	1	06/30/23	07/03/23	
Surrogate: 4-Bromochlorobenzene-PID	96.2 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2326080	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/30/23	07/03/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	84.7 %	70-130		06/30/23	07/03/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2327032	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/06/23	07/08/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/06/23	07/08/23	
Surrogate: n-Nonane	108 %	50-200		07/06/23	07/08/23	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2327025	
Chloride	206	20.0	1	07/06/23	07/07/23	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX FEDERAL 28 #023	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	7/10/2023 3:10:23PM

Volatile Organics by EPA 8021B

Analyst: SL

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

Blank (2326080-BLK1) Prepared: 06/30/23 Analyzed: 07/01/23

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	7.63		8.00		95.3	70-130			

LCS (2326080-BS1) Prepared: 06/30/23 Analyzed: 07/01/23

Benzene	5.18	0.0250	5.00		104	70-130			
Ethylbenzene	5.02	0.0250	5.00		100	70-130			
Toluene	5.13	0.0250	5.00		103	70-130			
o-Xylene	5.05	0.0250	5.00		101	70-130			
p,m-Xylene	10.2	0.0500	10.0		102	70-130			
Total Xylenes	15.2	0.0250	15.0		102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.76		8.00		97.0	70-130			

Matrix Spike (2326080-MS1) Source: E306236-06 Prepared: 06/30/23 Analyzed: 07/02/23

Benzene	4.98	0.0250	5.00	ND	99.7	54-133			
Ethylbenzene	4.83	0.0250	5.00	ND	96.5	61-133			
Toluene	4.93	0.0250	5.00	ND	98.7	61-130			
o-Xylene	4.86	0.0250	5.00	ND	97.1	63-131			
p,m-Xylene	9.80	0.0500	10.0	ND	98.0	63-131			
Total Xylenes	14.7	0.0250	15.0	ND	97.7	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.75		8.00		96.9	70-130			

Matrix Spike Dup (2326080-MSD1) Source: E306236-06 Prepared: 06/30/23 Analyzed: 07/02/23

Benzene	5.06	0.0250	5.00	ND	101	54-133	1.52	20	
Ethylbenzene	4.91	0.0250	5.00	ND	98.2	61-133	1.76	20	
Toluene	5.02	0.0250	5.00	ND	100	61-130	1.74	20	
o-Xylene	4.94	0.0250	5.00	ND	98.8	63-131	1.73	20	
p,m-Xylene	9.97	0.0500	10.0	ND	99.7	63-131	1.71	20	
Total Xylenes	14.9	0.0250	15.0	ND	99.4	63-131	1.72	20	
Surrogate: 4-Bromochlorobenzene-PID	7.71		8.00		96.3	70-130			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX FEDERAL 28 #023	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	7/10/2023 3:10:23PM

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

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 (2326080-BLK1)

Prepared: 06/30/23 Analyzed: 07/01/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.19		8.00		89.9	70-130			

## LCS (2326080-BS2)

Prepared: 06/30/23 Analyzed: 07/02/23

Gasoline Range Organics (C6-C10)	40.0	20.0	50.0		80.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.98		8.00		87.2	70-130			

## Matrix Spike (2326080-MS2)

Source: E306236-06

Prepared: 06/30/23 Analyzed: 07/02/23

Gasoline Range Organics (C6-C10)	40.7	20.0	50.0	ND	81.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.19		8.00		89.8	70-130			

## Matrix Spike Dup (2326080-MSD2)

Source: E306236-06

Prepared: 06/30/23 Analyzed: 07/02/23

Gasoline Range Organics (C6-C10)	41.5	20.0	50.0	ND	83.1	70-130	1.95	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.17		8.00		89.6	70-130			





QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX FEDERAL 28 #023	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	7/10/2023 3:10:23PM

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 (2327032-BLK1)					Prepared: 07/06/23 Analyzed: 07/07/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	54.0		50.0		108	50-200			

LCS (2327032-BS1)					Prepared: 07/06/23 Analyzed: 07/07/23				
Diesel Range Organics (C10-C28)	284	25.0	250		114	38-132			
Surrogate: n-Nonane	54.2		50.0		108	50-200			

Matrix Spike (2327032-MS1)					Source: E306237-07		Prepared: 07/06/23 Analyzed: 07/07/23		
Diesel Range Organics (C10-C28)	369	25.0	250	76.9	117	38-132			
Surrogate: n-Nonane	56.9		50.0		114	50-200			

Matrix Spike Dup (2327032-MSD1)					Source: E306237-07		Prepared: 07/06/23 Analyzed: 07/07/23		
Diesel Range Organics (C10-C28)	317	25.0	250	76.9	96.1	38-132	15.1	20	
Surrogate: n-Nonane	54.5		50.0		109	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX FEDERAL 28 #023	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	7/10/2023 3:10:23PM

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 (2327025-BLK1)					Prepared: 07/06/23 Analyzed: 07/07/23				
Chloride	ND	20.0							
LCS (2327025-BS1)					Prepared: 07/06/23 Analyzed: 07/07/23				
Chloride	261	20.0	250		105	90-110			
Matrix Spike (2327025-MS1)					Source: E306237-01		Prepared: 07/06/23 Analyzed: 07/07/23		
Chloride	16800	400	250	14700	841	80-120			M5
Matrix Spike Dup (2327025-MSD1)					Source: E306237-01		Prepared: 07/06/23 Analyzed: 07/07/23		
Chloride	16300	400	250	14700	629	80-120	3.21	20	M5

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

WPX Energy - Carlsbad	Project Name:	RDX FEDERAL 28 #023	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Giovengo	07/10/23 15:10

- M5      The analysis of the MS sample required a dilution such that the spike recovery calculation does not provide useful information. The accociated LCS spike recovery was acceptable.
- 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.





## Project Information

## Chain of Custody

Page 1 of 2

DEVON WD #: 12065402

Client: <u>WDX Energy</u>		Bill To		Lab Use Only		TAT		EPA Program						
Project: <u>RDX FEDERAL 28 #023</u>		Attention: <u>Jim Raley</u>		Lab WO# <u>E306237</u>		Job Number <u>0058-0007</u>		1D	2D	3D	Standard	CWA	SDWA	
Project Manager: <u>Ashley Giovenego</u>		Address: <u>5315 Buena Vista Dr</u>		Analysis and Method										
Address: <u>3122 Nat'l Parks Hwy</u>		City, State, Zip: <u>Carlsbad, NM 88220</u>												RCRA
City, State, Zip: <u>Carlsbad, NM 88220</u>		Phone: <u>575-689-7597</u>												
Phone: <u>575-988-0055</u>		Email: <u>jim.raley@dvn.com</u>												
Email: <u>agiovenego@ensolum.com</u>														
Report due by:														

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	GDOC TX	Remarks
1015	6/28/23	S	1	BH01-0'	1						X		
1020	6/28/23	S	1	<del>BH02-1'</del> BH01A-1'	2						X		
1025	6/28/23	S	1	BH01B-2'	3						X		
1030	6/28/23	S	1	BH01C-3'	4						X		
1035	6/28/23	S	1	BH01D-4'	5						X		
1130	6/28/23	S	1	BH02-0'	6						X		
1135	6/28/23	S	1	BH02A-1'	7						X		
1140	6/28/23	S	1	BH02B-2'	8						X		
1305	6/28/23	S	1	BH03-0'	9						X		
1310	6/28/23	S	1	BH03A-1'	10						X		

Additional Instructions: Preserved on ice. Please CC Ashley Giovenego (agiovenego@ensolum.com), Cole Burton (cburton@ensolum.com) + Jim Raley (jim.raley@dvn.com) in results.

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: Meredith Roberts

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 5°C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <u>Y</u> /N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<u>Michelle Gumpel</u>	6/29/23	1500	<u>Michelle Gumpel</u>	6-29-23	1500	
<u>Michelle Gumpel</u>	6-29-23	1700	<u>Andrew Russo</u>	6-29-23	1730	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	
<u>Andrew Russo</u>	6-29-23	2300	<u>Carth Man</u>	6/30/23	8:20	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



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## Project Information

## Chain of Custody

Page 2 of 2  
Devon WD #: 12065402

Client: <u>WPX Energy</u>					Bill To					Lab Use Only					TAT				EPA Program							
Project: <u>RDX FEDERAL 28 #023</u>					Attention: <u>Jim Raley</u>					Lab WO# <u>E306237</u>					Job Number <u>01058-0007</u>				1D	2D	3D	Standard	CWA	SDWA		
Project Manager: <u>Ashley Giovenco</u>					Address: <u>5315 Buena Vista Dr</u>					Analysis and Method																
Address: <u>3122 Nat'l Parks Hwy</u>					City, State, Zip: <u>Carlsbad, NM 88220</u>																					
City, State, Zip: <u>Carlsbad, NM 88220</u>					Phone: <u>575-988-0055</u>																					
Email: <u>agiovenco@ensolum.com</u>					Email: <u>jim.raley@dvn.com</u>																					
Report due by:																										
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0				BGDOC NM	GDOC TX	State					Remarks					
																NM CO UT AZ TX										
1315	6/28/23	S	1	BH03B-2'	11									X		X										

**Additional Instructions:** Preserved on ice. Please CC Ashley Giovenco (agiovenco@ensolum.com), Cole Burton (cburton@ensolum.com), + Jim Raley (jim.raley@dvn.com) in results.

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Meredith Roberts

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <u>(Y)</u> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<u>Meredith Roberts</u>	6/28/23	1500	<u>Micelle Angelis</u>	6-29-23	1500	
<u>Micelle Angelis</u>	6-29-23	1700	<u>Andrew Mess</u>	6-29-23	1730	
<u>Andrew Mess</u>	6-29-23	2300	<u>Carth Man</u>	6/30/23	8:20	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



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## Envirotech Analytical Laboratory

Printed: 6/30/2023 10:48:25AM

## 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:	WPX Energy - Carlsbad	Date Received:	06/30/23 08:20	Work Order ID:	E306237
Phone:	(539) 573-4018	Date Logged In:	06/29/23 17:12	Logged In By:	Caitlin Mars
Email:	ashley.giovengo@wesominc.com	Due Date:	07/10/23 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? Yes

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.

Report to:

Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Devon Energy - Carlsbad

Project Name: RDX Federal 28 #023

Work Order: E308059

Job Number: 01058-0007

Received: 8/10/2023

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
8/15/23

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: 8/15/23

Ashley Giovengo  
6488 7 Rivers Hwy  
Artesia, NM 88210



Project Name: RDX Federal 28 #023  
Workorder: E308059  
Date Received: 8/10/2023 7:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/10/2023 7:00:00AM, under the Project Name: RDX Federal 28 #023.

The analytical test results summarized in this report with the Project Name: RDX Federal 28 #023 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,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
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**Alexa Michaels**  
Sample Custody Officer  
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**West Texas Midland/Odessa Area**  
**Rayny Hagan**  
Technical Representative  
Office: 505-421-LABS(5227)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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## Sample Summary

Devon Energy - Carlsbad	Project Name:	RDX Federal 28 #023	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	08/15/23 14:28

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS01 - 0.5'	E308059-01A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS02 - 0.5'	E308059-02A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS03 - 0.5'	E308059-03A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS04 - 0.5'	E308059-04A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS05 - 0.5'	E308059-05A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS06 - 0.5'	E308059-06A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS07 - 0.5'	E308059-07A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS08 - 0.5'	E308059-08A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS09 - 0.5'	E308059-09A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS10 - 0.5'	E308059-10A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS11 - 0.5'	E308059-11A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS12 - 0.5'	E308059-12A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS13 - 0.5'	E308059-13A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS14 - 0.5'	E308059-14A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.
FS15 - 0.5'	E308059-15A	Soil	08/08/23	08/10/23	Glass Jar, 2 oz.



## Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: RDX Federal 28 #023 Project Number: 01058-0007 Project Manager: Ashley Giovengo	<b>Reported:</b> 8/15/2023 2:28:40PM
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## FS01 - 0.5'

## E308059-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2332088	
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
Surrogate: 4-Bromochlorobenzene-PID	95.4 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2332088	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	89.5 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KM		Batch: 2332068	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
Surrogate: n-Nonane	97.7 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2332081	
Chloride	19400	1000	50	08/10/23	08/10/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS02 - 0.5'

E308059-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/14/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/14/23	
Toluene	ND	0.0250	1	08/10/23	08/14/23	
o-Xylene	ND	0.0250	1	08/10/23	08/14/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/14/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/14/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.3 %	70-130		08/10/23	08/14/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/14/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.5 %	70-130		08/10/23	08/14/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	94.5 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	5720	200	10	08/10/23	08/10/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS03 - 0.5'

E308059-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.3 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.7 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	92.2 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	4770	400	20	08/10/23	08/10/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS04 - 0.5'

E308059-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.0 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.7 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	92.2 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	1150	100	5	08/10/23	08/10/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS05 - 0.5'

E308059-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.0 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.0 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	99.3 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	179	40.0	2	08/10/23	08/11/23	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS06 - 0.5'

E308059-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.3 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.9 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	96.7 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	2090	200	10	08/10/23	08/11/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS07 - 0.5'

E308059-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.6 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.3 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	90.6 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	5850	400	20	08/10/23	08/11/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS08 - 0.5'

E308059-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.4 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.8 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	88.2 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	670	100	5	08/10/23	08/11/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS09 - 0.5'

E308059-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.6 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.1 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	96.8 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	7370	400	20	08/10/23	08/11/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS10 - 0.5'

E308059-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.8 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.8 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	88.8 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	1980	100	5	08/10/23	08/11/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS11 - 0.5'

E308059-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.6 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.8 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	88.9 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	6940	100	5	08/10/23	08/11/23	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS12 - 0.5'

E308059-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.7 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.8 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	70.0 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	667	40.0	2	08/10/23	08/11/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS13 - 0.5'

E308059-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.6 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.5 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	94.5 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	658	40.0	2	08/10/23	08/11/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS14 - 0.5'

E308059-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.2 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.7 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	91.1 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	8820	400	20	08/10/23	08/11/23	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: RDX Federal 28 #023  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
8/15/2023 2:28:40PM

FS15 - 0.5'

E308059-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Benzene	ND	0.0250	1	08/10/23	08/15/23	
Ethylbenzene	ND	0.0250	1	08/10/23	08/15/23	
Toluene	ND	0.0250	1	08/10/23	08/15/23	
o-Xylene	ND	0.0250	1	08/10/23	08/15/23	
p,m-Xylene	ND	0.0500	1	08/10/23	08/15/23	
Total Xylenes	ND	0.0250	1	08/10/23	08/15/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.2 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2332088
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/10/23	08/15/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.6 %	70-130		08/10/23	08/15/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2332068
Diesel Range Organics (C10-C28)	ND	25.0	1	08/09/23	08/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	08/09/23	08/12/23	
<i>Surrogate: n-Nonane</i>						
	95.8 %	50-200		08/09/23	08/12/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2332081
Chloride	3470	200	10	08/10/23	08/11/23	



## QC Summary Data

Devon Energy - Carlsbad	Project Name:	RDX Federal 28 #023	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	8/15/2023 2:28:40PM

## 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 (2332088-BLK1)

Prepared: 08/10/23 Analyzed: 08/14/23

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	7.62		8.00		95.2	70-130			

## LCS (2332088-BS1)

Prepared: 08/10/23 Analyzed: 08/14/23

Benzene	4.96	0.0250	5.00		99.1	70-130			
Ethylbenzene	4.95	0.0250	5.00		99.0	70-130			
Toluene	5.00	0.0250	5.00		99.9	70-130			
o-Xylene	4.98	0.0250	5.00		99.6	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.1	0.0250	15.0		100	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.66		8.00		95.8	70-130			

## Matrix Spike (2332088-MS1)

Source: E308059-02

Prepared: 08/10/23 Analyzed: 08/14/23

Benzene	5.05	0.0250	5.00	ND	101	54-133			
Ethylbenzene	5.03	0.0250	5.00	ND	101	61-133			
Toluene	5.10	0.0250	5.00	ND	102	61-130			
o-Xylene	5.06	0.0250	5.00	ND	101	63-131			
p,m-Xylene	10.3	0.0500	10.0	ND	103	63-131			
Total Xylenes	15.3	0.0250	15.0	ND	102	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.65		8.00		95.7	70-130			

## Matrix Spike Dup (2332088-MSD1)

Source: E308059-02

Prepared: 08/10/23 Analyzed: 08/15/23

Benzene	5.04	0.0250	5.00	ND	101	54-133	0.275	20	
Ethylbenzene	5.05	0.0250	5.00	ND	101	61-133	0.229	20	
Toluene	5.09	0.0250	5.00	ND	102	61-130	0.134	20	
o-Xylene	5.05	0.0250	5.00	ND	101	63-131	0.124	20	
p,m-Xylene	10.3	0.0500	10.0	ND	103	63-131	0.00292	20	
Total Xylenes	15.3	0.0250	15.0	ND	102	63-131	0.0389	20	
Surrogate: 4-Bromochlorobenzene-PID	7.67		8.00		95.9	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	RDX Federal 28 #023	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	8/15/2023 2:28:40PM

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 (2332088-BLK1) Prepared: 08/10/23 Analyzed: 08/14/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.22		8.00		90.3	70-130			

LCS (2332088-BS2) Prepared: 08/10/23 Analyzed: 08/14/23

Gasoline Range Organics (C6-C10)	46.6	20.0	50.0		93.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.35		8.00		91.9	70-130			

Matrix Spike (2332088-MS2) Source: E308059-02 Prepared: 08/10/23 Analyzed: 08/15/23

Gasoline Range Organics (C6-C10)	55.2	20.0	50.0	ND	110	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.18		8.00		89.7	70-130			

Matrix Spike Dup (2332088-MSD2) Source: E308059-02 Prepared: 08/10/23 Analyzed: 08/15/23

Gasoline Range Organics (C6-C10)	51.5	20.0	50.0	ND	103	70-130	6.89	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.17		8.00		89.6	70-130			





QC Summary Data

Devon Energy - Carlsbad	Project Name:	RDX Federal 28 #023	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	8/15/2023 2:28:40PM

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 (2332068-BLK1)					Prepared: 08/09/23 Analyzed: 08/11/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.2		50.0		100	50-200			

LCS (2332068-BS1)					Prepared: 08/09/23 Analyzed: 08/11/23				
Diesel Range Organics (C10-C28)	271	25.0	250		108	38-132			
Surrogate: n-Nonane	48.7		50.0		97.4	50-200			

Matrix Spike (2332068-MS1)					Source: E308059-05		Prepared: 08/09/23 Analyzed: 08/11/23		
Diesel Range Organics (C10-C28)	251	25.0	250	ND	101	38-132			
Surrogate: n-Nonane	39.3		50.0		78.5	50-200			

Matrix Spike Dup (2332068-MSD1)					Source: E308059-05		Prepared: 08/09/23 Analyzed: 08/12/23		
Diesel Range Organics (C10-C28)	260	25.0	250	ND	104	38-132	3.24	20	
Surrogate: n-Nonane	42.9		50.0		85.8	50-200			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	RDX Federal 28 #023	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	8/15/2023 2:28:40PM

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 (2332081-BLK1)					Prepared: 08/10/23 Analyzed: 08/10/23				
Chloride	ND	20.0							
LCS (2332081-BS1)					Prepared: 08/10/23 Analyzed: 08/10/23				
Chloride	275	20.0	250		110	90-110			
Matrix Spike (2332081-MS1)					Source: E308059-01		Prepared: 08/10/23 Analyzed: 08/10/23		
Chloride	18400	1000	250	19400	NR	80-120			M4
Matrix Spike Dup (2332081-MSD1)					Source: E308059-01		Prepared: 08/10/23 Analyzed: 08/10/23		
Chloride	16900	1000	250	19400	NR	80-120	8.26	20	M4

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

Devon Energy - Carlsbad	Project Name:	RDX Federal 28 #023	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	08/15/23 14:28

- M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
- 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.



Client: Devon Energy	<b>Bill To</b> Attention: Jim Raley Address: 5315 Buena Vista Dr City, State, Zip: Carlsbad NM, 88220 Phone: (575)689-7597 Email: jim.raley@devon.com	<b>Lab Use Only</b>		<b>TAT</b>				<b>EPA Program</b>		
Project: RDX Federal 28 #023		Lab WO#	Job Number	1D	2D	3D	Standard	CWA	SDWA	
Project Manager: Ashley Giovengo		E 307059	01058-0007				X			
Address: 3122 National Parks Hwy		Analysis and Method								RCRA
City, State, Zip: Carlsbad NM, 88220		TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		NM	TX	
Phone: 575-988-0055		State								
Email: agiovengo@ensolum.com	NM CO UT AZ TX X									
Report due by:	Remarks									

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC	GDOC	TX	Remarks
9:51	8/8/2023	S	1	FS01 - 0.5'	1							X			
9:56	8/8/2023	S	1	FS02 - 0.5'	2							X			
10:05	8/8/2023	S	1	FS03 - 0.5'	3							X			
10:06	8/8/2023	S	1	FS04 - 0.5'	4							X			
10:17	8/8/2023	S	1	FS05 - 0.5'	5							X			
10:37	8/8/2023	S	1	FS06 - 0.5'	6							X			
10:47	8/8/2023	S	1	FS07 - 0.5'	7							X			
10:55	8/8/2023	S	1	FS08 - 0.5'	8							X			
11:09	8/8/2023	S	1	FS09 - 0.5'	9							X			
11:11	8/8/2023	S	1	FS10 - 0.5'	10							X			

**Additional Instructions:** Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@devon.com, chamilton@ensolum.com

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
<i>[Signature]</i>	8/9/23	11:30 AM	<i>[Signature]</i>	8-9-23	11:30
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
<i>[Signature]</i>	8-9-23	1515	<i>[Signature]</i>	8-9-23	1700
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
<i>[Signature]</i>	8-9-23	2300	<i>[Signature]</i>	8/10/23	7:00

Lab Use Only

Received on ice: ☒ Y ☐ N

T1 T2 T3

AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



envirotech



Client: Devon Energy		<b>Bill To</b>		<b>Lab Use Only</b>		<b>TAT</b>				<b>EPA Program</b>	
Project: RDX Federal 28 #023		Attention: Jim Raley		Lab WO#		1D 2D 3D Standard				CWA	SDWA
Project Manager: Ashley Giovengo		Address: 5315 Buena Vista Dr		E 308059		Job Number				01058-0007	
Address: 3122 National Parks Hwy		City, State, Zip: Carlsbad NM, 88220		Analysis and Method						X	
City, State, Zip: Carlsbad NM, 88220		Phone: (575)689-7597								RCRA	
Phone: 575-988-0055		Email: jim.raley@dvn.com								State	
Email: agiovengo@ensolum.com										NM CO UT AZ TX	
Report due by:										X	

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	GDOC TX	Remarks
11:16	8/8/2023	S	1	FS11 - 0.5'	11						X		
11:18	8/8/2023	S	1	FS12 - 0.5'	12						X		
11:23	8/8/2023	S	1	FS13 - 0.5'	13						X		
12:26	8/8/2023	S	1	FS14 - 0.5'	14						X		
13:20	8/8/2023	S	1	FS15 - 0.5'	15						X		

**Additional Instructions:** Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dvn.com, chamilton@ensolum.com

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.						Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.					
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>					
Date		Time		Date		Time		Date		Time	
8/8/23		11:30 AM		8-9-23		1130		8-9-23		1700	
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>					
Date		Time		Date		Time		Date		Time	
8-9-23		1515		8-9-23		1700		8/10/23		7:00	
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>					
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other						Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA					
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.											



**envirotech**

## Envirotech Analytical Laboratory

Printed: 8/10/2023 9:16:09AM

## 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:	Devon Energy - Carlsbad	Date Received:	08/10/23 07:00	Work Order ID:	E308059
Phone:	(505) 382-1211	Date Logged In:	08/09/23 15:09	Logged In By:	Alexa Michaels
Email:	ashley.giovengo@wescominc.com	Due Date:	08/16/23 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? Yes

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 F

### Email Correspondence

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**From:** [Raley, Jim](#)  
**To:** [CFO Spill, BLM NM](#)  
**Cc:** [Ashley Giovengo](#)  
**Subject:** FW: Email notification of WPX Energy spill at the RDX Federal 28 #023 (API 30-015-41985)  
**Date:** Tuesday, June 13, 2023 12:24:28 PM  
**Attachments:** [image002.png](#)  
[Initial C-141.pdf](#)  
[MUE FORM \(napp2316442083\).pdf](#)

---

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

Chrisha,  
Please find C-141, MUE and 2 pictures for this event.

**Jim Raley** | Environmental Professional - Permian Basin  
5315 Buena Vista Dr., Carlsbad, NM 88220  
C: (575)689-7597 | [jim.raleym@devon.com](mailto:jim.raleym@devon.com)



---

**From:** Woodall, Dale <Dale.Woodall@devon.com>  
**Sent:** Thursday, June 8, 2023 9:35 AM  
**To:** Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; RosaM.Romero@state.nm.us; Enviro, OCD, EMNRD <ocd.enviro@state.nm.us>  
**Cc:** Anderson, Lacey <Lacey.Anderson@devon.com>; Raley, Jim <Jim.Raley@devon.com>  
**Subject:** Email notification of WPX Energy spill at the RDX Federal 28 #023 (API 30-015-41985)

There was a 158 bbl produced water spill at the RDX Federal 28 #023 (API 30-015-41985) on 6/7/2023. The LO arrived at the location and noticed fluid in the containment. The source was a 1" bleed off valve. The bleeder valve was closed to stop the leak. 150 bbls were recovered. The spill was not confined to the lined containment as fluids were on the pad.

Please let me know if you have any questions.

Dale Woodall  
**Environmental Professional**  
205 E Bender Road # 150  
Hobbs, New Mexico 88240  
Office: 575-748-1838  
Mobile: 405-318-4697  
[Dale.Woodall@devon.com](mailto:Dale.Woodall@devon.com)



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**From:** [Enviro, OCD, EMNRD](#)  
**To:** [Cole Burton](#)  
**Cc:** [Bratcher, Michael, EMNRD](#); [Hamlet, Robert, EMNRD](#)  
**Subject:** RE: [EXTERNAL] 48-Hour Liner Inspection - RDX Federal 28 #023 (nAPP2316442083)  
**Date:** Friday, June 23, 2023 2:49:57 PM  
**Attachments:** [image006.png](#)  
[image007.png](#)  
[image008.png](#)  
[image009.png](#)

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

Cole,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

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



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**From:** Cole Burton <[cburton@ensolum.com](mailto:cburton@ensolum.com)>  
**Sent:** Friday, June 23, 2023 9:28 AM  
**To:** Enviro, OCD, EMNRD <[OCD.Enviro@emnrd.nm.gov](mailto:OCD.Enviro@emnrd.nm.gov)>  
**Cc:** Ashley Giovengo <[agiovengo@ensolum.com](mailto:agiovengo@ensolum.com)>; Raley, Jim <[Jim.Raley@dvn.com](mailto:Jim.Raley@dvn.com)>; Meredith Roberts <[mroberts@ensolum.com](mailto:mroberts@ensolum.com)>  
**Subject:** [EXTERNAL] 48-Hour Liner Inspection - RDX Federal 28 #023 (nAPP2316442083)

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


Hello,

We intend to perform a liner integrity inspection at RDX Federal 28 #023 site (nAPP2316442083) on Wednesday, June 28, 2023.

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

Thanks,



**Cole Burton**  
Project Manager  
575-706-5056  
**Ensolum, LLC**  
in f 



**From:** [Ashley Giovengo](#)  
**To:** [Enviro, OCD, EMNRD](#); [Morgan, Crisha A](#)  
**Cc:** [Raley, Jim](#); [Cole Burton](#); [Chad Hamilton](#)  
**Subject:** 48-hour Confirmation Sampling Notification Email - RDX Federal 28 #023 - Incident Number nAPP2316442083  
**Date:** Thursday, August 3, 2023 12:11:00 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)

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Hello,

We intend to collect confirmation samples at Devon Energy's RDX Federal 28 #023 site (nAPP2316442083) beginning on Monday, August 07, 2023, at 09:00 am MST through August 08, 2023.

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 261407

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 261407
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2316442083 RDX FEDERAL 28 #023, thank you. 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 including pictures of the contoured backfilled excavation surface and a thorough discussion on reseeding mixture, vegetation ratio, timelines, etc., will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete".	1/26/2024