

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	nAPP2307930900
District RP	
Facility ID	
Application ID	

Responsible Party

Responsible Party WPX Energy Permain, LLC	OGRID 246289
Contact Name Jim Raley	Contact Telephone 575-689-7597
Contact email Jim.Raley@dmn.com	Incident # (assigned by OCD) nAPP2307930900
Contact mailing address 5315 Buena Vista Drive, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.0457649 Longitude -103.88517  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: RDX 16 #008	Site Type Oil Well
Date Release Discovered: 3/16/2023	API# (if applicable) 30-015-39751

Unit Letter	Section	Township	Range	County
G	16	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 checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 4	Volume Recovered (bbls) 2
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 30	Volume Recovered (bbls) 25
	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 to head switch was closed, which did not allow the water transfer pump to activate. This caused a tank overflow to secondary containment.

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


State of New Mexico  
Oil Conservation Division

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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 Mike Bratcher and Rosa Romero on 3/17/2023	

**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>3/20/2023</u>	
email: <u>jim.raley@dvn.com</u> Telephone: <u>575-689-7597</u>	
<b><u>OCD Only</u></b>	
Received by: <u>Jocelyn Harimon</u> Date: <u>03/20/2023</u>	

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## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (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 checked="" type="checkbox"/> Yes <input 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

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Printed Name: Jim Raley Title: Environmental ProfessionalSignature:  Date: 6/13/2023email: Jim.Raley@dvn.com Telephone: 575-689-7597**OCD Only**Received by: Jocelyn Harimon Date: 06/13/2023



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## Remediation Plan


**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Jim Raley Title: Environmental Professional  
Signature:  Date: 6/13/2023  
email: Jim.Raley@dvn.com Telephone: 575-689-7597

**OCD Only**

Received by: Jocelyn Harimon Date: 06/13/2023

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# REMEDIATION WORK PLAN

**RDX 16 #008**

**Eddy County, New Mexico**

**Incident Number nAPP2307930900**

**Prepared for:**

**WPX Energy Permian, LLC**

Carlsbad • Midland • San Antonio • Lubbock • Hobbs • Lafayette



## SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy Permian, LLC (WPX), presents the following Remediation Work Plan (RWP) detailing site assessment and delineation soil sampling activities at the RDX 16 #008 ((Site) (**Figure 1 in Appendix A**)) associated with an inadvertent release of crude oil and produced water. Based on field observations, field screening activities and review of the laboratory analytical results from delineation soil sampling activities at the Site, WPX proposes this RWP which summarizes corrective actions and details remediation objectives to rectify environmental impacts.

## SITE LOCATION AND RELEASE BACKGROUND

On March 16, 2023, a storage tank overflow resulted in approximately 4 barrels (bbls) of crude oil and 30 bbls of produced water to be released within the tank battery containment earthen berm. Vacuum trucks were immediately dispatched and recovered approximately 2 bbls of crude oil and 25 bbls of produced water. WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141), which was received by the NMOCD on March 20, 2023, and was subsequently assigned Incident Number nAPP2307930900. Shortly after the incident, the release area was mapped based on field observations, hereafter referred to as the Area of Concern (AOC) and presented on **Figure 2 in Appendix A**.

The production well (API 30-015-39751) for this Site is located in Unit G, Section 16, Township 26 South, Range 30 East, in Eddy County, New Mexico (32.0457649°, -103.88517°) as provided on the initial Form C-141 and is associated with oil and gas exploration and production operations on State Land.

The storage tanks for the well, where the release occurred, is located east of the production well in Unit H, Section 16, Township 26 South, Range 30 East, in Eddy County New Mexico (32.04507°, -103.88068°). The updated legals and coordinates are provided on the Final Form C-141.

## SITE CHARACTERIZATION AND CLOSURE CRITERIA

Etech characterized the Site according to Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC) considering depth to groundwater and the proximity to:

- Any continuously flowing watercourse or any other significant watercourse;
- Any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);
- An occupied permanent residence, school, hospital, institution or church;
- A spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes;
- Any freshwater well or spring;
- Incorporated municipal boundaries or a defined municipal fresh water well field covered under a municipal ordinance;
- A wetland;
- A subsurface mine;
- An unstable area (i.e. high karst potential); and
- A 100-year floodplain.

Based on the initial desktop review, the Site appears to be within proximity of three potential receptors. The closest continuously flowing or significant water course to the Site appears to be an ephemeral stream identified on the NMOCD Oil and Gas Map online database and on the United States Geological Survey (USGS) 7.5-minute quadrangle map, located to the north within 300 feet of the Site. Forested/Shrub Riparian Wetlands were identified on the United States Fish and Wildlife Service (USFWS) online database, National Wetland Inventory (Wetland Mapper), located to the east and west



within 300 feet of the Site. The Site is located within a 100-year floodplain, as defined by the Federal Emergency Management Agency's (FEMA) National Flood Hazard Layer (NFHL) online database.

Based on the desktop review of the current BLM Carlsbad Field Office (CFO) karst cave potential map, this Site is located in a medium potential karst area. All other potential receptors are not within the established buffers in NMAC 19.15.29.12. Receptor details from the site characterization are included in **Figure 1 in Appendix A**.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs), based off a nearby soil boring performed by Talon LPE on behalf of WPX, located approximately ½ mile south of the Site on the RDX 16-25 well pad. Soil boring (MW-1) was advanced on December 16, 2020, via truck mounted drill rig equipped with hollow stem auger to a total depth of 110 feet bgs. No fluids were observed throughout the drilling process nor after a 72-hour observation period. Following the observation period, the boring was plugged and abandoned according to the appropriate regulations. The well log for the referenced soil boring is provided in **Appendix B**.

Based on the results from the desktop review and estimated regional depth to groundwater at the Site, the following Closure Criteria was applied:

Constituents of Concern (COCs)	Laboratory Analytical Method	Closure Criteria
Chloride	Environmental Protection Agency (EPA) 300.0	600 milligram per kilogram (mg/kg)
Total Petroleum Hydrocarbon (TPH)	EPA 8015 M/D	100 mg/kg
Benzene	EPA 8021B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8021B	50 mg/kg

## DELINEATION SOIL SAMPLING ACTIVITIES

On May 22, 2023, Etech evaluated the Site based on information provided by WPX and conducted delineation activities to assess the AOC. Six delineation locations (BH01 through BH06) were advanced via hand auger and/or backhoe within and around the AOC, which were driven by field screening soil samples for volatile organic hydrocarbons using a photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. A minimum of two soil samples were collected per sampling location, representing the highest observed field screening concentrations and the greatest depth representing the characterization of impacts. Field screening results and soil descriptions were denoted on soil sampling logs, which is included as **Attachment C**. The location of the delineation soil samples is shown in **Figure 2 in Appendix A**. Photographic documentation during delineation activities is included in **Attachment D**.

Delineation soil samples were placed directly into lab provided pre-cleaned glass jars, packaged with minimal void space, labeled, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures, to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of COCs.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for soil samples assisting with lateral delineation (BH02 through BH05) were compliant with Site Closure Criteria.

Laboratory analytical results for the remaining samples collected within the AOC (BH01 and BH06) indicated that at least one of the COCs exceeded the Site Closure Criteria. Identified chloride impacts are characterized by concentrations ranging from 666 mg/kg to 5,290 mg/kg. Elevated TPH and BTEX



concentrations were only present at 0.5 feet bgs at BH06 and decreased to concentrations below Site Closure Criteria at 4 feet bgs.

Laboratory analytical results are summarized in Table 1 as **Attachment E**, and the complete laboratory reports with chain-of-custody documentation is included as **Attachment F**.

## **PROPOSED REMEDIATION WORK PLAN**

Based on the delineation soil sampling results, the following conclusions regarding the release are presented:

- Laboratory analytical results for soil samples collected from BH01 within the AOC indicated elevated chloride concentrations (666 mg/kg and 5,290 mg/kg) exist up to 12 feet bgs. TPH concentrations only appear to exist in the proximity of sample location BH06, which dramatically decreased from 2,590 mg/kg at 0.5 feet bgs to 91.2 mg/kg at 4 feet bgs. Further investigation is necessary to determine the vertical extent of residual impacts associated with BH01;
- Laboratory analytical results for soil samples collected from BH02 through BH05 indicated COC concentrations were below the Site Closure Criteria, which will assist with defining the lateral extent of impacts associated with the inadvertent release.

Based on the conclusions drawn above, WPX proposes the following remedial corrective actions:

- WPX proposes to continue advancement of BH01 to investigate the vertical extent of the AOC via mechanical equipment (**Figure 2** in **Appendix A**). Soil samples will be collected at a maximum frequency of 5-foot intervals and field screened for volatile organic compounds and chloride as previously described. Soil observations and field screening results for each delineation soil sample will be recorded on soil sampling logs. Soil sample locations will be mapped using a handheld GPS unit.
- WPX proposes to attempt advancement of lateral delineation boreholes BH02 through BH05 to match the total depth of BH01 to confirm the horizontal extent of impacts. Soil samples will be collected from each delineation location at a maximum frequency of 5-foot intervals and field screened for volatile organic compounds and chloride as previously described. Continued soil observations and field screening results for each delineation soil sample will be recorded on soil sampling logs. Soil sample locations will be mapped using a handheld GPS unit.
- A minimum of two soil samples will be collected from each delineation point location, representing the highest field screened concentration(s) and the greatest depth, and submitted to an accredited lab for analysis of BTEX, TPH and Chloride.
- Upon receipt and review of delineation soil laboratory results, WPX will determine the appropriate measure of corrective actions that will include:
  - Documenting and estimating an amount of impacted soil to be left in place at the Site with a subsequent Deferral Report detailing remediation efforts and soil sampling activities or
  - Preparing a RWP detailing the next course of remedial actions to address the presence of soil impacts at the Site, based off an estimated lateral and vertical extent of impacted soil from assessment and delineation activities.

If you have any questions or comments, please do not hesitate to contact Joseph Hernandez at (281) 702-2329 or [joseph@etechenv.com](mailto:joseph@etechenv.com) or Anna Byers at (575) 200-6754 or [anna@etechenv.com](mailto:anna@etechenv.com).



Sincerely,

eTECH Environmental and Safety Solutions, Inc.

A handwritten signature in black ink that reads 'Anna Byers'.

Anna Byers  
Senior Geologist

A handwritten signature in black ink that reads 'Joseph S. Hernandez'.

Joseph S. Hernandez  
Senior Managing Geologist

cc: Jim Raley, Devon  
New Mexico Oil Conservation Division  
State Land Office

**Appendices:**

- Appendix A** Figure 1: Site Map  
Figure 2: Delineation Soil Sample Locations
- Appendix B** Referenced Well Records
- Appendix C** Lithologic Sampling Logs
- Appendix D** Photographic Log
- Appendix E** Tables
- Appendix F** Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix G** NMOCD Correspondence

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# APPENDIX A

## Figures



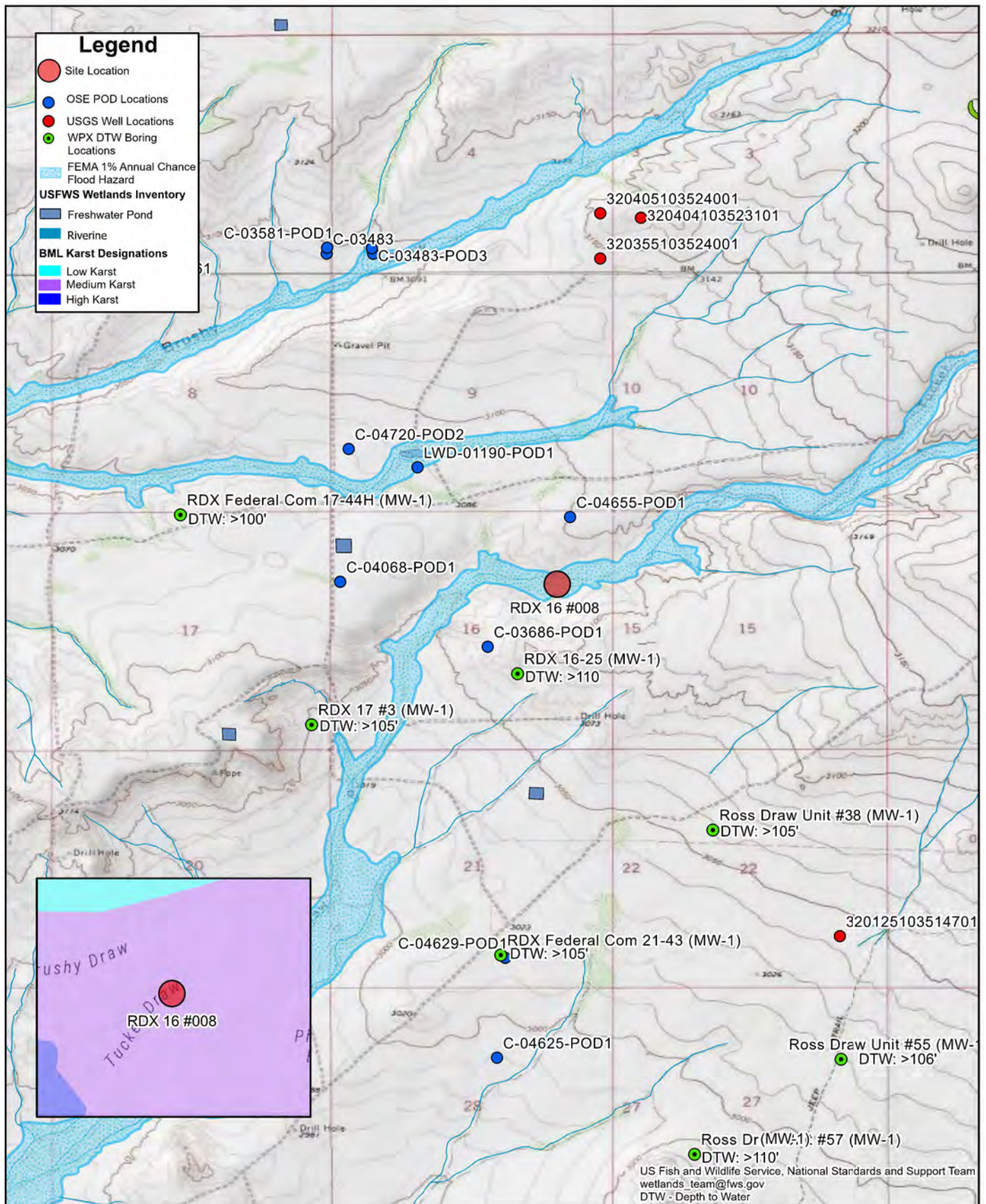
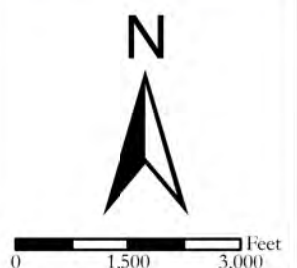


FIGURE 1  
**Site Map**

WPX ENERGY PERMIAN, LLC  
RDX 16 #008  
Unit H Sec 16 T26S R30E  
Eddy County, New Mexico








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## APPENDIX B


### Referenced Well Records

 <b>HRL COMPLIANCE SOLUTIONS</b>							BORING LOG/MONITORING WELL COMPLETION DIAGRAM					
							Boring/Well Number:		Location:			
							MW-1		RDX 16-25			
							Date:		Client:			
							12/10/2020		WPX Energy			
Drilling Method:			Sampling Method:				Logged By:		Drilled By:			
Air Rotary			None				J. Linn, PG		Talon LPE			
Gravel Pack Type:			Gravel Pack Depth Interval:				Seal Type:		Seal Depth Interval:		Latitude:	
10/20 sand			3 bags				None		None		32.0399004	
Casing Type:		Diameter:	Depth Interval:				Boring Total Depth (ft. BGS):		Longitude:			
PVC		2-inch	0-105 feet bgs				110		-103.8833368			
Screen Type:		Slot:	Diameter:	Depth Interval:				Well Total Depth (ft. BGS):		Depth to Water (ft. BTOC):		DTW Date:
PVC		0.010-inch	2-inch	105-110 ft				110		> 110		12/16/2020
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks		Well Completion	
0	NM	L	D	N	N	NM	SW	NS	Pale orange to pink tan well graded sand with silt			
5												
10												
15												
20												
25	NM	L	D	N	N	NM	SP	NS	Pale pinky orange poorly graded fine sand			
30												
35												
40	NM	L	D	N	N	NM	SW	NS	Orange to pale red well graded sand with gravel			
45												
50	NM	L	D	N	N	NM	SP	NS	Pale pinky orange poorly graded fine sand			
55												
60	NM	L	D	N	N	NM	SP	NS	Pale pinky orange poorly graded fine sand with minor medium and coarse sand - TD: 110' bgs			
65												
70												
75												
80												
85												
90												
95												
100												
105												
110												


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## APPENDIX C

### Lithologic Sampling Logs

								Sample Name: BH01		Date: 05/22/2023					
								Site Name: RDX 16 #008							
								Incident Number: nAPP2307930900							
								Job Number: 18138							
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Edyte Konan		Method: Hand Auger					
Site Coordinates: 32.644579, -103.448392								Hole Diameter: 4 inches		Total Depth: 12 feet					
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 (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes							
						0	CCHE	0-1' bgs: Pad surface CALICHE, dry, no staining, no odor							
Dry	4,060	0.0	No	BH01	0.5			1-2' bgs: SAND, dry, brown, well graded with silt and some small gravel, very fine to coarse grained, no staining, no odor  2-12' bgs: SAND, dry, light brown, poorly graded with small gravel, very fine to fine grained, no staining, no odor							
Dry	656	0.0	No		1	1	SW-SM								
Dry	551	0.0	No		2	2	SP								
Dry	656	0.0	No		3	3									
Dry	1,046	0.0	No	BH01	4	4									
Dry	1,696	0.0	No		5	5									
Dry	1,208	0.0	No		6	6									
Dry	656	0.0	No	BH01	7	7									
Dry	904	0.0	No		8	8									
Dry	972	0.0	No		9	9									
								BH01 continued on following page (10' through 12')							



								Sample Name: BH01	Date: 05/22/2023
								Site Name: RDX 16 #008	
								Incident Number: nAPP2307930900	
								Job Number: 18138	
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Edyte Konan	Method: Hand Auger
Site Coordinates: 32.644579, -103.448392								Hole Diameter: 4 inches	Total Depth: 12 feet
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 (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes	
Dry	972	0.0	No		10	10		BH01 continued...	
Dry	904	0.0	No		11	11	SP	2-12' bgs: SAND, dry, light brown, poorly graded with small gravel, very fine to fine grained, no staining, no odor	
Dry	972	0.0	No	BH01	12	12			
Total Depth: 12 feet bgs									



Sample Name: BH02 Date: 05/22/2023

Site Name: RDX 16 #008

Incident Number: nAPP2307930900

Job Number: 18138

**LITHOLOGIC / SOIL SAMPLING LOG**

Logged By: Edyte Konan

Method: Back Hoe

Site Coordinates: 32.644579, -103.448392


Hole Diameter: n/a

Total Depth: 4 feet

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 (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
Dry	0	0.0	No	BH02	0.5	0	CCHE	0-1' bgs: Pad surface CALICHE, dry, no staining, no odor
Dry	0	0.0	No		1	1	SP	1-4' bgs: SAND, dry, light brown, poorly graded, very fine to fine grained, no staining, no odor
Dry	0	0.0	No		2	2		
Dry	0	0.0	No		3	3		
Dry	<120	0.0	No	BH02	4	4		

Total Depth: 4 feet bgs

								Sample Name: BH03	Date: 05/22/2023
								Site Name: RDX 16 #008	
								Incident Number: nAPP2307930900	
								Job Number: 18138	
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Edyte Konan	Method: Back Hoe
Site Coordinates: 32.644579, -103.448392								Hole Diameter: n/a	Total Depth: 4 feet
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 (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes	
Dry	236	0.0	No	BH03	0.5	0	CCHE	0-1' bgs: Pad surface CALICHE, dry, no staining, no odor	
Dry	236	0.0	No		1	1	SP	1-4' bgs: SAND, dry, light brown, poorly graded, very fine to fine grained, no staining, no odor	
Dry	156	0.0	No		2	2			
Dry	156	0.0	No		3	3			
Dry	<120	0.0	No	BH03	4	4			
Total Depth: 4 feet bgs									





Sample Name: BH04 Date: 05/22/2023

Site Name: RDX 16 #008

Incident Number: nAPP2307930900

Job Number: 18138

**LITHOLOGIC / SOIL SAMPLING LOG**

Logged By: Edyte Konan

Method: Hand Auger

Site Coordinates: 32.644579, -103.448392

Hole Diameter: 4 inches

Total Depth: 4 feet

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 (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
Dry	236	0.0	No	BH04	0.5	0	SP	0-4 ft bgs: SAND, dry, light brown, poorly graded, very fine to fine, no staining, no odor
Dry	236	0.0	No		1	1		
Dry	156	0.0	No		2	2		
Dry	156	0.0	No		3	3		
Dry	<120	0.0	No	BH04	4	4		

Total Depth: 4 feet bgs



Sample Name: BH05 Date: 05/22/2023

Site Name: RDX 16 #008

Incident Number: nAPP2307930900

Job Number: 18138

**LITHOLOGIC / SOIL SAMPLING LOG**

Logged By: Edyte Konan

Method: Hand Auger

Site Coordinates: 32.644579, -103.448392

Hole Diameter: 4 inches

Total Depth: 4 feet

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 (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
Dry	<120	0.0	No	BH05	0.5	0	CCHE	0-1' bgs: Pad surface CALICHE, dry, no staining, no odor
Dry	132	0.0	No		1	1	SP	1-4' bgs: SAND, dry, light brown, poorly graded, very fine to fine grained, no staining, no odor
Dry	132	0.0	No		2	2		
Dry	<120	0.0	No		3	3		
Dry	<120	0.0	No	BH05	4	4		

Total Depth: 4 feet bgs



Sample Name: BH06 Date: 05/22/2023  
 Site Name: RDX 16 #008  
 Incident Number: nAPP2307930900  
 Job Number: 18138

### LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Edyte Konan Method: Hand Auger  
 Hole Diameter: 4 inches Total Depth: 7 feet

Site Coordinates: 32.644579, -103.448392

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 (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
						0	CCHE	0-1' bgs: Pad surface CALICHE, dry, stained, no odor
Dry	5,592	170.1	Yes	BH06	0.5			1-2' ft bgs: SAND, dry, brown, well graded with silt and some small gravel, very fine to coarse, no staining, no odor
Dry	268	14.5	No		1	1	SW-SM	
								2-7' ft bgs: Sand, dry, light brown, poorly graded, very fine to fine, no staining, no odor
Dry	200	31.3	No		2	2	SP	
Dry	<120	8.4	No		3	3		
Dry	156	8.0	No	BH06	4	4		
Dry	<120	10.5	No		5	5		
Dry	<120	30.1	No		6	6		
Dry	<120	32.3	No		7	7		

Total Depth: 7 feet bgs

---

## APPENDIX D

### Photographic Log

**PHOTOGRAPHIC LOG**

WPX Energy Permian, LLC

RDX 16 #008

Incident Number nAPP2307930900

**Photograph 1****Date: 05/22/2023**

Description: Delineation activities, southern view of BH01 advancement.

**Photograph 2****Date: 05/22/2023**

Description: Delineation activities, southwestern view of BH06 advancement.



**PHOTOGRAPHIC LOG**

WPX Energy Permian, LLC

RDX 16 #008

Incident Number nAPP2307930900

**Photograph 3****Date: 05/22/2023**

Description: Delineation activities, eastern view of BH03 advancement.

**Photograph 4****Date: 05/22/2023**

Description: Delineation activities, northern view of BH02 advancement.

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# APPENDIX E

## Tables



**Table 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**WPX Energy Permian, LLC**  
**RDX 16 #008**  
**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)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			10	50	NE	NE	NE	100	600
Delineation Soil Samples - nAPP2307930900									
BH01	05/22/2023	0.5	<0.0250	<0.0250	<20.0	32.7	<50.0	32.7	<b>5,290</b>
BH01	05/22/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<b>1,510</b>
BH01	05/22/2023	7	<0.0250	<0.0250	<20.0	<50.0	<50.0	<50.0	<b>666</b>
BH01	05/22/2023	12	<0.0250	<0.0250	<20.0	37.4	<50.0	37.4	<b>861</b>
BH02	05/22/2023	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	278
BH02	05/22/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	34.1
BH03	05/22/2023	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	161
BH03	05/22/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	21.8
BH04	05/22/2023	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	48.9
BH04	05/22/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	49.6
BH05	05/22/2023	0.5	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<20.0
BH05	05/22/2023	4	<0.0250	<0.0250	<20.0	<25.0	<50.0	<50.0	<20.0
BH06	05/22/2023	0.5	<0.0250	0.2664	<20.0	611	255	<b>866</b>	<b>2,590</b>
BH06	05/22/2023	4	<0.0250	<0.0250	<20.0	34.4	<50.0	34.4	91.2

## Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria and/or Reclamation Standard for Soils Impacted by a Release



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## APPENDIX F

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

Report to:

Gilbert Moreno



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 16 #008

Work Order: E305150

Job Number: 01058-0007

Received: 5/25/2023

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/30/23

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: 5/30/23



Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: RDX 16 #008  
Workorder: E305150  
Date Received: 5/25/2023 8:20:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/25/2023 8:20:00AM, under the Project Name: RDX 16 #008.

The analytical test results summarized in this report with the Project Name: RDX 16 #008 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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**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 16 #008	Reported: 05/30/23 17:23
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH06 0.5'	E305150-01A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.
BH06 4'	E305150-02A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.



## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-0007  
Project Manager: Gilbert Moreno

**Reported:**  
5/30/2023 5:23:53PM

BH06 0.5'

E305150-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2321061	
Benzene	ND	0.0250	1	05/25/23	05/27/23	
Ethylbenzene	<b>0.0454</b>	0.0250	1	05/25/23	05/27/23	
Toluene	ND	0.0250	1	05/25/23	05/27/23	
o-Xylene	<b>0.0636</b>	0.0250	1	05/25/23	05/27/23	
p,m-Xylene	<b>0.157</b>	0.0500	1	05/25/23	05/27/23	
Total Xylenes	<b>0.221</b>	0.0250	1	05/25/23	05/27/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	109 %	70-130		05/25/23	05/27/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: IY		Batch: 2321061	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/25/23	05/27/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.8 %	70-130		05/25/23	05/27/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: JL		Batch: 2321057	
Diesel Range Organics (C10-C28)	<b>611</b>	25.0	1	05/25/23	05/26/23	
Oil Range Organics (C28-C36)	<b>255</b>	50.0	1	05/25/23	05/26/23	
<i>Surrogate: n-Nonane</i>						
	124 %	50-200		05/25/23	05/26/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: RAS		Batch: 2321082	
Chloride	<b>2590</b>	20.0	1	05/26/23	05/27/23	



## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-0007  
Project Manager: Gilbert Moreno

**Reported:**  
5/30/2023 5:23:53PM

## BH06 4'

## E305150-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2321061
Benzene	ND	0.0250	1	05/25/23	05/27/23	
Ethylbenzene	ND	0.0250	1	05/25/23	05/27/23	
Toluene	ND	0.0250	1	05/25/23	05/27/23	
o-Xylene	ND	0.0250	1	05/25/23	05/27/23	
p,m-Xylene	ND	0.0500	1	05/25/23	05/27/23	
Total Xylenes	ND	0.0250	1	05/25/23	05/27/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	05/25/23	05/27/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2321061
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/25/23	05/27/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		90.3 %	70-130	05/25/23	05/27/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2321057
Diesel Range Organics (C10-C28)	34.4	25.0	1	05/25/23	05/26/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/25/23	05/26/23	
<i>Surrogate: n-Nonane</i>						
		110 %	50-200	05/25/23	05/26/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2321082
Chloride	91.2	20.0	1	05/26/23	05/27/23	



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:23:53PM

## 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 (2321061-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

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	7.95		8.00		99.4	70-130			

## LCS (2321061-BS1)

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.31	0.0250	5.00		86.2	70-130			
Ethylbenzene	4.50	0.0250	5.00		90.0	70-130			
Toluene	4.65	0.0250	5.00		93.0	70-130			
o-Xylene	4.75	0.0250	5.00		95.0	70-130			
p,m-Xylene	9.32	0.0500	10.0		93.2	70-130			
Total Xylenes	14.1	0.0250	15.0		93.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.93		8.00		99.2	70-130			

## Matrix Spike (2321061-MS1)

Source: E305149-03

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.83	0.0250	5.00	ND	96.7	54-133			
Ethylbenzene	5.06	0.0250	5.00	ND	101	61-133			
Toluene	5.22	0.0250	5.00	ND	104	61-130			
o-Xylene	5.33	0.0250	5.00	ND	107	63-131			
p,m-Xylene	10.5	0.0500	10.0	ND	105	63-131			
Total Xylenes	15.8	0.0250	15.0	ND	105	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.04		8.00		101	70-130			

## Matrix Spike Dup (2321061-MSD1)

Source: E305149-03

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.44	0.0250	5.00	ND	88.8	54-133	8.51	20	
Ethylbenzene	4.63	0.0250	5.00	ND	92.6	61-133	8.90	20	
Toluene	4.78	0.0250	5.00	ND	95.6	61-130	8.78	20	
o-Xylene	4.89	0.0250	5.00	ND	97.8	63-131	8.62	20	
p,m-Xylene	9.58	0.0500	10.0	ND	95.8	63-131	8.86	20	
Total Xylenes	14.5	0.0250	15.0	ND	96.4	63-131	8.78	20	
Surrogate: 4-Bromochlorobenzene-PID	7.98		8.00		99.8	70-130			





## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:23:53PM

## 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 (2321061-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

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

## LCS (2321061-BS2)

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	49.1	20.0	50.0		98.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.20		8.00		90.1	70-130			

## Matrix Spike (2321061-MS2)

Source: E305149-03

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	46.3	20.0	50.0	ND	92.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.04		8.00		88.0	70-130			

## Matrix Spike Dup (2321061-MSD2)

Source: E305149-03

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	40.9	20.0	50.0	ND	81.8	70-130	12.4	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.02		8.00		75.2	70-130			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:23:53PM

## 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 (2321057-BLK1)

Prepared: 05/25/23 Analyzed: 05/25/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.8		50.0		114	50-200			

## LCS (2321057-BS1)

Prepared: 05/25/23 Analyzed: 05/25/23

Diesel Range Organics (C10-C28)	270	25.0	250		108	38-132			
Surrogate: n-Nonane	52.0		50.0		104	50-200			

## Matrix Spike (2321057-MS1)

Source: E305146-01

Prepared: 05/25/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	289	25.0	250	ND	116	38-132			
Surrogate: n-Nonane	50.5		50.0		101	50-200			

## Matrix Spike Dup (2321057-MSD1)

Source: E305146-01

Prepared: 05/25/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	285	25.0	250	ND	114	38-132	1.30	20	
Surrogate: n-Nonane	52.0		50.0		104	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:23:53PM

Anions by EPA 300.0/9056A

Analyst: RAS

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 (2321082-BLK1)					Prepared: 05/26/23 Analyzed: 05/26/23				
Chloride	ND	20.0							
LCS (2321082-BS1)					Prepared: 05/26/23 Analyzed: 05/26/23				
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2321082-MS1)					Source: E305149-01		Prepared: 05/26/23 Analyzed: 05/26/23		
Chloride	272	20.0	250	21.8	99.9	80-120			
Matrix Spike Dup (2321082-MSD1)					Source: E305149-01		Prepared: 05/26/23 Analyzed: 05/26/23		
Chloride	290	20.0	250	21.8	107	80-120	6.42	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

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	05/30/23 17:23

- 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

Client: WPX Energy Permian LLC.					<b>Bill To</b>					<b>Lab Use Only</b>					<b>TAT</b>					<b>EPA Program</b>											
Project: RDX 16 #008					Attention: Jim Raley					Lab WO# E 305150					Job Number 01058-0007					1D		2D		3D		Standard		CWA		SDWA	
Project Manager: Gilbert Moreno					Address: 5315 Buena Vista Dr.					Analysis and Method										5 day TAT						RCRA					
Address: 13000 W County Rd 100					City, State, Zip: Carlsbad, NM, 88220																										
City, State, Zip: Odessa, TX, 79765					Phone: 575-885-7502																										
Phone: 432-305-6415					Email: jim.raley@dmv.com																										
Email: Devon-team@etechnv.com					WO: 21141253																										
Collected by: Edyte Konan					Incident ID:																										

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth (ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC NM		GDGC TX		Remarks
13:00	5/22/2023	S	1	BH06	1	0.5'							X				
13:20	5/22/2023	S	1	BH06	2	4'							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: \_\_\_\_\_

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) Edyte Konan	Date 05/24/23	Time 10:30	Received by: (Signature) Michelle R. Gault	Date 5/24/23	Time 10:30	<b>Lab Use Only</b> Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) Michelle R. Gault	Date 5/24/23	Time 1:15	Received by: (Signature) Andrew Messo	Date 5/24/23	Time 1:30	
Relinquished by: (Signature) Andrew Messo	Date 5/24/23	Time 2:40	Received by: (Signature) Cathy Mann	Date 5/25/23	Time 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.

## Envirotech Analytical Laboratory

Printed: 5/26/2023 1:57:24PM

## 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:	05/25/23 08:20	Work Order ID:	E305150
Phone:	(539) 573-4018	Date Logged In:	05/24/23 16:19	Logged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	06/01/23 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.



## Project Information

## Chain of Custody

Client: WPX Energy Permian LLC.					Bill To		Lab Use Only						TAT				EPA Program			
Project: RDX 16 #008					Attention: Jim Raley		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA				
Project Manager: Gilbert Moreno					Address: 5315 Buena Vista Dr.		E 305150		D1058-0007					5 day TAT						
Address: 13000 W County Rd 100					City, State, Zip: Carlsbad, NM, 88220		Analysis and Method										RCRA			
City, State, Zip: Odessa, TX, 79765					Phone: 575-885-7502		Depth (ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	TX	GDGC	State				
Phone: 432-305-6415					Email: jim.raley@dnv.com											NM	CO	UT	AZ	TX
Email: Devon-team@etechenv.com					WO: 21141253															
Collected by: Edyte Konan					Incident ID: NAPP2301930900															
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number											Remarks				
13:00	5/22/2023	S	1	BH06	1	0.5'							X			Added incident				
13:20	5/22/2023	S	1	BH06	2	4'							X			# to COC per Gilbert.				
																5/26/23 CM				

## 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:

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) Edyte Konan	Date 05/24/23	Time 10:30	Received by: (Signature) Michelle R. Gault	Date 5/24/23	Time 10:30	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C 4	
Relinquished by: (Signature) Michelle R. Gault	Date 5/24/23	Time 1:15	Received by: (Signature) Andrew Messo	Date 5/24/23	Time 1:30		
Relinquished by: (Signature) Andrew Messo	Date 5/24/23	Time 2:40	Received by: (Signature) Cathy Mon	Date 5/25/23	Time 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.



Report to:

Gilbert Moreno



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 16 #008

Work Order: E305151

Job Number: 01058-0007

Received: 5/25/2023

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/30/23

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: 5/30/23



Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: RDX 16 #008  
Workorder: E305151  
Date Received: 5/25/2023 8:20:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/25/2023 8:20:00AM, under the Project Name: RDX 16 #008.

The analytical test results summarized in this report with the Project Name: RDX 16 #008 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  
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**Alexa Michaels**  
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Office: 505-632-1881  
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**Lynn Jarboe**  
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[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

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported: 05/30/23 17:17
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH04 0.5'	E305151-01A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.
BH04 4'	E305151-02A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.



## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-0007  
Project Manager: Gilbert Moreno

**Reported:**  
5/30/2023 5:17:21PM

BH04 0.5'

E305151-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2321061
Benzene	ND	0.0250	1	05/25/23	05/27/23	
Ethylbenzene	ND	0.0250	1	05/25/23	05/27/23	
Toluene	ND	0.0250	1	05/25/23	05/27/23	
o-Xylene	ND	0.0250	1	05/25/23	05/27/23	
p,m-Xylene	ND	0.0500	1	05/25/23	05/27/23	
Total Xylenes	ND	0.0250	1	05/25/23	05/27/23	
Surrogate: 4-Bromochlorobenzene-PID		101 %	70-130	05/25/23	05/27/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2321061
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/25/23	05/27/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.5 %	70-130	05/25/23	05/27/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2321057
Diesel Range Organics (C10-C28)	ND	25.0	1	05/25/23	05/26/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/25/23	05/26/23	
Surrogate: n-Nonane		108 %	50-200	05/25/23	05/26/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2321082
Chloride	48.9	20.0	1	05/26/23	05/27/23	



## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-0007  
Project Manager: Gilbert Moreno

**Reported:**  
5/30/2023 5:17:21PM

## BH04 4'

## E305151-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2321061
Benzene	ND	0.0250	1	05/25/23	05/27/23	
Ethylbenzene	ND	0.0250	1	05/25/23	05/27/23	
Toluene	ND	0.0250	1	05/25/23	05/27/23	
o-Xylene	ND	0.0250	1	05/25/23	05/27/23	
p,m-Xylene	ND	0.0500	1	05/25/23	05/27/23	
Total Xylenes	ND	0.0250	1	05/25/23	05/27/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	05/25/23	05/27/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2321061
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/25/23	05/27/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		90.7 %	70-130	05/25/23	05/27/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: JL		Batch: 2321057
Diesel Range Organics (C10-C28)	ND	25.0	1	05/25/23	05/26/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/25/23	05/26/23	
<i>Surrogate: n-Nonane</i>						
		106 %	50-200	05/25/23	05/26/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2321082
Chloride	49.6	20.0	1	05/26/23	05/27/23	



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:17:21PM

## 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 (2321061-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

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	7.95		8.00		99.4	70-130			

## LCS (2321061-BS1)

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.31	0.0250	5.00		86.2	70-130			
Ethylbenzene	4.50	0.0250	5.00		90.0	70-130			
Toluene	4.65	0.0250	5.00		93.0	70-130			
o-Xylene	4.75	0.0250	5.00		95.0	70-130			
p,m-Xylene	9.32	0.0500	10.0		93.2	70-130			
Total Xylenes	14.1	0.0250	15.0		93.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.93		8.00		99.2	70-130			

## Matrix Spike (2321061-MS1)

Source: E305149-03

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.83	0.0250	5.00	ND	96.7	54-133			
Ethylbenzene	5.06	0.0250	5.00	ND	101	61-133			
Toluene	5.22	0.0250	5.00	ND	104	61-130			
o-Xylene	5.33	0.0250	5.00	ND	107	63-131			
p,m-Xylene	10.5	0.0500	10.0	ND	105	63-131			
Total Xylenes	15.8	0.0250	15.0	ND	105	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.04		8.00		101	70-130			

## Matrix Spike Dup (2321061-MSD1)

Source: E305149-03

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.44	0.0250	5.00	ND	88.8	54-133	8.51	20	
Ethylbenzene	4.63	0.0250	5.00	ND	92.6	61-133	8.90	20	
Toluene	4.78	0.0250	5.00	ND	95.6	61-130	8.78	20	
o-Xylene	4.89	0.0250	5.00	ND	97.8	63-131	8.62	20	
p,m-Xylene	9.58	0.0500	10.0	ND	95.8	63-131	8.86	20	
Total Xylenes	14.5	0.0250	15.0	ND	96.4	63-131	8.78	20	
Surrogate: 4-Bromochlorobenzene-PID	7.98		8.00		99.8	70-130			





## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:17:21PM

## 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 (2321061-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

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

## LCS (2321061-BS2)

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	49.1	20.0	50.0		98.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.20		8.00		90.1	70-130			

## Matrix Spike (2321061-MS2)

Source: E305149-03

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	46.3	20.0	50.0	ND	92.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.04		8.00		88.0	70-130			

## Matrix Spike Dup (2321061-MSD2)

Source: E305149-03

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	40.9	20.0	50.0	ND	81.8	70-130	12.4	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.02		8.00		75.2	70-130			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:17:21PM

## 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 (2321057-BLK1)

Prepared: 05/25/23 Analyzed: 05/25/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.8		50.0		114	50-200			

## LCS (2321057-BS1)

Prepared: 05/25/23 Analyzed: 05/25/23

Diesel Range Organics (C10-C28)	270	25.0	250		108	38-132			
Surrogate: n-Nonane	52.0		50.0		104	50-200			

## Matrix Spike (2321057-MS1)

Source: E305146-01

Prepared: 05/25/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	289	25.0	250	ND	116	38-132			
Surrogate: n-Nonane	50.5		50.0		101	50-200			

## Matrix Spike Dup (2321057-MSD1)

Source: E305146-01

Prepared: 05/25/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	285	25.0	250	ND	114	38-132	1.30	20	
Surrogate: n-Nonane	52.0		50.0		104	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:17:21PM

Anions by EPA 300.0/9056A

Analyst: RAS

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

Blank (2321082-BLK1)					Prepared: 05/26/23 Analyzed: 05/26/23				
Chloride	ND	20.0							
LCS (2321082-BS1)					Prepared: 05/26/23 Analyzed: 05/26/23				
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2321082-MS1)					Source: E305149-01		Prepared: 05/26/23 Analyzed: 05/26/23		
Chloride	272	20.0	250	21.8	99.9	80-120			
Matrix Spike Dup (2321082-MSD1)					Source: E305149-01		Prepared: 05/26/23 Analyzed: 05/26/23		
Chloride	290	20.0	250	21.8	107	80-120	6.42	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

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	05/30/23 17:17

- 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: WPX Energy Permian LLC.	Bill To		Lab Use Only				TAT				EPA Program				
Project: RDX 16 #008	Attention: Jim Raley		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA			
Project Manager: Gilbert Moreno	Address: 5315 Buena Vista Dr.		E305151		01658-0067					5 day TAT					
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220		Analysis and Method									RCRA			
City, State, Zip: Odessa, TX, 79765	Phone: 575-885-7502		(t.) O/DRO/ORO by 8021 8260 8010 300.0 NM TX									State			
Phone: 432-305-6415	Email: jim.raley@dvn.com														
Email: Devon-team@etechenv.com	WO: 21141253														
Collected by: Edyte Konan	Incident ID: nAPP2307930900														

[illegible]

**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: \_\_\_\_\_

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>Elyse Konan</i>	Date 05/24/23	Time 10:30	Received by: (Signature) <i>Michelle Cappel</i>	Date 5/24/23	Time 10:30	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <i>Michelle Cappel</i>	Date 5-24-23	Time 1615	Received by: (Signature) <i>Andrew Musso</i>	Date 5-24-23	Time 1930	
Relinquished by: (Signature) <i>Andrew Musso</i>	Date 5-24-23	Time 2400	Received by: (Signature) <i>Cathy Mann</i>	Date 5/25/23	Time 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.

## Envirotech Analytical Laboratory

Printed: 5/26/2023 1:58:43PM

## 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:	05/25/23 08:20	Work Order ID:	E305151
Phone:	(539) 573-4018	Date Logged In:	05/24/23 16:20	Logged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	06/01/23 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:

Gilbert Moreno



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 16 #008

Work Order: E305152

Job Number: 01058-007

Received: 5/25/2023

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/30/23

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: 5/30/23



Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: RDX 16 #008  
Workorder: E305152  
Date Received: 5/25/2023 8:20:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/25/2023 8:20:00AM, under the Project Name: RDX 16 #008.

The analytical test results summarized in this report with the Project Name: RDX 16 #008 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  
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**Alexa Michaels**  
Sample Custody Officer  
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**Southern New Mexico Area**  
**Lynn Jarboe**  
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[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

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported: 05/30/23 17:18
5315 Buena Vista Dr	Project Number:	01058-007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH05 0.5'	E305152-01A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.
BH05 4'	E305152-02A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.



## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-007  
Project Manager: Gilbert Moreno

**Reported:**  
5/30/2023 5:18:51PM

BH05 0.5'

E305152-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2321067	
Benzene	ND	0.0250	1	05/26/23	05/26/23	
Ethylbenzene	ND	0.0250	1	05/26/23	05/26/23	
Toluene	ND	0.0250	1	05/26/23	05/26/23	
o-Xylene	ND	0.0250	1	05/26/23	05/26/23	
p,m-Xylene	ND	0.0500	1	05/26/23	05/26/23	
Total Xylenes	ND	0.0250	1	05/26/23	05/26/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.0 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2321067	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/26/23	05/26/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.6 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KM		Batch: 2321081	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/26/23	05/26/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/26/23	05/26/23	
<i>Surrogate: n-Nonane</i>						
	93.6 %	50-200		05/26/23	05/26/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: RAS		Batch: 2321082	
Chloride	ND	20.0	1	05/26/23	05/27/23	



## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-007  
Project Manager: Gilbert Moreno

**Reported:**  
5/30/2023 5:18:51PM

## BH05 4'

## E305152-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321067
Benzene	ND	0.0250	1	05/26/23	05/26/23	
Ethylbenzene	ND	0.0250	1	05/26/23	05/26/23	
Toluene	ND	0.0250	1	05/26/23	05/26/23	
o-Xylene	ND	0.0250	1	05/26/23	05/26/23	
p,m-Xylene	ND	0.0500	1	05/26/23	05/26/23	
Total Xylenes	ND	0.0250	1	05/26/23	05/26/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.9 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321067
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/26/23	05/26/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	87.6 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2321081
Diesel Range Organics (C10-C28)	ND	25.0	1	05/26/23	05/26/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/26/23	05/26/23	
<i>Surrogate: n-Nonane</i>						
	95.5 %	50-200		05/26/23	05/26/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2321082
Chloride	ND	20.0	1	05/26/23	05/27/23	



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:18:51PM

## Volatile Organics by EPA 8021B

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 (2321067-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

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	7.69		8.00		96.2	70-130			

## LCS (2321067-BS1)

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.84	0.0250	5.00		96.7	70-130			
Ethylbenzene	5.09	0.0250	5.00		102	70-130			
Toluene	5.17	0.0250	5.00		103	70-130			
o-Xylene	5.21	0.0250	5.00		104	70-130			
p,m-Xylene	10.3	0.0500	10.0		103	70-130			
Total Xylenes	15.6	0.0250	15.0		104	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.80		8.00		97.5	70-130			

## Matrix Spike (2321067-MS1)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.52	0.0250	5.00	ND	90.5	54-133			
Ethylbenzene	4.77	0.0250	5.00	ND	95.5	61-133			
Toluene	4.84	0.0250	5.00	ND	96.7	61-130			
o-Xylene	4.90	0.0250	5.00	ND	98.1	63-131			
p,m-Xylene	9.70	0.0500	10.0	ND	97.0	63-131			
Total Xylenes	14.6	0.0250	15.0	ND	97.3	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.77		8.00		97.2	70-130			

## Matrix Spike Dup (2321067-MSD1)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.10	0.0250	5.00	ND	81.9	54-133	9.94	20	
Ethylbenzene	4.34	0.0250	5.00	ND	86.7	61-133	9.63	20	
Toluene	4.39	0.0250	5.00	ND	87.9	61-130	9.60	20	
o-Xylene	4.43	0.0250	5.00	ND	88.6	63-131	10.1	20	
p,m-Xylene	8.83	0.0500	10.0	ND	88.3	63-131	9.41	20	
Total Xylenes	13.3	0.0250	15.0	ND	88.4	63-131	9.66	20	
Surrogate: 4-Bromochlorobenzene-PID	7.74		8.00		96.8	70-130			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:18:51PM

## 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 (2321067-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.29		8.00		91.1	70-130			

## LCS (2321067-BS2)

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	48.1	20.0	50.0		96.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.24		8.00		90.5	70-130			

## Matrix Spike (2321067-MS2)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/27/23

Gasoline Range Organics (C6-C10)	40.4	20.0	50.0	ND	80.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.3	70-130			

## Matrix Spike Dup (2321067-MSD2)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	46.6	20.0	50.0	ND	93.3	70-130	14.4	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.13		8.00		89.1	70-130			





## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:18:51PM

## 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 (2321081-BLK1)

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.5		50.0		97.1	50-200			

## LCS (2321081-BS1)

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132			
Surrogate: n-Nonane	44.4		50.0		88.9	50-200			

## Matrix Spike (2321081-MS1)

Source: E305155-01

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	302	25.0	250	37.4	106	38-132			
Surrogate: n-Nonane	43.6		50.0		87.1	50-200			

## Matrix Spike Dup (2321081-MSD1)

Source: E305155-01

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	307	25.0	250	37.4	108	38-132	1.63	20	
Surrogate: n-Nonane	43.8		50.0		87.5	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:18:51PM

Anions by EPA 300.0/9056A

Analyst: RAS

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 (2321082-BLK1)					Prepared: 05/26/23 Analyzed: 05/26/23				
Chloride	ND	20.0							
LCS (2321082-BS1)					Prepared: 05/26/23 Analyzed: 05/26/23				
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2321082-MS1)					Source: E305149-01		Prepared: 05/26/23 Analyzed: 05/26/23		
Chloride	272	20.0	250	21.8	99.9	80-120			
Matrix Spike Dup (2321082-MSD1)					Source: E305149-01		Prepared: 05/26/23 Analyzed: 05/26/23		
Chloride	290	20.0	250	21.8	107	80-120	6.42	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

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	
5315 Buena Vista Dr	Project Number:	01058-007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	05/30/23 17:18

- 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

Client: WPX Energy Permian LLC.		<b>Bill To</b>		<b>Lab Use Only</b>		<b>TAT</b>		<b>EPA Program</b>	
Project: RDX 16 #008		Attention: Jim Raley		Lab WO#		1D 2D 3D		CWA SDWA	
Project Manager: Gilbert Moreno		Address: 5315 Buena Vista Dr.		E305152		Job Number		5 day TAT	
Address: 13000 W County Rd 100		City, State, Zip: Carlsbad, NM, 88220		Analysis and Method				RCRA	
City, State, Zip: Odessa, TX, 79765		Phone: 575-885-7502							
Phone: 432-305-6415		Email: jim.raley@dvn.com							
Email: Devon-team@etechenv.com		WO: 21141253							
Collected by: Edyte Konan		Incident ID:							

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth (ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC	NM	TX	GDOC	Remarks
12:20	5/22/2023	S	1	BH05	1	0.5'						X				
12:40	5/22/2023	S	1	BH05	2	4'						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:

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) Edyte Konan	Date 05/24/23	Time 10:30	Received by: (Signature) Michelle Campbell	Date 5-24-23	Time 10:30	<b>Lab Use Only</b> Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C 4	
Relinquished by: (Signature) Michelle Campbell	Date 5-24-23	Time 1:15	Received by: (Signature) Andrew Miso	Date 5-24-23	Time 1:30		
Relinquished by: (Signature) Andrew Miso	Date 5-24-23	Time 2:40	Received by: (Signature) Caithe Man	Date 5/25/23	Time 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.



envirotech

## Envirotech Analytical Laboratory

Printed: 5/26/2023 1:59:59PM

## 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:	05/25/23 08:20	Work Order ID:	E305152
Phone:	(539) 573-4018	Date Logged In:	05/25/23 08:27	Logged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	06/01/23 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:

Gilbert Moreno



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 16 #008

Work Order: E305153

Job Number: 01058-0007

Received: 5/25/2023

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/30/23

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: 5/30/23



Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: RDX 16 #008  
Workorder: E305153  
Date Received: 5/25/2023 8:20:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/25/2023 8:20:00AM, under the Project Name: RDX 16 #008.

The analytical test results summarized in this report with the Project Name: RDX 16 #008 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  
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**Alexa Michaels**  
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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 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	05/30/23 17:20

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH03 0.5'	E305153-01A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.
BH03 4'	E305153-02A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.



## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-0007  
Project Manager: Gilbert Moreno

**Reported:**  
5/30/2023 5:20:20PM

BH03 0.5'

E305153-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2321067	
Benzene	ND	0.0250	1	05/26/23	05/26/23	
Ethylbenzene	ND	0.0250	1	05/26/23	05/26/23	
Toluene	ND	0.0250	1	05/26/23	05/26/23	
o-Xylene	ND	0.0250	1	05/26/23	05/26/23	
p,m-Xylene	ND	0.0500	1	05/26/23	05/26/23	
Total Xylenes	ND	0.0250	1	05/26/23	05/26/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.7 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2321067	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/26/23	05/26/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.4 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KM		Batch: 2321081	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/26/23	05/26/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/26/23	05/26/23	
<i>Surrogate: n-Nonane</i>						
	91.7 %	50-200		05/26/23	05/26/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: RAS		Batch: 2321083	
Chloride	161	40.0	2	05/26/23	05/26/23	



## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-0007  
Project Manager: Gilbert Moreno

**Reported:**  
5/30/2023 5:20:20PM

## BH03 4'

## E305153-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2321067	
Benzene	ND	0.0250	1	05/26/23	05/26/23	
Ethylbenzene	ND	0.0250	1	05/26/23	05/26/23	
Toluene	ND	0.0250	1	05/26/23	05/26/23	
o-Xylene	ND	0.0250	1	05/26/23	05/26/23	
p,m-Xylene	ND	0.0500	1	05/26/23	05/26/23	
Total Xylenes	ND	0.0250	1	05/26/23	05/26/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.7 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2321067	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/26/23	05/26/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.9 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KM		Batch: 2321081	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/26/23	05/26/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/26/23	05/26/23	
<i>Surrogate: n-Nonane</i>						
	91.9 %	50-200		05/26/23	05/26/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: RAS		Batch: 2321083	
Chloride	21.8	20.0	1	05/26/23	05/26/23	



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:20:20PM

## Volatile Organics by EPA 8021B

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 (2321067-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

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	7.69		8.00		96.2	70-130			

## LCS (2321067-BS1)

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.84	0.0250	5.00		96.7	70-130			
Ethylbenzene	5.09	0.0250	5.00		102	70-130			
Toluene	5.17	0.0250	5.00		103	70-130			
o-Xylene	5.21	0.0250	5.00		104	70-130			
p,m-Xylene	10.3	0.0500	10.0		103	70-130			
Total Xylenes	15.6	0.0250	15.0		104	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.80		8.00		97.5	70-130			

## Matrix Spike (2321067-MS1)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.52	0.0250	5.00	ND	90.5	54-133			
Ethylbenzene	4.77	0.0250	5.00	ND	95.5	61-133			
Toluene	4.84	0.0250	5.00	ND	96.7	61-130			
o-Xylene	4.90	0.0250	5.00	ND	98.1	63-131			
p,m-Xylene	9.70	0.0500	10.0	ND	97.0	63-131			
Total Xylenes	14.6	0.0250	15.0	ND	97.3	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.77		8.00		97.2	70-130			

## Matrix Spike Dup (2321067-MSD1)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.10	0.0250	5.00	ND	81.9	54-133	9.94	20	
Ethylbenzene	4.34	0.0250	5.00	ND	86.7	61-133	9.63	20	
Toluene	4.39	0.0250	5.00	ND	87.9	61-130	9.60	20	
o-Xylene	4.43	0.0250	5.00	ND	88.6	63-131	10.1	20	
p,m-Xylene	8.83	0.0500	10.0	ND	88.3	63-131	9.41	20	
Total Xylenes	13.3	0.0250	15.0	ND	88.4	63-131	9.66	20	
Surrogate: 4-Bromochlorobenzene-PID	7.74		8.00		96.8	70-130			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:20:20PM

## 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 (2321067-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.29		8.00		91.1	70-130			

## LCS (2321067-BS2)

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	48.1	20.0	50.0		96.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.24		8.00		90.5	70-130			

## Matrix Spike (2321067-MS2)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/27/23

Gasoline Range Organics (C6-C10)	40.4	20.0	50.0	ND	80.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.3	70-130			

## Matrix Spike Dup (2321067-MSD2)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	46.6	20.0	50.0	ND	93.3	70-130	14.4	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.13		8.00		89.1	70-130			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	<b>Reported:</b>
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:20:20PM

## 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 (2321081-BLK1)

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.5		50.0		97.1	50-200			

## LCS (2321081-BS1)

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132			
Surrogate: n-Nonane	44.4		50.0		88.9	50-200			

## Matrix Spike (2321081-MS1)

Source: E305155-01

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	302	25.0	250	37.4	106	38-132			
Surrogate: n-Nonane	43.6		50.0		87.1	50-200			

## Matrix Spike Dup (2321081-MSD1)

Source: E305155-01

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	307	25.0	250	37.4	108	38-132	1.63	20	
Surrogate: n-Nonane	43.8		50.0		87.5	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:20:20PM

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 (2321083-BLK1)					Prepared: 05/26/23 Analyzed: 05/26/23				
Chloride	ND	20.0							
LCS (2321083-BS1)					Prepared: 05/26/23 Analyzed: 05/26/23				
Chloride	246	20.0	250		98.5	90-110			
Matrix Spike (2321083-MS1)					Source: E305153-01		Prepared: 05/26/23 Analyzed: 05/26/23		
Chloride	419	40.0	250	161	103	80-120			
Matrix Spike Dup (2321083-MSD1)					Source: E305153-01		Prepared: 05/26/23 Analyzed: 05/26/23		
Chloride	424	40.0	250	161	105	80-120	1.25	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

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	05/30/23 17:20

- 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: WPX Energy Permian LLC.		<b>Bill To</b>		<b>Lab Use Only</b>		<b>TAT</b>		<b>EPA Program</b>	
Project: RDX 16 #008		Attention: Jim Raley		Lab WO#		1D 2D 3D		CWA SDWA	
Project Manager: Gilbert Moreno		Address: 5315 Buena Vista Dr.		E 305153		Job Number		5 day TAT	
Address: 13000 W County Rd 100		City, State, Zip: Carlsbad, NM, 88220		Analysis and Method				RCRA	
City, State, Zip: Odessa, TX, 79765		Phone: 575-885-7502							
Phone: 432-305-6415		Email: jim.raley@dv.com							
Email: Devon-team@etechnv.com		WO: 21141253							
Collected by: Edyte Konan		Incident ID: nAPP2307930900							

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth (ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC	TX	State	Remarks
11:00	5/22/2023	S	1	BH03	1	0.5'						X			
11:20	5/22/2023	S	1	BH03	2	4'						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:

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) Edyte Konan	Date 05/24/23	Time 10:30	Received by: (Signature) Michelle Campylo	Date 5-24-23	Time 1030	<b>Lab Use Only</b> Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) Michelle Campylo	Date 5-24-23	Time 1815	Received by: (Signature) Andrew Russo	Date 5-24-23	Time 1830	
Relinquished by: (Signature) Andrew Russo	Date 5-24-23	Time 2400	Received by: (Signature) Caitlin Man	Date 5/25/23	Time 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.

## Envirotech Analytical Laboratory

Printed: 5/26/2023 2:01:02PM

## 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:	05/25/23 08:20	Work Order ID:	E305153
Phone:	(539) 573-4018	Date Logged In:	05/25/23 08:29	Logged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	06/01/23 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:

Gilbert Moreno



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 16 #008

Work Order: E305154

Job Number: 01058-0007

Received: 5/25/2023

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/30/23

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: 5/30/23



Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: RDX 16 #008  
Workorder: E305154  
Date Received: 5/25/2023 8:20:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/25/2023 8:20:00AM, under the Project Name: RDX 16 #008.

The analytical test results summarized in this report with the Project Name: RDX 16 #008 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**  
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**Rayny Hagan**  
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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported: 05/30/23 17:25
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH02 0.5'	E305154-01A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.
BH02 4'	E305154-02A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.



## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-0007  
Project Manager: Gilbert Moreno

**Reported:**  
5/30/2023 5:25:21PM

BH02 0.5'

E305154-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321067
Benzene	ND	0.0250	1	05/26/23	05/26/23	
Ethylbenzene	ND	0.0250	1	05/26/23	05/26/23	
Toluene	ND	0.0250	1	05/26/23	05/26/23	
o-Xylene	ND	0.0250	1	05/26/23	05/26/23	
p,m-Xylene	ND	0.0500	1	05/26/23	05/26/23	
Total Xylenes	ND	0.0250	1	05/26/23	05/26/23	
Surrogate: 4-Bromochlorobenzene-PID	95.6 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321067
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/26/23	05/26/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	88.8 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2321081
Diesel Range Organics (C10-C28)	ND	25.0	1	05/26/23	05/26/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/26/23	05/26/23	
Surrogate: n-Nonane	92.0 %	50-200		05/26/23	05/26/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2321083
Chloride	278	20.0	1	05/26/23	05/26/23	



## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-0007  
Project Manager: Gilbert Moreno

**Reported:**  
5/30/2023 5:25:21PM

## BH02 4'

## E305154-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321067
Benzene	ND	0.0250	1	05/26/23	05/26/23	
Ethylbenzene	ND	0.0250	1	05/26/23	05/26/23	
Toluene	ND	0.0250	1	05/26/23	05/26/23	
o-Xylene	ND	0.0250	1	05/26/23	05/26/23	
p,m-Xylene	ND	0.0500	1	05/26/23	05/26/23	
Total Xylenes	ND	0.0250	1	05/26/23	05/26/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.8 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321067
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/26/23	05/26/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	87.6 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2321081
Diesel Range Organics (C10-C28)	ND	25.0	1	05/26/23	05/26/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/26/23	05/26/23	
<i>Surrogate: n-Nonane</i>						
	93.1 %	50-200		05/26/23	05/26/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2321083
Chloride	34.1	20.0	1	05/26/23	05/26/23	



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:25:21PM

## Volatile Organics by EPA 8021B

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 (2321067-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

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	7.69		8.00		96.2	70-130			

## LCS (2321067-BS1)

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.84	0.0250	5.00		96.7	70-130			
Ethylbenzene	5.09	0.0250	5.00		102	70-130			
Toluene	5.17	0.0250	5.00		103	70-130			
o-Xylene	5.21	0.0250	5.00		104	70-130			
p,m-Xylene	10.3	0.0500	10.0		103	70-130			
Total Xylenes	15.6	0.0250	15.0		104	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.80		8.00		97.5	70-130			

## Matrix Spike (2321067-MS1)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.52	0.0250	5.00	ND	90.5	54-133			
Ethylbenzene	4.77	0.0250	5.00	ND	95.5	61-133			
Toluene	4.84	0.0250	5.00	ND	96.7	61-130			
o-Xylene	4.90	0.0250	5.00	ND	98.1	63-131			
p,m-Xylene	9.70	0.0500	10.0	ND	97.0	63-131			
Total Xylenes	14.6	0.0250	15.0	ND	97.3	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.77		8.00		97.2	70-130			

## Matrix Spike Dup (2321067-MSD1)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.10	0.0250	5.00	ND	81.9	54-133	9.94	20	
Ethylbenzene	4.34	0.0250	5.00	ND	86.7	61-133	9.63	20	
Toluene	4.39	0.0250	5.00	ND	87.9	61-130	9.60	20	
o-Xylene	4.43	0.0250	5.00	ND	88.6	63-131	10.1	20	
p,m-Xylene	8.83	0.0500	10.0	ND	88.3	63-131	9.41	20	
Total Xylenes	13.3	0.0250	15.0	ND	88.4	63-131	9.66	20	
Surrogate: 4-Bromochlorobenzene-PID	7.74		8.00		96.8	70-130			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:25:21PM

## 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 (2321067-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.29		8.00		91.1	70-130			

## LCS (2321067-BS2)

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	48.1	20.0	50.0		96.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.24		8.00		90.5	70-130			

## Matrix Spike (2321067-MS2)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/27/23

Gasoline Range Organics (C6-C10)	40.4	20.0	50.0	ND	80.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.3	70-130			

## Matrix Spike Dup (2321067-MSD2)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	46.6	20.0	50.0	ND	93.3	70-130	14.4	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.13		8.00		89.1	70-130			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:25:21PM

## 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 (2321081-BLK1)

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.5		50.0		97.1	50-200			

## LCS (2321081-BS1)

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132			
Surrogate: n-Nonane	44.4		50.0		88.9	50-200			

## Matrix Spike (2321081-MS1)

Source: E305155-01

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	302	25.0	250	37.4	106	38-132			
Surrogate: n-Nonane	43.6		50.0		87.1	50-200			

## Matrix Spike Dup (2321081-MSD1)

Source: E305155-01

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	307	25.0	250	37.4	108	38-132	1.63	20	
Surrogate: n-Nonane	43.8		50.0		87.5	50-200			





QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:25:21PM

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 (2321083-BLK1)					Prepared: 05/26/23 Analyzed: 05/26/23				
Chloride	ND	20.0							
LCS (2321083-BS1)					Prepared: 05/26/23 Analyzed: 05/26/23				
Chloride	246	20.0	250		98.5	90-110			
Matrix Spike (2321083-MS1)					Source: E305153-01		Prepared: 05/26/23 Analyzed: 05/26/23		
Chloride	419	40.0	250	161	103	80-120			
Matrix Spike Dup (2321083-MSD1)					Source: E305153-01		Prepared: 05/26/23 Analyzed: 05/26/23		
Chloride	424	40.0	250	161	105	80-120	1.25	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

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	
5315 Buena Vista Dr	Project Number:	01058-0007	<b>Reported:</b>
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	05/30/23 17:25

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.



[illegible]

**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.						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.					
Sampled by:											
Relinquished by: (Signature) Edyta Konan		Date 05/24/23	Time 10:30	Received by: (Signature) Michelle Cangelosi		Date 5-24-23	Time 1030	<div>Lab Use Only</div> <div>Received on ice: <input checked="" type="checkbox"/> N</div> <div>T1 _____ T2 _____ T3 _____</div> <div>AVG Temp °C <u>4</u></div>			
Relinquished by: (Signature) Michelle Cangelosi		Date 5-24-23	Time 1815	Received by: (Signature) Andrew Mello		Date 5-24-23	Time 1830				
Relinquished by: (Signature) Andrew Mello		Date 5-24-23	Time 2400	Received by: (Signature) Cath Mann		Date 5/25/23	Time 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.											

## Envirotech Analytical Laboratory

Printed: 5/26/2023 2:01:43PM

## 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:	05/25/23 08:20	Work Order ID:	E305154
Phone:	(539) 573-4018	Date Logged In:	05/25/23 08:30	Logged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	06/01/23 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.

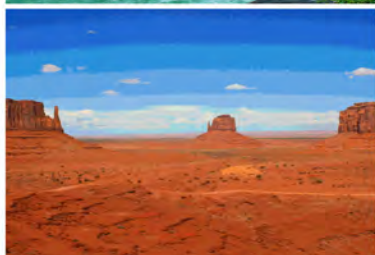
Date



envirotech Inc.

Report to:

Gilbert Moreno



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 16 #008

Work Order: E305155

Job Number: 01058-0007

Received: 5/25/2023

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/30/23

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: 5/30/23



Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: RDX 16 #008  
Workorder: E305155  
Date Received: 5/25/2023 8:20:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/25/2023 8:20:00AM, under the Project Name: RDX 16 #008.

The analytical test results summarized in this report with the Project Name: RDX 16 #008 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**  
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Field Offices:

**Southern New Mexico Area**  
**Lynn Jarboe**  
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**West Texas Midland/Odessa Area**  
**Rayny Hagan**  
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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	05/30/23 17:15

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01 12'	E305155-01A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.



## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-0007  
Project Manager: Gilbert Moreno

**Reported:**  
5/30/2023 5:15:06PM

BH01 12'

E305155-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321067
Benzene	ND	0.0250	1	05/26/23	05/26/23	
Ethylbenzene	ND	0.0250	1	05/26/23	05/26/23	
Toluene	ND	0.0250	1	05/26/23	05/26/23	
o-Xylene	ND	0.0250	1	05/26/23	05/26/23	
p,m-Xylene	ND	0.0500	1	05/26/23	05/26/23	
Total Xylenes	ND	0.0250	1	05/26/23	05/26/23	
Surrogate: 4-Bromochlorobenzene-PID	94.6 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321067
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/26/23	05/26/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	91.2 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2321081
Diesel Range Organics (C10-C28)	37.4	25.0	1	05/26/23	05/26/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/26/23	05/26/23	
Surrogate: n-Nonane	87.8 %	50-200		05/26/23	05/26/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2321083
Chloride	861	20.0	1	05/26/23	05/26/23	



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:15:06PM

## Volatile Organics by EPA 8021B

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 (2321067-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

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	7.69		8.00		96.2	70-130			

## LCS (2321067-BS1)

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.84	0.0250	5.00		96.7	70-130			
Ethylbenzene	5.09	0.0250	5.00		102	70-130			
Toluene	5.17	0.0250	5.00		103	70-130			
o-Xylene	5.21	0.0250	5.00		104	70-130			
p,m-Xylene	10.3	0.0500	10.0		103	70-130			
Total Xylenes	15.6	0.0250	15.0		104	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.80		8.00		97.5	70-130			

## Matrix Spike (2321067-MS1)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.52	0.0250	5.00	ND	90.5	54-133			
Ethylbenzene	4.77	0.0250	5.00	ND	95.5	61-133			
Toluene	4.84	0.0250	5.00	ND	96.7	61-130			
o-Xylene	4.90	0.0250	5.00	ND	98.1	63-131			
p,m-Xylene	9.70	0.0500	10.0	ND	97.0	63-131			
Total Xylenes	14.6	0.0250	15.0	ND	97.3	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.77		8.00		97.2	70-130			

## Matrix Spike Dup (2321067-MSD1)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.10	0.0250	5.00	ND	81.9	54-133	9.94	20	
Ethylbenzene	4.34	0.0250	5.00	ND	86.7	61-133	9.63	20	
Toluene	4.39	0.0250	5.00	ND	87.9	61-130	9.60	20	
o-Xylene	4.43	0.0250	5.00	ND	88.6	63-131	10.1	20	
p,m-Xylene	8.83	0.0500	10.0	ND	88.3	63-131	9.41	20	
Total Xylenes	13.3	0.0250	15.0	ND	88.4	63-131	9.66	20	
Surrogate: 4-Bromochlorobenzene-PID	7.74		8.00		96.8	70-130			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:15:06PM

## 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 (2321067-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.29		8.00		91.1	70-130			

## LCS (2321067-BS2)

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	48.1	20.0	50.0		96.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.24		8.00		90.5	70-130			

## Matrix Spike (2321067-MS2)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/27/23

Gasoline Range Organics (C6-C10)	40.4	20.0	50.0	ND	80.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.3	70-130			

## Matrix Spike Dup (2321067-MSD2)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	46.6	20.0	50.0	ND	93.3	70-130	14.4	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.13		8.00		89.1	70-130			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:15:06PM

## 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 (2321081-BLK1)

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.5		50.0		97.1	50-200			

## LCS (2321081-BS1)

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132			
Surrogate: n-Nonane	44.4		50.0		88.9	50-200			

## Matrix Spike (2321081-MS1)

Source: E305155-01

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	302	25.0	250	37.4	106	38-132			
Surrogate: n-Nonane	43.6		50.0		87.1	50-200			

## Matrix Spike Dup (2321081-MSD1)

Source: E305155-01

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	307	25.0	250	37.4	108	38-132	1.63	20	
Surrogate: n-Nonane	43.8		50.0		87.5	50-200			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	<b>Reported:</b>
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/30/2023 5:15:06PM

## Anions by EPA 300.0/9056A

Analyst: RAS

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 (2321083-BLK1)

Prepared: 05/26/23 Analyzed: 05/26/23

Chloride ND 20.0

## LCS (2321083-BS1)

Prepared: 05/26/23 Analyzed: 05/26/23

Chloride 246 20.0 250 98.5 90-110

## Matrix Spike (2321083-MS1)

Source: E305153-01

Prepared: 05/26/23 Analyzed: 05/26/23

Chloride 419 40.0 250 161 103 80-120

## Matrix Spike Dup (2321083-MSD1)

Source: E305153-01

Prepared: 05/26/23 Analyzed: 05/26/23

Chloride 424 40.0 250 161 105 80-120 1.25 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

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	05/30/23 17:15

- 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: WPX Energy Permian LLC.	<b>Bill To</b>			<b>Lab Use Only</b>				<b>TAT</b>				<b>EPA Program</b>					
Project: RDX 16 #008	Attention: Jim Raley			Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA				
Project Manager: Gilbert Moreno	Address: 5315 Buena Vista Dr.			E305155		01058-0007					5 day TAT						
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220			Analysis and Method									RCRA				
City, State, Zip: Odessa, TX, 79765	Phone: 575-885-7502			2/ DRO/ORO by 8021 83260 1010 300.0 NM TX													
Phone: 432-305-6415	Email: jim.raley@divn.com												State				
Email: Devon-team@etechenv.com	WO: 21141253												NM	CO	UT	AZ	TX
Collected by: Edyte Konan	Incident ID: nAPP2307930900																

[illegible]

## Additional Instructions:

(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.		
Sampled by: _____								
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>		
<i>Edey Konan</i>	05/24/23	10:30	<i>Michelle Cough</i>	5-24-23	1030			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time			
<i>Michelle Cough</i>	5-24-23	1815	<i>Andrew Messo</i>	5-24-23	1830			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time			
<i>Andrew Messo</i>	5-24-23	2400	<i>Carth Man</i>	5/25/23	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.

## Envirotech Analytical Laboratory

Printed: 5/26/2023 2:02:26PM

## 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:	05/25/23 08:20	Work Order ID:	E305155
Phone:	(539) 573-4018	Date Logged In:	05/25/23 08:31	Logged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	06/01/23 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:

Gilbert Moreno



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 16 #008

Work Order: E305156

Job Number: 01058-0007

Received: 5/25/2023

Revision: 2

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
6/2/23

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: 6/2/23

Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220



Project Name: RDX 16 #008  
Workorder: E305156  
Date Received: 5/25/2023 8:20:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/25/2023 8:20:00AM, under the Project Name: RDX 16 #008.

The analytical test results summarized in this report with the Project Name: RDX 16 #008 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**  
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**West Texas Midland/Odessa Area**  
**Rayny Hagan**  
Technical Representative  
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QC - Anions by EPA 300.0/9056A	9
Definitions and Notes	10
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Sample Summary

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	06/02/23 12:28

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01 7'	E305156-01A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.





## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-0007  
Project Manager: Gilbert Moreno

**Reported:**  
6/2/2023 12:28:33PM

BH01 7'

E305156-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2321067	
Benzene	ND	0.0250	1	05/26/23	05/26/23	
Ethylbenzene	ND	0.0250	1	05/26/23	05/26/23	
Toluene	ND	0.0250	1	05/26/23	05/26/23	
o-Xylene	ND	0.0250	1	05/26/23	05/26/23	
p,m-Xylene	ND	0.0500	1	05/26/23	05/26/23	
Total Xylenes	ND	0.0250	1	05/26/23	05/26/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	95.5 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2321067	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/26/23	05/26/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.1 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KM		Batch: 2321081	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/26/23	05/26/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/26/23	05/26/23	
<i>Surrogate: n-Nonane</i>						
	87.4 %	50-200		05/26/23	05/26/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: RAS		Batch: 2321083	
Chloride	666	20.0	1	05/26/23	05/26/23	



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/2/2023 12:28:33PM

## Volatile Organics by EPA 8021B

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 (2321067-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

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	7.69		8.00		96.2	70-130			

## LCS (2321067-BS1)

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.84	0.0250	5.00		96.7	70-130			
Ethylbenzene	5.09	0.0250	5.00		102	70-130			
Toluene	5.17	0.0250	5.00		103	70-130			
o-Xylene	5.21	0.0250	5.00		104	70-130			
p,m-Xylene	10.3	0.0500	10.0		103	70-130			
Total Xylenes	15.6	0.0250	15.0		104	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.80		8.00		97.5	70-130			

## Matrix Spike (2321067-MS1)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.52	0.0250	5.00	ND	90.5	54-133			
Ethylbenzene	4.77	0.0250	5.00	ND	95.5	61-133			
Toluene	4.84	0.0250	5.00	ND	96.7	61-130			
o-Xylene	4.90	0.0250	5.00	ND	98.1	63-131			
p,m-Xylene	9.70	0.0500	10.0	ND	97.0	63-131			
Total Xylenes	14.6	0.0250	15.0	ND	97.3	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.77		8.00		97.2	70-130			

## Matrix Spike Dup (2321067-MSD1)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.10	0.0250	5.00	ND	81.9	54-133	9.94	20	
Ethylbenzene	4.34	0.0250	5.00	ND	86.7	61-133	9.63	20	
Toluene	4.39	0.0250	5.00	ND	87.9	61-130	9.60	20	
o-Xylene	4.43	0.0250	5.00	ND	88.6	63-131	10.1	20	
p,m-Xylene	8.83	0.0500	10.0	ND	88.3	63-131	9.41	20	
Total Xylenes	13.3	0.0250	15.0	ND	88.4	63-131	9.66	20	
Surrogate: 4-Bromochlorobenzene-PID	7.74		8.00		96.8	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/2/2023 12:28:33PM

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 (2321067-BLK1) Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.29		8.00		91.1	70-130			

LCS (2321067-BS2) Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	48.1	20.0	50.0		96.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.24		8.00		90.5	70-130			

Matrix Spike (2321067-MS2) Source: E305152-02 Prepared: 05/25/23 Analyzed: 05/27/23

Gasoline Range Organics (C6-C10)	40.4	20.0	50.0	ND	80.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.3	70-130			

Matrix Spike Dup (2321067-MSD2) Source: E305152-02 Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	46.6	20.0	50.0	ND	93.3	70-130	14.4	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.13		8.00		89.1	70-130			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/2/2023 12:28:33PM

## 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 (2321081-BLK1)

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.5		50.0		97.1	50-200			

## LCS (2321081-BS1)

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132			
Surrogate: n-Nonane	44.4		50.0		88.9	50-200			

## Matrix Spike (2321081-MS1)

Source: E305155-01

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	302	25.0	250	37.4	106	38-132			
Surrogate: n-Nonane	43.6		50.0		87.1	50-200			

## Matrix Spike Dup (2321081-MSD1)

Source: E305155-01

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	307	25.0	250	37.4	108	38-132	1.63	20	
Surrogate: n-Nonane	43.8		50.0		87.5	50-200			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	<b>Reported:</b>
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	6/2/2023 12:28:33PM

## Anions by EPA 300.0/9056A

Analyst: RAS

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 (2321083-BLK1)

Prepared: 05/26/23 Analyzed: 05/26/23

Chloride ND 20.0

## LCS (2321083-BS1)

Prepared: 05/26/23 Analyzed: 05/26/23

Chloride 246 20.0 250 98.5 90-110

## Matrix Spike (2321083-MS1)

Source: E305153-01

Prepared: 05/26/23 Analyzed: 05/26/23

Chloride 419 40.0 250 161 103 80-120

## Matrix Spike Dup (2321083-MSD1)

Source: E305153-01

Prepared: 05/26/23 Analyzed: 05/26/23

Chloride 424 40.0 250 161 105 80-120 1.25 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

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	06/02/23 12:28

- 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: WPX Energy Permian LLC.	<b>Bill To</b>		<b>Lab Use Only</b>				<b>TAT</b>				<b>EPA Program</b>			
Project: RDX 16 #008	Attention: Jim Raley		Lab WO#		Job Number		1D	2D	3D	Standard	CWA		SDWA	
Project Manager: Gilbert Moreno	Address: 5315 Buena Vista Dr.		E305156		01058-0007					5 day TAT				
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220		Analysis and Method								RCRA			
City, State, Zip: Odessa, TX, 79765	Phone: 575-885-7502		2/DRO/DRO by 8021 8260 8010 300.0 NM TX									State		
Phone: 432-305-6415	Email: jim.raley@dvn.com													
Email: Devon-team@etechnv.com	WO: 21141253													
Collected by: Edyte Konan	Incident ID: nAPP2307930900													

[illegible]

## 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: \_\_\_\_\_

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>Eddie Kanan</i>	Date 05/21/23	Time 10:30	Received by: (Signature) <i>Michelle Canyon</i>	Date 5-24-23	Time 1030	Lab Use Only Received on ice: <input checked="" type="radio"/> Y / N
Relinquished by: (Signature) <i>Michelle Canyon</i>	Date 5-24-23	Time 1815	Received by: (Signature) <i>Andrew Messo</i>	Date 5-24-23	Time 1830	
Relinquished by: (Signature) <i>Andrew Messo</i>	Date 5-24-23	Time 2400	Received by: (Signature) <i>Carth Manno</i>	Date 5/25/23	Time 8:20	T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other				Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA		

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: 5/26/2023 2:03:10PM

## 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:	05/25/23 08:20	Work Order ID:	E305156
Phone:	(539) 573-4018	Date Logged In:	05/25/23 08:32	Logged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	06/01/23 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:

Gilbert Moreno



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 16 #008

Work Order: E305157

Job Number: 01058-0007

Received: 5/25/2023

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/31/23

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: 5/31/23



Gilbert Moreno  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: RDX 16 #008  
Workorder: E305157  
Date Received: 5/25/2023 8:20:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/25/2023 8:20:00AM, under the Project Name: RDX 16 #008.

The analytical test results summarized in this report with the Project Name: RDX 16 #008 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**  
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Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

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

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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 16 #008	Reported: 05/31/23 12:56
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01 0.5'	E305157-01A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.
BH01 4'	E305157-02A	Soil	05/22/23	05/25/23	Glass Jar, 2 oz.



## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-0007  
Project Manager: Gilbert Moreno

**Reported:**  
5/31/2023 12:56:56PM

BH01 0.5'

E305157-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321067
Benzene	ND	0.0250	1	05/26/23	05/26/23	
Ethylbenzene	ND	0.0250	1	05/26/23	05/26/23	
Toluene	ND	0.0250	1	05/26/23	05/26/23	
o-Xylene	ND	0.0250	1	05/26/23	05/26/23	
p,m-Xylene	ND	0.0500	1	05/26/23	05/26/23	
Total Xylenes	ND	0.0250	1	05/26/23	05/26/23	
Surrogate: 4-Bromochlorobenzene-PID	96.0 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321067
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/26/23	05/26/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	88.8 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2321081
Diesel Range Organics (C10-C28)	32.7	25.0	1	05/26/23	05/27/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/26/23	05/27/23	
Surrogate: n-Nonane	81.2 %	50-200		05/26/23	05/27/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2321083
Chloride	5290	40.0	2	05/26/23	05/30/23	



## Sample Data

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

Project Name: RDX 16 #008  
Project Number: 01058-0007  
Project Manager: Gilbert Moreno

**Reported:**  
5/31/2023 12:56:56PM

## BH01 4'

## E305157-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321067
Benzene	ND	0.0250	1	05/26/23	05/26/23	
Ethylbenzene	ND	0.0250	1	05/26/23	05/26/23	
Toluene	ND	0.0250	1	05/26/23	05/26/23	
o-Xylene	ND	0.0250	1	05/26/23	05/26/23	
p,m-Xylene	ND	0.0500	1	05/26/23	05/26/23	
Total Xylenes	ND	0.0250	1	05/26/23	05/26/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.0 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2321067
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/26/23	05/26/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.9 %	70-130		05/26/23	05/26/23	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KM		Batch: 2321081
Diesel Range Organics (C10-C28)	ND	25.0	1	05/26/23	05/27/23	
Oil Range Organics (C28-C36)	ND	50.0	1	05/26/23	05/27/23	
<i>Surrogate: n-Nonane</i>						
	87.6 %	50-200		05/26/23	05/27/23	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2321083
Chloride	1510	20.0	1	05/26/23	05/26/23	





## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/31/2023 12:56:56PM

## Volatile Organics by EPA 8021B

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 (2321067-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

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	7.69		8.00		96.2	70-130			

## LCS (2321067-BS1)

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.84	0.0250	5.00		96.7	70-130			
Ethylbenzene	5.09	0.0250	5.00		102	70-130			
Toluene	5.17	0.0250	5.00		103	70-130			
o-Xylene	5.21	0.0250	5.00		104	70-130			
p,m-Xylene	10.3	0.0500	10.0		103	70-130			
Total Xylenes	15.6	0.0250	15.0		104	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.80		8.00		97.5	70-130			

## Matrix Spike (2321067-MS1)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.52	0.0250	5.00	ND	90.5	54-133			
Ethylbenzene	4.77	0.0250	5.00	ND	95.5	61-133			
Toluene	4.84	0.0250	5.00	ND	96.7	61-130			
o-Xylene	4.90	0.0250	5.00	ND	98.1	63-131			
p,m-Xylene	9.70	0.0500	10.0	ND	97.0	63-131			
Total Xylenes	14.6	0.0250	15.0	ND	97.3	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.77		8.00		97.2	70-130			

## Matrix Spike Dup (2321067-MSD1)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Benzene	4.10	0.0250	5.00	ND	81.9	54-133	9.94	20	
Ethylbenzene	4.34	0.0250	5.00	ND	86.7	61-133	9.63	20	
Toluene	4.39	0.0250	5.00	ND	87.9	61-130	9.60	20	
o-Xylene	4.43	0.0250	5.00	ND	88.6	63-131	10.1	20	
p,m-Xylene	8.83	0.0500	10.0	ND	88.3	63-131	9.41	20	
Total Xylenes	13.3	0.0250	15.0	ND	88.4	63-131	9.66	20	
Surrogate: 4-Bromochlorobenzene-PID	7.74		8.00		96.8	70-130			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/31/2023 12:56:56PM

## 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 (2321067-BLK1)

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.29		8.00		91.1	70-130			

## LCS (2321067-BS2)

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	48.1	20.0	50.0		96.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.24		8.00		90.5	70-130			

## Matrix Spike (2321067-MS2)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/27/23

Gasoline Range Organics (C6-C10)	40.4	20.0	50.0	ND	80.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.3	70-130			

## Matrix Spike Dup (2321067-MSD2)

Source: E305152-02

Prepared: 05/25/23 Analyzed: 05/26/23

Gasoline Range Organics (C6-C10)	46.6	20.0	50.0	ND	93.3	70-130	14.4	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.13		8.00		89.1	70-130			



## QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/31/2023 12:56:56PM

## 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 (2321081-BLK1)

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.5		50.0		97.1	50-200			

## LCS (2321081-BS1)

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132			
Surrogate: n-Nonane	44.4		50.0		88.9	50-200			

## Matrix Spike (2321081-MS1)

Source: E305155-01

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	302	25.0	250	37.4	106	38-132			
Surrogate: n-Nonane	43.6		50.0		87.1	50-200			

## Matrix Spike Dup (2321081-MSD1)

Source: E305155-01

Prepared: 05/26/23 Analyzed: 05/26/23

Diesel Range Organics (C10-C28)	307	25.0	250	37.4	108	38-132	1.63	20	
Surrogate: n-Nonane	43.8		50.0		87.5	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	5/31/2023 12:56:56PM

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 (2321083-BLK1)					Prepared: 05/26/23 Analyzed: 05/26/23				
Chloride	ND	20.0							
LCS (2321083-BS1)					Prepared: 05/26/23 Analyzed: 05/26/23				
Chloride	246	20.0	250		98.5	90-110			
Matrix Spike (2321083-MS1)					Source: E305153-01		Prepared: 05/26/23 Analyzed: 05/26/23		
Chloride	419	40.0	250	161	103	80-120			
Matrix Spike Dup (2321083-MSD1)					Source: E305153-01		Prepared: 05/26/23 Analyzed: 05/26/23		
Chloride	424	40.0	250	161	105	80-120	1.25	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

WPX Energy - Carlsbad	Project Name:	RDX 16 #008	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	05/31/23 12:56

- 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: WPX Energy Permian LLC.	Bill To		Lab Use Only				TAT				EPA Program								
Project: RDX 16 #008	Attention: Jim Raley		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA							
Project Manager: Gilbert Moreno	Address: 5315 Buena Vista Dr.		E305157		01058-0001					5 day TAT									
Address: 13000 W County Rd 100	City, State, Zip: Carlsbad, NM, 88220		Analysis and Method									RCRA							
City, State, Zip: Odessa, TX, 79765	Phone: 575-885-7502		t.) D/DRO/DRO by	8021	8260	5010	300.0			NM		TX							
Phone: 432-305-6415	Email: jim.raley@dvn.com												State						
Email: Devon-team@etechemv.com	WO: 21141253												NM	CO	UT	AZ	TX		
Collected by: Edyte Konan	Incident ID: nAPP2307930900																		

[illegible]

**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.

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) Edyta Korman	Date 05/24/23	Time 10:30	Received by: (Signature) Michelle Coughs	Date 5-24-23	Time 1030	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) Michelle Coughs	Date 5-24-23	Time 1815	Received by: (Signature) Hblew Musso	Date 5-24-23	Time 1830	
Relinquished by: (Signature) Hblew Musso	Date 5-24-23	Time 2400	Received by: (Signature) Caitlin Marx	Date 5/25/23	Time 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.

## Envirotech Analytical Laboratory

Printed: 5/26/2023 2:03:56PM

## 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:	05/25/23 08:20	Work Order ID:	E305157
Phone:	(539) 573-4018	Date Logged In:	05/25/23 08:33	Logged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	06/01/23 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.



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## APPENDIX G

### NMOCD Notifications

## Anna Byers

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**From:** Joseph Hernandez  
**Sent:** Friday, June 9, 2023 1:02 PM  
**To:** Anna Byers  
**Subject:** FW: WPX Site Sampling Update (5/22 - 5/26/2023)

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**From:** Erick Herrera <erick@etechenv.com>  
**Sent:** Wednesday, May 17, 2023 5:14 PM  
**To:** OCD.Enviro@emnrd.nm.gov; blm\_nm\_cfo\_spill@blm.gov  
**Cc:** jim.raley@dmv.com; Devon-Team <Devon-Team@etechenv.com>  
**Subject:** WPX Site Sampling Update (5/22 - 5/26/2023)

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following site between May 22 – May 26, 2023:

Site Name: RDX 16-#008

API: 30-015-39751

Incident Number: nAPP2307930900

Thank you,

**Erick Herrera**  
Staff Geologist



Work: (432) 305-6416  
Cell: (281) 777-4152

Incident ID	nAPP2307930900
District RP	
Facility ID	
Application ID	

## Remediation Plan


**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Jim Raley Title: Environmental Professional  
Signature:  Date: 6/13/2023  
email: Jim.Raley@dvn.com Telephone: 575-689-7597

**OCD Only**

Received by: Jocelyn Harimon Date: 06/13/2023

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature:  Date: 11/14/2023

**District I**

1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**

811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**

1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 227084

**CONDITIONS**

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 227084
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. Due to the sensitive nature of the release location and the site being located within a 100-year floodplain, the site will need to be remediated to the strictest closure criteria from Table 1 of the OCD Spill Rule. All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Sidewall/edge samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. All sidewall samples should be taken from the sidewall of the excavation. Please make sure that the edge of the release extent is accurately defined. Please collect confirmation samples, representing no more than 200 ft2. The work will need to occur in 90 days after the report has been reviewed.	11/14/2023