Environmental & Safety Solutions, Inc.

# SITE CHARACTERZIATION AND REMEDIATION PLAN

*Prepared For:*

*WPX Energy Permian, LLC*

*5315 Buena Vista Dr.*

*Carlsbad, NM 88220*

*Site Information:*

**RDX 16 #013**

**Incident Number nAPP2510448511**

*Unit M, Section 16, Township 26 South, Range 30 East*

*Eddy County, New Mexico*

*(32.0379791°, -103.893859°)*

Carlsbad ● Houston ● Midland ● San Antonio ● Lubbock ● Hobbs ● Lafayette

## SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy Permian, LLC (WPX), presents the following Site Characterization Remediation Plan (SCRP) detailing delineation soil sampling activities, associated with an inadvertent crude oil release at the RDX 16 #013 (Site). Based on laboratory analytical results, WPX proposes this SCRP, which summarizes initial response efforts, sampling activities and details remediation objectives to rectify environmental impacts at the Site.

## SITE LOCATION AND RELEASE BACKGROUND

The Site is associated with oil and gas exploration and production operations located on State Land, managed by the New Mexico State Land Office (NMSLO) (**Figure 1 in Appendix A)**. On April 11, 2025, a heater treater "high leveled" and allowed fluids to be released via a pressure relief valve which resulted in approximately 10 barrels (bbls) of crude oil to be released onto the pad surface and lightly mist over the adjacent northeastern pasture, hereafter referred to as the Area of Concern (AOC). Vacuum trucks were immediately dispatched and recovered 9 bbls of free-standing fluids from the well pad. WPX immediately notified the NMSLO and New Mexico Oil Conservation Division (NMOCD) via email on April 14, 2025, and reported the release on a Corrective Action Form C-141 (Form C-141), which was received by the NMOCD April 15, 2025, and was assigned Incident Number nAPP2510448511.

The Site's climate is generally semi-arid to arid and characterized by light precipitation and abundant sunshine. According to the United States of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey, the average annual precipitation ranges from 8 to 16 inches with most of the precipitation occurring from the months of July and August. The major ecological Site consists of Simona gravelly fine sandy loam, with 0 to 3 percent slopes where tree, shrub, and herbaceous are the dominant plant species. Further soil characteristics and ecological descriptions can be referenced in the complete USDA NRCS Soil survey and NRCS Ecological Site descriptions in **Appendix B**.

## NMSLO REGULATORY COMPLIANCE

Based on a desktop review of the NMOCD Oil and Gas Map and NMSLO Land Status map, the AOC is located on an active NMSLO oil and gas lease (VB11800004). The active lease is currently managed by EOG Resources Inc. Since WPX operates an active well on this lease, and the AOC footprint is situated within the boundaries of the active lease, a Right-of-Entry (ROE) for remediation was not necessary.

On July 10, 2025, an extension request for a report required in Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC) was submitted to the NMOCD in order to comply with the NMSLO Environmental Compliance Office (ECO) requirements for off-pad work for undisturbed areas. The extension was granted on the same day by the NMOCD for October 8, 2025.

Because a Remediation Closure Report was not submitted within 90-days of discovery of the release, a Delineation Sampling Plan (DSP) to complete delineation of the AOC was submitted to the NMSLO ECO for review and approval on July 24, 2025. The DSP was subsequently approved on August 1, 2025, by NMSLO ECO via email.

## SITE CHARACTERIZATION AND CLOSURE CRITERIA

Etech characterized the Site according to Table I, Closure Criteria for Soils Impacted by a Release, of 19.15.29.12 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.

An initial desktop review referencing the *NMOCD Oil and Gas Map* and/or the *USGS National Water Information System: Mapper* indicated the closest boring and/or well with recent depth to groundwater data was New Mexico Office of the State Engineer (NMOSE) permitted soil boring (MW-1). The boring was drilled by Talon LPE (Talon) for WPX Energy Permian, LLC on December 8, 2020, which is located approximately 0.15 miles southwest of the Site (**Figure 1A** in **Appendix A**). Using a truck mounted drill rig equipped with air rotary, the soil boring was advanced to a total depth of 107 feet below ground surface (bgs). No fluids were observed throughout the drilling process nor after a 72-hr observation period. Following the observation period, the boring was plugged and abandoned per the appropriate NMOSE regulations. The boring log is provided in **Appendix C**.

The Site is located within a designated medium karst potential area. As a result, Advanced Geophysics, LLC (AG) was retained to conduct an environmental karst survey to determine if the Site was "stable" or "unstable" in accordance with the NMOCD Karst Public Notice. The aerial and subsurface geophysical surveys were negative and determined the Site to be "stable", which is detailed in the Aerial and Geophysical Cave and Karst Investigation report included in **Appendix D.** The Karst Investigation report was also presented in the approved DSP by the NMSLO ECO.

All other potential receptors are not within the established buffers defined in NMAC 19.15.29.12. Receptor details from the site characterization are included in **Figure 1B** and **Figure 1C** in **Appendix A**.

Based on the results from the desktop review, estimated depth to groundwater, and "stable" designation at the Site, WPX proposes the following Closure Criteria:

| Constituents of Concern (COCs) | Laboratory Analytical Method | Closure Criteria† |
|---|---|---|
| Chloride | Environmental Protection Agency (EPA) 300.0 | 20,000 milligram per kilogram (mg/kg) |
| Total Petroleum Hydrocarbon (TPH) | EPA 8015 M/D | 2,500 mg/kg |
| TPH-Gasoline Range Organics (GRO)+ TPH-Deisel Range Organics (DRO) | EPA 8015 M/D | 1,000 mg/kg |
| Benzene | EPA 8260B | 10 mg/kg |
| Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX) | EPA 8260B | 50 mg/kg |

†*The reclamation concentration requirements of 600 mg/kg chloride and 100 mg/kg TPH apply to the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13.*

## CULTURAL PROPERTIES PROTECTION RULE

Per the requirements set forth by the NMSLO Cultural Properties Protection (CPP) Rule (19.2.24 NMAC), Etech, on behalf of WPX consulted with SWCA Environmental Consultants (SWCA) to perform an intensive pedestrian survey on the Area of Potential Effect (APE) on the NMSLO-managed land on May 3, 2025. The pedestrian survey yielded negative with no archaeological sites and/or historic properties observed during the investigation. A copy of the New Mexico Cultural Resources Information System (NMCRIS) Cultural Resources Cover Sheet (Activity Number: 158644) is included in **Appendix E**.

## BIOLOGICAL SENSITIVE AREAS

A desktop review indicated that a Special Status Plant Species (SSPS) survey was warranted for the Site. WPX, consulted with a certified SWCA botanist to conduct a more detailed assessment. SWCA subsequently consulted with an NMSLO biologist to review the APE, and it was determined that a formal SSPS survey was required to adequately characterize the potential presence of special status plants within the APE. The SSPS survey was conducted on June 2, 2025, by a certified botanist. The survey was conducted in compliance with the requirements mandated by the NMSLO. Survey results determined that no SSPS individuals and/or other sensitive biological species were observed within the APE. A full report summarizing these findings can provided upon request, subject to sensitivity considerations. The email thread summarizing survey findings are included in **Appendix F**. All other sources utilized in the desktop review are referenced in **Appendix G**.

## DELINEATION SOIL SAMPLING ACTIVITES

Between August 27, 2025, and August 28, 2025, Etech conducted delineation activities to assess the presence or absence of residual soil impacts associated with the AOC. Twenty delineation boreholes (PH01 through PH20) were advanced via hand auger and/or mechanical equipment within and around the AOC, which were driven by field screening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. A minimum of two soil samples were collected from each delineation soil sampling location, representing the highest observed field screening concentration(s) and the greatest depth. Field screening results and soil observations are included on soil sampling logs in **Appendix H**. The delineation soil sample locations are shown in **Figure 2** in **Appendix A**. Photographic documentation of delineation activities is included in **Appendix I**.

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 Envirotech, Inc. Laboratories (Envirotech) in Farmington, New Mexico, for analysis of COCs.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for soil samples surrounding the AOC were compliant with the Site Closure Criteria and/or reclamation standard. Additionally, BTEX concentrations were below the Site Closure Criteria for all delineation soil samples.

Laboratory analytical results for soil samples within the AOC indicated that TPH-GRO + TPH DRO/TPH concentrations exceed the Site Closure Criteria and/or reclamation standard up to 3 feet bgs. Elevated TPH concentrations were characterized by concentrations ranging from 273 mg/kg to 5,650 mg/kg.

Laboratory analytical results are summarized in **Table 1** included in **Appendix J**. The executed chain-of-custody form and laboratory reports are provided in **Appendix K**.

## PROPOSED REMEDIATION WORK PLAN

Based on the delineation soil sample analytical results, the following conclusions regarding the inadvertent release are presented:

- Residual impacts, defined by the applicable Site Closure Criteria, appear to be confined to the top 4-feet bgs of the eastern adjacent pasture and are sufficiently vertically and horizontally delineated.

The Site is in a medium karst potential area designated by the BLM; however, an Environmental Karst Study, performed by Advanced Geophysics concluded that the Site was stable. Results from the Environmental Karst Study were presented in the approved DSP by the NMSLO ECO. Based on the conclusions drawn above, WPX proposes the following remedial corrective actions:

- Identified residual impacts, based on laboratory analytical results, will be excavated in accordance with the applicable Site Closure Criteria as shown in **Figure 3** in **Appendix A** or otherwise extended vertically and laterally until the applicable Site Closure Criteria is met. However, advancement of the excavation(s) may be inhibited by active production equipment or utilities, in which case, WPX or third-party operator(s) may implement encroachment requirements for the health and safety of on-site personnel. Such restrictions include, but are not limited to:
    - Shifting the proposed excavation extent(s) to adhere to established buffer zone(s) around one or more utilities.
- Following the completion of excavation activities, 5-point composite confirmation soil samples will be collected from the excavation(s) floor and sidewalls, remaining AOC surface area, and the edges of the AOC. Confirmation soil samples will be comprised of five equivalent aliquots and homogenized in a 1-gallon, resealable plastic bag. The soil samples will be handled and analyzed for COCs by an accredited laboratory as previously described.
    - Due to the extensive area of the confirmation soil sampling area (approximately 15,809 square feet) and the lack of sensitive receptors within proximity of the Site, WPX requests a soil sampling variance of 400 square feet per confirmation soil sample. As such, 40 samples are anticipated to be collected from the surface of the AOC and/or excavation floors compared to 80 samples following the standard 200 square foot soil sampling frequency (**Figure 4** in **Appendix A**). The sampling frequency for the edge of the AOC and/or excavation sidewalls will remain at 200 square feet. Since there are no designated cultural properties, biological sensitive areas, or other environmental resources in consideration to the Site, WPX believes that the proposed reduced sampling frequency will be equally protective of human health, the environment, and groundwater.
    - Based on confirmation soil sample laboratory analytical results, WPX will advance additional excavation(s) for confirmation soil sample(s) that exceed the Site Closure Criteria within proximity to the respective sample(s) up to 0.5-foot bgs or until the Site Closure Criteria is met. Subsequent confirmation excavation soil samples will be collected from the excavation following the proposed sampling frequency, handled, and analyzed by an accredited laboratory for COCs as previously described.
- Upon receipt of final confirmation soil sample laboratory analytical results indicating compliance with the applicable Site Closure Criteria, WPX will backfill the excavation(s) with clean, locally sourced soil and restored to “as close to its original state as possible”. The final soil cover will be placed to match the Site’s pre-existing grade to prevent ponding of water and erosion. Off-pad disturbed area(s) will be reseeded with the proposed NMSLO Sandy Loam (SL) seed mix (**Appendix L**) according to the information provided in the USDA NRCS Web Soil Survey and NMSLO guidelines.

## PROPOSED SCHEDULE

Upon the notice of NMOCD and NMSLO approval of this SCRP, WPX will initiate the proposed remediation activities within 90-days and determine the next appropriate measure of action that will include:

- Documenting the removal of impacted soil and restoration at the Site with a subsequent Closure Request Report detailing excavation confirmation soil sampling activities and Site restoration activities including, but not limited to backfilling the excavation with clean, locally sourced soil and restored to “as close to its original state as possible.”

OR

- If warranted, documenting and estimating an amount of impacted soil located directly adjacent and/or beneath active production equipment and utilities to be left in place at the Site with a subsequent Deferral Request Report detailing remediation efforts and soil sampling activities.

WPX believes this SCRP meets the requirements set forth in NMAC 19.15.29.13 and to be protective of human health, the environment, and groundwater. As such, WPX respectfully requests to proceed with the proposed remediation outline. If you have any questions or comments, please do not hesitate to contact Erick Herrera at (432) 305-6416 or erick@etechenv.com or Joseph S. Hernandez at (432) 305-6413 or joseph@etechenv.com. **Appendix M** provides correspondence and email notification receipts associated with the subject release.

Sincerely,

Etech Environmental and Safety Solutions, Inc.

Erick Herrera
Lead Project Geologist

Joseph S. Hernandez
Senior Managing Geologist

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

**Appendices:**

# APPENDIX A

## Figures

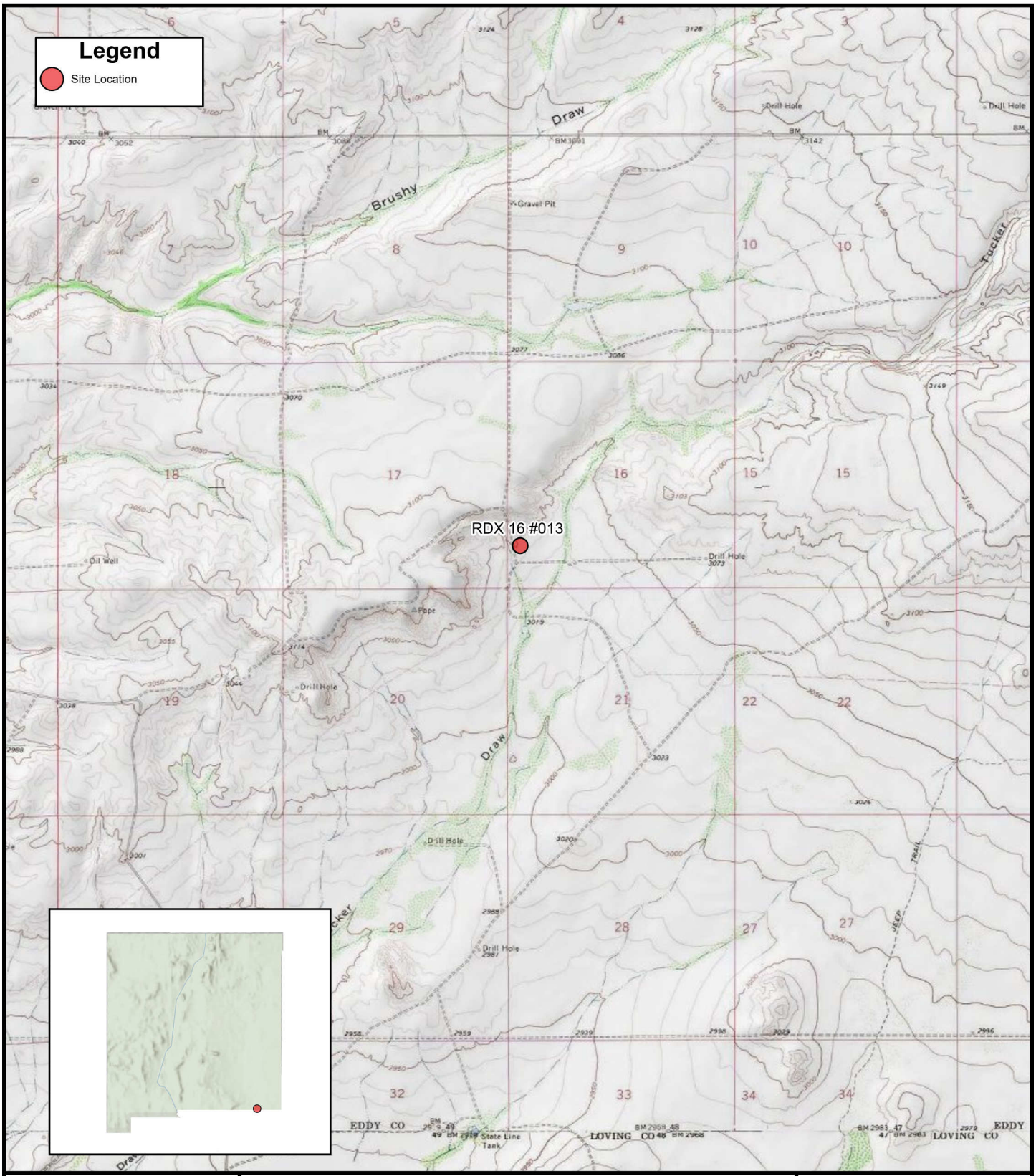


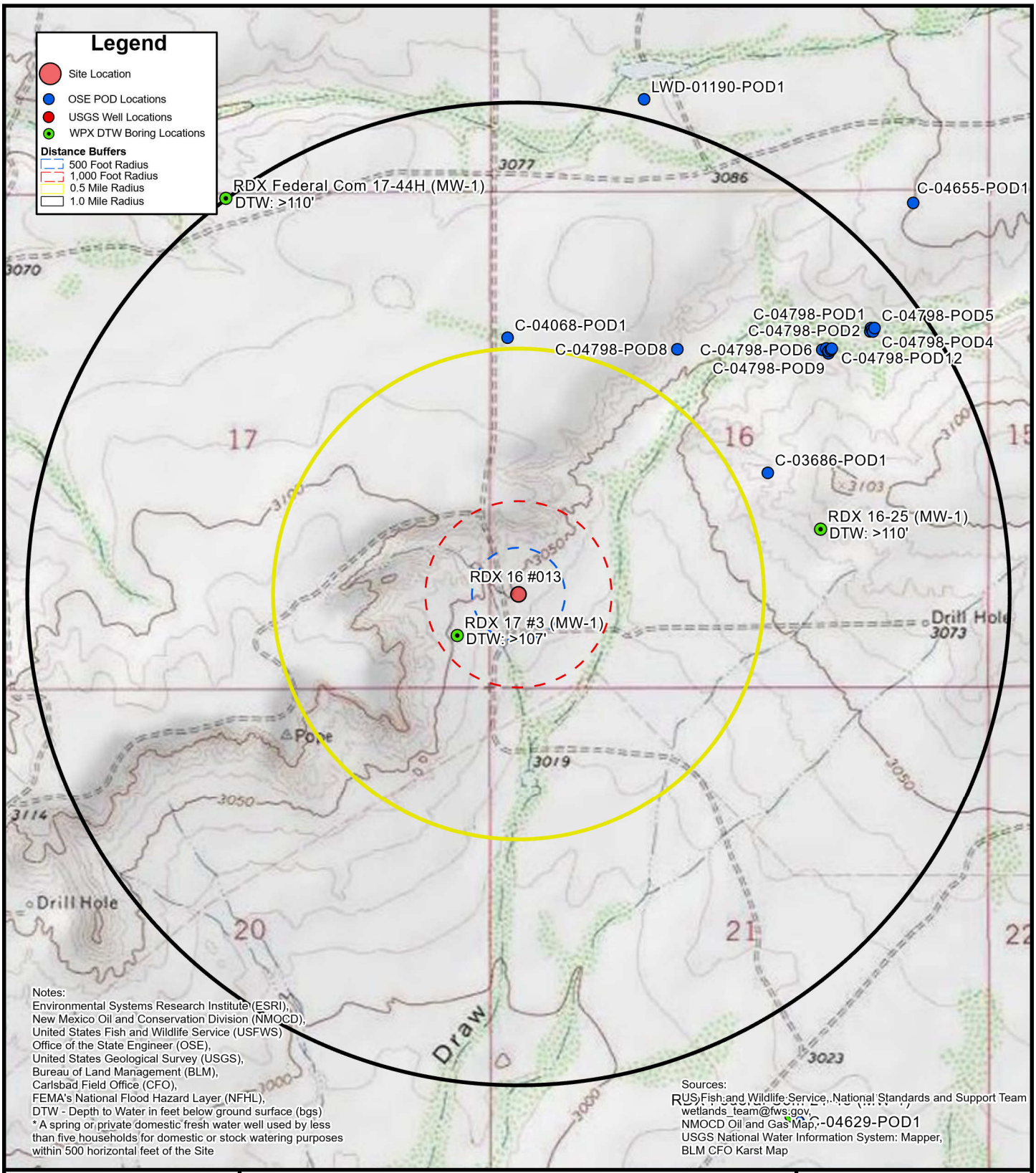

FIGURE 1

## Site Location Map

WPX ENERGY PERMIAN, LLC
RDX 16 #013
Unit M Sec 16 T26S R30E
Eddy County, New Mexico

N

0 2,000 4,000 Feet



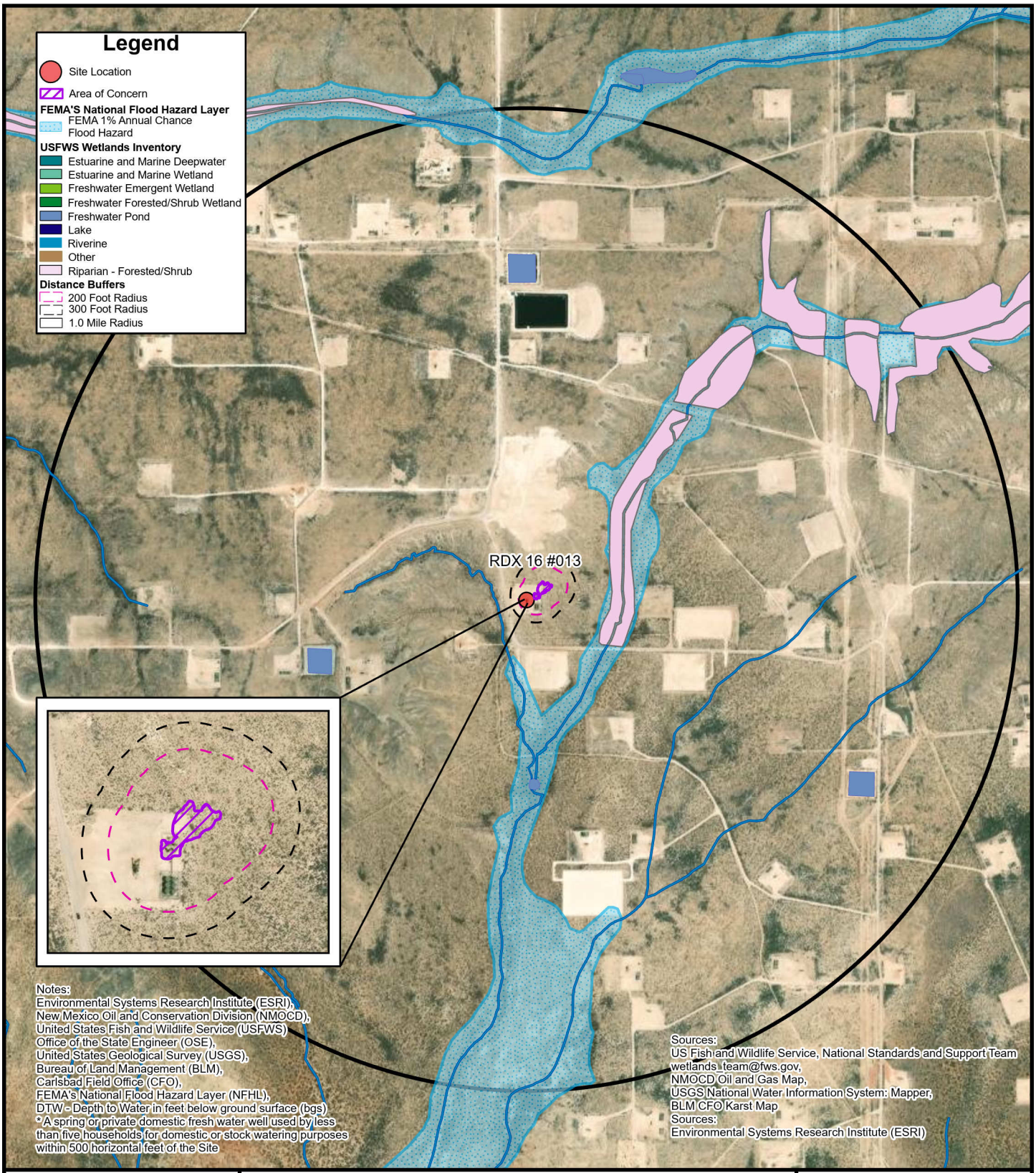

eTECH

FIGURE 1A

# Site Characterization Map

## Groundwater

WPX ENERGY PERMIAN, LLC
RDX 16 #013
Unit M Sec 16 T26S R30E
Eddy County, New Mexico




eTECH

FIGURE 1B

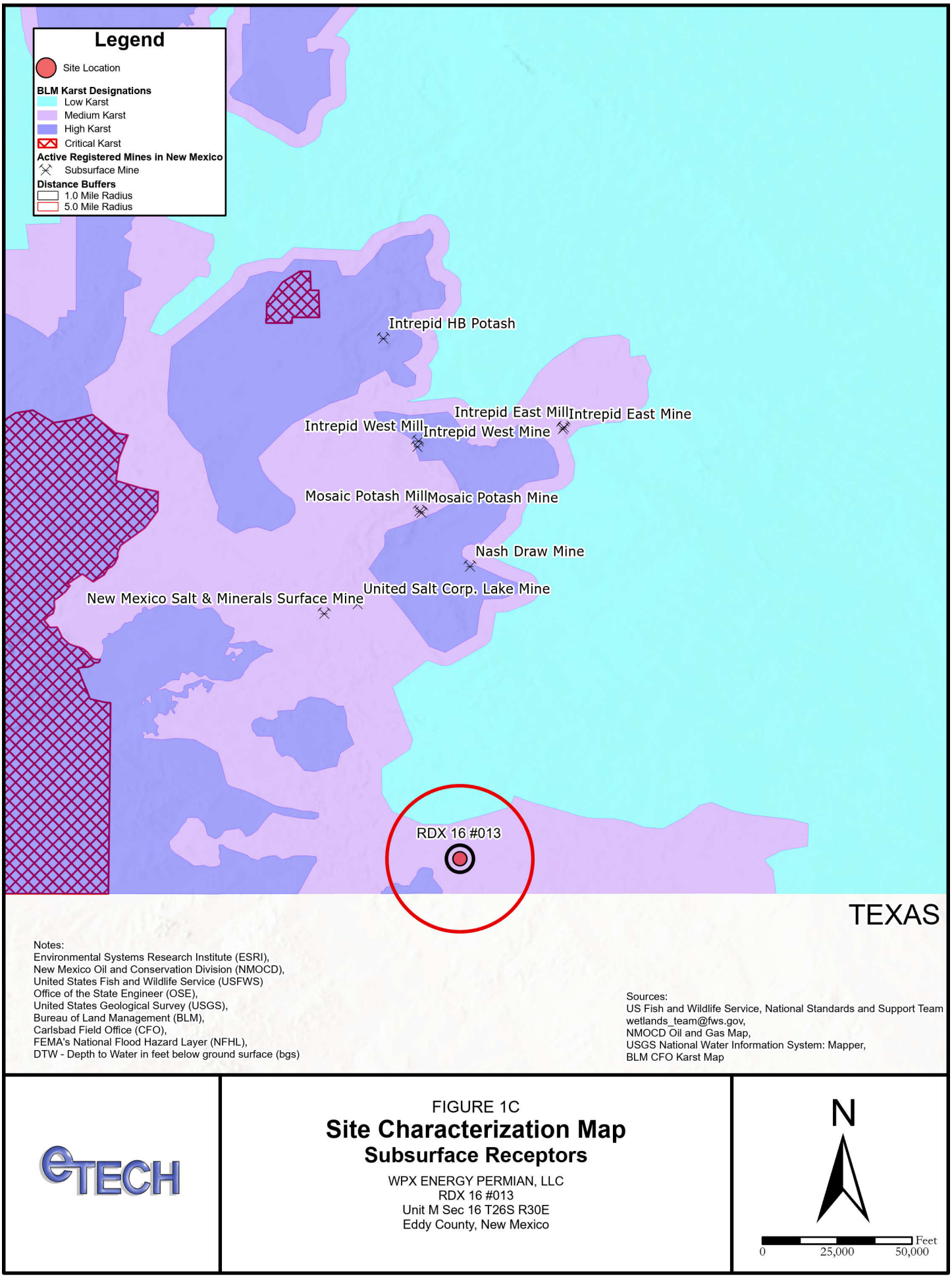
## Site Characterization Map

### Surficial Receptors

WPX ENERGY PERMIAN, LLC
RDX 16 #013
Unit M Sec 16 T26S R30E
Eddy County, New Mexico

N

0 950 1,900 Feet




Notes:
Environmental Systems Research Institute (ESRI),
New Mexico Oil and Conservation Division (NMOCD),
United States Fish and Wildlife Service (USFWS)
Office of the State Engineer (OSE),
United States Geological Survey (USGS),
Bureau of Land Management (BLM),
Carlsbad Field Office (CFO),
FEMA's National Flood Hazard Layer (NFHL),
DTW - Depth to Water in feet below ground surface (bgs)

Sources:
US Fish and Wildlife Service, National Standards and Support Team
wetlands_team@fws.gov,
NMOCD Oil and Gas Map,
USGS National Water Information System: Mapper,
BLM CFO Karst Map

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FIGURE 1C

# Site Characterization Map

## Subsurface Receptors

WPX ENERGY PERMIAN, LLC
RDX 16 #013
Unit M Sec 16 T26S R30E
Eddy County, New Mexico

N

0 25,000 50,000 Feet

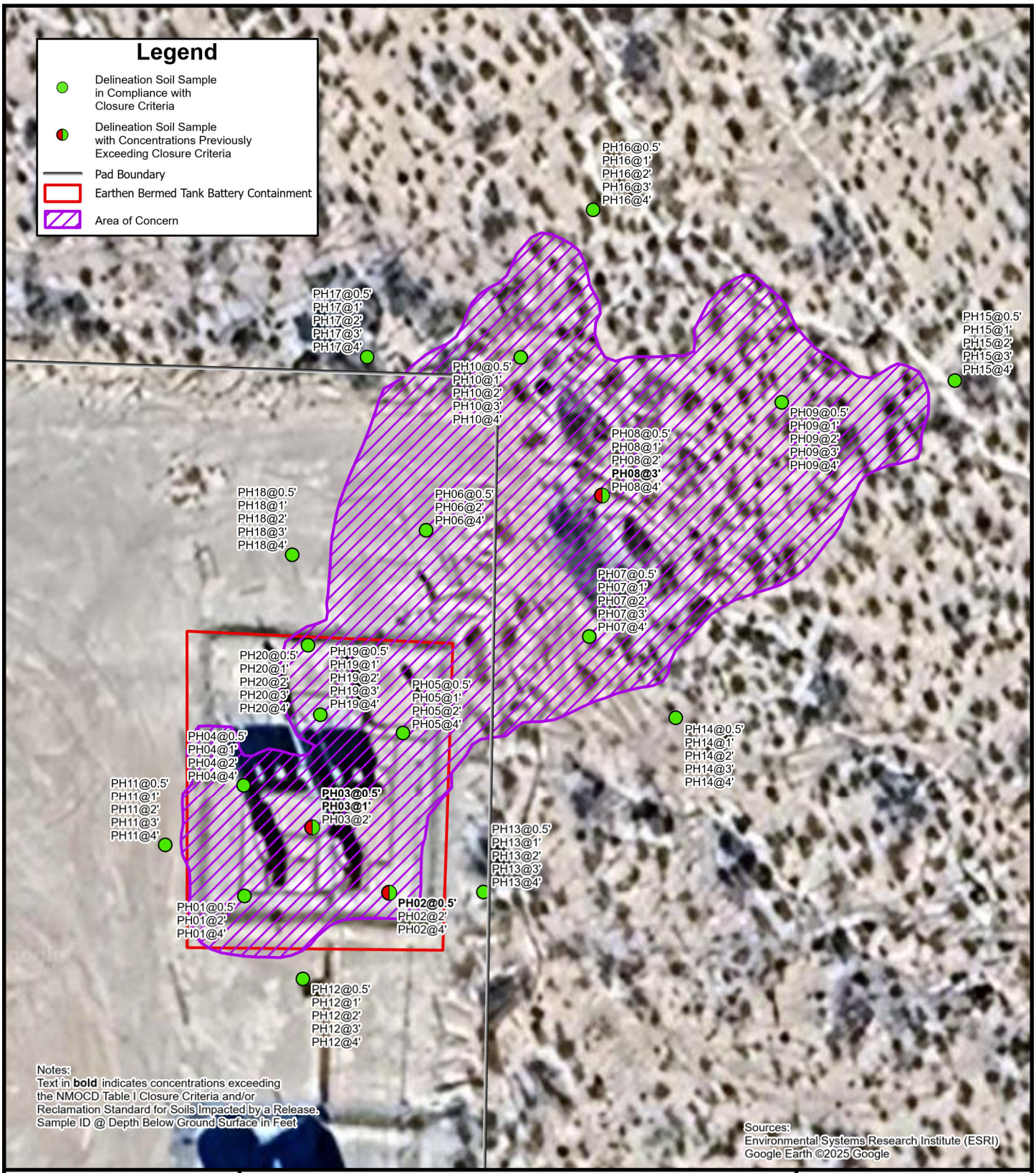



FIGURE 2

# Delineation Soil Sample Locations

WPX ENERGY PERMIAN, LLC
RDX 16 #013
Unit M Sec 16 T26S R30E
Eddy County, New Mexico

N

0 20 40 Feet


eTECH

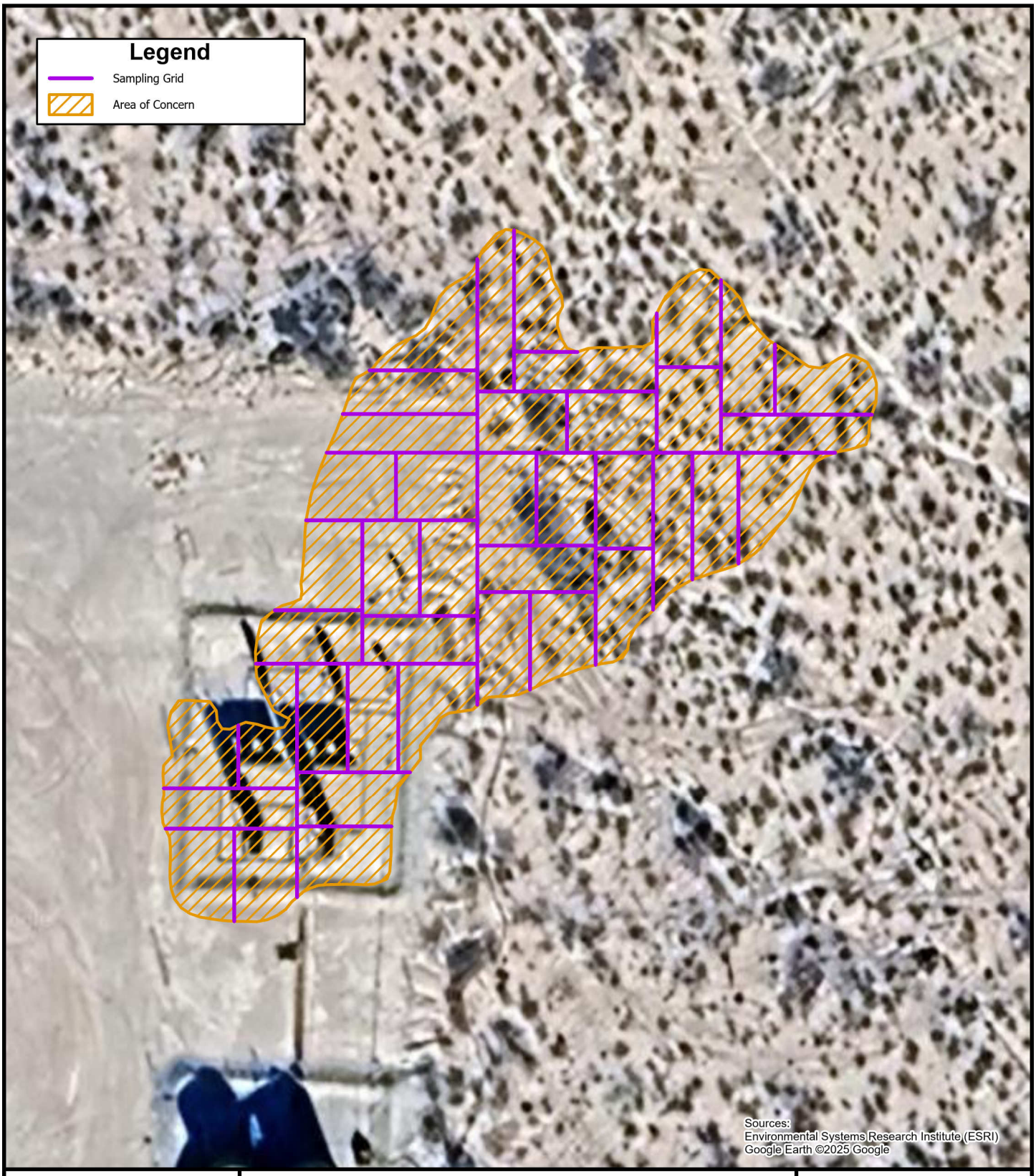
FIGURE 3

## Proposed Excavation Areas

WPX ENERGY PERMIAN, LLC
RDX 16 #013
Unit M Sec 16 T26S R30E
Eddy County, New Mexico

N

0 15 30 Feet




eTECH

FIGURE 4

## Sampling Grid

WPX ENERGY PERMIAN, LLC
RDX 16 #013
Unit M Sec 16 T26S R30E
Eddy County, New Mexico

N

0 20 40 Feet

# APPENDIX B

# USDA NRCS Web Soil Survey and NRCS Ecological Site Descriptions

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Eddy Area, New Mexico


September 22, 2025

# Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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# Contents

# How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

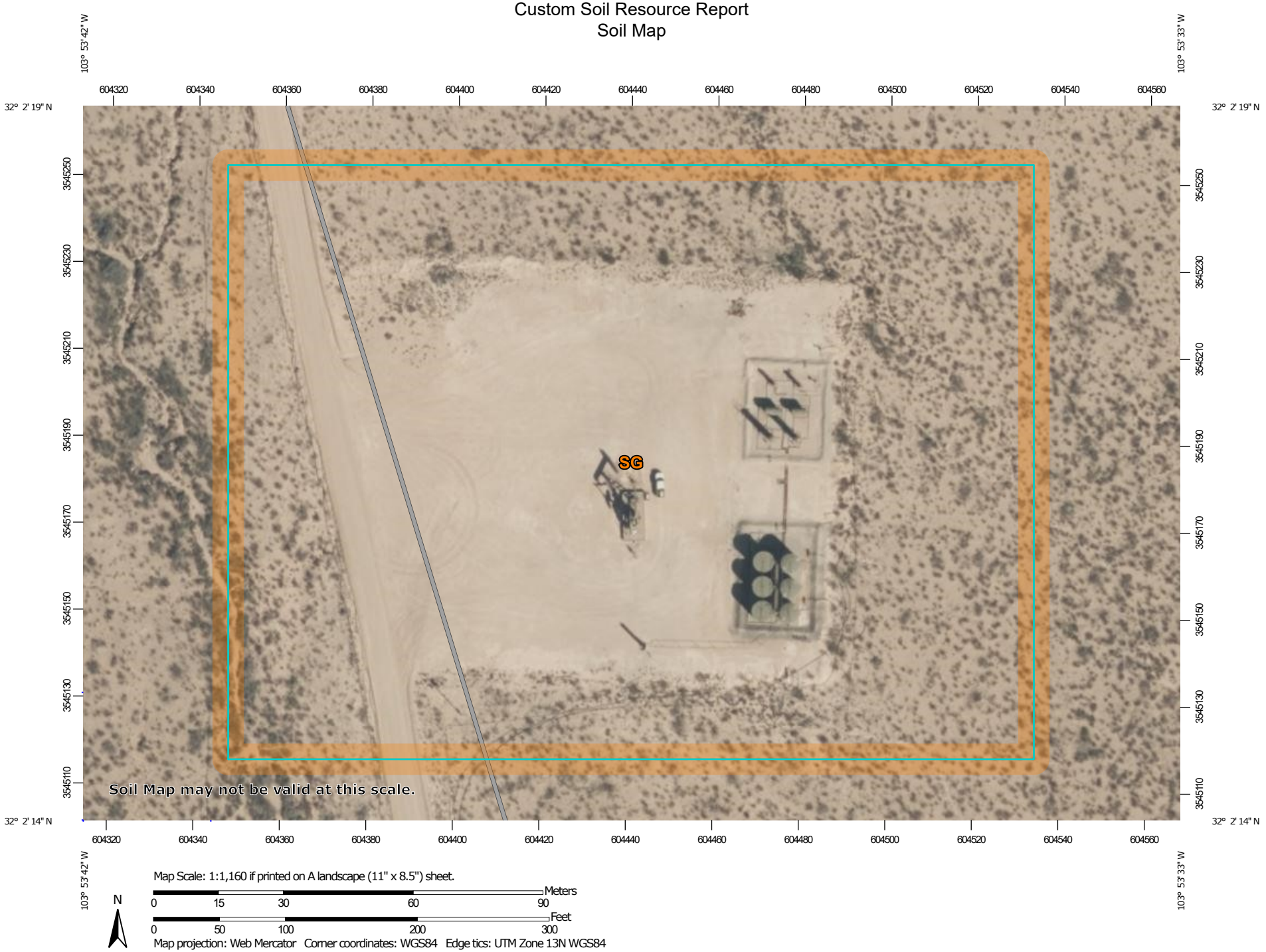
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report
## Soil Map



## MAP LEGEND

**Area of Interest (AOI)**
- Area of Interest (AOI)

**Soils**
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Water Features**
- Streams and Canals

**Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**
- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 20, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| SG | Simona gravelly fine sandy loam, 0 to 3 percent slopes | 6.3 | 100.0% |
| **Totals for Area of Interest** | | **6.3** | **100.0%** |

# Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

# Eddy Area, New Mexico

## SG—Simona gravelly fine sandy loam, 0 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* 1w5w
*Elevation:* 2,750 to 5,000 feet
*Mean annual precipitation:* 8 to 16 inches
*Mean annual air temperature:* 57 to 70 degrees F
*Frost-free period:* 180 to 230 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Simona and similar soils:* 95 percent
*Minor components:* 5 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Simona

#### Setting

*Landform:* Plains, alluvial fans
*Landform position (three-dimensional):* Rise
*Down-slope shape:* Convex, linear
*Across-slope shape:* Linear
*Parent material:* Mixed alluvium and/or eolian sands

#### Typical profile

*H1 - 0 to 19 inches:* gravelly fine sandy loam
*H2 - 19 to 23 inches:* indurated

#### Properties and qualities

*Slope:* 0 to 3 percent
*Depth to restrictive feature:* 7 to 20 inches to petrocalcic
*Drainage class:* Well drained
*Runoff class:* Very high
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 15 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 1.0
*Available water supply, 0 to 60 inches:* Very low (about 2.1 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7e
*Hydrologic Soil Group:* D
*Ecological site:* R070BD002NM - Shallow Sandy
*Hydric soil rating:* No

### Minor Components

#### Simona

*Percent of map unit:* 4 percent

*Ecological site:* R070BD002NM - Shallow Sandy
*Hydric soil rating:* No

**Playa**

*Percent of map unit:* 1 percent
*Landform:* Playas
*Landform position (three-dimensional):* Talf
*Down-slope shape:* Concave, convex
*Across-slope shape:* Concave, linear
*Ecological site:* R070BC017NM - Bottomland
*Hydric soil rating:* Yes

# Soil Information for All Uses

## Ecological Sites

Individual soil map unit components can be correlated to a particular ecological site. The Ecological Site Assessment section includes ecological site descriptions, plant growth curves, state and transition models, and selected National Plants database information.

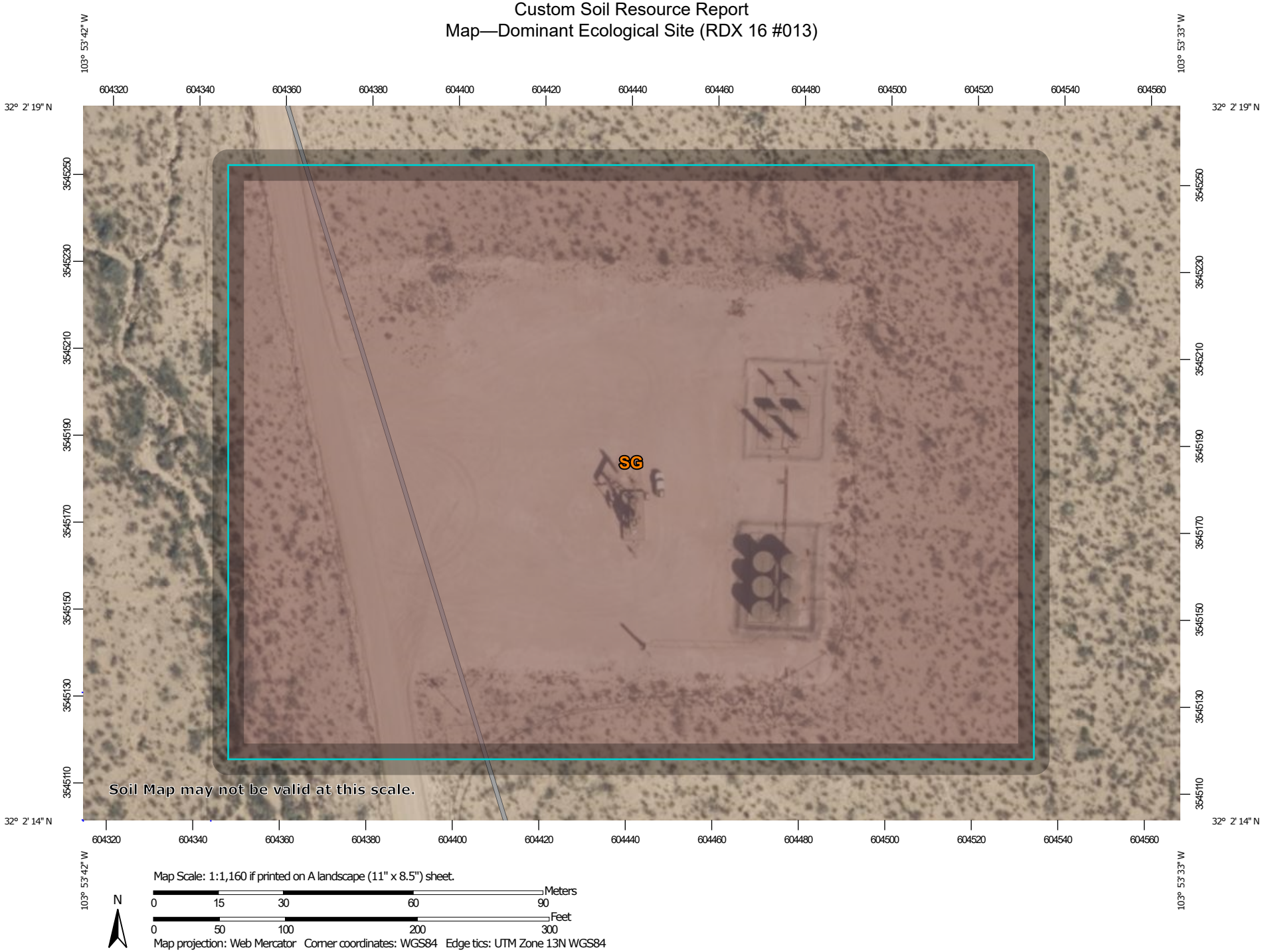
## All Ecological Sites — (RDX 16 #013)

An "ecological site" is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time; a characteristic hydrology, particularly infiltration and runoff, that has developed over time; and a characteristic plant community (kind and amount of vegetation). The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. For example, the hydrology of the site is influenced by development of the soil and plant community. The plant community on an ecological site is typified by an association of species that differs from that of other ecological sites in the kind and/or proportion of species or in total production.

An ecological site name provides a general description of a particular ecological site. For example, "Loamy Upland" is the name of a rangeland ecological site. An "ecological site ID" is the symbol assigned to a particular ecological site.

The map identifies the dominant ecological site for each map unit, aggregated by dominant condition. Other ecological sites may occur within each map unit. Each map unit typically consists of one or more components (soils and/or miscellaneous areas). Each soil component is associated with an ecological site. Miscellaneous areas, such as rock outcrop, sand dunes, and badlands, have little or no soil material and support little or no vegetation and therefore are not linked to an ecological site. The table below the map lists all of the ecological sites for each map unit component in your area of interest.

# Custom Soil Resource Report
## Map—Dominant Ecological Site (RDX 16 #013)



## MAP LEGEND

**Area of Interest (AOI)**
- Area of Interest (AOI)

**Soils**

**Soil Rating Polygons**
- R070BD002NM
- Not rated or not available

**Soil Rating Lines**
- R070BD002NM
- Not rated or not available

**Soil Rating Points**
- R070BD002NM
- Not rated or not available

**Water Features**
- Streams and Canals

**Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**
- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 20, Sep 3, 2024

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Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

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## Table—Ecological Sites by Map Unit Component (RDX 16 #013)

| Map unit symbol | Map unit name | Component name (percent) | Ecological site | Acres in AOI | Percent of AOI |
|---|---|---|---|---|---|
| SG | Simona gravelly fine sandy loam, 0 to 3 percent slopes | Simona (95%) | R070BD002NM — Shallow Sandy | 6.3 | 100.0% |
| | | Simona (4%) | R070BD002NM — Shallow Sandy | | |
| | | Playa (1%) | R070BC017NM — Bottomland | | |
| **Totals for Area of Interest** | | | | **6.3** | **100.0%** |

# References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

USDA Natural Resources Conservation Service

# Ecological site R070BD002NM
# Shallow Sandy

Accessed: 10/02/2025

## General information

**Provisional**. A provisional ecological site description has undergone quality control and quality assurance review. It contains a working state and transition model and enough information to identify the ecological site.

**Figure 1. Mapped extent**

Areas shown in blue indicate the maximum mapped extent of this ecological site. Other ecological sites likely occur within the highlighted areas. It is also possible for this ecological site to occur outside of highlighted areas if detailed soil survey has not been completed or recently updated.

## Associated sites

| | |
|---|---|
| R070BD004NM | **Sandy**<br>Sandy sites often occur in association or in a complex with Shallow Sandy Sites. |

## Similar sites

| | |
|---|---|
| R070BD004NM | **Sandy**<br>Sandy ecological sites are similar to Shallow Sandy sites in species composition and Transition pathways. |

**Table 1. Dominant plant species**

| | |
|---|---|
| Tree | Not specified |
| Shrub | Not specified |
| Herbaceous | Not specified |

## Physiographic features

This site occures on plains, alluvial fans, uplands, or fan piedmonts. The parent material consists of mixed loamy alluvium or eolian material derived from igneous and sedimentory bedrock. The petrocalcic layer is at a depth of 10 to 25 inches and undulating.

Slopes are nearly level to undulating, usually less than 9 percent. Elevations range from 2,842 to 4,500 feet.

**Table 2. Representative physiographic features**

| | |
|---|---|
| Landforms | (1) Plain<br>(2) Fan piedmont<br>(3) Alluvial fan |
| Elevation | 2,842–4,500 ft |
| Slope | 1–9% |
| Aspect | Aspect is not a significant factor |

## Climatic features

The average annual precipitation ranges from 8 to 13 inches. Variations of 5 inches, more or less, are common. Over 80 percent of the precipitation falls from April through October. Most of the summer precipitation comes in the form of high intensity – short duration thunderstorms.
Temperatures are characterized by distinct seasonal changes and large annual and diurnal temperature changes. The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer.
The average frost-free season is from 207 to 220 days. The last killing frost is in late March or early April, and the first killing frost is in late October or early November.
Temperature and rainfall both favor warm season perennial plant growth. In years of abundant spring moisture, annual forbs and cool season grasses can make up an important component of the site. The vegetation of this site can take advantage of the moisture and the time it falls. Because of the soil profile, little moisture can be stored in the soil for any length of time. Moisture is readily available to the plants from the time it falls. Strong winds from the southwest blow from January through June which rapidly dries out the soil profile during a critical period for plant growth.

Climate data was obtained from http://www.wrcc.sage.dri.edu/summary/climsmnm.html web site using 50% probability for freeze-free and frost-free seasons using 28.5 degrees F and 32.5 degrees F respectively.

**Table 3. Representative climatic features**

| | |
|---|---|
| Frost-free period (average) | 221 days |
| Freeze-free period (average) | 240 days |
| Precipitation total (average) | 13 in |

## Influencing water features

This site is not influenced from water from wetlands or streams.

## Soil features

Soils are very shallow to shallow, less than 20 inches in depth. Surface and subsurface textures are gravelly loamy sand, gravelly fine sandy loam or fine sandy loam.

An indurated calache layer occurs at depths of 6 to 25 inches and is at an average of 15 inches from the surface. Underlying material textures are very gravelly fine sandy loam, very gravelly sandy loam, gravelly fine sandy loam. Gravels are calcium carbonate concretions, calcium carbonate content ranges from 30 to 65 percent.

The indurated caliche layer typically holds water up in the profile for short periods within the root zone of plants. These soils will blow if left unprotected by vegetation.

Minimum and maximum values listed below represent the characteristic soils for this site.

Characteristic soils are:
Simona
Jerag

**Table 4. Representative soil features**

| | |
|---|---|
| Surface texture | (1) Fine sandy loam<br>(2) Loamy fine sand<br>(3) Gravelly fine sandy loam |
| Family particle size | (1) Loamy |
| Drainage class | Well drained to moderately well drained |
| Permeability class | Moderately slow to moderate |
| Soil depth | 7–24 in |
| Surface fragment cover <=3" | 5–25% |
| Surface fragment cover >3" | 0% |
| Available water capacity (0-40in) | 1–2 in |
| Calcium carbonate equivalent (0-40in) | 5–15% |
| Electrical conductivity (0-40in) | 0–4 mmhos/cm |

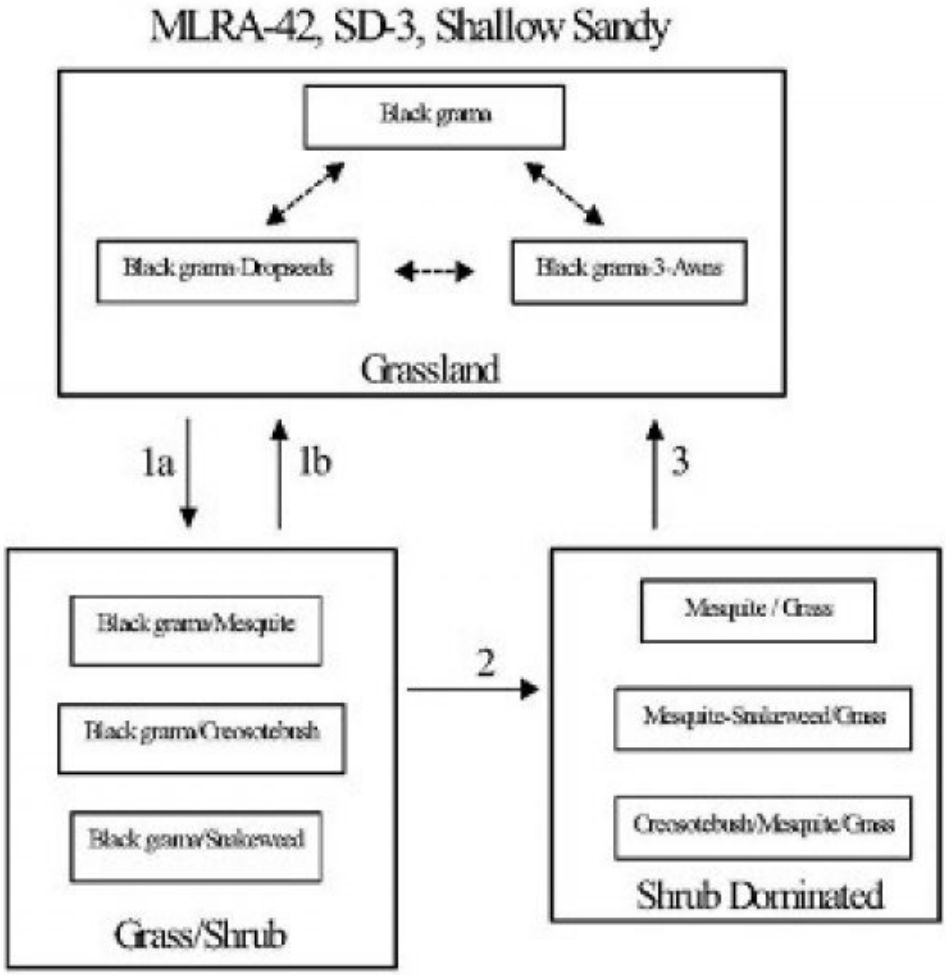
| | |
|---|---|
| Sodium adsorption ratio (0-40in) | 0 |
| Soil reaction (1:1 water) (0-40in) | 7.4–8 |
| Subsurface fragment volume <=3" (Depth not specified) | 5–25% |
| Subsurface fragment volume >3" (Depth not specified) | 0% |

## Ecological dynamics

Overview
The Shallow Sandy site occurs on upland plains, and tops of low ridges and mesas, associated with Sandy, Loamy Sand, and Shallow sites. Coarse to moderately coarse soil surface textures, shallow depth (<20 inches) to an indurated caliche layer (petrocalcic horizon), and an overwhelming dominance by black grama help to distinguish this site. The historic plant community of the Shallow Sandy site is a black grama dominated grassland sparsely dotted with shrubs. Shrubs, especially mesquite and creosotebush can increase or colonize due to the dispersal of shrub seeds by livestock or wildlife. This increase in mesquite and colonization of creosotebush may be enhanced by proximity to areas with existing high shrub densities. Fire suppression, and the loss of grass cover due to overgrazing or drought may facilitate the increase and encroachment of shrubs. Persistent loss of grass cover, competition for resources by shrubs, and periods of climate with increased winter precipitation and dry summers, may initiate the transition to a shrub-dominated state.

## State and transition model

**Plant Communities and Transitional Pathways (diagram)**




1a. Seed dispersal, drought, overgrazing, fire suppression.
1b. Prescribed fire, brush control, prescribed grazing.

2. Persistent loss of grass cover, resource competition, increased winter precipitation.

3. Brush control, range seeding, prescribed grazing.

## State 1
## Historic Climax Plant Community

## Community 1.1
## Historic Climax Plant Community

Grassland: This site responds well to management and is resistant to state change, due to the shallow depth to petrocalcic horizon and sandy surface textures. The sandy surface textures allow rapid water infiltration and the petrocalcic horizon helps to keep water

perched and available to shallow rooted grasses. Black grama is the dominant species in the historic plant community, averaging 50 to 60 percent of the total production for this site. Bush muhly, blue grama, and dropseeds are present as sub-dominants. Typically, yucca, javalinabush, range ratany, prickly pear, and mesquite are sparsely dotted across the landscape. Leatherweed croton, cutleaf happlopappus, wooly groundsel, and threadleaf groundsel are common forbs. Continuous heavy grazing or extended periods of drought will cause a loss of grass cover characterized by a decrease in black grama, bush muhly, blue and sideoats grama, plains bristlegrass, and Arizona cottontop. Dropseeds and or threeawns may increase and become sub-dominant to black grama. Continued loss of grass cover in conjunction with dispersal of shrub seeds and fire suppression is believed to cause the transition to a state with increased amounts of shrubs (Grass/Shrub state). Diagnosis: Black grama is the dominant grass species. Grass cover uniformly distributed. Shrubs are a minor component averaging only two to five percent canopy cover. Litter cover is high (40-50 percent of area), and litter movement is limited to smaller size class litter and short distances (<. 5m). Other grasses that could appear on this site would include: six-weeks grama, fluffgrass, false-buffalograss, hairy grama, little bluestem, bristle panicum, cane bluestem, Indian ricegrass, tridens spp., and red lovegrass. Other woody plants include: pricklypear, cholla, fourwing saltbush, catclaw mimosa, winterfat, American tarbush and mesquite. Other forbs include: globemallow, verbena, desert holly, senna, plains blackfoot, trailing fleabane, fiddleneck, deerstongue, wooly Indianwheat, and locoweed.

**Table 5. Annual production by plant type**

| Plant Type | Low (Lb/Acre) | Representative Value (Lb/Acre) | High (Lb/Acre) |
|---|---|---|---|
| Grass/Grasslike | 474 | 652 | 830 |
| Forb | 78 | 107 | 136 |
| Shrub/Vine | 48 | 66 | 84 |
| **Total** | **600** | **825** | **1050** |

**Table 6. Ground cover**

| | |
|---|---|
| Tree foliar cover | 0% |
| Shrub/vine/liana foliar cover | 0% |
| Grass/grasslike foliar cover | 30-35% |
| Forb foliar cover | 0% |
| Non-vascular plants | 0% |
| Biological crusts | 0% |
| Litter | 40-50% |
| Surface fragments >0.25" and <=3" | 0% |
| Surface fragments >3" | 0% |

| | |
|---|---|
| Bedrock | 0% |
| Water | 0% |
| Bare ground | 15-25% |

**Figure 5. Plant community growth curve (percent production by month). NM2802, R042XC002NM-Shallow Sandy-HCPC. SD-3 Shallow Sandy - Warm season plant community.**

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 3 | 5 | 10 | 10 | 25 | 30 | 12 | 5 | 0 | 0 |

## State 2
## Grass/Shrub

## Community 2.1
## Grass/Shrub

Grass/Shrub: This state is characterized by the notable presence of shrubs, especially mesquite, broom snakeweed, and/or creosotebush, however grasses remain as the dominant species. Black grama is the dominant grass species. Threeawns and or dropseeds are sub-dominant. The susceptibility of the Shallow Sandy site to shrub encroachment may be higher when located adjacent to other sites with high densities of mesquite or creosotebush. Retrogression within this site is characterized by decreases in grass cover and increasing densities of shrubs. Diagnosis: Black grama remains as the dominant grass species. Grass cover varies in response to the amount of shrub increase, ranging from uniform to patchy. Shrubs are found at increased densities relative to the grassland state, especially mesquite, creosotebush, or broom snakeweed. Transition to Grass/Shrub (1a) Historically fire may have kept mesquite and other shrubs in check by completely killing some species and disrupting seed production cycles and suppressing the establishment of shrub seedlings in others. Fire suppression combined with seed dispersal by livestock and wildlife is believed to be the factors responsible for the establishment and increase in shrubs.1, 3 Loss of grass cover due to overgrazing, prolonged periods of drought, or their combination, reduces fire fuel loads and increases the susceptibility of the site to shrub establishment. Key indicators of approach to transition: Increase in the relative abundance of dropseeds and threeawns Presence of shrub seedlings Loss of organic matter—evidenced by an increase in physical soil crusts 8 Transition back to Grassland (1b) Brush control is necessary to initiate the transition back to the grassland state. If adequate fuel loads remain, possibly the reintroduction of fire as a management tool will assist in the transition back, however, mixed results have been observed concerning the effects of fire on black grama grasslands.6 Prescribed grazing will help ensure adequate rest following brush control and will assist in the establishment and maintenance of grass cover capable of sustaining fire.

## State 3
## Shrub Dominated

## Community 3.1
## Shrub Dominated

Shrub-Dominated: Across the range of soil types included in the Shallow Sandy site, mesquite is typically the dominant shrub, but it does occur as a co-dominant or sub-dominant species with creosotebush or broom snakeweed. Mesquite tends to dominate when the Shallow Sandy site occurs as part of a complex or in association with Sandy or Loamy Sand sites. Creosotebush tends to dominate on Shallow Sandy sites that occur as part of, or adjacent to Shallow Sites. Broom snakeweed increases in response to heavy grazing, but tends to cycle in and out depending on timing of rainfall. However, once the site is dominated by shrubs and snakeweed becomes well established, it tends to remain as a major component in the shrub dominated state. Diagnosis: Mesquite, creosotebush, or snakeweed cover is high, exceeding that of grasses. Grass cover is patchy with large connected bare areas present. Black grama, threeawns, or dropseeds may be the dominant grass. Evidence of accelerated wind erosion in the form of pedestalling of plants, and soil deposition around shrub bases may be common. Transition to Shrub-Dominated (2) Persistent loss of grass cover and the resulting increased competition between shrubs and remaining grasses for dwindling resources (especially soil moisture) may drive this transition.5 Additionally periods of increased winter precipitation may facilitate periodic episodes of shrub expansion and establishment. 4 Key indicators of approach to transition: Increase in size and frequency of bare patches. Loss of grass cover in shrub interspaces. Increased signs of erosion, evidenced by pedestalling of plants, and soil and litter deposition on leeward side of plants. 7 Transition back to Grassland (3) Brush control is necessary to reduce competition from shrubs and reestablish grasses. Range seeding may be necessary if insufficient grasses remain, The benefits, and costs, will vary depending upon the degree of site degradation, and adequate precipitation following seeding.

## Additional community tables

**Table 7. Community 1.1 plant community composition**

| Group | Common Name | Symbol | Scientific Name | Annual Production (Lb/Acre) | Foliar Cover (%) |
|---|---|---|---|---|---|
| **Grass/Grasslike** | | | | | |
| 1 | **Warm Season** | | | 413–495 | |
| | black grama | BOER4 | *Bouteloua eriopoda* | 413–495 | – |
| 2 | **Warm Season** | | | 41–83 | |
| | bush muhly | MUPO2 | *Muhlenbergia porteri* | 41–83 | – |
| 3 | **Warm Season** | | | 41–83 | |

| | | | | | |
|---|---|---|---|---|---|
| | blue grama | BOGR2 | *Bouteloua gracilis* | 41–83 | – |
| 4 | **Warm Season** | | | 25–41 | |
| | sideoats grama | BOCU | *Bouteloua curtipendula* | 25–41 | – |
| 5 | **Warm Season** | | | 41–83 | |
| | spike dropseed | SPCO4 | *Sporobolus contractus* | 41–83 | – |
| | sand dropseed | SPCR | *Sporobolus cryptandrus* | 41–83 | – |
| | mesa dropseed | SPFL2 | *Sporobolus flexuosus* | 41–83 | – |
| 6 | **Warm Season** | | | 17–41 | |
| | threeawn | ARIST | *Aristida* | 17–41 | – |
| 7 | **Warm Season** | | | 41–83 | |
| | Arizona cottontop | DICA8 | *Digitaria californica* | 41–83 | – |
| | plains bristlegrass | SEVU2 | *Setaria vulpiseta* | 41–83 | – |
| 8 | **Warm Season** | | | 41–83 | |
| | mat sandbur | CELO3 | *Cenchrus longispinus* | 41–83 | – |
| | hooded windmill grass | CHCU2 | *Chloris cucullata* | 41–83 | – |
| 9 | **Other Perennial Grasses** | | | 25–41 | |
| | Grass, perennial | 2GP | *Grass, perennial* | 25–41 | – |
| **Shrub/Vine** | | | | | |
| 10 | **Shrub** | | | 8–25 | |
| | javelina bush | COER5 | *Condalia ericoides* | 8–25 | – |
| 11 | **Shrub** | | | 8–25 | |
| | yucca | YUCCA | *Yucca* | 8–25 | – |
| 12 | **Shrub** | | | 8–25 | |
| | jointfir | EPHED | *Ephedra* | 8–25 | – |
| | littleleaf ratany | KRER | *Krameria erecta* | 8–25 | – |
| 13 | **Shrub** | | | 8–25 | |
| | featherplume | DAFO | *Dalea formosa* | 8–25 | – |
| 14 | **Shrub** | | | 8–25 | |
| | broom snakeweed | GUSA2 | *Gutierrezia sarothrae* | 8–25 | – |
| 15 | **Other Shrubs** | | | 25–41 | |
| | Shrub (>.5m) | 2SHRUB | *Shrub (>.5m)* | 25–41 | – |
| **Forb** | | | | | |
| 16 | **Forb** | | | 17–41 | |
| | leatherweed | CRPOP | *Croton pottsii var. pottsii* | 17–41 | – |

| | | | | | |
|---|---|---|---|---|---|
| | Goodding's tansyaster | MAPIG2 | *Machaeranthera pinnatifida ssp. gooddingii var. gooddingii* | 17–41 | – |
| 17 | **Forb** | | | 17–41 | |
| | woolly groundsel | PACA15 | *Packera cana* | 17–41 | – |
| | threadleaf ragwort | SEFLF | *Senecio flaccidus var. flaccidus* | 17–41 | – |
| 18 | **Forb** | | | 8–25 | |
| | whitest evening primrose | OEAL | *Oenothera albicaulis* | 8–25 | – |
| 19 | **Other Forbs** | | | 8–25 | |
| | Forb (herbaceous, not grass nor grass-like) | 2FORB | *Forb (herbaceous, not grass nor grass-like)* | 8–25 | – |

## Animal community

This site provides habitats which support a resident animal community that is characterized by pronghorn antelope, swift fox, black-tailed jackrabbit, spotted ground squirrel, Ord’s kangaroo rat, northern grasshopper mouse, coyote, horned lark, meadowlark, lark bunting, scaled quail, morning dove, side-blotched lizard, round-tailed horned lizard, marbled whiptail, prairie rattlesnake and ornate box turtle.

## Hydrological functions

The runoff curve numbers are determined by field investigations using hydraulic cover conditions and hydrologic soil groups.

Hydrologic Interpretations
Soil Series Hydrologic Group
Jarag D
Simona D

## Recreational uses

This site offers recreation for hiking, horseback riding, nature observation and photography, and quail and dove hunting. During years of abundant spring moisture, this site displays a riot of color from wildflowers during May and June. A few summer and fall flowers also occur.

## Wood products

The natural potential plant community of this site affords little or no wood products. Where the site has been invaded by mesquite or cholla cactus the roots and stems of these plants provide attractive material for a variety of curiosities, such as lamps and small furniture.

## Other products

This site is suitable for grazing by all kinds and classes of livestock during all seasons of the year. Because of the sandy textures and shallow profile, this site will respond rapidly to management. As this site deteriorates, plants such as black grama, bush muhly, blue and sideoats grama, plains bristlegrass and Arizona cottontop, will decrease and be replaced by plants such as threeawns, mesquite, creosote bush, and broom snakeweed. This also causes a decrease in ground cover, leaving the soil to blow. This site responds best to a system of management that rotates the season of use.

## Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month
Similarity Index Ac/AUM
100 - 76 2.5 – 3.5
75 – 51 3.2 – 4.6
50 – 26 4.5 – 7.5
25 – 0 7.6 +

## Inventory data references

Data collection for this site was done in conjunction with the progressive soil surveys within the Southern Desertic Basins, Plains and Mountains, Major Land Resource Areas of New Mexico. This site has been mapped and correlated with soils in the following soil surveys. Eddy County, Lea County, and Chaves County.

## Other references

Literature References:

1. Brooks, M.L. and D.A. Pyke. 2001. Invasive plants and fire in the deserts of North America. Pages 1–14 in K.E.M. Galley and T.P. Wilson (eds.). Proceedings of the Invasive Species Workshop: the Role of Fire in the Control and Spread of Invasive Species.

2. Hennessy, J.T., R.P. Gibbens, J.M. Tromble, and M. Cardenas. 1983. Water properties of caliche. J. Range Manage. 36: 723-726.

3. Humphrey, R.R. 1974. Fire in the deserts and desert grassland of North America. In:

Kozlowski, T. T.; Ahlgren, C. E., eds. Fire and ecosystems. New York: Academic Press: 365-400.

4. Moir, W.H., and J. A. Ludwig. 1991. Plant succession and changing land features in desert grasslands. P. 15-18. In P.F. Ffolliott and W.T. Swank (eds.) People and the temperate region: a summary of research from the United States Man and the Biosphere Program 1991. U.S. Dept. State, Publ No. 9839, Nat. Tech. Info. Serv., U.S. Dept. Commerce, Springfield, Illinois. 63 p.

5. Tiedemann, A. R. and J. O. Klemmedson. 1977. Effect of mesquite trees on vegetation and soils in the desert grassland. J. Range Manage. 30: 361-367.

6. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (2002, September). Fire Effects Information System, [Online]. Available: http://www.fs.fed.us/database/feis/ [accessed 2/10/03].

7. U.S. Department of Agriculture, Natural Resources Conservation Service. 2001. Soil Quality Information Sheets. Rangeland Soil Quality—Wind Erosion. Rangeland Sheet 10 [Online]. Available: http://www.statlab.iastate.edu/survey/SQI/range.html

8. U.S. Department of Agriculture, Natural Resources Conservation Service. 2001. Soil Quality Information Sheets. Rangeland Soil Quality—Physical and Biological Soil Crusts. Rangeland Sheet 7 [Online]. Available: http://www.statlab.iastate.edu/survey/SQI/range.html

## Contributors

David Trujillo
Don Sylvester

## Rangeland health reference sheet

Interpreting Indicators of Rangeland Health is a qualitative assessment protocol used to determine ecosystem condition based on benchmark characteristics described in the Reference Sheet. A suite of 17 (or more) indicators are typically considered in an assessment. The ecological site(s) representative of an assessment location must be known prior to applying the protocol and must be verified based on soils and climate. Current plant community cannot be used to identify the ecological site.

| | |
|---|---|
| Author(s)/participant(s) | |
| Contact for lead author | |
| Date | |

| | |
|---|---|
| Approved by | |
| Approval date | |
| Composition (Indicators 10 and 12) based on | Annual Production |

## Indicators

1. **Number and extent of rills:**

2. **Presence of water flow patterns:**

3. **Number and height of erosional pedestals or terracettes:**

4. **Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):**

5. **Number of gullies and erosion associated with gullies:**

6. **Extent of wind scoured, blowouts and/or depositional areas:**

7. **Amount of litter movement (describe size and distance expected to travel):**

8. **Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):**

9. **Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):**

10. **Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:**

---

11. **Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):**

---

12. **Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):**

    Dominant:

    Sub-dominant:

    Other:

    Additional:

---

13. **Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):**

---

14. **Average percent litter cover (%) and depth ( in):**

---

15. **Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):**

---

16. **Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:**

17. **Perennial plant reproductive capability:**

# APPENDIX C

## Referenced Well Records

HRL COMPLIANCE SOLUTIONS

**BORING LOG/MONITORING WELL COMPLETION DIAGRAM**

| | | | |
|---|---|---|---|
| Boring/Well Number: MW-1 | | Location: RDX 17 #3 | |
| Date: 12/8/2020 | | Client: WPX Energy | |
| Drilling Method: Air Rotary | Sampling Method: None | Logged By: J. Linn, PG | Drilled By: Talon LPE |
| Gravel Pack Type: 10/20 Sand | Gravel Pack Depth Interval: 3 Bags | Seal Type: None / Seal Depth Interval: None | Latitude: 32.036765 |
| Casing Type: PVC / Diameter: 2-inch / Depth Interval: 0-102 feet bgs | | Boring Total Depth (ft. BGS): 107 | Longitude: -103.895993 |
| Screen Type: PVC / Slot: 0.010-inch / Diameter: 2-inch / Depth Interval: 102-107 ft | | Well Total Depth (ft. BGS): 107 | Depth to Water (ft. BTOC): > 107 / DTW Date: 12/16/2020 |

| Depth Interval (ft) | Recovery (ft) | Plasticity | Moisture | Odor | Staining | PID (ppm) | USCS | Sample ID | Lithology/Remarks | Well Completion |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | NM | L | D | N | N | NM | SP | NS | Pale orange poorly graded fine sand | |
| 5 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 25 | | | | | | | | | | |
| 30 | NM | L | D | N | N | NM | SP | NS | Same as above with slight increase in coarse sand and gravel | |
| 35 | | | | | | | | | | |
| 40 | NM | L | D | N | N | NM | SP | NS | Pale orange poorly graded fine sand with very slight silt | |
| 45 | | | | | | | | | | |
| 50 | | | | | | | | | | |
| 55 | NM | L | D | N | N | NM | SP | NS | Pale orange poorly graded fine sand | |
| 60 | NM | L | D | N | N | NM | SW | NS | Pale orange well graded fine sand | |
| 65 | NM | M | SL M | N | N | NM | SM | NS | Pale red orange clayey silty fine sand with minor coarse sand and gravel | |
| 70 | | | | | | | | | | |
| 75 | | | | | | | | | | |
| 80 | | | | | | | | | | |
| 85 | | | | | | | | | | |
| 90 | NM | L | SL M | N | N | NM | SP | NS | Pale orange poorly sorted fine sand - TD 107' BGS | |
| 95 | | | | | | | | | | |
| 100 | | | | | | | | | | |
| 105 | | | | | | | | | | |

# APPENDIX D

# Aerial and Geophysical Cave Karst Investigation Report

P.O. Box 62228 Midland • TX • 79711 • Tel: 432-563-2200 • Fax: 432-563-2213

# Aerial and Geophysical Cave and Karst Investigation: RDX 16 #013

**Report Delivered: 07/7/2025**

**Prepared for:**
**eTech Environmental & Safety Solutions, Inc.**
**13000 WCR 100**
**Odessa, Texas 79765**

**Prepared By:**
**Advanced Geophysics, LLC**
**2821 White Plains Dr.**
**Midlothian, Texas 76065**

ADVANCED GEOPHYSICS

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# LIST OF FIGURES

# Executive summary

## Introduction

**[e]Tech Environmental & Safety Solutions, Inc**. requested an aerial and geophysical karst survey for the RDX 16 #013 well pad, located at 32.038328, -103.893272. The purpose of the survey was to determine if the site is considered "stable" or "unstable", by investigating the surface and subsurface for any potential karst features.

## Findings

- The aerial survey revealed:
    - **No anomalies** identified within the 200-meter (656 ft) buffer.
- The geophysical survey revealed:
    - **No anomalies** interpreted to be areas of increased porosity or air-filled voids.

## Recommendations

- **Mitigation Planning:**
    - Any subsurface voids encountered during construction, or any phase of the remediation process must be reported to the Bureau of Land Management Karst Division or the New Mexico State Lands Office Resource Division.
    - Mitigation measures should align with guidelines in the **Bureau of Land Management Cave and Karst Management Handbook (H-8380-1)** or the **Natural Resources Conservation Service Conservation Practice Standard for Karst Sinkhole Treatment (Code 527).**

## Conclusions

The aerial and geophysical surveys conducted at the RDX 16 #013 site did not identify any karst features at the surface or within the subsurface (**Figure A**). Due to the absence of detectable anomalies, the site is characterized as stable.

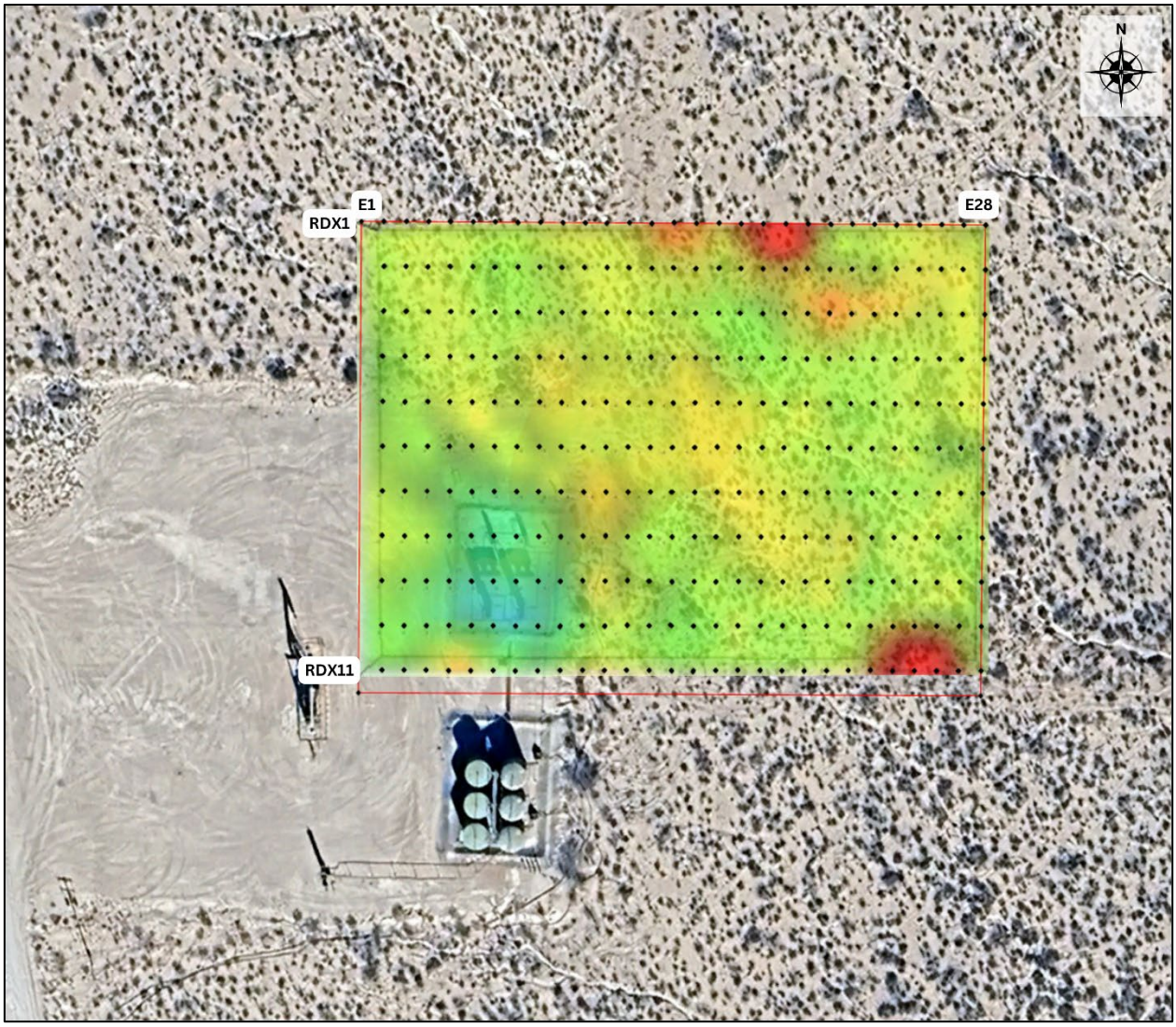



**Figure A.** Aerial view of RDX 16 #013 with integrated geophysical overlay, illustrating the results of the electrical resistivity survey.

# 1.0 INTRODUCTION

The following report has been prepared for eTech Environmental & Safety Solutions, Inc., to determine the presence or absence of surface and subsurface karst features at the RDX 16 #013 well pad, located at approximately 32.038328, -103.893272, within Eddy County, New Mexico (**Figure 1**). To delineate the subsurface features, a geophysical survey (electrical resistivity tomography) was conducted, processed, and interpreted by Kaleb Henry of Advanced Geophysics, LLC. The aerial karst survey was conducted and processed by SWCA Environmental Consultants. The aerial data was then reviewed and interpreted by Kaleb Henry of Advanced Geophysics, LLC.

The aerial and electrical resistivity surveys were requested by eTech Environmental & Safety Solutions, Inc. on June 2, 2025, and were completed by June 16, 2025. Upon the request, the client provided coordinates (listed above) for the well pad, as well as google earth shape file (**RDX 16-13 AOC.KMZ)** to ensure the survey encompassed the entire release.

## 1.1 Summary of Results

The aerial and geophysical surveys did not identify any anomalies that could be interpreted as karst features below or surrounding the RDX 16 #013 site, resulting in a site characterization of stable.

## 1.2 Site Location

The site is located approximately 26.76 kilometers (16.63 miles) southeast of Malaga, New Mexico, and approximately 15.87 kilometers (9.86 miles) east of US Highway 285, within the NESE quarters of Section 16, Township 26 South, Range 30 East, in Eddy County, New Mexico. The well pad is located on New Mexico State land.

## 1.3 Bureau of Land Management Characterization

The BLM have identified four divisions of karst potential: low, medium, high, and critical. These regions are characterized based on the known occurrence of karst features, underlying geologic formations, and potential impacts to freshwater aquifers. The survey was conducted within an area characterized as medium karst occurrence zone by the (BLM) – Carlsbad Office[1].

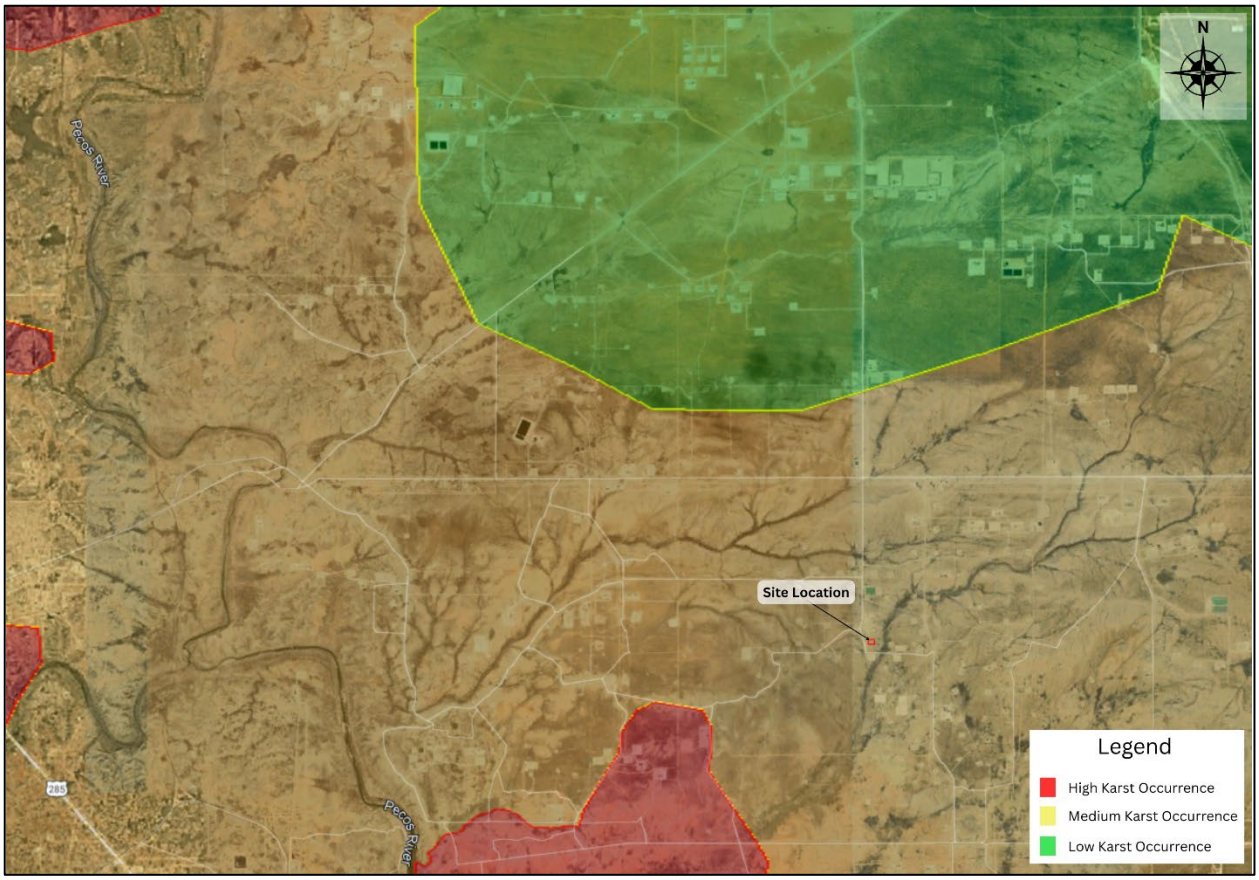



**Figure 1.** Site location map with the surrounding karst occurrence. Map provided by Google Earth in datum WSG-84. Karst occurrence map provided by Bureau of Land Management – Carlsbad Office.

# 2.0 LOCAL GEOLOGY AND ENVIRONMENT

## 2.1 Geologic Setting

The site is situated along the northern edge of the Chihuahuan Desert, on the outskirts of a physiographic region known as the Gypsum Plain (**Figure 2**) [13]. The Gypsum Plain is composed of Permian-age evaporites, characterized by extensive cave and karst development in the Castile, Salado, and Rustler Formations[11]. Stratigraphically, the Rustler Formation overlies the Salado and Castile Formations within the Delaware Basin. The Rustler Formation was deposited during the mid-to-late Ochoan, as the Delaware Basin transitioned from a hypersaline sea to a terrestrial environment[3][6]. This transition led to a complex array of depositional environments, resulting in the formation of five distinct members within the Rustler Formation: Los Medaños, Culebra Dolomite, Tamarisk, Magenta Dolomite, and Forty-niner, listed in ascending order. The Tamarisk and Forty-niner Members, in particular, exhibit the most diverse salt pan to mudflat facies within the Rustler Formation, comprising mudstone, halite, and gypsum[16]. Due to their composition, these facies are highly susceptible to dissolution, leading to the formation of karst features.

Directly beneath the Rustler Formation lies the Salado Formation, deposited during the mid-Ochoan as the Delaware Basin became increasingly restricted, forming a density-stratified, hypersaline sea[17]. This depositional environment resulted in the Salado Formation being predominantly composed of halite (salt-NaCl) interbedded with anhydrite (gypsum)[18]. These evaporite facies are highly prone to dissolution by downward-migrating meteoric waters, which can create various karst features such as conduits, sinkholes, and cavernous porosity. Once initiated, these features can expand rapidly due to the high solubility of halite and gypsum/anhydrite. Halite, with a solubility rate of 360 g/L at 77°F, is approximately two orders of magnitude more soluble than gypsum[15]. Gypsum, in turn, has a solubility rate of approximately 2.531 g/L at 68°F, which is around four orders of magnitude higher than that of limestone (calcium carbonate) [9].

The high solubility of these evaporite facies facilitates the rapid development of complex cave systems, which can form within days, weeks, or years, depending on the surrounding hydrogeologic conditions[13]. These cave systems serve as preferential flow paths for shallow groundwater recharge, creating a dynamic and continuously evolving karst-aquifer system[11].

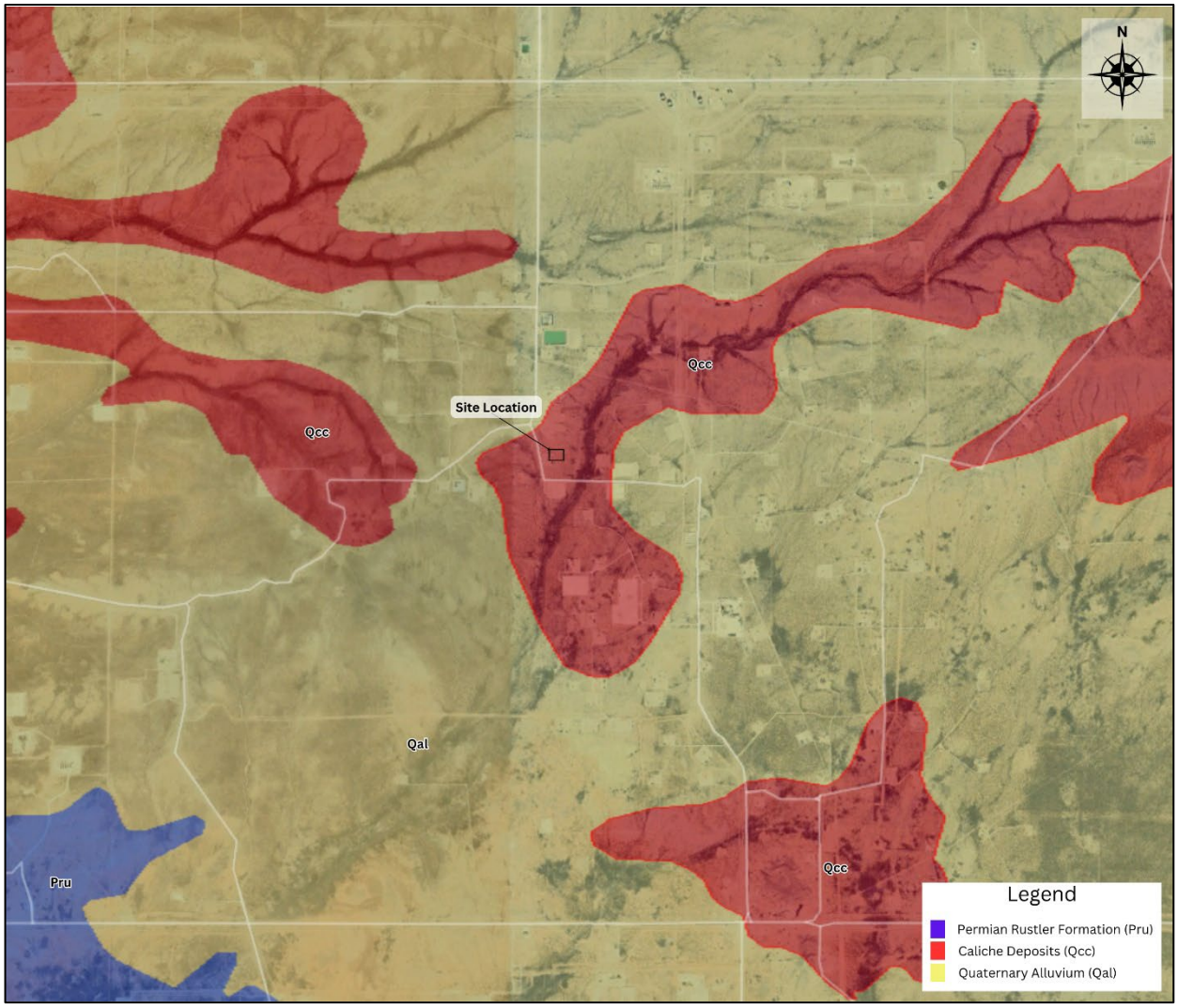



**Figure 2.** Geologic formations surrounding the site location. Permian Rustler Formation (Pr), Caliche Deposits (Qcc), Quaternary alluvial eolian deposits (Qae). Background image provided by Google Earth in datum WSG-84. Geologic unit overlay provided by the United State Geologic Society (USGS) and the Bureau of Economic Geology, UT-Austin.

## 2.2 Environmental Setting

The site is located within an area known as the Chihuahuan Desert Thornscrub, where vegetation is sparse. Vegetation surrounding the surveyed location primarily consists of grass with and few creosote bushes. The site is mantled by a soil profile known as the Upton-Simona complex, which is composed of gravelly sandy loam[14]. These soils are stable, due to their parent material, which consists of weathered limestone[14].

The environment surrounding the survey has been characterized as an evaporitic karst terrain, due to the underlying geologic formations. The Rustler Formation has many documented sinkholes, conduits, and caves, which are highly susceptible to enlargement by

dissolution as surface water migrates downward through the formation. These conduits can facilitate the rapid recharge of the groundwater aquifers.

# 3.0 METHODOLOGY

## 3.1 Description of Geophysical Survey

This project consisted of eleven parallel two-dimensional (2-D) direct current (DC) resistivity survey lines. These surveys were conducted using an Advanced Geosciences' Inc. (AGI) SuperSting™ (R8/IP) multi-electrode earth resistivity meter. All eleven lines were performed using a dipole-dipole array configuration consisting of 28 electrodes arranged west-to-east (electrodes 1 to 28), with a 5-meter (16.4 ft) electrode spacing and 10-meter (32.8 ft) line spacing oriented from north-to-south (lines 1 to 11). This set up was designed to ensure high accuracy and enhanced shallow depth resolution. Due to the electrode spacing and configuration, the near surface resolution is approximately 2.5 meters (8.2 ft), and total depth of investigation was between 22.7 and 26.7 meters (74.4–87.5 ft) below ground surface (bgs). Each electrode location was recorded using an EMLID RS3 GPS unit with an estimated horizontal location error of 5 centimeters (2 in). The KML file (**RDX 16.kml**) and the corresponding raw dataset (**RDX 16_Report.csv**) produced during the data collection were submitted to eTech Environmental & Safety Solutions, Inc. upon submission of the report.

The electrical contact resistance between the ground and each electrode was maintained below 5,000 Ωm. If initial electrode contact resistance exceeded 5,000 Ωm, then electrodes would be wetted with well water prior to the survey to lower contact resistance below 5,000 Ωm. Each electrical resistivity line was conducted using time estimates of 800 ms and cycled twice per electrode pair. The SuperSting ™ (R8/IP) was set to inject a 2,000 mA current for each survey measurement and was set to reach a maximum error threshold of 2% between measurement cycles. Recorded resistivity measurements were processed with EarthImager™ 2-D/3-D inversion modeling software, produced by AGI. To improve inverted resistivity models, data outliers which account for less than 10% of total data, were removed using data misfit histograms. Terrain correction was incorporated into resistivity sections to better constrain the relationship between topography and electrical resistivity analyses.

The surveyed lines (RDX1.stg – RDX11.stg) were completed by Sergio Martinez and Christian Santa Ana between June 15, 2025, and June 16, 2024.

## 3.2 Description of Aerial Survey

An aerial karst survey was conducted for the RDX 16 #013 well pad and operated by a highly experienced drone pilot licensed by the Federal Aviation Administration (FAA) and affiliated with SWCA Environmental Consultants. Survey parameters were developed by Kaleb Henry of Advanced Geophysics to ensure compliance with the stringent requirements established by the Bureau of Land Management – Carlsbad Field Office (BLM-CFO), which are recognized by the New Mexico Oil Conservation Division (NMOCD) and the New Mexico State Land Office (NMSLO).

The aerial survey utilized a preplanned flight path flown at low elevations, with aerial transects spaced to achieve an estimated 70–80% imagery overlap. This overlap minimizes errors during the image-stitching process and enhances the accuracy and resolution of the final imagery products. Following data collection, the images were stitched to produce an orthomosaic image, which was then processed to generate a highly accurate Digital Elevation Model (DEM). A Lower Relief Model (LRM) was subsequently derived from the DEM to highlight sharp changes in elevation (approximately 5 cm). The LRM, along with the DEM and orthomosaic imagery, was carefully examined and analyzed by an experienced cave and karst specialist.

The aerial imagery used in the survey has a resolution of approximately 5 cm (2 in), enabling a trained geologist to identify small-scale karst features with a high degree of detail. However, it is important to recognize the potential presence of artificial artifacts within the LRM, as shadowing and dense vegetation can result in the misrepresentation of topographic highs or lows.

## 3.3 Electrical Resistivity Theory

Electrical resistivity tomography is predicated on the response of electrical current flowing through subsurface material, from transmitter electrodes to potential electrodes. As the current migrates through the underlying media, a potential difference (apparent resistivity) in current is measured. There are three primary factors for determining the electrical resistivity of a subsurface material: Lithology, saturation, and porosity. As porosity increases, resistance to the flow of electrical current is increased, due to the theoretically infinite resistiveness of air. When an area of increased porosity/void is encountered within the subsurface a sharp contrast in electrical resistiveness to the surrounding material is measured and recorded. This theory, coupled with knowledge of the underlying geology, allows an experienced geophysicist to develop an accurate interpretation of the subsurface features.

NOTE: Conducting electrical resistivity surveys in areas with known subsurface metallic structures can lead to inaccurate representations of subsurface conditions. Metallic elements tend to create preferential pathways for electrical current, resulting in non-uniform current distributions that may cause inversion algorithms to misinterpret the acquired data. Additionally, these structures can generate shadow zones due to electromagnetic shielding, which impedes current penetration into deeper subsurface layers. Consequently, this may lead to artificially elevated or reduced resistivity values in the final interpretation.

## 3.3 Survey Results

### 3.3.1 Aerial Karst Survey

The aerial karst survey did not identify any surficial karst features within the 200-meter (656 ft) buffer surrounding the RDX 16 #013 well pad (**Figure 3**). The survey identified several areas with sharp elevation changes; however, subsequent analysis determined the areas to be vegetation and arroyos without any sinking streams.

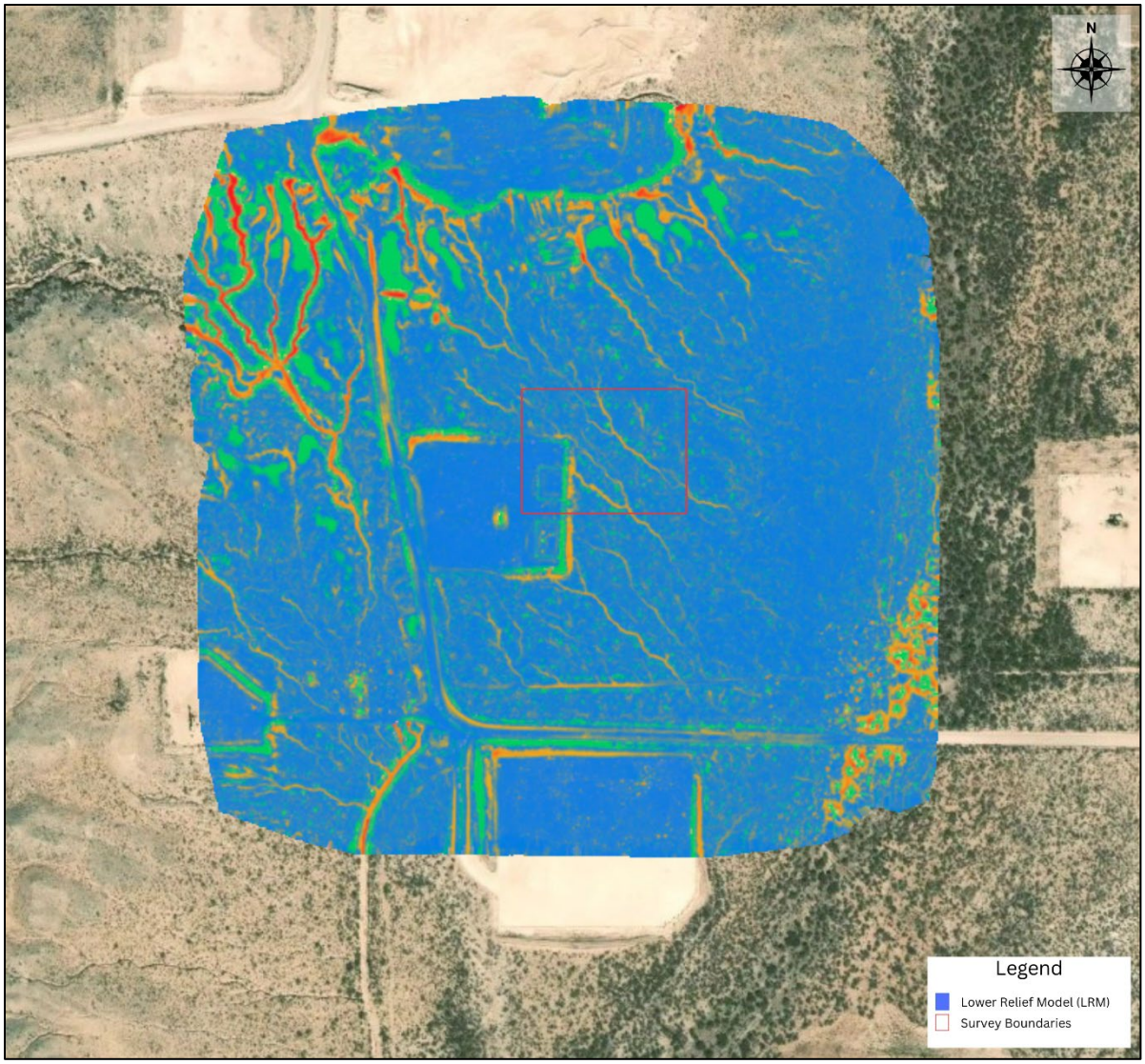



**Figure 3.** Lower Relief Model (LRM) of the area surrounding the proposed site, delineated by red boundaries. The blue gradient indicates variations in surface elevation, with notable drainage patterns visible (orange and red coloration) in the northwestern portion of the survey area. These anomalous features were field verified and determined to be arroyos without the presence of karst features.

### 3.3.2 Geophysical Karst Survey

The geophysical survey did not identify any subsurface anomalies that could be characterized as air-filled voids or areas of increased porosity. However, due to the resolution limits, smaller fractures and voids/conduits may be present but not detected.

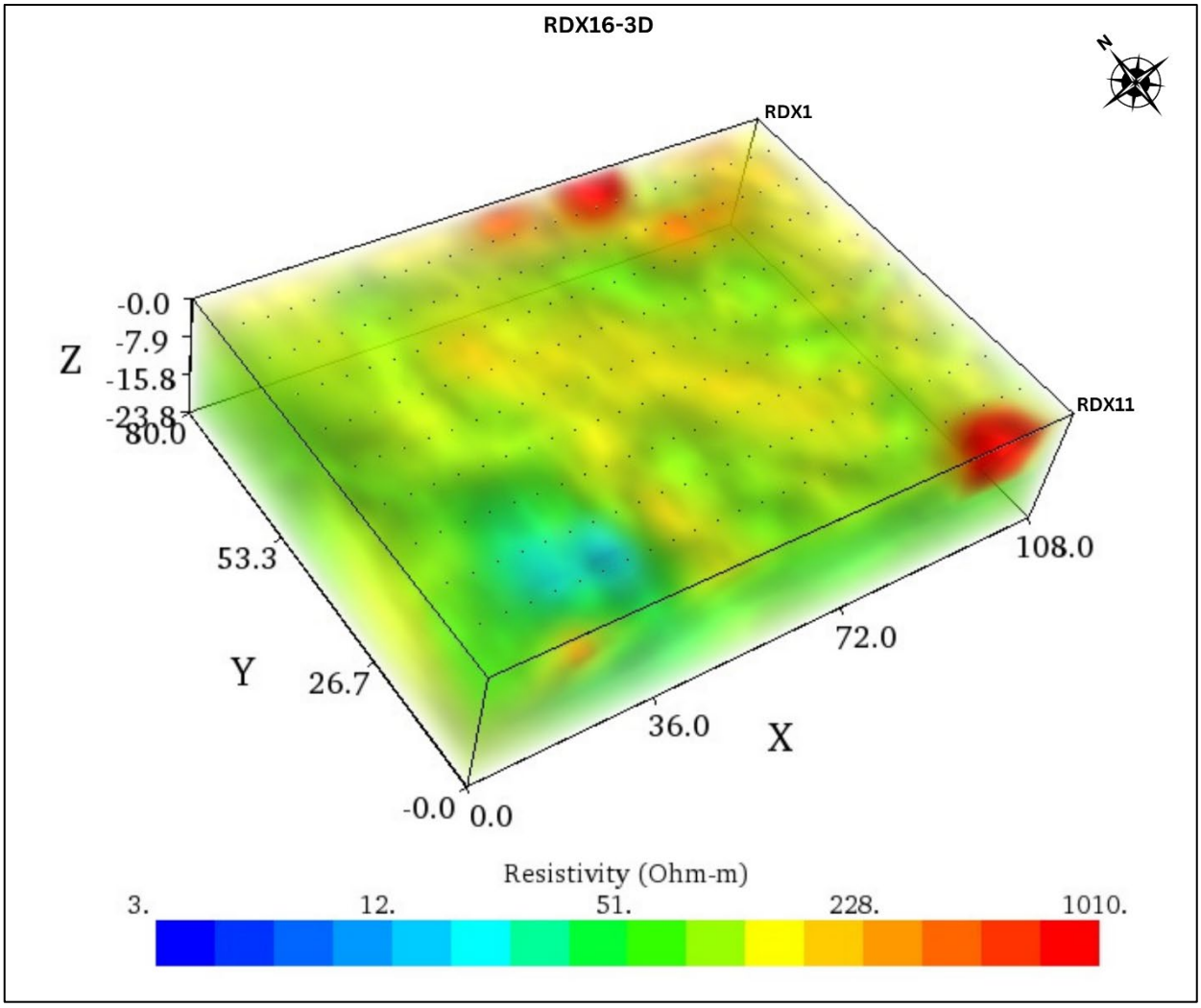



**Figure 4.** 3-D image of the subsurface surrounding the release at RDX 16 #013. This model was created by combining the 2-D resistivity lines RDX1 through RDX11.

# 4.0 SUMMARY AND RECOMMENDATIONS

The aerial karst survey did not identify any surficial karst features within the 200-meter (656 ft) buffer surrounding the RDX 16 #013 well pad. The survey identified several areas with sharp elevation changes; however, upon further review, these features were determined to be vegetation and arroyos with no karst features.

The geophysical survey did not identify any subsurface anomalies that could be characterized as air-filled voids or areas of increased porosity. However, due to the resolution limits, smaller fractures and voids/conduits may be present but not detected.

The underlying geologic formation at the surveyed location is highly susceptible to dissolution, which facilitates the rapid development and expansion of subsurface voids and conduits, within a timescale ranging from days to a few months. The progression of these processes can be significantly accelerated in the absence of appropriate mitigation measures. Infrastructure systems that contain or transport fluids pose a heightened risk in such settings. In the event of a structural failure or unnoticed leakage, the unintended introduction of fluids into the subsurface can intensify dissolution processes, potentially triggering rapid subsidence or collapse.

Subsurface voids encountered during construction, drilling or remediation processes should be immediately reported to either the Surface Resources Division of the New Mexico State Land Office, or the Bureau of Land Management Karst Division, in order to request a Cave and Karst Specialist. Any implemented procedures to mitigate a cave or karst feature should follow the **Bureau of Land Management Cave and Karst Management Handbook, H-8380-1**, or the **Natural Resources Conservation Service Conservation Practice Standard for Karst Sinkhole Treatment, Code 527**.

## 5.0 REFERENCES


1. Hernandez, R., (2021), Karst Potential Map. CFO Base map.
2. Horton, J.D., 2017, The State Geologic Map Compilation (SGMC) geodatabase of the conterminous United States (ver. 1.1, August 2017): U.S. Geological Survey data release
3. Adams, J.E., 1972. Semi-cyclicity in the Castile anhydrite, in Elam, J.G. and Chuber, S. (eds), Cyclic Sedimentation in the Permian Basin. West Texas Geological Society, p. 196-202.
4. Anderson, R.Y., Dean, W.E., Kirkland, D.W. and Snider, H.I., 1972. Permian Castile varved evaporite sequence. West Texas and New Mexico. GSA Bulletin, v. 83, p. 59- 85.
5. Hill, C.A., 1996. Geology of the Delaware Basin, Guadalupe, Apache and Glass Mountains: New Mexico and West Texas. Permian Basin Section – SEPM, Midland, TX, 480 p.
6. Kendall, A.C. and Harwood, G.M., 1989. Shallow-water gypsum in the Castile Formation – significance and implications, in Harris, P.M. and Grover, G.A. (eds), Subsurface and Outcrop Examination of the Capitan Shelf Margin, Northern Delaware Basin. SEPM, Core Workshop No. 13, San Antonio, TX, p. 451-457.
7. Kirkland, D.W. and Anderson, R.Y., 1970. Microfolding in the Castile and Todilto evaporites, Texas and New Mexico. GSA Bulletin, v. 81, p. 3259-3282.
8. Klimchouk, A., 1996. The typology of gypsum karst according to its geological and geomorphological evolution. International Journal of Speleology, v. 25, no. 3-4, p. 49-60.
9. Klimchouk, A., 1996. Dissolution and conversion of gypsum and anhydrite. Int. J. Speleology, v. 25, no. 3-4, p. 263-274.
10. Stafford, Kevin W.; Nance, Raymond; Rosales-Largarde, Laura; and Boston, Penelope J., 2008. Epigene and Hypogene Karst Manifestations of the Castile Formation: Eddy County, New Mexico and Culberson County, Texas, USA. Faculty Publication. 12.
11. Stafford, Kevin W., 2013. Evaporite Karst and Hydrogeology of the Castile Formation: Culberson County, Texas and Eddy County, New Mexico. Faculty Publication. 3.
12. Stafford, Kevin W.; Brown, Wesley A.; Ehrhart, Jon T.; Majzoub, Adam F.; and Woodard, Jonathan D., 2017. Evaporite Karst Geohazards in the Delaware Basin, Texas: Review of Traditional Karst Studies Coupled with Geophysical and Remote Sensing Characterization. Faculty Publication. 17.
13. Stafford, Kevin W.; Ulmer-Scholle, Dana; and Rosales-Largarde, Laura., 2008. Hypogene Calcitization: Evaporite Diagenesis in the Western Delaware Basin. Faculty Publication. 7.
14. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions. Available online. Accessed [12/28/2024].

15. Langer, H. Offermann, 1982. On the Solubility of Sodium Chloride in Water. Journal of Crystal Growth, Volume 60, Issue 2, p. 389-392.

16. Dennis W. Powers, Robert M. Holt, Richard L. Beauheim, and Ron G. Richardson, 2006, Caves and Karst of Southeastern New Mexico, Land, Lewis; Lueth, Virgil W.; Raatz, William; Boston, Penny; Love, David L. [eds.], New Mexico Geological Society 57th Annual Fall Field Conference Guidebook, pp. 267-276.

17. Stafford, K.W., 2024. Klimchouk's impact on the development of speleogenetic models for Castile evaporites: West Texas and southeastern New Mexico, USA. International Journal of Speleology, 53(2), 79-87.

18. Kenneth S. Johnson, 2023. Evaporite Karst of the Lower Pecos Region, Land, Lewis; Bou Jaoude, Issam; Hutchinson, Peter; Zeigler, Kate; Jakle, Anne; Van Der Werff, Brittney, New Mexico Geological Society 73rd Annual Fall Field Conference Guidebook, p. 152.

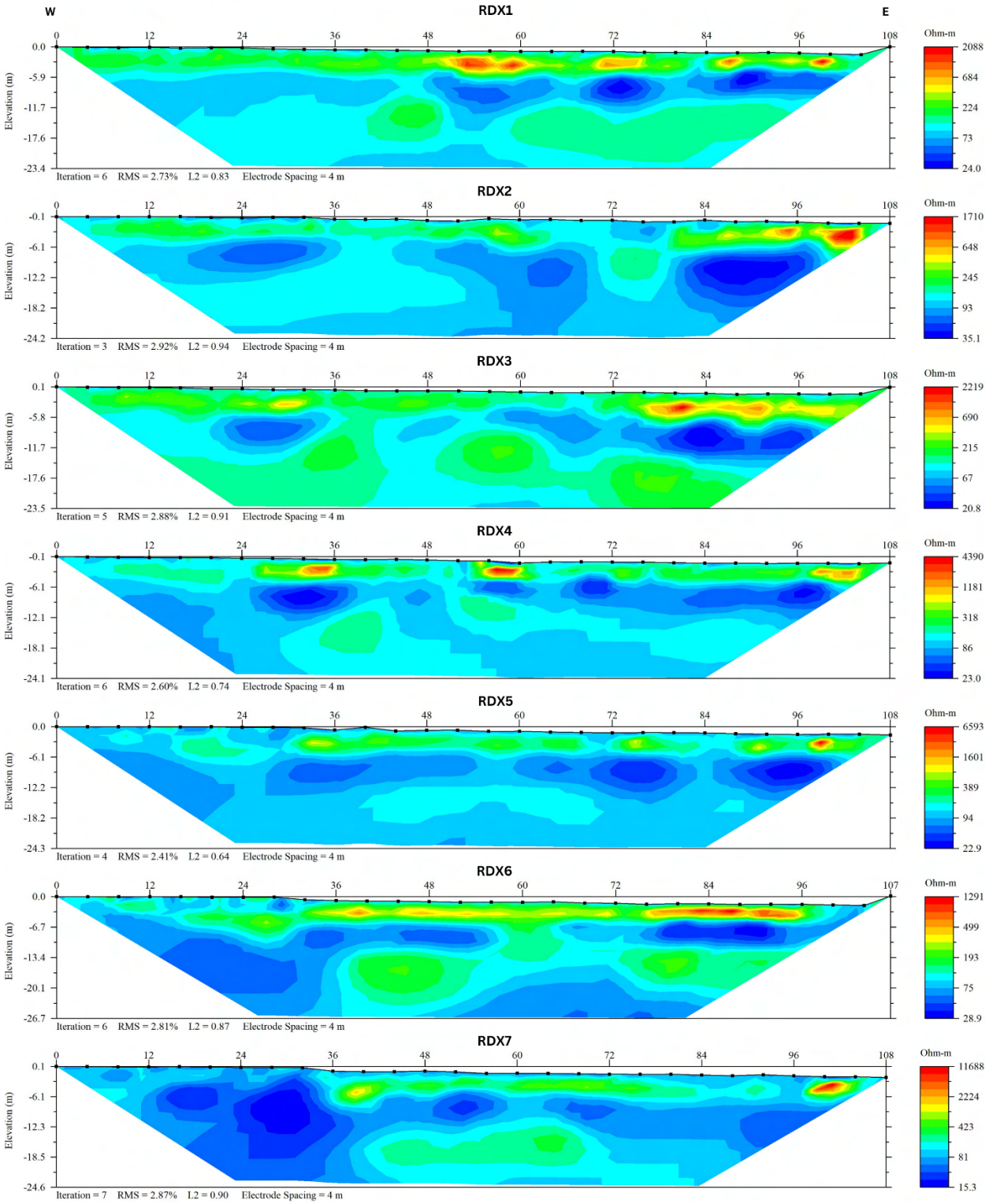
# 6.0 APPENDICES

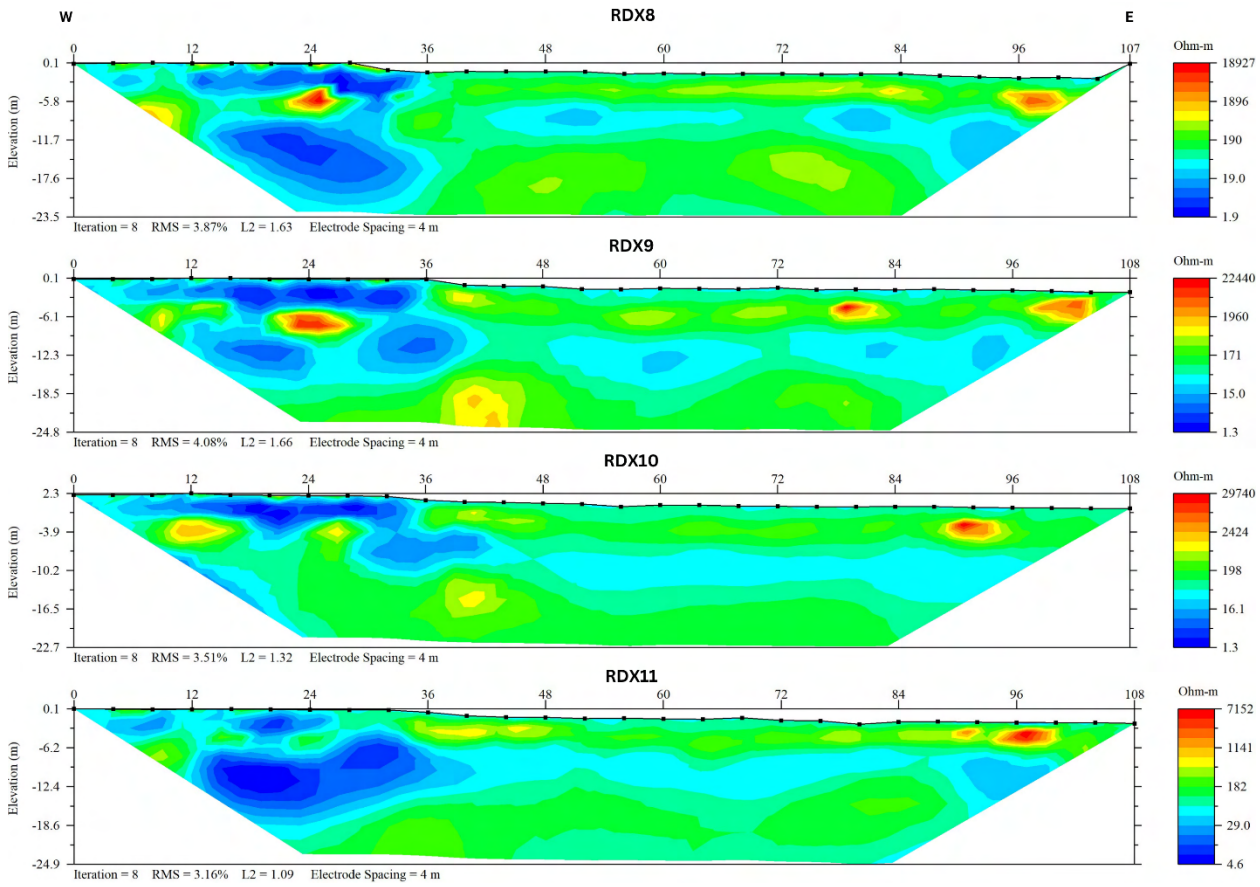
## 6.1 Electrical Resistivity Data

The KML file (**RDX 16.kml**) and the corresponding raw dataset (**RDX 16_Report.csv**), which document the precise locations of all electrodes, have been provided to the client with the report. The STG files were processed and modeled using EarthImager™ 2D/3D, provided by AGI. During the modeling process, data outliers which account for less than 10% of total data were removed using data misfit histograms. Terrain correction was incorporated into resistivity sections to better constrain the relationship between topography and electrical resistivity analyses.

The resistivity lines were collected from north-to-south (Line 1–Line 11), and the electrodes were oriented from west-to-east (Electrode 1–Electrode 28). The surveys reached a maximum depth of 26.7 meters (87.5 ft). These sections did not delineate any anomalies that could be interpreted as air-filled voids or zones of elevated porosity. However, small voids or areas of increased porosity may be present, but not identified in this survey, due to resolution limits.

## 6.2 Electrical Resistivity Images




W
RDX8
E
0 12 24 36 48 60 72 84 96 107
0.1
-5.8
-11.7
-17.6
-23.5
Elevation (m)
Iteration = 8 RMS = 3.87% L2 = 1.63 Electrode Spacing = 4 m
Ohm-m
18927
1896
190
19.0
1.9
RDX9
0 12 24 36 48 60 72 84 96 108
0.1
-6.1
-12.3
-18.5
-24.8
Elevation (m)
Iteration = 8 RMS = 4.08% L2 = 1.66 Electrode Spacing = 4 m
Ohm-m
22440
1960
171
15.0
1.3
RDX10
0 12 24 36 48 60 72 84 96 108
2.3
-3.9
-10.2
-16.5
-22.7
Elevation (m)
Iteration = 8 RMS = 3.51% L2 = 1.32 Electrode Spacing = 4 m
Ohm-m
29740
2424
198
16.1
1.3
RDX11
0 12 24 36 48 60 72 84 96 108
0.1
-6.2
-12.4
-18.6
-24.9
Elevation (m)
Iteration = 8 RMS = 3.16% L2 = 1.09 Electrode Spacing = 4 m
Ohm-m
7152
1141
182
29.0
4.6

# APPENDIX E

# NMSLO Cultural Resources Cover Sheet

Stephanie Garcia Richard, Commissioner of Public Lands
State of New Mexico

# NMSLO Cultural Resources Cover Sheet Exhibit

**NMCRIS Activity Number:**
(if applicable)

**Exhibit Type** (select one)

**ARMS Inspection/Review** - Summarize the results (select one):

(A) The entire area of potential effect or project area has been previously surveyed to current standards and **no cultural properties** were found within the survey area.
(B) The entire area of potential effect or project area has been previously surveyed to current standards and **cultural properties were found** within the survey area.
(C) The entire area of potential effect or project area has **not** been previously surveyed or **has not been surveyed** to current standards. A complete archaeological survey will be conducted and submitted for review.

**Archaeological Survey**

**Findings:**

**Negative** - No further archaeological review is required.

**Positive** - Have avoidance and protection measures been devised? Select one:

**Comments:**

## Project Details:

NMSLO Lease Number (if available):

Cultural Resources Consultant:

Project Proponent (Applicant):

Project Title/Description:

**Project Location:**

County(ies):

PLSS/Section/Township/Range):

---

***For NMSLO Agency Use Only:***

NMSLO Lease Number: Acknowledgment-Only:

Lease Analyst:

Date Exhibit Routed to Cultural Resources Office:

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*No person may alter the wording of the questions or layout of the cover sheet. The completion of this cover sheet by itself does not authorize anyone to engage in new surface disturbing activity before the review and approvals required by the Cultural Properties Protections Rule.*

Form Revised 12 22

Stephanie Garcia Richard
COMMISSIONER

State of New Mexico
Commissioner of Public Lands
310 OLD SANTA FE TRAIL
P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

COMMISSIONER'S OFFICE
Phone (505) 827-5760
Fax (505) 827-5766
www.nmstatelands.org

# MEMORANDUM

**TO:** Etech Environmental and Safety Solutions

**FROM:** Megan Weldy, *Archaeologist/Conservationist*
*(505) 827-5742*
*mweldy@nmslo.gov*

**SUBJECT:** Etech on behalf of WPX Energy, Inc., a subsidiary of Devon
Remediation for: RDX 16 #003 Gathering Line Inadvertent Release
Section 16, T26S, R30E, N.M.P.M. Eddy County

**REFERENCE:** NMSLO Cultural Properties Protection Rule (19.2.24 NMAC)

**DATE:** 6/26/2025

Thank you for your submission relating to the Proponent's proposed remediation activities at the RDX 16 #003 Gathering Line Inadvertent Release. An archaeological survey of the entire area of potential effect has been completed and no cultural properties were identified. Pursuant to NMSLO 19.2.24.8 (C) NMAC, remediation may proceed.

If any cultural materials are inadvertently encountered during surface disturbance, work must cease within 50 feet and the NMSLO Cultural Resources Office must be notified immediately by emailing (CROinfo@nmslo.gov). Please reach out if you have questions or need additional clarification.

# APPENDIX F

## SSPS and Biological Survey Technical Memorandum Email Thread

## Erick Herrera

**From:** Courtney Blair <CBlair@swca.com>
**Sent:** Tuesday, June 10, 2025 3:54 PM
**To:** Erick Herrera
**Cc:** NM TX Geo Group
**Subject:** Re: SSPS and Biological Survey of RDX 16 #013 Inadvertent Release

HI Erick,

Il apologize for not getting back the next day. It was negative for both cultural resources, gen bio, and any Scheer's Cacti. The gen bio and SSPS tech memos should be ready by the 24th. The Cultural report will be ready COB today to submit. I will get you that information shortly.

**Courtney Blair**
*Associate Project Archaeologist*

**SWCA Environmental Consultants**
Cell: (617) 435-2083
cblair@swca.com

---

**From:** Erick Herrera <erick@etechenv.com>
**Sent:** Tuesday, June 10, 2025 12:13 PM
**To:** Courtney Blair <CBlair@swca.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** RE: SSPS and Biological Survey of RDX 16 #013 Inadvertent Release

Hi Courtney,

What were the results for both the biological and cultural surveys, was anything found around the Site?

Thanks,

**Erick Herrera**
Lead Project Geologist/GIS Manager
**Etech Environmental & Safety Solutions, Inc.**
W: (432) 305-6416
C: (281) 777-4152

**From:** Courtney Blair <CBlair@swca.com>
**Sent:** Tuesday, June 3, 2025 3:13 PM
**To:** Santos Rivera <santos@etechenv.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** SSPS and Biological Survey of RDX 16 #013 Inadvertent Release

Good afternoon Santos,

The natural resources team completed the survey of the Inadvertent Release Project at RDX 16 #013 Well Pad. Once I hear back from Lara, I can get you an idea of when the deliverables will be ready.

The CR report is just waiting on a map edit and then it will be ready to submit. There were no cultural findings.

**Courtney Blair**
*Associate Project Archaeologist*

**SWCA Environmental Consultants**
Cell: (617) 435-2083
cblair@swca.com

# APPENDIX G

# U.S. Fish & Wildlife Service Threatened and Endangered Species Report

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.



## Location

Eddy County, New Mexico

## Local office

New Mexico Ecological Services Field Office

(505) 346-2525
(505) 346-2542

2105 Osuna Road Ne

Albuquerque, NM 87113-1001

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., *placing a dam upstream of a fish population even if that fish does not occur at the dam site*, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Birds

| NAME | STATUS |
|---|---|
| Northern Aplomado Falcon Falco femoralis septentrionalis<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/1923 | EXPN |
| Piping Plover Charadrius melodus<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>https://ecos.fws.gov/ecp/species/6039 | Threatened |

## Insects

| NAME | STATUS |
|---|---|
| Monarch Butterfly Danaus plexippus<br>Wherever found<br>There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat.<br>https://ecos.fws.gov/ecp/species/9743 | Proposed Threatened |

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

# Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their nests, should follow appropriate

regulations and implement required avoidance and minimization measures, as described in the various links on this page.

The data in this location indicates that no eagles have been observed in this area. This does not mean eagles are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the Supplemental Information on Migratory Birds and Eagles document to determine if your project is in a poorly surveyed area. If it is, you may need to rely on other resources to determine if eagles may be present (e.g. your local FWS field office, state surveys, your own surveys).

---

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

## Bald & Golden Eagles FAQs

**What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?**

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

**Proper interpretation and use of your eagle report**

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

**How do I know if eagles are breeding, wintering, or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

**Interpreting the Probability of Presence Graphs**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

***How is the probability of presence score calculated? The calculation is done in three steps:***
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

**Breeding Season ()**
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

**Survey Effort ()**
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

**No Data ()**
A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

# Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (FWS).

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The data in this location indicates that no migratory birds of concern have been observed in this area. This does not mean birds of concern are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the Supplemental Information on Migratory Birds and Eagles document to determine if your project is in a poorly surveyed area. If it is, you may need to rely on other resources to determine what migratory birds of concern may be present (e.g. your local FWS field office, state surveys, your own surveys).

## Migratory Bird FAQs

**Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.**

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as “Vulnerable”. See the FAQ “What are the levels of concern for migratory birds?” for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your

project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

**Why are subspecies showing up on my list?**

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

**How do I know if a bird is breeding, wintering, or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

**What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

**Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

**Proper interpretation and use of your migratory bird report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

**Interpreting the Probability of Presence Graphs**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

***How is the probability of presence score calculated? The calculation is done in three steps:***

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

**Breeding Season ()**
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

**Survey Effort ()**
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

**No Data ()**
A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

# Facilities

## National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

## Fish hatcheries

There are no fish hatcheries at this location.

# Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

## Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

# APPENDIX H

## Soil Sampling Logs

| | | |
|---|---|---|
| eTECH | Sample Name: PH01 | Date: 08/27/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Hand Auger |
| Delineation Soil Sample Coordinates: 32.0380544, -103.8935457 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | CCHE | (0-2') PAD CAP CALICHE, dry, tan, well graded, very fine to coarse grain, some silt, some subangular gravel, stained, odor present. |
| Dry | 8,060 | 249 | Yes | PH01 | 0.5 | 0.5 | | |
| Dry | 228 | 0.9 | No | | | 1 | | @1'- no staining or odor. |
| Dry | <112 | 0.1 | No | PH01 | 2 | 2 | SP-SM | (2-4') SAND, dry, brown, poorly graded, very fine to fine grain, some silt, no staining or odor. |
| Dry | <112 | 0.0 | No | | | 3 | | |
| Dry | 228 | 0.0 | No | PH01 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH02 | Date: 08/27/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Hand Auger |
| Delineation Soil Sample Coordinates: 32.0380564, -103.8934257 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | CCHE | (0-2') PAD CAP CALICHE, dry, tan, well graded, very fine to coarse grain, some silt, some subangular gravel, stained, odor present. |
| Dry | 4,980 | 156 | Yes | PH02 | 0.5 | 0.5 | | |
| Dry | 1,524 | 1.5 | No | - | | 1 | | @1'- no staining with odor. |
| Dry | 1,056 | 0.0 | No | PH02 | 2 | 2 | SP-SM | (2-4') SAND, dry, brown, poorly graded, very fine to fine grain, some silt, no staining or odor. |
| Dry | 976 | 0.0 | No | | | 3 | | |
| Dry | 656 | 0.0 | No | PH02 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH03 | Date: 08/27/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Hand Auger |
| Delineation Soil Sample Coordinates: 32.0381028, -103.8934895 | Hole Diameter: n/a | Total Depth: 2 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | CCHE | (0-2') PAD CAP CALICHE, dry, tan, well graded, very fine to coarse grain, some silt, some subangular gravel, stained, odor present. |
| Dry | <112 | 301 | Yes | PH03 | 0.5 | 0.5 | | |
| Dry | <112 | 156 | No | PH03 | 1 | 1 | | @1'- no staining with odor. |
| | | | | | | | | (2') SAND, dry, brown, poorly graded, very fine to fine |
| Dry | <112 | 10 | No | PH03 | 2 | 2 | SP-SM | grain, some silt, no staining or odor. |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH04 | Date: 08/27/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Hand Auger |
| Delineation Soil Sample Coordinates: 32.0381323, -103.8935470 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | CCHE | (0-2') PAD CAP CALICHE, dry, tan, well graded, very fine to coarse grain, some silt, some subangular gravel, stained, odor present. |
| Dry | 836 | 95 | Yes | PH04 | 0.5 | 0.5 | | |
| Dry | 656 | 15.0 | No | PH04 | 1 | 1 | | @1'- no staining with odor. |
| Dry | <112 | 0.5 | No | PH04 | 2 | 2 | SP-SM | (2-4') SAND, dry, brown, poorly graded, very fine to fine grain, some silt, no staining or odor. |
| Dry | 260 | 0.1 | No | | | 3 | | |
| Dry | 548 | 0.0 | No | PH04 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH05 | Date: 08/27/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Hand Auger |
| Delineation Soil Sample Coordinates: 32.0381696, -103.8934145 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | CCHE | (0-2') PAD CAP CALICHE, dry, tan, well graded, very fine to coarse grain, some silt, some subangular gravel, stained, odor present. |
| Dry | 6,340 | 0.5 | Yes | PH05 | 0.5 | 0.5 | | |
| Dry | 656 | 0.6 | No | PH05 | 1 | 1 | | @1'- no staining with odor. |
| Dry | <112 | 0.0 | No | PH05 | 2 | 2 | SP-SM | (2-4') SAND, dry, brown, poorly graded, very fine to fine grain, some silt, no staining or odor. |
| Dry | 412 | 0.1 | No | | | 3 | | |
| Dry | 260 | 0.0 | No | PH05 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH06 | Date: 08/27/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Backhoe |
| Delineation Soil Sample Coordinates: 32.0382210, -103.8928620 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | CCHE | (0-2') PAD CAP CALICHE, dry, tan, well graded, very fine to coarse grain, some silt, some subangular gravel, no staining or odor. |
| Dry | <112 | 0.3 | No | PH06 | 0.5 | 0.5 | | |
| | | | | | | 1 | | |
| Dry | <112 | 0.0 | No | PH06 | 2 | 2 | SP-SM | (2-4') SAND, dry, brown, poorly graded, very fine to fine grain, some silt, no staining or odor. |
| Dry | <112 | 0.0 | No | | | 3 | | |
| Dry | <112 | 0.0 | No | PH06 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH07 | Date: 08/27/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Backhoe |
| Delineation Soil Sample Coordinates: 32.0382374, -103.8932600 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | SP-SM | (0-4') SAND, dry, light brown, poorly graded with silt, very fine to fine grain, trace organic, no staining or odor. |
| Dry | <112 | 0.1 | No | PH07 | 0.5 | 0.5 | | |
| Dry | <112 | 0.0 | No | PH07 | 1 | 1 | | |
| Dry | <112 | 0.0 | No | PH07 | 2 | 2 | | @2'- no more trace organic. |
| Dry | <112 | 0.0 | No | PH07 | 3 | 3 | | |
| Dry | <112 | 0.0 | No | PH07 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH08 | Date: 08/27/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Backhoe |
| Delineation Soil Sample Coordinates: 32.0383358, -103.8932495 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | SP-SM | (0-4') SAND, dry, light brown, poorly graded with silt, very fine to fine grain, trace organic, no staining or odor. |
| Dry | <112 | 0.0 | No | PH08 | 0.5 | 0.5 | | |
| Dry | <112 | 0.0 | No | PH08 | 1 | 1 | | |
| Dry | <112 | 0.0 | No | PH08 | 2 | 2 | | @2'- no more trace organic. |
| Dry | <112 | 0.0 | No | PH08 | 3 | 3 | | |
| Dry | <112 | 0.0 | No | PH08 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH09 | Date: 08/28/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Backhoe |
| Delineation Soil Sample Coordinates: 32.0384018, -103.8930997 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | SP-SM | (0-4') SAND, dry, light brown, poorly graded with silt, very fine to fine grain, trace organic, no staining or odor. |
| Dry | <112 | 0.0 | No | PH09 | 0.5 | 0.5 | | |
| Dry | <112 | 0.0 | No | PH09 | 1 | 1 | | @1.5'- no more trace organic. |
| Dry | <112 | 0.0 | No | PH09 | 2 | 2 | | |
| Dry | <112 | 0.0 | No | PH09 | 3 | 3 | | |
| Dry | <112 | 0.0 | No | PH09 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH10 | Date: 08/28/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Backhoe |
| Delineation Soil Sample Coordinates: 32.038433, -103.893317 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | SP-SM | (0-4') SAND, dry, light brown, poorly graded with silt, very fine to fine grain, trace organic, no staining or odor. |
| Dry | <112 | 0.0 | No | PH10 | 0.5 | 0.5 | | |
| Dry | <112 | 0.0 | No | PH10 | 1 | 1 | | @1.5'- no more trace organic. |
| Dry | <112 | 0.0 | No | PH10 | 2 | 2 | | |
| Dry | <112 | 0.0 | No | PH10 | 3 | 3 | | |
| Dry | <112 | 0.0 | No | PH10 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH11 | Date: 08/28/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Backhoe |
| Delineation Soil Sample Coordinates: 32.038091, -103.893612 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | SP-SM | (0-4') SAND, dry, light brown, poorly graded with silt, very fine to fine grain, trace organic, no staining or odor. |
| Dry | <112 | 0.0 | No | PH11 | 0.5 | 0.5 | | |
| Dry | <112 | 0.0 | No | PH11 | 1 | 1 | | @1.5'- no more trace organic. |
| Dry | <112 | 0.0 | No | PH11 | 2 | 2 | | |
| Dry | <112 | 0.0 | No | PH11 | 3 | 3 | | |
| Dry | <112 | 0.0 | No | PH11 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH12 | Date: 08/28/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Backhoe |
| Delineation Soil Sample Coordinates: 32.038236, -103.892468 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | SP-SM | (0-4') SAND, dry, light brown, poorly graded with silt, very fine to fine grain, trace organic, no staining or odor. |
| Dry | <112 | 0.0 | No | PH12 | 0.5 | 0.5 | | |
| Dry | <112 | 0.0 | No | PH12 | 1 | 1 | | @1.5'- no more trace organic. |
| Dry | <112 | 0.0 | No | PH12 | 2 | 2 | | |
| Dry | <112 | 0.0 | No | PH12 | 3 | 3 | | |
| Dry | <112 | 0.0 | No | PH12 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH13 | Date: 08/28/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Backhoe |
| Delineation Soil Sample Coordinates: 32.038093, -103.893347 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | SP-SM | (0-4') SAND, dry, light brown, poorly graded with silt, very fine to fine grain, no staining or odor. |
| Dry | <112 | 0.0 | No | PH13 | 0.5 | 0.5 | | |
| Dry | <112 | 0.0 | No | PH13 | 1 | 1 | | |
| Dry | <112 | 0.0 | No | PH13 | 2 | 2 | | |
| Dry | <112 | 0.0 | No | PH13 | 3 | 3 | | |
| Dry | <112 | 0.0 | No | PH13 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH14 | Date: 08/28/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Backhoe |
| Delineation Soil Sample Coordinates: 32.038214, -103.893157 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | SP-SM | (0-4') SAND, dry, light brown, poorly graded with silt, very fine to fine grain, no staining or odor. |
| Dry | <112 | 0.0 | No | PH14 | 0.5 | 0.5 | | |
| Dry | <112 | 0.0 | No | PH14 | 1 | 1 | | |
| Dry | <112 | 0.0 | No | PH14 | 2 | 2 | | |
| Dry | <112 | 0.0 | No | PH14 | 3 | 3 | | |
| Dry | <112 | 0.0 | No | PH14 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH15 | Date: 08/28/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Backhoe |
| Delineation Soil Sample Coordinates: 32.038445, -103.892978 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | SP-SM | (0-4') SAND, dry, light brown, poorly graded with silt, very fine to fine grain, no staining or odor. |
| Dry | <112 | 0.0 | No | PH15 | 0.5 | 0.5 | | |
| Dry | <112 | 0.0 | No | PH15 | 1 | 1 | | |
| Dry | <112 | 0.0 | No | PH15 | 2 | 2 | | |
| Dry | <112 | 0.0 | No | PH15 | 3 | 3 | | |
| Dry | <112 | 0.0 | No | PH15 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH16 | Date: 08/28/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Backhoe |
| Delineation Soil Sample Coordinates: 32.038539, -103.893259 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | SP-SM | (0-4') SAND, dry, light brown, poorly graded with silt, very fine to fine grain, no staining or odor. |
| Dry | <112 | 0.0 | No | PH16 | 0.5 | 0.5 | | |
| Dry | <112 | 0.0 | No | PH16 | 1 | 1 | | |
| Dry | <112 | 0.0 | No | PH16 | 2 | 2 | | |
| Dry | <112 | 0.0 | No | PH16 | 3 | 3 | | |
| Dry | <112 | 0.0 | No | PH16 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH17 | Date: 08/28/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Backhoe |
| Delineation Soil Sample Coordinates: 32.038434, -103.893445 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | SP-SM | (0-4') SAND, dry, light brown, poorly graded with silt, very fine to fine grain, trace organic, no staining or odor. |
| Dry | <112 | 0.0 | No | PH17 | 0.5 | 0.5 | | |
| Dry | <112 | 0.0 | No | PH17 | 1 | 1 | | @1.5'- no more trace organic. |
| Dry | <112 | 0.0 | No | PH17 | 2 | 2 | | |
| Dry | <112 | 0.0 | No | PH17 | 3 | 3 | | |
| Dry | <112 | 0.0 | No | PH17 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH18 | Date: 08/28/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Backhoe |
| Delineation Soil Sample Coordinates: 32.038294, -103.893507 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | CCHE | (0-2') PAD CAP CALICHE, dry, tan, well graded, very fine to coarse grain, some silt, some subangular gravel, no staining or odor. |
| Dry | <112 | 0.0 | No | PH18 | 0.5 | 0.5 | | |
| Dry | <112 | 0.0 | No | PH18 | 1 | 1 | | |
| Dry | <112 | 0.0 | No | PH18 | 2 | 2 | SP-SM | (2-4') SAND, dry, brown, poorly graded with silt, very fine to fine grain, no staining or odor. |
| Dry | <112 | 0.0 | No | PH18 | 3 | 3 | | |
| Dry | <112 | 0.0 | No | PH18 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| eTECH | Sample Name: PH19 | Date: 08/28/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Hand Auger |
| Delineation Soil Sample Coordinates: 32.038182, -103.893484 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | CCHE | (0-2') PAD CAP CALICHE, dry, tan, well graded, very fine to coarse grain, some silt, some subangular gravel, no staining or odor. |
| Dry | 976 | 0.0 | No | PH19 | 0.5 | 0.5 | | |
| Dry | 656 | 0.0 | No | PH19 | 1 | 1 | | |
| Dry | 200 | 0.0 | No | PH19 | 2 | 2 | SP-SM | (2-4') SAND, dry, brown, poorly graded with silt, very fine to fine grain, no staining or odor. |
| Dry | 228 | 0.0 | No | PH19 | 3 | 3 | | |
| Dry | 156 | 0.0 | No | PH19 | 4 | 4 | | |
| | | | | | | Total Depth | | |

| | | |
|---|---|---|
| | Sample Name: PH20 | Date: 08/28/2025 |
| | Site Name: RDX 16-13 | |
| | Incident Number: nAPP2510448511 | |
| | Job Number: 22193 | |
| **LITHOLOGIC / SOIL SAMPLING LOG** | Logged By: EK | Method: Hand Auger |
| Delineation Soil Sample Coordinates: 32.038232, -103.893494 | 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.

| Moisture Content | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (feet bgs) | Depth (feet bgs) | USCS/Rock Symbol | Lithologic Descriptions/Notes |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 0 | CCHE | (0-2') PAD CAP CALICHE, dry, tan, well graded, very fine to coarse grain, some silt, some subangular gravel, no staining or odor. |
| Dry | 836 | 0.0 | No | PH20 | 0.5 | 0.5 | | |
| Dry | 548 | 0.0 | No | PH20 | 1 | 1 | | |
| Dry | 260 | 0.0 | No | PH20 | 2 | 2 | SP-SM | (2-4') SAND, dry, brown, poorly graded with silt, very fine to fine grain, no staining or odor. |
| Dry | 112 | 0.0 | No | PH20 | 3 | 3 | | |
| Dry | 112 | 0.0 | No | PH20 | 4 | 4 | | |
| | | | | | | Total Depth | | |

# APPENDIX I

## Photographic Log

**PHOTOGRAPHIC LOG**
**Devon Production Company, LP**
RDX 16 #013
Incident Number: nAPP2510448511


**Photograph 1** **Date: 08/27/2025**
Description: Northwestern view of delineation activities.


**Photograph 2** **Date: 08/27/2025**
Description: Southwestern view of delineation activities.


**Photograph 3** **Date: 08/28/2025**
Description: Northwestern view of delineation activities.


**Photograph 4** **Date: 08/28/2025**
Description: Northeastern view of delineation activities.

# APPENDIX J

# Tables

**Table 1**
**SOIL SAMPLE ANALYTICAL RESULTS**
**WPX Energy Permian, LLC**
**RDX 16 #013**
**Eddy County, NM**

| 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) | DRO+GRO (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 | **1,000** | **2,500** | **20,000** |
| **Delineation Soil Samples - nAPP2510448511** | | | | | | | | | | |
| PH01 | 08/27/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | 598 | 368 | 598 | 966 | 8,140 |
| PH01 | 08/27/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 55.4 |
| PH01 | 08/27/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 56.4 |
| PH02 | 08/27/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | 1,050 | 815 | **1,050** | 1,865 | 6,050 |
| PH02 | 08/27/25 | 2 | <0.0250 | <0.0500 | <20.0 | 62.4 | 90.2 | 62.4 | 153 | 2,060 |
| PH02 | 08/27/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 887 |
| PH03 | 08/27/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | 2,670 | 2,670 | **2,670** | **5,340** | 54.3 |
| PH03 | 08/27/25 | 1 | <0.0250 | <0.0500 | <20.0 | 2,870 | 2,780 | **2,870** | **5,650** | 50.6 |
| PH03 | 08/27/25 | 2 | <0.0250 | <0.0500 | <20.0 | 32.6 | <50.0 | <25.0 | 32.6 | 45.0 |
| PH04 | 08/27/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | 700 | 644 | 700 | 1,344 | 953 |
| PH04 | 08/27/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 819 |
| PH04 | 08/27/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 105 |
| PH04 | 08/27/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 559 |
| PH05 | 08/27/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 6,260 |
| PH05 | 08/27/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 928 |
| PH05 | 08/27/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 164 |
| PH05 | 08/27/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 293 |
| PH06 | 08/27/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH06 | 08/27/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH06 | 08/27/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH07* | 08/27/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH07* | 08/27/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH07* | 08/27/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH07* | 08/27/25 | 3 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH07 | 08/27/25 | 4 | <0.0250 | <0.0500 | <20.0 | 48.1 | <50.0 | 48.1 | 48.1 | <20.0 |
| PH08* | 08/27/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | 48.7 | <50.0 | 48.7 | 48.7 | <20.0 |
| PH08* | 08/27/25 | 1 | <0.0250 | <0.0500 | <20.0 | 42.9 | <50.0 | 42.9 | 42.9 | <20.0 |
| PH08* | 08/27/25 | 2 | <0.0250 | <0.0500 | <20.0 | 40.6 | <50.0 | 40.6 | 40.6 | <20.0 |

**Table 1**
**SOIL SAMPLE ANALYTICAL RESULTS**
**WPX Energy Permian, LLC**
**RDX 16 #013**
**Eddy County, NM**

| 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) | DRO+GRO (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 | **1,000** | **2,500** | **20,000** |
| PH08* | 08/27/25 | 3 | <0.0250 | <0.0500 | <20.0 | 128 | 145 | 128 | **273** | <20.0 |
| PH08 | 08/27/25 | 4 | <0.0250 | <0.0500 | <20.0 | 57.7 | 70.7 | 57.7 | 129 | <20.0 |
| PH09* | 08/28/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 107 |
| PH09* | 08/28/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 86.4 |
| PH09* | 08/28/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 90.8 |
| PH09* | 08/28/25 | 3 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH09 | 08/28/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 27.9 |
| PH10* | 08/28/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 26.0 |
| PH10* | 08/28/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 31.5 |
| PH10* | 08/28/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 30.5 |
| PH10* | 08/28/25 | 3 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <100 |
| PH10 | 08/28/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <100 |
| PH11 | 08/28/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 126 |
| PH11 | 08/28/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 284 |
| PH11 | 08/28/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 176 |
| PH11 | 08/28/25 | 3 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 175 |
| PH11 | 08/28/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 163 |
| PH12 | 08/28/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 97.4 |
| PH12 | 08/28/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 35.5 |
| PH12 | 08/28/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 35.6 |
| PH12 | 08/28/25 | 3 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <100 |
| PH12 | 08/28/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <100 |
| PH13* | 08/28/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <100 |
| PH13* | 08/28/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <100 |
| PH13* | 08/28/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 82.2 |
| PH13* | 08/28/25 | 3 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <100 |
| PH13 | 08/28/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <100 |
| PH14* | 08/28/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 76.8 |
| PH14* | 08/28/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 99.5 |
| PH14* | 08/28/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 115 |

**Table 1**
**SOIL SAMPLE ANALYTICAL RESULTS**
**WPX Energy Permian, LLC**
**RDX 16 #013**
**Eddy County, NM**

| 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) | DRO+GRO (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 | **1,000** | **2,500** | **20,000** |
| PH14* | 08/28/25 | 3 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 102 |
| PH14 | 08/28/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 105 |
| PH15* | 08/28/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 106 |
| PH15* | 08/28/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 161 |
| PH15* | 08/28/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 40.6 |
| PH15* | 08/28/25 | 3 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 31.1 |
| PH15 | 08/28/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 32.9 |
| PH16* | 08/28/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 38.6 |
| PH16* | 08/28/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 34.0 |
| PH16* | 08/28/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 39.2 |
| PH16* | 08/28/25 | 3 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 31.7 |
| PH16 | 08/28/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH17* | 08/28/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH17* | 08/28/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH17* | 08/28/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 64.3 |
| PH17* | 08/28/25 | 3 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH17 | 08/28/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH18 | 08/28/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | <20.0 |
| PH18 | 08/28/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 127 |
| PH18 | 08/28/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 173 |
| PH18 | 08/28/25 | 3 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 152 |
| PH18 | 08/28/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 165 |
| PH19 | 08/28/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 1,590 |
| PH19 | 08/28/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 463 |
| PH19 | 08/28/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 465 |
| PH19 | 08/28/25 | 3 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 281 |
| PH19 | 08/28/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 172 |
| PH20 | 08/28/25 | 0.5 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 1,870 |
| PH20 | 08/28/25 | 1 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 513 |
| PH20 | 08/28/25 | 2 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 229 |

**Table 1**
**SOIL SAMPLE ANALYTICAL RESULTS**
**WPX Energy Permian, LLC**
**RDX 16 #013**
**Eddy County, NM**

| 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) | DRO+GRO (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 | **1,000** | **2,500** | **20,000** |
| PH20 | 08/28/25 | 3 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 141 |
| PH20 | 08/28/25 | 4 | <0.0250 | <0.0500 | <20.0 | <25.0 | <50.0 | <25.0 | <50.0 | 102 |

*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*
*Text in "grey" represents excavated soil samples*
*Concentrations in **bold** exceed the NMOCD Table I Closure Criteria and/or Reclamation Standard† for Soils Impacted by a Release*
*" + "Soil sample was collected in the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13, if exceeding the reclamation concentration requirements of 600 mg/kg chloride and 100 mg/kg TPH.*

# APPENDIX K

# Laboratory Analytical Reports & Chain-of-Custody Documentation

P.O. Box 62228 Midland • TX • 79711 • Tel: 432-563-2200 • Fax: 432-563-2213

Report to:

Anna Byers

5796 U.S. Hwy 64
Farmington, NM 87401

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

# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 16 #013

Work Order: E509001

Job Number: 01058-0007

Received: 9/2/2025

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
9/8/25

Date Reported: 9/8/25

Anna Byers
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: RDX 16 #013
Workorder: E509001
Date Received: 9/2/2025 8:00:53AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/2/2025 8:00:53AM, under the Project Name: RDX 16 #013.

The analytical test results summarized in this report with the Project Name: RDX 16 #013 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 reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

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

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

Respectfully,

**Walter Hinchman**
Laboratory Director
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Cell: 775-287-1762
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# Table of Contents (continued)

# Sample Summary

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 09/08/25 12:28 |

| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
|---|---|---|---|---|---|
| PH01 0.5' | E509001-01A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH01 2' | E509001-02A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH01 4' | E509001-03A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH02 0.5' | E509001-04A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH02 2' | E509001-05A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH02 4' | E509001-06A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH03 0.5' | E509001-07A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH03 1' | E509001-08A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH03 2' | E509001-09A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH04 0.5' | E509001-10A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH04 1' | E509001-11A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH04 2' | E509001-12A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH04 4' | E509001-13A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH05 0.5' | E509001-14A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH05 1' | E509001-15A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH05 2' | E509001-16A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH05 4' | E509001-17A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH06 0.5' | E509001-18A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH06 2' | E509001-19A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH06 4' | E509001-20A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH07 0.5' | E509001-21A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH07 1' | E509001-22A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH07 2' | E509001-23A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH07 3' | E509001-24A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH07 4' | E509001-25A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH08 0.5' | E509001-26A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH08 1' | E509001-27A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH08 2' | E509001-28A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH08 3' | E509001-29A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH08 4' | E509001-30A | Soil | 08/27/25 | 09/02/25 | Glass Jar, 2 oz. |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH01 0.5'**

**E509001-01**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *97.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *106 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | **598** | 50.0 | 2 | 09/02/25 | 09/05/25 | |
| Oil Range Organics (C28-C36) | **368** | 100 | 2 | 09/02/25 | 09/05/25 | |
| *Surrogate: n-Nonane* | | *108 %* | *61-141* | *09/02/25* | *09/05/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **8140** | 100 | 5 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH01 2'**

**E509001-02**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *97.9 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *108 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/05/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/05/25 | |
| *Surrogate: n-Nonane* | | *91.5 %* | *61-141* | *09/02/25* | *09/05/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **55.4** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH01 4'**

**E509001-03**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *99.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *106 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/05/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/05/25 | |
| *Surrogate: n-Nonane* | | *88.5 %* | *61-141* | *09/02/25* | *09/05/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **56.4** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH02 0.5'**

**E509001-04**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *96.9 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *107 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | **1050** | 25.0 | 1 | 09/02/25 | 09/02/25 | |
| Oil Range Organics (C28-C36) | **815** | 50.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: n-Nonane* | | *109 %* | *61-141* | *09/02/25* | *09/02/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **6050** | 40.0 | 2 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH02 2'**

**E509001-05**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *97.9 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *108 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | **62.4** | 25.0 | 1 | 09/02/25 | 09/02/25 | |
| Oil Range Organics (C28-C36) | **90.2** | 50.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: n-Nonane* | | *93.1 %* | *61-141* | *09/02/25* | *09/02/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **2060** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH02 4'**

**E509001-06**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/02/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *100 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *105 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/02/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: n-Nonane* | | *97.9 %* | *61-141* | *09/02/25* | *09/02/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **887** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH03 0.5'**

**E509001-07**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *96.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *109 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | **2670** | 500 | 20 | 09/02/25 | 09/02/25 | |
| Oil Range Organics (C28-C36) | **2670** | 1000 | 20 | 09/02/25 | 09/02/25 | |
| *Surrogate: n-Nonane* | | *109 %* | *61-141* | *09/02/25* | *09/02/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **54.3** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH03 1'**

**E509001-08**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *96.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *106 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | **2870** | 500 | 20 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | **2780** | 1000 | 20 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *121 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **50.6** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH03 2'**

**E509001-09**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *95.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *107 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | **32.6** | 25.0 | 1 | 09/02/25 | 09/05/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/05/25 | |
| *Surrogate: n-Nonane* | | *99.0 %* | *61-141* | *09/02/25* | *09/05/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **45.0** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH04 0.5'**

**E509001-10**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *96.9 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *106 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | **700** | 50.0 | 2 | 09/02/25 | 09/05/25 | |
| Oil Range Organics (C28-C36) | **644** | 100 | 2 | 09/02/25 | 09/05/25 | |
| *Surrogate: n-Nonane* | | *115 %* | *61-141* | *09/02/25* | *09/05/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **953** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH04 1'**

**E509001-11**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *94.6 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *109 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *99.7 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **819** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH04 2'**

**E509001-12**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *95.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *110 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *102 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **105** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH04 4'**

**E509001-13**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *97.2 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *106 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *103 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **559** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH05 0.5'**

**E509001-14**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *98.6 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *106 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *106 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **6260** | 40.0 | 2 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH05 1'**

**E509001-15**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *96.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *108 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *96.0 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **928** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH05 2'**

**E509001-16**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *95.2 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *108 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *97.9 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **164** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH05 4'**

**E509001-17**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *98.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *109 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *100 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | **293** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH06 0.5'**

**E509001-18**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *98.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *105 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *96.3 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH06 2'**

**E509001-19**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *101 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *108 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *94.6 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH06 4'**

**E509001-20**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *98.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536013 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *104 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536018 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *98.7 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536016 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH07 0.5'**

**E509001-21**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *84.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *93.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KH | | | Batch: 2536017 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *101 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536012 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH07 1'**

**E509001-22**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *85.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *93.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KH | | | Batch: 2536017 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *94.7 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536012 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH07 2'**

**E509001-23**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *85.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *92.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KH | | | Batch: 2536017 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *102 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536012 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH07 3'**

**E509001-24**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *86.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *93.2 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KH | | | Batch: 2536017 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *106 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536012 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH07 4'**

**E509001-25**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *86.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KH | | | Batch: 2536017 |
| Diesel Range Organics (C10-C28) | **48.1** | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *106 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536012 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH08 0.5'**

**E509001-26**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *84.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *92.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KH | | | Batch: 2536017 |
| Diesel Range Organics (C10-C28) | **48.7** | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *102 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536012 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

## PH08 1'

**E509001-27**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *81.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *91.7 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KH | | | Batch: 2536017 |
| Diesel Range Organics (C10-C28) | **42.9** | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *104 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536012 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH08 2'**

**E509001-28**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *81.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *90.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KH | | | Batch: 2536017 |
| Diesel Range Organics (C10-C28) | **40.6** | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *104 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536012 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH08 3'**

**E509001-29**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *81.7 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *91.7 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KH | | | Batch: 2536017 |
| Diesel Range Organics (C10-C28) | **128** | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | **145** | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *106 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536012 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

**PH08 4'**

**E509001-30**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *83.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: SL | | | Batch: 2536005 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *92.6 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: KH | | | Batch: 2536017 |
| Diesel Range Organics (C10-C28) | **57.7** | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | **70.7** | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *104 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536012 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

## Volatile Organics by EPA 8021B

Analyst: SL

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536005-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| 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* | *6.84* | | *8.00* | | *85.5* | *70-130* | | | |
| **LCS (2536005-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Benzene | 4.50 | 0.0250 | 5.00 | | 89.9 | 70-130 | | | |
| Ethylbenzene | 4.37 | 0.0250 | 5.00 | | 87.5 | 70-130 | | | |
| Toluene | 4.48 | 0.0250 | 5.00 | | 89.6 | 70-130 | | | |
| o-Xylene | 4.47 | 0.0250 | 5.00 | | 89.4 | 70-130 | | | |
| p,m-Xylene | 8.87 | 0.0500 | 10.0 | | 88.7 | 70-130 | | | |
| Total Xylenes | 13.3 | 0.0250 | 15.0 | | 88.9 | 70-130 | | | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *6.76* | | *8.00* | | *84.4* | *70-130* | | | |
| **Matrix Spike (2536005-MS1)** | | | | **Source: E508334-03** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Benzene | 5.25 | 0.0250 | 5.00 | ND | 105 | 70-130 | | | |
| Ethylbenzene | 5.16 | 0.0250 | 5.00 | ND | 103 | 70-130 | | | |
| Toluene | 5.25 | 0.0250 | 5.00 | ND | 105 | 70-130 | | | |
| o-Xylene | 5.12 | 0.0250 | 5.00 | ND | 102 | 70-130 | | | |
| p,m-Xylene | 10.4 | 0.0500 | 10.0 | ND | 104 | 70-130 | | | |
| Total Xylenes | 15.5 | 0.0250 | 15.0 | ND | 103 | 70-130 | | | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *6.76* | | *8.00* | | *84.5* | *70-130* | | | |
| **Matrix Spike Dup (2536005-MSD1)** | | | | **Source: E508334-03** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Benzene | 5.23 | 0.0250 | 5.00 | ND | 105 | 70-130 | 0.341 | 27 | |
| Ethylbenzene | 5.14 | 0.0250 | 5.00 | ND | 103 | 70-130 | 0.230 | 26 | |
| Toluene | 5.23 | 0.0250 | 5.00 | ND | 105 | 70-130 | 0.369 | 20 | |
| o-Xylene | 5.10 | 0.0250 | 5.00 | ND | 102 | 70-130 | 0.295 | 25 | |
| p,m-Xylene | 10.4 | 0.0500 | 10.0 | ND | 104 | 70-130 | 0.313 | 23 | |
| Total Xylenes | 15.5 | 0.0250 | 15.0 | ND | 103 | 70-130 | 0.307 | 26 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *6.82* | | *8.00* | | *85.2* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

## Volatile Organics by EPA 8021B

Analyst: SL

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536013-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| 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* | *7.96* | | *8.00* | | *99.5* | *70-130* | | | |
| **LCS (2536013-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Benzene | 4.73 | 0.0250 | 5.00 | | 94.7 | 70-130 | | | |
| Ethylbenzene | 4.74 | 0.0250 | 5.00 | | 94.7 | 70-130 | | | |
| Toluene | 4.77 | 0.0250 | 5.00 | | 95.3 | 70-130 | | | |
| o-Xylene | 4.79 | 0.0250 | 5.00 | | 95.8 | 70-130 | | | |
| p,m-Xylene | 9.61 | 0.0500 | 10.0 | | 96.1 | 70-130 | | | |
| Total Xylenes | 14.4 | 0.0250 | 15.0 | | 96.0 | 70-130 | | | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *7.90* | | *8.00* | | *98.8* | *70-130* | | | |
| **Matrix Spike (2536013-MS1)** | | | | **Source: E509001-06** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Benzene | 4.88 | 0.0250 | 5.00 | ND | 97.6 | 70-130 | | | |
| Ethylbenzene | 4.90 | 0.0250 | 5.00 | ND | 97.9 | 70-130 | | | |
| Toluene | 4.92 | 0.0250 | 5.00 | ND | 98.4 | 70-130 | | | |
| o-Xylene | 4.92 | 0.0250 | 5.00 | ND | 98.5 | 70-130 | | | |
| p,m-Xylene | 9.93 | 0.0500 | 10.0 | ND | 99.3 | 70-130 | | | |
| Total Xylenes | 14.9 | 0.0250 | 15.0 | ND | 99.0 | 70-130 | | | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *7.91* | | *8.00* | | *98.8* | *70-130* | | | |
| **Matrix Spike Dup (2536013-MSD1)** | | | | **Source: E509001-06** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Benzene | 4.55 | 0.0250 | 5.00 | ND | 91.0 | 70-130 | 7.08 | 27 | |
| Ethylbenzene | 4.56 | 0.0250 | 5.00 | ND | 91.1 | 70-130 | 7.17 | 26 | |
| Toluene | 4.58 | 0.0250 | 5.00 | ND | 91.6 | 70-130 | 7.08 | 20 | |
| o-Xylene | 4.63 | 0.0250 | 5.00 | ND | 92.5 | 70-130 | 6.23 | 25 | |
| p,m-Xylene | 9.26 | 0.0500 | 10.0 | ND | 92.6 | 70-130 | 6.97 | 23 | |
| Total Xylenes | 13.9 | 0.0250 | 15.0 | ND | 92.6 | 70-130 | 6.73 | 26 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *7.78* | | *8.00* | | *97.3* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536005-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.43* | | *8.00* | | *92.9* | *70-130* | | | |
| **LCS (2536005-BS2)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Gasoline Range Organics (C6-C10) | 46.6 | 20.0 | 50.0 | | 93.2 | 70-130 | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.50* | | *8.00* | | *93.8* | *70-130* | | | |
| **Matrix Spike (2536005-MS2)** | | | | **Source: E508334-03** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Gasoline Range Organics (C6-C10) | 50.6 | 20.0 | 50.0 | ND | 101 | 70-130 | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.47* | | *8.00* | | *93.4* | *70-130* | | | |
| **Matrix Spike Dup (2536005-MSD2)** | | | | **Source: E508334-03** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Gasoline Range Organics (C6-C10) | 53.9 | 20.0 | 50.0 | ND | 108 | 70-130 | 6.37 | 20 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.54* | | *8.00* | | *94.3* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536013-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *8.18* | | *8.00* | | *102* | *70-130* | | | |
| **LCS (2536013-BS2)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Gasoline Range Organics (C6-C10) | 50.4 | 20.0 | 50.0 | | 101 | 70-130 | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *8.53* | | *8.00* | | *107* | *70-130* | | | |
| **Matrix Spike (2536013-MS2)** | | | | **Source: E509001-06** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Gasoline Range Organics (C6-C10) | 54.9 | 20.0 | 50.0 | ND | 110 | 70-130 | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *8.49* | | *8.00* | | *106* | *70-130* | | | |
| **Matrix Spike Dup (2536013-MSD2)** | | | | **Source: E509001-06** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Gasoline Range Organics (C6-C10) | 56.7 | 20.0 | 50.0 | ND | 113 | 70-130 | 3.33 | 20 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *8.49* | | *8.00* | | *106* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

## Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KH

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536017-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| *Surrogate: n-Nonane* | *51.6* | | *50.0* | | *103* | *61-141* | | | |
| **LCS (2536017-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Diesel Range Organics (C10-C28) | 283 | 25.0 | 250 | | 113 | 66-144 | | | |
| *Surrogate: n-Nonane* | *49.6* | | *50.0* | | *99.2* | *61-141* | | | |
| **Matrix Spike (2536017-MS1)** | | | | **Source: E508335-23** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Diesel Range Organics (C10-C28) | 308 | 25.0 | 250 | ND | 123 | 56-156 | | | |
| *Surrogate: n-Nonane* | *54.5* | | *50.0* | | *109* | *61-141* | | | |
| **Matrix Spike Dup (2536017-MSD1)** | | | | **Source: E508335-23** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Diesel Range Organics (C10-C28) | 303 | 25.0 | 250 | ND | 121 | 56-156 | 1.67 | 20 | |
| *Surrogate: n-Nonane* | *52.3* | | *50.0* | | *105* | *61-141* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

## Nonhalogenated Organics by EPA 8015D - DRO/ORO

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 (2536018-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| *Surrogate: n-Nonane* | *55.3* | | *50.0* | | *111* | *61-141* | | | |
| **LCS (2536018-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Diesel Range Organics (C10-C28) | 251 | 25.0 | 250 | | 100 | 66-144 | | | |
| *Surrogate: n-Nonane* | *47.2* | | *50.0* | | *94.4* | *61-141* | | | |
| **Matrix Spike (2536018-MS1)** | | | | **Source: E509001-04** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Diesel Range Organics (C10-C28) | 2060 | 25.0 | 250 | 1050 | 403 | 56-156 | | | M3 |
| *Surrogate: n-Nonane* | *58.7* | | *50.0* | | *117* | *61-141* | | | |
| **Matrix Spike Dup (2536018-MSD1)** | | | | **Source: E509001-04** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Diesel Range Organics (C10-C28) | 1500 | 25.0 | 250 | 1050 | 182 | 56-156 | 31.1 | 20 | M3, R3 |
| *Surrogate: n-Nonane* | *59.0* | | *50.0* | | *118* | *61-141* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

## Anions by EPA 300.0/9056A

Analyst: IY

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536012-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | ND | 20.0 | | | | | | | |
| **LCS (2536012-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | 251 | 20.0 | 250 | | 100 | 90-110 | | | |
| **Matrix Spike (2536012-MS1)** | | | | **Source: E508335-24** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | 1080 | 200 | 250 | 980 | 40.2 | 80-120 | | | M4 |
| **Matrix Spike Dup (2536012-MSD1)** | | | | **Source: E508335-24** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | 1270 | 200 | 250 | 980 | 117 | 80-120 | 16.4 | 20 | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 12:28:40PM |

## Anions by EPA 300.0/9056A

Analyst: TP

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536016-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | ND | 20.0 | | | | | | | |
| **LCS (2536016-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | 255 | 20.0 | 250 | | 102 | 90-110 | | | |
| **Matrix Spike (2536016-MS1)** | | | | **Source: E509001-05** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | 2290 | 20.0 | 250 | 2060 | 91.9 | 80-120 | | | |
| **Matrix Spike Dup (2536016-MSD1)** | | | | **Source: E509001-05** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | 2120 | 20.0 | 250 | 2060 | 23.2 | 80-120 | 7.81 | 20 | M4 |

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

# Definitions and Notes

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 09/08/25 12:28 |

| | |
|---|---|
| M3 | Matrix spike recovery was outside quality control limits due to matrix interference. The associated LCS spike recovery was acceptable. |
| M4 | Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable. |
| R3 | The RPD exceeded the acceptance limit. LCS spike recovery met acceptance criteria. |
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| RPD | Relative Percent Difference |
| DNI | Did Not Ignite |
| DNR | Did not react with the addition of acid or base. |

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

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

envirotech
Analytical Laboratory

# Chain of Custody



| Client Information | Invoice Information | Lab Use Only | TAT | State |
|---|---|---|---|---|
| Client: WPX Energy Permian, LLC. | Company:Devon Energy Production Co LP | Lab WO# E 509001 / Job Number 01058-0007 | 1D 2D 3D Std: x | NM x, CO, UT, TX |
| Project: RDX 16 #013 | Address: 5315 Buena Vista Dr. | | | |
| Project Manager: Anna Byers | City, State, Zip: Carlsbad, NM, 88220 | | | |
| Address: 13000 W County Rd 100 | Phone: 575-885-7502 | | | |
| City, State, Zip_Odessa,TX, 79765 | Email: jim.raley@dvn.com | | | |
| Phone: 432-305-6415 | Miscellaneous: PN:22193 IN: NAPP2510448511 | | | |
| Email: NMTXGeoGroup@etechenv.com | WO: 21560572 | | | |

**Sample Information** — **Analysis and Method** — **EPA Program**

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Depth | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Chloride 300.0 | TCEQ 1005 - TX | RCRA 8 Metals | | BGDOC - NM | BGDOC - TX | | Sample Temp | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11:00 | 8/27/2025 | S | 1 | PH01 | 0.5' | 1 | | | | | | | | | X | | | 5.3 | |
| 11:05 | 8/27/2025 | S | 1 | PH01 | 2' | 2 | | | | | | | | | X | | | 5.1 | |
| 11:10 | 8/27/2025 | S | 1 | PH01 | 4' | 3 | | | | | | | | | X | | | 4.3 | |
| 11:15 | 8/27/2025 | S | 1 | PH02 | 0.5' | 4 | | | | | | | | | X | | | 5.9 | |
| 11:20 | 8/27/2025 | S | 1 | PH02 | 2' | 5 | | | | | | | | | X | | | 4.3 | |
| 11:25 | 8/27/2025 | S | 1 | PH02 | 4' | 6 | | | | | | | | | X | | | 5.1 | |
| 11:30 | 8/27/2025 | S | 1 | PH03 | 0.5' | 7 | | | | | | | | | X | | | 4.8 | |
| 11:35 | 8/27/2025 | S | 1 | PH03 | 1' | 8 | | | | | | | | | X | | | 5.9 | |
| 11:40 | 8/27/2025 | S | 1 | PH03 | 2' | 9 | | | | | | | | | X | | | 4.7 | |
| 11:45 | 8/27/2025 | S | 1 | PH04 | 0.5' | | | | | | | | | | X | | | | |

SDWA | CWA | RCRA
Compliance Y or N
PWSID #

**Additional Instructions:**

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

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| ~~Kyf~~ | 08/29/25 | 16:00 | Marissa Gonzales | 8-29-25 | 1600 |
| Marissa Gonzales | 8-30-25 | 1230 | Andrew Musso | 8.30.25 | 1230 |
| Andrew Musso | 8.30.25 | 1915 | Caitlin Mars | 9.2.25 | 800 |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |

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

Lab Use Only
Received on ice: Y / N

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 14 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

# Chain of Custody



| Client Information | Invoice Information | Lab Use Only | TAT | State |
|---|---|---|---|---|
| Client: WPX Energy Permian, LLC. | Company:Devon Energy Production Co LP | Lab WO# E509001 / Job Number 01058-0007 | 1D 2D 3D Std: x | NM: x; CO UT TX |
| Project: RDX 16 #013 | Address: 5315 Buena Vista Dr. | | | |
| Project Manager: Anna Byers | City, State, Zip: Carlsbad, NM, 88220 | | | |
| Address: 13000 W County Rd 100 | Phone: 575-885-7502 | | | |
| City, State, Zip_Odessa,TX, 79765 | Email: jim.raley@dvn.com | | | |
| Phone: 432-305-6415 | Miscellaneous: PN:22193 IN: NAPP2510448511 | | | |
| Email: NMTXGeoGroup@etechenv.com | WO: 21560572 | | | |

**Sample Information**

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Depth | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Chloride 300.0 | TCEQ 1005 - TX | RCRA 8 Metals | BGDOC - NM | BGDOC - TX | Sample Temp | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11:00 | 8/27/2025 | S | 1 | PH04 | 0.5' | 10 | | | | | | | | X | | 4.2 | |
| 11:05 | 8/27/2025 | S | 1 | PH04 | 1' | 11 | | | | | | | | X | | 4.7 | |
| 11:10 | 8/27/2025 | S | 1 | PH04 | 2' | 12 | | | | | | | | X | | 5.0 | |
| 11:15 | 8/27/2025 | S | 1 | PH04 | 4' | 13 | | | | | | | | X | | 5.5 | |
| 11:20 | 8/27/2025 | S | 1 | PH05 | 0.5' | 14 | | | | | | | | X | | 5.9 | |
| 11:25 | 8/27/2025 | S | 1 | PH05 | 1' | 15 | | | | | | | | X | | 5.5 | |
| 11:30 | 8/27/2025 | S | 1 | PH05 | 2' | 16 | | | | | | | | X | | 5.5 | |
| 11:35 | 8/27/2025 | S | 1 | PH05 | 4' | 17 | | | | | | | | X | | 5.9 | |
| 11:40 | 8/27/2025 | S | 1 | PH06 | 0.5' | 18 | | | | | | | | X | | 5.8 | |
| 11:45 | 8/27/2025 | S | 1 | PH06 | 2' | 19 | | | | | | | | X | | 5.3 | |

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance Y or N

PWSID #

**Additional Instructions:**

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

Sampled by: Edyte Konan

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| ~~Edyte Konan~~ | 08/29/25 | 16:00 | Marissa Gonzales | 8-29-25 | 1600 |
| Marissa Gonzales | 8-30-25 | 1230 | Andrew Musso | 8.30.25 | 1230 |
| Andrew Musso | 8.30.25 | 1915 | Caitlin Mair | 9.2.25 | 800 |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |

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

Lab Use Only
Received on ice: (Y) N

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 14 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

# Chain of Custody



| Client Information | Invoice Information | Lab Use Only | TAT | | | | State | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Client: WPX Energy Permian, LLC. | Company:Devon Energy Production Co LP | Lab WO# E509001 | Job Number 03058-0057 | 1D | 2D | 3D | Std | NM | CO | UT | TX | |
| Project: RDX 16 #013 | Address: 5315 Buena Vista Dr. | | | | | | x | x | | | | |
| Project Manager: Anna Byers | City, State, Zip: Carlsbad, NM, 88220 | | | | | | | | | | | |
| Address: 13000 W County Rd 100 | Phone: 575-885-7502 | | | | | | | | | | | |
| City, State, Zip_Odessa,TX, 79765 | Email: jim.raley@dvn.com | | | | | | | | | | | |
| Phone: 432-305-6415 | Miscellaneous: PN:22193 IN: NAPP2510448511 | | | | | | | | | | | |
| Email: NMTXGeoGroup@etechenv.com | WO: 21560572 | | | | | | | | | | | |

**Sample Information**

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Depth | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Chloride 300.0 | TCEQ 1005 - TX | RCRA 8 Metals | | BGDOC - NM | BGDOC - TX | | Sample Temp | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11:00 | 8/27/2025 | S | 1 | PH06 | 4' | 20 | | | | | | | | | X | | | 5.6 | |
| 11:05 | 8/27/2025 | S | 1 | PH07 | 0.5' | 21 | | | | | | | | | X | | | 4.4 | |
| 11:10 | 8/27/2025 | S | 1 | PH07 | 1' | 22 | | | | | | | | | X | | | 5.5 | |
| 11:15 | 8/27/2025 | S | 1 | PH07 | 2' | 23 | | | | | | | | | X | | | 5.8 | |
| 11:20 | 8/27/2025 | S | 1 | PH07 | 3' | 24 | | | | | | | | | X | | | 5.9 | |
| 11:25 | 8/27/2025 | S | 1 | PH07 | 4' | 25 | | | | | | | | | X | | | 4.7 | |
| 11:30 | 8/27/2025 | S | 1 | PH08 | 0.5' | 26 | | | | | | | | | X | | | 4.8 | |
| 11:35 | 8/27/2025 | S | 1 | PH08 | 1' | 27 | | | | | | | | | X | | | 5.2 | |
| 11:40 | 8/27/2025 | S | 1 | PH08 | 2' | 28 | | | | | | | | | X | | | 5.3 | |
| 11:45 | 8/27/2025 | S | 1 | PH08 | 3' | 29 | | | | | | | | | X | | | 4.5 | |

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance Y or N

PWSID #

**Additional Instructions:**

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

Sampled by: Edyte Konan

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| [illegible] | 08/29/25 | 16:00 | Marissa Gonzales | 8-29-25 | 1600 |
| Marissa Gonzales | 8.30.25 | 1230 | Andrew Musso | 8.30.25 | 1230 |
| Andrew Musso | 8.30.25 | 1915 | Caitlin Mars | 8.31.25 | 800 |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |

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

Lab Use Only

Received on ice: (Y) / N

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 14 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

# Chain of Custody



| Client Information | Invoice Information | Lab Use Only | TAT | State |
|---|---|---|---|---|
| Client: WPX Energy Permian, LLC. | Company:Devon Energy Production Co LP | Lab WO# E509001 | 1D 2D 3D Std | NM CO UT TX |
| Project: RDX 16 #013 | Address: 5315 Buena Vista Dr. | Job Number 01958-0007 | x | x |
| Project Manager: Anna Byers | City, State, Zip: Carlsbad, NM, 88220 | | | |
| Address: 13000 W County Rd 100 | Phone: 575-885-7502 | | | |
| City, State, Zip_Odessa,TX, 79765 | Email: jim.raley@dvn.com | | | |
| Phone: 432-305-6415 | Miscellaneous: PN:22193 IN: NAPP2510448511 | | | |
| Email: NMTXGeoGroup@etechenv.com | WO: 21560572 | | | |

**Sample Information**

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Depth | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Chloride 300.0 | TCEQ 1005 - TX | RCRA 8 Metals | | BGDOC - NM | BGDOC - TX | | Sample Temp | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11:00 | 8/27/2025 | S | 1 | PH08 | 4' | 30 | | | | | | | | | X | | | 5.8 | |

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance Y or N

PWSID #

08/29/2025

**Additional Instructions:**

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

Sampled by: Edyte Konan

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| [signature] | 08/29/25 | 16:00 | Marissa Gonzales | 8-29-25 | 1600 |
| Marissa Gonzales | 8-30-25 | 1230 | Andrew Musso | 8.30.25 | 1230 |
| Andrew Musso | 8.30.25 | 1915 | Caitlin Main | 9.2.25 | 800 |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |

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

Lab Use Only

Received on ice: (Y) / N

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 14 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: 9/2/2025 9:36:57AM

## 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: | 09/02/25 08:00 | Work Order ID: | E509001 |
| Phone: | (575) 200-6754 | Date Logged In: | 09/02/25 08:45 | Logged In By: | Caitlin Mars |
| Email: | anna@etechenv.com | Due Date: | 09/08/25 07:00 (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 | Carrier: Courier |
| 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? | Yes | |
| 5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion. | Yes | |

**Comments/Resolution**

**Sample 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? Note: Thermal preservation is not required, if samples are received within 15 minutes of sampling | Yes |
| 13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments. | |

**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:

Anna Byers

5796 U.S. Hwy 64
Farmington, NM 87401

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

# envirotech

***Practical Solutions for a Better Tomorrow***

## Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 16 #013

Work Order: E509002

Job Number: 01058-0007

Received: 9/2/2025

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
9/8/25

Date Reported: 9/8/25

Anna Byers
5315 Buena Vista Dr
Carlsbad, NM 88220

Project Name: RDX 16 #013
Workorder: E509002
Date Received: 9/2/2025 8:00:53AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/2/2025 8:00:53AM, under the Project Name: RDX 16 #013.

The analytical test results summarized in this report with the Project Name: RDX 16 #013 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 reguarding 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

**Raina Schwanz**
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Field Offices:

**Southern New Mexico Area**

**Lynn Jarboe**
Laboratory Technical Representative
Office: 505-421-LABS(5227)
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ljarboe@envirotech-inc.com

**Michelle Gonzales**
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

# Table of Contents

# Table of Contents (continued)

# Table of Contents (continued)

# Sample Summary

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 09/08/25 16:41 |

| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
|---|---|---|---|---|---|
| PH09 0.5' | E509002-01A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH09 1' | E509002-02A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH09 2' | E509002-03A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH09 3' | E509002-04A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH09 4' | E509002-05A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH10 0.5' | E509002-06A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH10 1' | E509002-07A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH10 2' | E509002-08A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH10 3' | E509002-09A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH10 4' | E509002-10A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH11 0.5' | E509002-11A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH11 1' | E509002-12A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH11 2' | E509002-13A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH11 3' | E509002-14A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH11 4' | E509002-15A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH12 0.5' | E509002-16A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH12 1' | E509002-17A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH12 2' | E509002-18A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH12 3' | E509002-19A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH12 4' | E509002-20A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH13 0.5' | E509002-21A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH13 1' | E509002-22A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH13 2' | E509002-23A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH13 3' | E509002-24A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH13 4' | E509002-25A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH14 0.5' | E509002-26A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH14 1' | E509002-27A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH14 2' | E509002-28A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH14 3' | E509002-29A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH14 4' | E509002-30A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH15 0.5' | E509002-31A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH15 1' | E509002-32A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH15 2' | E509002-33A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH15 3' | E509002-34A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH15 4' | E509002-35A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH16 0.5' | E509002-36A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH16 1' | E509002-37A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH16 2' | E509002-38A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH16 3' | E509002-39A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH16 4' | E509002-40A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |

# Sample Summary

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 09/08/25 16:41 |

| Client Sample ID | Lab Sample ID | Matrix | Sampled | Received | Container |
|---|---|---|---|---|---|
| PH17 0.5' | E509002-41A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH17 1' | E509002-42A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH17 2' | E509002-43A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH17 3' | E509002-44A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH17 4' | E509002-45A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH18 0.5' | E509002-46A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH18 1' | E509002-47A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH18 2' | E509002-48A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH18 3' | E509002-49A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH18 4' | E509002-50A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH19 0.5' | E509002-51A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH19 1' | E509002-52A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH19 2' | E509002-53A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH19 3' | E509002-54A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH19 4' | E509002-55A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH20 0.5' | E509002-56A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH20 1' | E509002-57A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH20 2' | E509002-58A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH20 3' | E509002-59A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |
| PH20 4' | E509002-60A | Soil | 08/28/25 | 09/02/25 | Glass Jar, 2 oz. |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH09 0.5'

**E509002-01**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/02/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *94.7 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *86.8 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *95.9 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **107** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH09 1'

**E509002-02**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/02/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *96.5 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *92.8 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *101 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **86.4** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH09 2'**

**E509002-03**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/02/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *96.1 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *87.0 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *99.6 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **90.8** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH09 3'**

**E509002-04**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/02/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.8 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *90.5 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *106 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH09 4'**

**E509002-05**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/02/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *94.5 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *88.8 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *98.9 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **27.9** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH10 0.5'**

**E509002-06**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/02/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.9 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *87.3 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *103 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **26.0** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH10 1'**

**E509002-07**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/02/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.7 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *89.5 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *103 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **31.5** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH10 2'**

**E509002-08**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/02/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.6 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *93.5 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *106 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **30.5** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH10 3'**

**E509002-09**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/02/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *95.8 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *92.4 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *99.8 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | ND | 100 | 5 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH10 4'**

**E509002-10**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/02/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *91.6 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *91.6 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *106 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | ND | 100 | 5 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH11 0.5'**

**E509002-11**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *91.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *111 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **126** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH11 1'**

**E509002-12**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *92.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *106 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **284** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH11 2'**

**E509002-13**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *90.7 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *92.7 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *99.1 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **176** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH11 3'**

**E509002-14**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *91.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *96.6 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **175** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH11 4'**

**E509002-15**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *91.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *92.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *101 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **163** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH12 0.5'**

**E509002-16**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *90.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *91.9 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *101 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **97.4** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH12 1'**

**E509002-17**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *94.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *91.9 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *101 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **35.5** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH12 2'**

**E509002-18**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *91.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *98.1 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | **35.6** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH12 3'**

**E509002-19**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.6 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *91.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *115 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | ND | 100 | 5 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH12 4'**

**E509002-20**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536014 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *90.9 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536019 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *103 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: TP | | | Batch: 2536022 |
| Chloride | ND | 100 | 5 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH13 0.5'**

**E509002-21**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/02/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: n-Nonane* | | *103 %* | *61-141* | *09/02/25* | *09/02/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | ND | 100 | 5 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH13 1'

**E509002-22**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *93.9 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/02/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: n-Nonane* | | *99.3 %* | *61-141* | *09/02/25* | *09/02/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | ND | 100 | 5 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH13 2'**

**E509002-23**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/02/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: n-Nonane* | | *101 %* | *61-141* | *09/02/25* | *09/02/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **82.2** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH13 3'**

**E509002-24**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *91.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/02/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: n-Nonane* | | *100 %* | *61-141* | *09/02/25* | *09/02/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | ND | 100 | 5 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH13 4'**

**E509002-25**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/02/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.9 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *95.3 %* | *70-130* | *09/02/25* | *09/02/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/02/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: n-Nonane* | | *101 %* | *61-141* | *09/02/25* | *09/02/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | ND | 100 | 5 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH14 0.5'**

**E509002-26**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *91.9 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.2 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/02/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: n-Nonane* | | *95.8 %* | *61-141* | *09/02/25* | *09/02/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **76.8** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH14 1'

**E509002-27**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *90.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/02/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/02/25 | |
| *Surrogate: n-Nonane* | | *94.9 %* | *61-141* | *09/02/25* | *09/02/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **99.5** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH14 2'**

**E509002-28**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *91.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *97.2 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **115** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH14 3'**

**E509002-29**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *96.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *97.7 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **102** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH14 4'**

**E509002-30**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *91.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *95.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *98.2 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **105** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH15 0.5'**

**E509002-31**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.9 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *100 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **106** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH15 1'

**E509002-32**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *91.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *102 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **161** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH15 2'

**E509002-33**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *95.2 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **40.6** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH15 3'**

**E509002-34**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *91.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.7 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *92.4 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **31.1** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH15 4'**

**E509002-35**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.2 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.6 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *100 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **32.9** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH16 0.5'**

**E509002-36**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.2 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *99.1 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **38.6** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH16 1'

**E509002-37**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *94.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *92.9 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **34.0** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH16 2'

**E509002-38**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *94.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *97.6 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **39.2** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH16 3'

**E509002-39**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *94.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *94.6 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | **31.7** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH16 4'

**E509002-40**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *94.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536015 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *96.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536020 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *99.8 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536026 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH17 0.5'**

**E509002-41**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *90.2 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *90.9 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *94.6 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH17 1'

**E509002-42**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *92.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *95.0 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH17 2'**

**E509002-43**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *88.6 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *94.8 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **64.3** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH17 3'**

**E509002-44**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *91.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *95.8 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH17 4'**

**E509002-45**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *94.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *90.7 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *96.1 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH18 0.5'**

**E509002-46**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *86.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *95.3 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | ND | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH18 1'

**E509002-47**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *91.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *89.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/03/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: n-Nonane* | | *92.3 %* | *61-141* | *09/02/25* | *09/03/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **127** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH18 2'

**E509002-48**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.7 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *89.2 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *92.5 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **173** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH18 3'**

**E509002-49**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *90.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *93.9 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **152** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH18 4'**

**E509002-50**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.6 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *90.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *100 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **165** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH19 0.5'**

**E509002-51**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *89.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *94.0 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **1590** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH19 1'

**E509002-52**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *88.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *95.4 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **463** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH19 2'**

**E509002-53**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *94.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *92.1 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *97.8 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **465** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH19 3'**

**E509002-54**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *89.0 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *95.0 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **281** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH19 4'**

**E509002-55**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *94.2 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *88.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *94.2 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **172** | 20.0 | 1 | 09/02/25 | 09/02/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## PH20 0.5'

**E509002-56**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *94.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *90.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *94.9 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **1870** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH20 1'**

**E509002-57**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *93.8 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *88.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *93.9 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **513** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH20 2'**

**E509002-58**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *94.2 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *91.9 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *96.6 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **229** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH20 3'**

**E509002-59**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *92.3 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *90.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *96.5 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **141** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# Sample Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

**PH20 4'**

**E509002-60**

| Analyte | Result | Reporting Limit | Dilution | Prepared | Analyzed | Notes |
|---|---|---|---|---|---|---|
| **Volatile Organics by EPA 8021B** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Benzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Ethylbenzene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| Toluene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| o-Xylene | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| p,m-Xylene | ND | 0.0500 | 1 | 09/02/25 | 09/03/25 | |
| Total Xylenes | ND | 0.0250 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | | *95.5 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - GRO** | mg/kg | mg/kg | Analyst: BA | | | Batch: 2536023 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | 1 | 09/02/25 | 09/03/25 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | | *89.4 %* | *70-130* | *09/02/25* | *09/03/25* | |
| **Nonhalogenated Organics by EPA 8015D - DRO/ORO** | mg/kg | mg/kg | Analyst: RAS | | | Batch: 2536021 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | 1 | 09/02/25 | 09/04/25 | |
| Oil Range Organics (C28-C36) | ND | 50.0 | 1 | 09/02/25 | 09/04/25 | |
| *Surrogate: n-Nonane* | | *96.1 %* | *61-141* | *09/02/25* | *09/04/25* | |
| **Anions by EPA 300.0/9056A** | mg/kg | mg/kg | Analyst: IY | | | Batch: 2536027 |
| Chloride | **102** | 20.0 | 1 | 09/02/25 | 09/03/25 | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## Volatile Organics by EPA 8021B

Analyst: BA

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536014-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| 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* | *7.33* | | *8.00* | | *91.7* | *70-130* | | | |
| **LCS (2536014-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Benzene | 5.01 | 0.0250 | 5.00 | | 100 | 70-130 | | | |
| Ethylbenzene | 4.92 | 0.0250 | 5.00 | | 98.3 | 70-130 | | | |
| Toluene | 4.99 | 0.0250 | 5.00 | | 99.9 | 70-130 | | | |
| o-Xylene | 4.98 | 0.0250 | 5.00 | | 99.5 | 70-130 | | | |
| p,m-Xylene | 9.94 | 0.0500 | 10.0 | | 99.4 | 70-130 | | | |
| Total Xylenes | 14.9 | 0.0250 | 15.0 | | 99.4 | 70-130 | | | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *7.63* | | *8.00* | | *95.4* | *70-130* | | | |
| **Matrix Spike (2536014-MS1)** | | | | **Source: E509002-07** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Benzene | 4.94 | 0.0250 | 5.00 | ND | 98.8 | 70-130 | | | |
| Ethylbenzene | 4.86 | 0.0250 | 5.00 | ND | 97.1 | 70-130 | | | |
| Toluene | 4.95 | 0.0250 | 5.00 | ND | 98.9 | 70-130 | | | |
| o-Xylene | 4.93 | 0.0250 | 5.00 | ND | 98.6 | 70-130 | | | |
| p,m-Xylene | 9.79 | 0.0500 | 10.0 | ND | 97.9 | 70-130 | | | |
| Total Xylenes | 14.7 | 0.0250 | 15.0 | ND | 98.1 | 70-130 | | | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *7.63* | | *8.00* | | *95.4* | *70-130* | | | |
| **Matrix Spike Dup (2536014-MSD1)** | | | | **Source: E509002-07** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Benzene | 4.84 | 0.0250 | 5.00 | ND | 96.8 | 70-130 | 2.06 | 27 | |
| Ethylbenzene | 4.76 | 0.0250 | 5.00 | ND | 95.3 | 70-130 | 1.91 | 26 | |
| Toluene | 4.84 | 0.0250 | 5.00 | ND | 96.8 | 70-130 | 2.15 | 20 | |
| o-Xylene | 4.82 | 0.0250 | 5.00 | ND | 96.4 | 70-130 | 2.27 | 25 | |
| p,m-Xylene | 9.63 | 0.0500 | 10.0 | ND | 96.3 | 70-130 | 1.66 | 23 | |
| Total Xylenes | 14.4 | 0.0250 | 15.0 | ND | 96.3 | 70-130 | 1.87 | 26 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *7.31* | | *8.00* | | *91.4* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## Volatile Organics by EPA 8021B

Analyst: BA

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536015-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| 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* | *7.55* | | *8.00* | | *94.3* | *70-130* | | | |
| **LCS (2536015-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Benzene | 5.56 | 0.0250 | 5.00 | | 111 | 70-130 | | | |
| Ethylbenzene | 5.47 | 0.0250 | 5.00 | | 109 | 70-130 | | | |
| Toluene | 5.57 | 0.0250 | 5.00 | | 111 | 70-130 | | | |
| o-Xylene | 5.37 | 0.0250 | 5.00 | | 107 | 70-130 | | | |
| p,m-Xylene | 11.0 | 0.0500 | 10.0 | | 110 | 70-130 | | | |
| Total Xylenes | 16.3 | 0.0250 | 15.0 | | 109 | 70-130 | | | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *7.49* | | *8.00* | | *93.6* | *70-130* | | | |
| **Matrix Spike (2536015-MS1)** | | | | **Source: E509002-25** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Benzene | 5.58 | 0.0250 | 5.00 | ND | 112 | 70-130 | | | |
| Ethylbenzene | 5.50 | 0.0250 | 5.00 | ND | 110 | 70-130 | | | |
| Toluene | 5.59 | 0.0250 | 5.00 | ND | 112 | 70-130 | | | |
| o-Xylene | 5.38 | 0.0250 | 5.00 | ND | 108 | 70-130 | | | |
| p,m-Xylene | 11.0 | 0.0500 | 10.0 | ND | 110 | 70-130 | | | |
| Total Xylenes | 16.4 | 0.0250 | 15.0 | ND | 110 | 70-130 | | | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *7.38* | | *8.00* | | *92.2* | *70-130* | | | |
| **Matrix Spike Dup (2536015-MSD1)** | | | | **Source: E509002-25** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Benzene | 5.41 | 0.0250 | 5.00 | ND | 108 | 70-130 | 3.17 | 27 | |
| Ethylbenzene | 5.33 | 0.0250 | 5.00 | ND | 107 | 70-130 | 3.10 | 26 | |
| Toluene | 5.42 | 0.0250 | 5.00 | ND | 108 | 70-130 | 3.06 | 20 | |
| o-Xylene | 5.23 | 0.0250 | 5.00 | ND | 105 | 70-130 | 2.85 | 25 | |
| p,m-Xylene | 10.7 | 0.0500 | 10.0 | ND | 107 | 70-130 | 3.07 | 23 | |
| Total Xylenes | 15.9 | 0.0250 | 15.0 | ND | 106 | 70-130 | 3.00 | 26 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *7.40* | | *8.00* | | *92.5* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## Volatile Organics by EPA 8021B

Analyst: BA

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536023-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| 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* | *7.59* | | *8.00* | | *94.9* | *70-130* | | | |
| **LCS (2536023-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Benzene | 4.70 | 0.0250 | 5.00 | | 94.0 | 70-130 | | | |
| Ethylbenzene | 4.62 | 0.0250 | 5.00 | | 92.3 | 70-130 | | | |
| Toluene | 4.70 | 0.0250 | 5.00 | | 93.9 | 70-130 | | | |
| o-Xylene | 4.69 | 0.0250 | 5.00 | | 93.7 | 70-130 | | | |
| p,m-Xylene | 9.31 | 0.0500 | 10.0 | | 93.1 | 70-130 | | | |
| Total Xylenes | 14.0 | 0.0250 | 15.0 | | 93.3 | 70-130 | | | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *7.51* | | *8.00* | | *93.9* | *70-130* | | | |
| **Matrix Spike (2536023-MS1)** | | | | **Source: E509002-42** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Benzene | 4.96 | 0.0250 | 5.00 | ND | 99.2 | 70-130 | | | |
| Ethylbenzene | 4.87 | 0.0250 | 5.00 | ND | 97.4 | 70-130 | | | |
| Toluene | 4.97 | 0.0250 | 5.00 | ND | 99.4 | 70-130 | | | |
| o-Xylene | 4.95 | 0.0250 | 5.00 | ND | 98.9 | 70-130 | | | |
| p,m-Xylene | 9.82 | 0.0500 | 10.0 | ND | 98.2 | 70-130 | | | |
| Total Xylenes | 14.8 | 0.0250 | 15.0 | ND | 98.5 | 70-130 | | | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *7.31* | | *8.00* | | *91.4* | *70-130* | | | |
| **Matrix Spike Dup (2536023-MSD1)** | | | | **Source: E509002-42** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Benzene | 4.91 | 0.0250 | 5.00 | ND | 98.1 | 70-130 | 1.13 | 27 | |
| Ethylbenzene | 4.82 | 0.0250 | 5.00 | ND | 96.4 | 70-130 | 0.963 | 26 | |
| Toluene | 4.92 | 0.0250 | 5.00 | ND | 98.5 | 70-130 | 0.922 | 20 | |
| o-Xylene | 4.90 | 0.0250 | 5.00 | ND | 98.0 | 70-130 | 0.934 | 25 | |
| p,m-Xylene | 9.71 | 0.0500 | 10.0 | ND | 97.1 | 70-130 | 1.13 | 23 | |
| Total Xylenes | 14.6 | 0.0250 | 15.0 | ND | 97.4 | 70-130 | 1.06 | 26 | |
| *Surrogate: 4-Bromochlorobenzene-PID* | *7.40* | | *8.00* | | *92.5* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536014-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.28* | | *8.00* | | *91.0* | *70-130* | | | |
| **LCS (2536014-BS2)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Gasoline Range Organics (C6-C10) | 55.7 | 20.0 | 50.0 | | 111 | 70-130 | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.59* | | *8.00* | | *94.8* | *70-130* | | | |
| **Matrix Spike (2536014-MS2)** | | | | **Source: E509002-07** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Gasoline Range Organics (C6-C10) | 57.9 | 20.0 | 50.0 | ND | 116 | 70-130 | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.45* | | *8.00* | | *93.1* | *70-130* | | | |
| **Matrix Spike Dup (2536014-MSD2)** | | | | **Source: E509002-07** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Gasoline Range Organics (C6-C10) | 58.4 | 20.0 | 50.0 | ND | 117 | 70-130 | 0.794 | 20 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.43* | | *8.00* | | *92.9* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536015-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.59* | | *8.00* | | *94.9* | *70-130* | | | |
| **LCS (2536015-BS2)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Gasoline Range Organics (C6-C10) | 54.1 | 20.0 | 50.0 | | 108 | 70-130 | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.62* | | *8.00* | | *95.3* | *70-130* | | | |
| **Matrix Spike (2536015-MS2)** | | | | **Source: E509002-25** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Gasoline Range Organics (C6-C10) | 53.4 | 20.0 | 50.0 | ND | 107 | 70-130 | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.64* | | *8.00* | | *95.5* | *70-130* | | | |
| **Matrix Spike Dup (2536015-MSD2)** | | | | **Source: E509002-25** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Gasoline Range Organics (C6-C10) | 53.3 | 20.0 | 50.0 | ND | 107 | 70-130 | 0.296 | 20 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.70* | | *8.00* | | *96.2* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536023-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Gasoline Range Organics (C6-C10) | ND | 20.0 | | | | | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.22* | | *8.00* | | *90.2* | *70-130* | | | |
| **LCS (2536023-BS2)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Gasoline Range Organics (C6-C10) | 51.9 | 20.0 | 50.0 | | 104 | 70-130 | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.31* | | *8.00* | | *91.4* | *70-130* | | | |
| **Matrix Spike (2536023-MS2)** | | | | **Source: E509002-42** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Gasoline Range Organics (C6-C10) | 57.1 | 20.0 | 50.0 | ND | 114 | 70-130 | | | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.27* | | *8.00* | | *90.9* | *70-130* | | | |
| **Matrix Spike Dup (2536023-MSD2)** | | | | **Source: E509002-42** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Gasoline Range Organics (C6-C10) | 54.5 | 20.0 | 50.0 | ND | 109 | 70-130 | 4.77 | 20 | |
| *Surrogate: 1-Chloro-4-fluorobenzene-FID* | *7.48* | | *8.00* | | *93.5* | *70-130* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## Nonhalogenated Organics by EPA 8015D - DRO/ORO

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 (2536019-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| *Surrogate: n-Nonane* | *51.6* | | *50.0* | | *103* | *61-141* | | | |
| **LCS (2536019-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Diesel Range Organics (C10-C28) | 291 | 25.0 | 250 | | 116 | 66-144 | | | |
| *Surrogate: n-Nonane* | *50.5* | | *50.0* | | *101* | *61-141* | | | |
| **Matrix Spike (2536019-MS1)** | | | | **Source: E509002-05** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Diesel Range Organics (C10-C28) | 289 | 25.0 | 250 | ND | 116 | 56-156 | | | |
| *Surrogate: n-Nonane* | *51.0* | | *50.0* | | *102* | *61-141* | | | |
| **Matrix Spike Dup (2536019-MSD1)** | | | | **Source: E509002-05** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Diesel Range Organics (C10-C28) | 283 | 25.0 | 250 | ND | 113 | 56-156 | 2.26 | 20 | |
| *Surrogate: n-Nonane* | *50.5* | | *50.0* | | *101* | *61-141* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## Nonhalogenated Organics by EPA 8015D - DRO/ORO

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 (2536020-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| *Surrogate: n-Nonane* | *48.1* | | *50.0* | | *96.3* | *61-141* | | | |
| **LCS (2536020-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Diesel Range Organics (C10-C28) | 249 | 25.0 | 250 | | 99.6 | 66-144 | | | |
| *Surrogate: n-Nonane* | *46.6* | | *50.0* | | *93.2* | *61-141* | | | |
| **Matrix Spike (2536020-MS1)** | | | | **Source: E509002-26** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Diesel Range Organics (C10-C28) | 255 | 25.0 | 250 | ND | 102 | 56-156 | | | |
| *Surrogate: n-Nonane* | *46.9* | | *50.0* | | *93.8* | *61-141* | | | |
| **Matrix Spike Dup (2536020-MSD1)** | | | | **Source: E509002-26** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Diesel Range Organics (C10-C28) | 256 | 25.0 | 250 | ND | 102 | 56-156 | 0.208 | 20 | |
| *Surrogate: n-Nonane* | *47.4* | | *50.0* | | *94.8* | *61-141* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## Nonhalogenated Organics by EPA 8015D - DRO/ORO

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 (2536021-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Diesel Range Organics (C10-C28) | ND | 25.0 | | | | | | | |
| Oil Range Organics (C28-C36) | ND | 50.0 | | | | | | | |
| *Surrogate: n-Nonane* | *49.4* | | *50.0* | | *98.8* | *61-141* | | | |
| **LCS (2536021-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Diesel Range Organics (C10-C28) | 241 | 25.0 | 250 | | 96.5 | 66-144 | | | |
| *Surrogate: n-Nonane* | *45.9* | | *50.0* | | *91.7* | *61-141* | | | |
| **Matrix Spike (2536021-MS1)** | | | | **Source: E509002-47** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Diesel Range Organics (C10-C28) | 245 | 25.0 | 250 | ND | 98.0 | 56-156 | | | |
| *Surrogate: n-Nonane* | *46.6* | | *50.0* | | *93.3* | *61-141* | | | |
| **Matrix Spike Dup (2536021-MSD1)** | | | | **Source: E509002-47** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Diesel Range Organics (C10-C28) | 236 | 25.0 | 250 | ND | 94.4 | 56-156 | 3.72 | 20 | |
| *Surrogate: n-Nonane* | *46.0* | | *50.0* | | *92.0* | *61-141* | | | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## Anions by EPA 300.0/9056A

Analyst: TP

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536022-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | ND | 20.0 | | | | | | | |
| **LCS (2536022-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | 255 | 20.0 | 250 | | 102 | 90-110 | | | |
| **Matrix Spike (2536022-MS1)** | | | | **Source: E509002-02** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | 349 | 20.0 | 250 | 86.4 | 105 | 80-120 | | | |
| **Matrix Spike Dup (2536022-MSD1)** | | | | **Source: E509002-02** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | 347 | 20.0 | 250 | 86.4 | 104 | 80-120 | 0.552 | 20 | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## Anions by EPA 300.0/9056A

Analyst: IY

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536026-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Chloride | ND | 20.0 | | | | | | | |
| **LCS (2536026-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Chloride | 250 | 20.0 | 250 | | 99.9 | 90-110 | | | |
| **Matrix Spike (2536026-MS1)** | | | | **Source: E509002-25** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Chloride | 258 | 100 | 250 | ND | 103 | 80-120 | | | |
| **Matrix Spike Dup (2536026-MSD1)** | | | | **Source: E509002-25** | | | | | Prepared: 09/02/25 Analyzed: 09/03/25 |
| Chloride | 260 | 100 | 250 | ND | 104 | 80-120 | 0.454 | 20 | |

# QC Summary Data

| | | | |
|---|---|---|---|
| WPX Energy - Carlsbad | Project Name: | RDX 16 #013 | **Reported:** |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 9/8/2025 4:41:59PM |

## Anions by EPA 300.0/9056A

Analyst: IY

| Analyte | Result | Reporting Limit | Spike Level | Source Result | Rec | Rec Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|
| | mg/kg | mg/kg | mg/kg | mg/kg | % | % | % | % | |
| **Blank (2536027-BLK1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | ND | 20.0 | | | | | | | |
| **LCS (2536027-BS1)** | | | | | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | 255 | 20.0 | 250 | | 102 | 90-110 | | | |
| **Matrix Spike (2536027-MS1)** | | | | **Source: E509002-49** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | 405 | 20.0 | 250 | 152 | 101 | 80-120 | | | |
| **Matrix Spike Dup (2536027-MSD1)** | | | | **Source: E509002-49** | | | | | Prepared: 09/02/25 Analyzed: 09/02/25 |
| Chloride | 422 | 20.0 | 250 | 152 | 108 | 80-120 | 4.02 | 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 #013 | |
| 5315 Buena Vista Dr | Project Number: | 01058-0007 | **Reported:** |
| Carlsbad NM, 88220 | Project Manager: | Anna Byers | 09/08/25 16:41 |

| | |
|---|---|
| ND | Analyte NOT DETECTED at or above the reporting limit |
| NR | Not Reported |
| RPD | Relative Percent Difference |
| DNI | Did Not Ignite |
| DNR | Did not react with the addition of acid or base. |

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

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

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Analytical Laboratory

# Chain of Custody



| Client Information | Invoice Information | Lab Use Only | TAT | State |
|---|---|---|---|---|
| Client: WPX Energy Permian, LLC. | Company:Devon Energy Production Co LP | Lab WO# E509002 Job Number 01058-0007 | 1D 2D 3D Std: x | NM x, CO, UT, TX |
| Project: RDX 16 #013 | Address: 5315 Buena Vista Dr. | | | |
| Project Manager: Anna Byers | City, State, Zip: Carlsbad, NM, 88220 | | | |
| Address: 13000 W County Rd 100 | Phone: 575-885-7502 | | | |
| City, State, Zip_Odessa,TX, 79765 | Email: jim.raley@dvn.com | | | |
| Phone: 432-305-6415 | Miscellaneous: PN:22193 IN: NAPP2510448511 | | | |
| Email: NMTXGeoGroup@etechenv.com | WO: 21560572 | | | |

## Sample Information

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Depth | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Chloride 300.0 | TCEQ 1005 - TX | RCRA 8 Metals | BGDOC - NM | BGDOC - TX | Sample Temp | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8:00 | 8/28/2025 | S | 1 | PH09 | 0.5' | 1 | | | | | | | | X | | 5.6 | |
| 8:05 | 8/28/2025 | S | 1 | PH09 | 1' | 2 | | | | | | | | X | | 5.8 | |
| 8:10 | 8/28/2025 | S | 1 | PH09 | 2' | 3 | | | | | | | | X | | 5.9 | |
| 8:15 | 8/28/2025 | S | 1 | PH09 | 3' | 4 | | | | | | | | X | | 5.8 | |
| 8:20 | 8/28/2025 | S | 1 | PH09 | 4' | 5 | | | | | | | | X | | 5.1 | |
| 8:25 | 8/28/2025 | S | 1 | PH10 | 0.5' | 6 | | | | | | | | X | | 5.4 | |
| 8:30 | 8/28/2025 | S | 1 | PH10 | 1' | 7 | | | | | | | | X | | 5.4 | |
| 8:35 | 8/28/2025 | S | 1 | PH10 | 2' | 8 | | | | | | | | X | | 5.6 | |
| 8:40 | 8/28/2025 | S | 1 | PH10 | 3' | 9 | | | | | | | | X | | 5.9 | |
| 8:45 | 8/28/2025 | S | 1 | PH10 | 4' | 10 | | | | | | | | X | | 5.6 | |

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance Y or N

PWSID #

**Additional Instructions:**

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

Sampled by: Edyte Konan

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| [illegible] | 08/29/25 | 16:00 | Marissa Gonzales | 8-29-25 | 1600 |
| Marissa Gonzales | 8-30-25 | 1230 | Andrew Musso | 8.30.25 | 1230 |
| Andrew Musso | 8.30.25 | 1915 | Caitlin Mars | 9.2.25 | 800 |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |

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

Lab Use Only

Received on ice: (Y) / N

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

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Analytical Laboratory

# Chain of Custody



| Client Information | Invoice Information | Lab Use Only | TAT | State |
|---|---|---|---|---|
| Client: WPX Energy Permian, LLC. | Company:Devon Energy Production Co LP | Lab WO# E509002 | Job Number 61058.0007 | 1D 2D 3D Std: x | NM: x CO UT TX |
| Project: RDX 16 #013 | Address: 5315 Buena Vista Dr. | | | |
| Project Manager: Anna Byers | City, State, Zip: Carlsbad, NM, 88220 | | | |
| Address: 13000 W County Rd 100 | Phone: 575-885-7502 | | | |
| City, State, Zip_Odessa,TX, 79765 | Email: jim.raley@dvn.com | | | |
| Phone: 432-305-6415 | Miscellaneous: PN:22193 IN: NAPP2510448511 | | | |
| Email: NMTXGeoGroup@etechenv.com | WO: 21560572 | | | |

**Sample Information**

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Depth | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Chloride 300.0 | TCEQ 1005 - TX | RCRA 8 Metals | BGDOC - NM | BGDOC - TX | Sample Temp | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8:50 | 8/28/2025 | S | 1 | PH11 | 0.5' | 11 | | | | | | | | X | | 5.6 | |
| 8:55 | 8/28/2025 | S | 1 | PH11 | 1' | 12 | | | | | | | | X | | 5.9 | |
| 9:00 | 8/28/2025 | S | 1 | PH11 | 2' | 13 | | | | | | | | X | | 5.8 | |
| 9:05 | 8/28/2025 | S | 1 | PH11 | 3' | 14 | | | | | | | | X | | 5.4 | |
| 9:10 | 8/28/2025 | S | 1 | PH11 | 4' | 15 | | | | | | | | X | | 5.5 | |
| 9:15 | 8/28/2025 | S | 1 | PH12 | 0.5' | 16 | | | | | | | | X | | 5.3 | |
| 9:20 | 8/28/2025 | S | 1 | PH12 | 1' | 17 | | | | | | | | X | | 5.7 | |
| 9:25 | 8/28/2025 | S | 1 | PH12 | 2' | 18 | | | | | | | | X | | 5.9 | |
| 9:30 | 8/28/2025 | S | 1 | PH12 | 3' | 19 | | | | | | | | X | | 5.3 | |
| 9:35 | 8/28/2025 | S | 1 | PH12 | 4' | 20 | | | | | | | | X | | 5.0 | |

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance Y or N

PWSID #

**Additional Instructions:**

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

Sampled by: Edyte Konan

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| [signature] | 08/29/25 | 16:00 | Marissa Gonzales | 8-29-25 | 1600 |
| Marissa Gonzales | 8-30-25 | 1230 | Andrew Musso | 8.30.25 | 1230 |
| Andrew Musso | 8.30.25 | 1915 | Caitlin Mair | 8.29.25 | 800 |
| | | | | Date | Time |
| | | | | Date | Time |

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

Lab Use Only

Received on ice: (Y) N

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

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Analytical Laboratory

# Chain of Custody



| Client Information | Invoice Information | Lab Use Only | TAT | State |
|---|---|---|---|---|
| Client: WPX Energy Permian, LLC. | Company:Devon Energy Production Co LP | Lab WO# E509002 | Job Number 01058-0007 | 1D 2D 3D Std: x | NM: x CO UT TX |
| Project: RDX 16 #013 | Address: 5315 Buena Vista Dr. | | | |
| Project Manager: Anna Byers | City, State, Zip: Carlsbad, NM, 88220 | | | |
| Address: 13000 W County Rd 100 | Phone: 575-885-7502 | | | |
| City, State, Zip_Odessa,TX, 79765 | Email: jim.raley@dvn.com | | | |
| Phone: 432-305-6415 | Miscellaneous: PN:22193 IN: NAPP2510448511 | | | |
| Email: NMTXGeoGroup@etechenv.com | WO: 21560572 | | | |

## Sample Information

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Depth | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Chloride 300.0 | TCEQ 1005 - TX | RCRA 8 Metals | BGDOC - NM | BGDOC - TX | Sample Temp | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9:40 | 8/28/2025 | S | 1 | PH13 | 0.5' | H21 | | | | | | | | X | | 5.7 | |
| 9:45 | 8/28/2025 | S | 1 | PH13 | 1' | H22 | | | | | | | | X | | 5.7 | |
| 9:50 | 8/28/2025 | S | 1 | PH13 | 2' | H23 | | | | | | | | X | | 5.6 | |
| 9:55 | 8/28/2025 | S | 1 | PH13 | 3' | H24 | | | | | | | | X | | 4.3 | |
| 10:00 | 8/28/2025 | S | 1 | PH13 | 4' | H25 | | | | | | | | X | | 5.4 | |
| 10:05 | 8/28/2025 | S | 1 | PH14 | 0.5' | H26 | | | | | | | | X | | 5.1 | |
| 10:10 | 8/28/2025 | S | 1 | PH14 | 1' | H27 | | | | | | | | X | | 5.9 | |
| 10:15 | 8/28/2025 | S | 1 | PH14 | 2' | H28 | | | | | | | | X | | 5.4 | |
| 10:20 | 8/28/2025 | S | 1 | PH14 | 3' | 29 | | | | | | | | X | | 5.9 | |
| 10:25 | 8/28/2025 | S | 1 | PH14 | 4' | 30 | | | | | | | | X | | 5.4 | |

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance Y or N

PWSID #

**Additional Instructions:** CM 9/2/25

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

Sampled by: Edyte Konan

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| [illegible] | 08129125 | 16:00 | Marissa Gonzales | 8-29-25 | 1600 |
| Marissa Gonzales | 8-30-25 | 1230 | Andrew Musso | 8.30.25 | 1230 |
| Andrew Musso | 8.30.25 | 1915 | Caitlin Mair | 9.2.25 | 800 |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |

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

Lab Use Only

Received on ice: (Y) N

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 14 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

# Chain of Custody



| Client Information | Invoice Information | Lab Use Only | TAT | State |
|---|---|---|---|---|
| Client: WPX Energy Permian, LLC. | Company:Devon Energy Production Co LP | Lab WO# E509002 / Job Number 01058-0007 | 1D 2D 3D Std: x | NM x, CO, UT, TX |
| Project: RDX 16 #013 | Address: 5315 Buena Vista Dr. | | | |
| Project Manager: Anna Byers | City, State, Zip: Carlsbad, NM, 88220 | | | |
| Address: 13000 W County Rd 100 | Phone: 575-885-7502 | | | |
| City, State, Zip_Odessa,TX, 79765 | Email: jim.raley@dvn.com | | | |
| Phone: 432-305-6415 | Miscellaneous: PN:22193 IN: NAPP2510448511 | | | |
| Email: NMTXGeoGroup@etechenv.com | WO: 21560572 | | | |

**Sample Information** — **Analysis and Method** — **EPA Program**

EPA Program: SDWA | CWA | RCRA; Compliance Y or N; PWSID #

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Depth | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Chloride 300.0 | TCEQ 1005 - TX | RCRA 8 Metals | BGDOC - NM | BGDOC - TX | Sample Temp | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10:30 | 8/28/2025 | S | 1 | PH15 | 0.5' | 31 | | | | | | | | X | | 5.4 | |
| 10:35 | 8/28/2025 | S | 1 | PH15 | 1' | 32 | | | | | | | | X | | 5.2 | |
| 10:40 | 8/28/2025 | S | 1 | PH15 | 2' | 33 | | | | | | | | X | | 5.5 | |
| 10:45 | 8/28/2025 | S | 1 | PH15 | 3' | 34 | | | | | | | | X | | 5.3 | |
| 10:50 | 8/28/2025 | S | 1 | PH15 | 4' | 35 | | | | | | | | X | | 5.6 | |
| 10:55 | 8/28/2025 | S | 1 | PH16 | 0.5' | 36 | | | | | | | | X | | 5.4 | |
| 11:00 | 8/28/2025 | S | 1 | PH16 | 1' | 37 | | | | | | | | X | | 5.0 | |
| 11:05 | 8/28/2025 | S | 1 | PH16 | 2' | 38 | | | | | | | | X | | 5.2 | |
| 11:10 | 8/28/2025 | S | 1 | PH16 | 3' | 39 | | | | | | | | X | | 5.6 | |
| 11:15 | 8/28/2025 | S | 1 | PH16 | 4' | 40 | | | | | | | | X | | 5.4 | |

**Additional Instructions:**

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

Sampled by: Edyte Konan

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| [signature] | 08/29/25 | 16:00 | Marissa Gonzales | 8-29-25 | 1600 |
| Marissa Gonzales | 8-30-25 | 1230 | Andrew Musso | 8.30.25 | 1230 |
| Andrew Musso | 8.30.25 | 1915 | Caitlin Mars | 9-2-25 | 800 |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |

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

Lab Use Only
Received on ice: (Y) / N

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 14 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

# Chain of Custody



| Client Information | Invoice Information | Lab Use Only | TAT | State |
|---|---|---|---|---|
| Client: WPX Energy Permian, LLC. | Company:Devon Energy Production Co LP | Lab WO# E509002 | Job Number 01058-0007 | 1D 2D 3D Std: x | NM: x CO UT TX |
| Project: RDX 16 #013 | Address: 5315 Buena Vista Dr. | | | |
| Project Manager: Anna Byers | City, State, Zip: Carlsbad, NM, 88220 | | | |
| Address: 13000 W County Rd 100 | Phone: 575-885-7502 | | | |
| City, State, Zip_Odessa,TX, 79765 | Email: jim.raley@dvn.com | | | |
| Phone: 432-305-6415 | Miscellaneous: PN:22193 IN: NAPP2510448511 | | | |
| Email: NMTXGeoGroup@etechenv.com | WO: 21560572 | | | |

## Sample Information

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Depth | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Chloride 300.0 | TCEQ 1005 - TX | RCRA 8 Metals | | BGDOC - NM | BGDOC - TX | | Sample Temp | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11:20 | 8/28/2025 | S | 1 | PH17 | 0.5' | 41 | | | | | | | | | X | | | 4.9 | |
| 11:25 | 8/28/2025 | S | 1 | PH17 | 1' | 42 | | | | | | | | | X | | | 4.9 | |
| 11:30 | 8/28/2025 | S | 1 | PH17 | 2' | 43 | | | | | | | | | X | | | 5.0 | |
| 11:35 | 8/28/2025 | S | 1 | PH17 | 3' | 44 | | | | | | | | | X | | | 5.2 | |
| 11:40 | 8/28/2025 | S | 1 | PH17 | 4' | 45 | | | | | | | | | X | | | 5.4 | |
| 11:45 | 8/28/2025 | S | 1 | PH18 | 0.5' | 46 | | | | | | | | | X | | | 4.6 | |
| 11:50 | 8/28/2025 | S | 1 | PH18 | 1' | 47 | | | | | | | | | X | | | 4.8 | |
| 11:55 | 8/28/2025 | S | 1 | PH18 | 2' | 48 | | | | | | | | | X | | | 5.2 | |
| 12:00 | 8/28/2025 | S | 1 | PH18 | 3' | 49 | | | | | | | | | X | | | 5.4 | |
| 12:05 | 8/28/2025 | S | 1 | PH18 | 4' | 50 | | | | | | | | | X | | | 5.4 | |

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance Y or N

PWSID #

**Additional Instructions:**

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

Sampled by: Edyte Konan

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| [illegible] | 08/28/25 | 16:00 | Marissa Gonzales | 8-29-25 | 1600 |
| Marissa Gonzales | 8-30-25 | 1230 | Andrew Musso | 8.30.25 | 1230 |
| Andrew Musso | 8.30.25 | 1915 | Caitlyn Mar | 9.2.25 | 800 |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |

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

Lab Use Only

Received on ice: (Y) / N

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 14 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

# Chain of Custody



| Client Information | Invoice Information | Lab Use Only | TAT | | | | State | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Client: WPX Energy Permian, LLC. | Company:Devon Energy Production Co LP | Lab WO# E509002 | Job Number 01058-0007 | 1D | 2D | 3D | Std | NM | CO | UT | TX | |
| Project: RDX 16 #013 | Address: 5315 Buena Vista Dr. | | | | | | x | x | | | | |
| Project Manager: Anna Byers | City, State, Zip: Carlsbad, NM, 88220 | | | | | | | | | | | |
| Address: 13000 W County Rd 100 | Phone: 575-885-7502 | | | | | | | | | | | |
| City, State, Zip_Odessa,TX, 79765 | Email: jim.raley@dvn.com | | | | | | | | | | | |
| Phone: 432-305-6415 | Miscellaneous: PN:22193 IN: NAPP2510448511 | | | | | | | | | | | |
| Email: NMTXGeoGroup@etechenv.com | WO: 21560572 | | | | | | | | | | | |

**Sample Information**

| Time Sampled | Date Sampled | Matrix | No. of Containers | Sample ID | Depth | Lab Number | DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Chloride 300.0 | TCEQ 1005 - TX | RCRA 8 Metals | | BGDOC - NM | BGDOC - TX | | Sample Temp | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:10 | 8/28/2025 | S | 1 | PH19 | 0.5' | 51 | | | | | | | | | X | | | 5.2 | |
| 12:15 | 8/28/2025 | S | 1 | PH19 | 1' | 52 | | | | | | | | | X | | | 5.0 | |
| 12:20 | 8/28/2025 | S | 1 | PH19 | 2' | 53 | | | | | | | | | X | | | 5.3 | |
| 12:25 | 8/28/2025 | S | 1 | PH19 | 3' | 54 | | | | | | | | | X | | | 5.1 | |
| 12:30 | 8/28/2025 | S | 1 | PH19 | 4' | 55 | | | | | | | | | X | | | 5.2 | |
| 12:35 | 8/28/2025 | S | 1 | PH20 | 0.5' | 56 | | | | | | | | | X | | | 5.0 | |
| 12:40 | 8/28/2025 | S | 1 | PH20 | 1' | 57 | | | | | | | | | X | | | 4.8 | |
| 12:45 | 8/28/2025 | S | 1 | PH20 | 2' | 58 | | | | | | | | | X | | | 5.4 | |
| 12:50 | 8/28/2025 | S | 1 | PH20 | 3' | 59 | | | | | | | | | X | | | 5.2 | |
| 12:55 | 8/28/2025 | S | 1 | PH20 | 4' | 60 | | | | | | | | | X | | | 4.9 | |

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance | Y | or | N

PWSID #

**Additional Instructions:**

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

Sampled by: Edyte Konan

| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
|---|---|---|---|---|---|
| | 08/29/25 | 16:00 | Marissa Gonzales | 8-29-25 | 1600 |
| Marissa Gonzales | 8-30-25 | 1230 | Andrew Musso | 8.30.25 | 1230 |
| Andrew Musso | 8.30.25 | 1915 | Caitlin Mars | 9.2.25 | 800 |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |
| Relinquished by: (Signature) | Date | Time | Received by: (Signature) | Date | Time |

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

Lab Use Only

Received on ice: (Y) / N

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 14 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: 9/2/2025 9:38:28AM

## 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: | 09/02/25 08:00 | Work Order ID: | E509002 |
| Phone: | (575) 200-6754 | Date Logged In: | 09/02/25 08:55 | Logged In By: | Caitlin Mars |
| Email: | anna@etechenv.com | Due Date: | 09/08/25 07:00 (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 | Carrier: Courier |
| 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? | Yes | |
| 5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion. | Yes | |

**Comments/Resolution**

**Sample 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? Note: Thermal preservation is not required, if samples are received within 15 minutes of sampling | Yes |
| 13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments. | |

**Sample Container**

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

**Field Label**

| | |
|---|---|
| 20. Were field sample labels filled out with the minimum information: | |
| Sample ID? | Yes |
| Date/Time Collected? | Yes |
| Collectors name? | Yes |

**Sample Preservation**

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

**Multiphase Sample Matrix**

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

**Subcontract Laboratory**

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

**Client Instruction**

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

Date

envirotech Inc.

# APPENDIX L

# NMSLO Sandy Loam Site Seed Mixture

P.O. Box 62228 Midland • TX • 79711 • Tel: 432-563-2200 • Fax: 432-563-2213

# 1 REVEGETATION PLANS

The following Revegetation Plans were developed for revegetation of sites in southeastern New Mexico. To determine which revegetation plan is appropriate follow procedures in the section titled Determining the Revegetation Plan.

Revegetation Plans contain seed mixtures, as well as seed bed preparation and planting requirements. The detailed instructions for seedbed preparation and planting can be found in the section Revegetation Techniques.

**Table 3 - Revegetation Plans, Codes, and Soil Types for Southeastern New Mexico**

| REVEGTATION PLANS | CODE | SOIL TEXTURES |
|---|---|---|
| **Clay** | C | Clay, Silty Clay, Stony Silty Clay, Clay Loam, Silty Clay Loam (including saline and sodic Clay soils) |
| **Loam** | L | Silty Loam, Cobbly Silt Loam, Stony Silt Loam, Silt, Loam, Sandy, Clay Loam |
| **Sandy Loam** | SL | Very Fine Sandy Loam, Fine Sandy Loam, Cobbly Fine Sandy Loam, Sandy Loam, Cobbly Sandy Loam, Gravelly Fine Sandy Loam, Very Gravelly Fine Sand Loam, Stony Fine Sandy Loam, Stony Sandy Loam |
| **Shallow** | SH | Rocky Loam, Cobbly Loam |
| **Course** | CS | Gravelly Loam, very Gravelly Loam, Gravelly Sandy Loam, Very Gravelly Sandy Loam, Stony Loam, Stony Sandy Loam |
| **Sandy** | S | Loamy Fine Sand, Loam Sand, Very Gravelly Loamy Fine Sand |
| **Blow Sand** | BS | Fine Sand, Sand, Coarse Sand |
| **Mountain Meadow** | MM | Clay, Loam |
| **Mountain Upland** | MU | Clay Loam, Loam |

# NMSLO Seed Mix Sandy Loam (SL)

**SANDY LOAM (SL) SITES SEED MIXTURE:**

| COMMON NAME | VARIETY | APPLICATION RATE (PLS/Acre) | DRILL BOX |
|---|---|---|---|
| **Grasses:** | | | |
| Galleta grass | Viva, VNS, So. | 2.5 | F |
| Little bluestem | Cimmaron, Pastura | 2.5 | F |
| Blue grama | Hachita, Lovington | 2.0 | D |
| Sideoats grama | Vaughn, El Reno | 2.0 | F |
| Sand dropseed | VNS, Southern | 1.0 | S |
| **Forbs:** | | | |
| Indian blanketflower | VNS, Southern | 1.0 | D |
| Parry penstemon | VNS, Southern | 1.0 | D |
| Blue flax | Appar | 1.0 | D |
| Desert globemallow | VNS, Southern | 1.0 | D |
| **Shrubs:** | | | |
| Fourwing saltbush | VNS, Southern | 2.0 | D |
| Common winterfat | VNS, Southern | 1.0 | F |
| Apache plume | VNS, Southern | 0.75 | F |
| | **Total PLS/acre** | **17.75** | |

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box

- VNS, Southern – No Variety Stated, seed should be from a southern latitude collection of this species.
- Double above seed rates for broadcast or hydroseeding.
- If Parry penstemon is not available, substitute firecracker penstemon.
- If desert globemallow is not available, substitute scarlet globemallow or Nelson globemallow.
- If a species is not available, provide a suggested substitute to the New Mexico Land Office for approval. Increasing all other species proportionately may be acceptable.

# APPENDIX M

## Correspondence & Notifications

## Erick Herrera

**From:** Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
**Sent:** Thursday, July 10, 2025 10:01 AM
**To:** Erick Herrera
**Cc:** Raley, Jim; NM TX Geo Group; Bratcher, Michael, EMNRD
**Subject:** RE: [EXTERNAL] WPX Extension Request - RDX 16 #013 - Incident Number nAPP2510448511

Good morning Erick,

A 90-day extension is approved for NAPP2510448511 RDX 16 #013. A remediation plan or closure report must be submitted to the OCD Permitting website no later than October 8, 2025. Please include a copy of this and all notifications in the report to ensure the notifications are documented in the project file.

Kind regards,

Shelly

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

---

**From:** Erick Herrera <erick@etechenv.com>
**Sent:** Thursday, July 10, 2025 7:15 AM
**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; ocdonline, emnrd, EMNRD <emnrd.ocdonline@emnrd.nm.gov>
**Cc:** Raley, Jim <jim.raley@dvn.com>; NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** [EXTERNAL] WPX Extension Request - RDX 16 #013 - Incident Number nAPP2510448511



Good morning,

Etech Environmental & Safety Solutions, Inc. (Etech) on behalf of WPX Energy Permian, LLC (WPX), respectfully requests a 90-day extension request associated with Incident Number (nAPP2510448511) at the RDX 16 #013 (Site), currently due on July 10th, 2025.

Prior to soil disturbance at the Site, land access surveys were required. The Site has since been assessed according to cultural and biological requirements required by the State Land Office. Additionally, an electrical resistivity imagery (ERI) survey to assess the Site stability was recently conducted to appropriately characterize the Site. To provide enough time for the completion of the ERI survey report, soil sampling activities, receipt of laboratory analytical results, and preparation and submittal of a formal report, WPX requests a 90-day extension of the current July 10th, 2025, deadline to October 8th, 2025, for Incident Number nAPP2510448511.

Thank you,

**Erick Herrera**
Lead Project Geologist/GIS Manager
**Etech Environmental & Safety Solutions, Inc.**
W: (432) 305-6416
C: (281) 777-4152

## Santos Rivera

**From:** Courtney Blair <CBlair@swca.com>
**Sent:** Tuesday, June 10, 2025 4:32 PM
**To:** Erick Herrera; Santos Rivera
**Cc:** NM TX Geo Group
**Subject:** Fw: SSPS and Biological Survey of RDX 16 #013 Inadvertent Release
**Attachments:** NMCRIS 158644_RDX 16#013 Inadvertent Release_NMSLO-Cultural-Resources-Cover-Sheet.pdf; RDX 16 #013 Well Pad Inadvertent Release_Client Redacted Copy.pdf

**Follow Up Flag:** Flag for follow up
**Flag Status:** Flagged

I forgot to include Santos and the etech group email. Please see below for submittal information for RDX 16 #013 Well Pad Inadvertent Release Report.

**Courtney Blair**
*Associate Project Archaeologist*

**SWCA Environmental Consultants**
Cell: (617) 435-2083
cblair@swca.com

---

**From:** Courtney Blair <CBlair@swca.com>
**Sent:** Tuesday, June 10, 2025 5:30 PM
**To:** Erick Herrera <erick@etechenv.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** Re: SSPS and Biological Survey of RDX 16 #013 Inadvertent Release

Good evening Erick,

I meant to send this out yesterday. Attached is the client copy of the cultural report as well as the NMSLO cover sheet associated with the cultural report. A copy of the NMSLO Coversheet has been sent to the NMSLO today to trigger their review. The cultural report has been uploaded and submitted to the NMCRIS database this afternoon as well. Please let me know if you need anything else to show that the survey and report are complete.

The gen bio and SSPS tech memo reports should be ready to be submitted around June 24th. I will try to check in beforehand to update you on the progress. Feel free to reach out at any time. I will be out of town this Thursday through Sunday (6/12-6/15) for a small vacation. Feel free to reach out to Lara directly for any Natural resource questions that might come up.

Kind regards,

**Courtney Blair**
*Associate Project Archaeologist*

**SWCA Environmental Consultants**
Cell: (617) 435-2083
cblair@swca.com

---

**From:** Erick Herrera <erick@etechenv.com>
**Sent:** Tuesday, June 10, 2025 5:02 PM
**To:** Courtney Blair <CBlair@swca.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** Re: SSPS and Biological Survey of RDX 16 #013 Inadvertent Release

Thank you Courtney!

Get Outlook for iOS

---

**From:** Courtney Blair <CBlair@swca.com>
**Sent:** Tuesday, June 10, 2025 3:53:44 PM
**To:** Erick Herrera <erick@etechenv.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** Re: SSPS and Biological Survey of RDX 16 #013 Inadvertent Release

HI Erick,

II apologize for not getting back the next day. It was negative for both cultural resources, gen bio, and any Scheer's Cacti. The gen bio and SSPS tech memos should be ready by the 24th. The Cultural report will be ready COB today to submit. I will get you that information shortly.

**Courtney Blair**
*Associate Project Archaeologist*

**SWCA Environmental Consultants**
Cell: (617) 435-2083
cblair@swca.com

**From:** Erick Herrera <erick@etechenv.com>
**Sent:** Tuesday, June 10, 2025 12:13 PM
**To:** Courtney Blair <CBlair@swca.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** RE: SSPS and Biological Survey of RDX 16 #013 Inadvertent Release

Hi Courtney,

What were the results for both the biological and cultural surveys, was anything found around the Site?

Thanks,

**Erick Herrera**
Lead Project Geologist/GIS Manager
**Etech Environmental & Safety Solutions, Inc.**
W: (432) 305-6416
C: (281) 777-4152

**From:** Courtney Blair <CBlair@swca.com>
**Sent:** Tuesday, June 3, 2025 3:13 PM
**To:** Santos Rivera <santos@etechenv.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** SSPS and Biological Survey of RDX 16 #013 Inadvertent Release

Good afternoon Santos,

The natural resources team completed the survey of the Inadvertent Release Project at RDX 16 #013 Well Pad. Once I hear back from Lara, I can get you an idea of when the deliverables will be ready.

The CR report is just waiting on a map edit and then it will be ready to submit. There were no cultural findings.

**Courtney Blair**
*Associate Project Archaeologist*

**SWCA Environmental Consultants**
Cell: (617) 435-2083
cblair@swca.com

## Santos Rivera

**From:** Courtney Blair <CBlair@swca.com>
**Sent:** Wednesday, July 2, 2025 12:58 PM
**To:** Santos Rivera; Erick Herrera
**Cc:** NM TX Geo Group
**Subject:** Re: NMSLO Negative Report Submittal NMCRIS No. 158644, WPX Energy's RDX 16 #013 Well Pad Inadvertent Release
**Attachments:** Etech RDX 16 #013 Gathering Line_Remediation_Memo.pdf; RDX 16 #013 Well Pad Inadvertent Release_Client Redacted Copy.pdf; NMCRIS 158644_RDX 16#013 Inadvertent Release_NMSLO-Cultural-Resources-Cover-Sheet.pdf

Hi Santos,

The updated NMSLO memo and the cover sheet, along with the client copy of the report are all attached. All the typos should be addressed but let me know if anything was missed.

**Courtney Blair**
*Associate Project Archaeologist*

**SWCA Environmental Consultants**
Cell: (617) 435-2083
cblair@swca.com

---

**From:** Santos Rivera <santos@etechenv.com>
**Sent:** Wednesday, July 2, 2025 9:59 AM
**To:** Courtney Blair <CBlair@swca.com>; Erick Herrera <erick@etechenv.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** Re: NMSLO Negative Report Submittal NMCRIS No. 158644, WPX Energy's RDX 16 #013 Well Pad Inadvertent Release

Thank you Courtney!

**Santos Rivera**
Permitting & Review Specialist
**Etech Environmental & Safety Solutions, Inc.**
C: +1 (432) 313-1566

**From:** Courtney Blair <CBlair@swca.com>
**Sent:** Tuesday, July 1, 2025 12:44 PM
**To:** Santos Rivera <santos@etechenv.com>; Erick Herrera <erick@etechenv.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** Re: NMSLO Negative Report Submittal NMCRIS No. 158644, WPX Energy's RDX 16 #013 Well Pad Inadvertent Release

Of course. Give me a few to get that for you.

**Courtney Blair**
*Associate Project Archaeologist*

**SWCA Environmental Consultants**
Cell: (617) 435-2083
cblair@swca.com

**From:** Santos Rivera <santos@etechenv.com>
**Sent:** Monday, June 30, 2025 4:01 PM
**To:** Courtney Blair <CBlair@swca.com>; Erick Herrera <erick@etechenv.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** Re: NMSLO Negative Report Submittal NMCRIS No. 158644, WPX Energy's RDX 16 #013 Well Pad Inadvertent Release

No that's fine I can see where the mix up can happen. Is there a way I can get an updated memo and cover sheet for our records when you get the chance?

**Santos Rivera**
Permitting & Review Specialist
**Etech Environmental & Safety Solutions, Inc.**
C: +1 (432) 313-1566

**From:** Courtney Blair <CBlair@swca.com>
**Sent:** Monday, June 30, 2025 2:55 PM
**To:** Santos Rivera <santos@etechenv.com>; Erick Herrera <erick@etechenv.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** Re: NMSLO Negative Report Submittal NMCRIS No. 158644, WPX Energy's RDX 16 #013 Well Pad Inadvertent Release

Oh jeez. It is RDX 16 #013.

**Courtney Blair**
*Associate Project Archaeologist*

**SWCA Environmental Consultants**
Cell: (617) 435-2083
cblair@swca.com

---

**From:** Santos Rivera <santos@etechenv.com>
**Sent:** Monday, June 30, 2025 3:53 PM
**To:** Courtney Blair <CBlair@swca.com>; Erick Herrera <erick@etechenv.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** Re: NMSLO Negative Report Submittal NMCRIS No. 158644, WPX Energy's RDX 16 #013 Well Pad Inadvertent Release

RDX 16 #013 correct? Not RDX 15 #013? Sorry for any confusion just want to triple check and make sure on my end.

Thank you,

**Santos Rivera**
Permitting & Review Specialist
**Etech Environmental & Safety Solutions, Inc.**
C: +1 (432) 313-1566

---

**From:** Courtney Blair <CBlair@swca.com>
**Sent:** Monday, June 30, 2025 2:51 PM
**To:** Santos Rivera <santos@etechenv.com>; Erick Herrera <erick@etechenv.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** Re: NMSLO Negative Report Submittal NMCRIS No. 158644, WPX Energy's RDX 16 #013 Well Pad Inadvertent Release

That is correct Santos. I apologize for the typos. This report should be for RDX 15 #013. I noticed I made two typos regarding that number.

**Courtney Blair**

*Associate Project Archaeologist*

**SWCA Environmental Consultants**
Cell: (617) 435-2083
cblair@swca.com

---

**From:** Santos Rivera <santos@etechenv.com>
**Sent:** Monday, June 30, 2025 1:03 PM
**To:** Courtney Blair <CBlair@swca.com>; Erick Herrera <erick@etechenv.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** Re: NMSLO Negative Report Submittal NMCRIS No. 158644, WPX Energy's RDX 16 #014 Well Pad Inadvertent Release

Hi Courtney,

Just wanted to confirm that this is for the RDX 16 #013 pad site? It seems there may have been a typo. Please feel free to reach out.

Best,

**Santos Rivera**
Permitting & Review Specialist
**Etech Environmental & Safety Solutions, Inc.**
C: +1 (432) 313-1566

---

**From:** Courtney Blair <CBlair@swca.com>
**Sent:** Monday, June 30, 2025 11:52 AM
**To:** Santos Rivera <santos@etechenv.com>; Erick Herrera <erick@etechenv.com>
**Cc:** NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** Fw: NMSLO Negative Report Submittal NMCRIS No. 158644, WPX Energy's RDX 16 #014 Well Pad Inadvertent Release

Good morning Santos,

Attached is a memo from the NMSLO regarding their findings for RDX 16 #013 that the remediation work may proceed.

**Courtney Blair**
*Associate Project Archaeologist*

**SWCA Environmental Consultants**
Cell: (617) 435-2083
cblair@swca.com

---

**From:** Weldy, Megan L. <mweldy@nmslo.gov>
**Sent:** Thursday, June 26, 2025 5:12 PM
**To:** Courtney Blair <CBlair@swca.com>; CRO Info <croinfo@nmslo.gov>
**Subject:** RE: NMSLO Negative Report Submittal NMCRIS No. 158644, WPX Energy's RDX 16 #014 Well Pad Inadvertent Release

Hi Courtney!
Thank you for your submission of the Cover Sheet. Please pass the attached memo along to your client Etech (on behalf of WPX Energy, Inc., a subsidiary of Devon), who is now free to move forward with remediation. Feel free to reach out if you have any additional questions. Thank you!

Hope you're having a great summer,

**Megan Weldy**
*Archaeologist – Conservationist*
*Cultural Resources Office*
505.819.8249
New Mexico State Land Office
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, NM 87504-1148
mweldy@nmslo.gov
nmstatelands.org



---

**From:** Courtney Blair <CBlair@swca.com>
**Sent:** Tuesday, June 10, 2025 3:23 PM

**To:** CRO Info <croinfo@nmslo.gov>
**Subject:** [EXTERNAL] NMSLO Negative Report Submittal NMCRIS No. 158644, WPX Energy's RDX 16 #014 Well Pad Inadvertent Release

Good afternoon,

The negative report for WPX Energy's RDX 16 #013 Well Pad Inadvertent Release Project has been uploaded and submitted to the NMCRIS database under NMCRIS NO. 158644. Attached is the NMSLO-cover sheet for the project. Please let me know if any additional information is needed.

Kind regards,

**Courtney Blair**
*Associate Project Archaeologist*

**SWCA Environmental Consultants**
Cell: (617) 435-2083
cblair@swca.com

## Erick Herrera

**From:** Erick Herrera
**Sent:** Monday, August 4, 2025 8:09 AM
**To:** Knight, Tami C.
**Subject:** RE: WPX Delineation Sampling Plan - RDX 16 #013 nAPP2510448511 - Approved.

Received - Thank you Tami!

Thank you,

**Erick Herrera**
Lead Project Geologist/GIS Manager
**Etech Environmental & Safety Solutions, Inc.**
W: (432) 305-6416
C: (281) 777-4152

---

**From:** Knight, Tami C. <tknight@nmslo.gov>
**Sent:** Friday, August 1, 2025 11:10 AM
**To:** Erick Herrera <erick@etechenv.com>; Abe Valladares <abevalladares@etechenv.com>
**Cc:** Raley, Jim <jim.raley@dvn.com>; NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** RE: WPX Delineation Sampling Plan - RDX 16 #013 nAPP2510448511 - Approved.

Erick,

I apologize for the delay in responding, please consider this email an approval to proceed with the Site Assessment.

**Tami Knight, CHMM**
*Senior Environmental Scientist*
*NMSLO-ECO*
505.670 1638
tknight@nmslo.gov
nmstatelands.org

**I will be in training August 5-6 and out of the office August 8.**

**From:** Erick Herrera <erick@etechenv.com>
**Sent:** Friday, July 25, 2025 1:15 PM
**To:** Knight, Tami C. <tknight@nmslo.gov>; Abe Valladares <abevalladares@etechenv.com>
**Cc:** Raley, Jim <jim.raley@dvn.com>; NM TX Geo Group <NMTXGeoGroup@etechenv.com>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Griffin, Becky R. <bgriffin@nmslo.gov>; David, Deon W. <ddavid@nmslo.gov>
**Subject:** [EXTERNAL] RE: WPX Delineation Sampling Plan - RDX 16 #013 nAPP2510448511 - Question

Hi Tami,

1. The riverine is adjacent to the well site, but based on the release footprint for this incident, the lateral extents of the release are not within a 300-foot radius of a wetland and/or a continuously flowing watercourse or any significant watercourse. If the approximate release boundary were to extend within 300-feet of the riverine, the site closure criteria will be updated or proposed accordingly.

2. Thank you for bringing this to our attention. We will ensure to include the necessary updates in our future reports.

Thank you,

**Erick Herrera**
Lead Project Geologist/GIS Manager
**Etech Environmental & Safety Solutions, Inc.**
W: (432) 305-6416
C: (281) 777-4152

**From:** Knight, Tami C. <tknight@nmslo.gov>
**Sent:** Friday, July 25, 2025 1:13 PM
**To:** Abe Valladares <abevalladares@etechenv.com>
**Cc:** Raley, Jim <jim.raley@dvn.com>; NM TX Geo Group <NMTXGeoGroup@etechenv.com>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Griffin, Becky R. <bgriffin@nmslo.gov>; David, Deon W. <ddavid@nmslo.gov>
**Subject:** RE: WPX Delineation Sampling Plan - RDX 16 #013 nAPP2510448511 - Question

**RE:** 30-015-39957 (WPX Energy); RDX 16 #013; VB-1180-0004 (EOG RESOURCES INC)
**Incident #:** nAPP2510448511
**Site Assessment Workplan Received:** July 24, 2025

Good Afternoon

ECO is reviewing the subject workplan and has a question about several items the workplan did not address.

1. The workplan did not address the nearest riverine adjacent to the well site. Has WPX received a variance to the closure criteria for this riverine?


2. The workplan states that there are no biological concerns. However, the narrative did not discuss what is supporting this statement. You do not need to revise the workplan since we were able to see the SSPS Survey attachment. But the narratives should refer to the attachment with a brief summary finding otherwise the reviewer could easily miss this information.

Thank you

**Tami Knight, CHMM**
*Environmental Specialist*
*Environmental Compliance Office*
505.670 1638
New Mexico State Land Office
tknight@nmslo.gov
nmstatelands.org

**I will be in training August 5-6 and out of the office August 8.**

.....



---

**From:** Abe Valladares <abevalladares@etechenv.com>
**Sent:** Thursday, July 24, 2025 11:53 AM
**To:** SLO Spills <spills@nmslo.gov>
**Cc:** Knight, Tami C. <tknight@nmslo.gov>; Raley, Jim <jim.raley@dvn.com>; NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** [EXTERNAL] Re: WPX Delineation Sampling Plan - RDX 16 #013 nAPP2510448511

Good afternoon,

Please disregard the attached report in my last email. I have attached the correct version of the Delineation Sampling Plan to this email.

Thank you,

**Abraham Valladares**
GIS Analyst/Reporting
**Etech Environmental & Safety Solutions, Inc.**
C: (432) 967-9624

---

**From:** Abe Valladares <abevalladares@etechenv.com>
**Sent:** Thursday, July 24, 2025 12:23 PM
**To:** eco@nmslo.gov <eco@nmslo.gov>
**Cc:** tknight@nmslo.gov <tknight@nmslo.gov>; Raley, Jim <jim.raley@dvn.com>; NM TX Geo Group <NMTXGeoGroup@etechenv.com>
**Subject:** WPX Delineation Remediation Work Plan - RDX 16 #013 nAPP2510448511

Good afternoon Eco,

Etech, on behalf of WPX Energy Permian, LLC (WPX), is planning to conduct delineation activities at the above Site. Up to 19 delineation points will be advanced via hand auger and/or mechanical equipment to confirm the presence or absence of residual impacts from a reportable release assigned Incident Number nAPP2510448511, near the following GPS coordinates (32.0379791, -103.893859). Soil samples will be collected from each delineation location at 0.5-foot, 1-foot, 2-feet, 3-feet, and 4-feet, or continued every foot and field screened on location for chloride and volatile organic compounds (VOCs) until the applicable Site Closure Criteria is met. The samples will be submitted to an accredited laboratory for analysis of BTEX, TPH, and chloride. Results from delineation activities will be used to determine the appropriate corrective action, and findings will be documented in a comprehensive report that will be submitted to the SLO for review.

Attached, you will find the Delineation Soil Sampling Plan (DSP) along with the proposed delineation points and a NMSLO Cultural Cover Sheet.

If you have any questions or require further information, please do not hesitate to reach out.

Thank you,

**Abraham Valladares**

GIS Analyst/Reporting

**Etech Environmental & Safety Solutions, Inc.**

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Phone: (505) 476-3441

General Information
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Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS

Action 498433

## QUESTIONS

| | |
|---|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289 |
| | Action Number:<br>498433 |
| | Action Type:<br>[NOTIFY] Notification Of Sampling (C-141N) |

**QUESTIONS**

| **Prerequisites** | |
|---|---|
| Incident ID (n#) | **nAPP2510448511** |
| Incident Name | **NAPP2510448511 RDX 16 #013 @ 30-015-39957** |
| Incident Type | **Oil Release** |
| Incident Status | **Initial C-141 Approved** |
| Incident Well | **[30-015-39957] RDX 16 #013** |

| **Location of Release Source** | |
|---|---|
| Site Name | **RDX 16 #013** |
| Date Release Discovered | **04/11/2025** |
| Surface Owner | **State** |

| **Sampling Event General Information**<br>*Please answer all the questions in this group.* | |
|---|---|
| What is the sampling surface area in square feet | 1,531 |
| What is the estimated number of samples that will be gathered | 76 |
| Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC | 08/27/2025 |
| Time sampling will commence | 07:00 AM |
| Please provide any information necessary for observers to contact samplers | Please contact Erick Herrera at 432-305-6416 with any questions |
| Please provide any information necessary for navigation to sampling site | Head south on US HWY 285, turn left onto Longhorn Rd/ Whitehorn Rd, proceed for 2.5 mis, slight left onto Longhorn Rd then proceed for 5.1 mis, turn left onto Longhorn Rd/ Whitehorn Rd then proceed for 1.5 mis, turn right to stay on Longhorn Rd/ Whitehorn Rd proceed for 1.1 mis, turn right to stay on Longhorn Rd/ Whitehorn Rd proceed for 1.3 mis, turn left proceed for 2.2 mis, turn right destination will be within 0.2mis (32.0379791,-103.893859). |

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## CONDITIONS

| | |
|---|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289 |
| | Action Number:<br>498433 |
| | Action Type:<br>[NOTIFY] Notification Of Sampling (C-141N) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| jraley | Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted. | 8/22/2025 |
| jraley | If confirmation sampling is going to take place over multiple days, individual C-141N applications must be submitted for each sampling date. Date ranges are not currently accepted on the C-141N application. | 8/22/2025 |

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# State of New Mexico
# Energy, Minerals and Natural Resources
# Oil Conservation Division
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# Santa Fe, NM 87505

QUESTIONS

Action 498435

## QUESTIONS

| | |
|---|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289 |
| | Action Number:<br>498435 |
| | Action Type:<br>[NOTIFY] Notification Of Sampling (C-141N) |

**QUESTIONS**

| **Prerequisites** | |
|---|---|
| Incident ID (n#) | **nAPP2510448511** |
| Incident Name | **NAPP2510448511 RDX 16 #013 @ 30-015-39957** |
| Incident Type | **Oil Release** |
| Incident Status | **Initial C-141 Approved** |
| Incident Well | **[30-015-39957] RDX 16 #013** |

| **Location of Release Source** | |
|---|---|
| Site Name | **RDX 16 #013** |
| Date Release Discovered | **04/11/2025** |
| Surface Owner | **State** |

| **Sampling Event General Information**<br>*Please answer all the questions in this group.* | |
|---|---|
| What is the sampling surface area in square feet | 1,531 |
| What is the estimated number of samples that will be gathered | 76 |
| Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC | 08/28/2025 |
| Time sampling will commence | 07:00 AM |
| Please provide any information necessary for observers to contact samplers | Please contact Erick Herrera at 432-305-6416 with any questions |
| Please provide any information necessary for navigation to sampling site | Head south on US HWY 285, turn left onto Longhorn Rd/ Whitehorn Rd, proceed for 2.5 mis, slight left onto Longhorn Rd then proceed for 5.1 mis, turn left onto Longhorn Rd/ Whitehorn Rd then proceed for 1.5 mis, turn right to stay on Longhorn Rd/ Whitehorn Rd proceed for 1.1 mis, turn right to stay on Longhorn Rd/ Whitehorn Rd proceed for 1.3 mis, turn left proceed for 2.2 mis, turn right destination will be within 0.2mis (32.0379791,-103.893859). |

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## CONDITIONS

| | |
|---|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289 |
| | Action Number:<br>498435 |
| | Action Type:<br>[NOTIFY] Notification Of Sampling (C-141N) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| jraley | Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted. | 8/22/2025 |
| jraley | If confirmation sampling is going to take place over multiple days, individual C-141N applications must be submitted for each sampling date. Date ranges are not currently accepted on the C-141N application. | 8/22/2025 |

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# Santa Fe, NM 87505



## QUESTIONS

| | |
|---|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289 |
| | Action Number:<br>511637 |
| | Action Type:<br>[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan) |

**QUESTIONS**

| **Prerequisites** | |
|---|---|
| Incident ID (n#) | **nAPP2510448511** |
| Incident Name | **NAPP2510448511 RDX 16 #013 @ 30-015-39957** |
| Incident Type | **Oil Release** |
| Incident Status | **Remediation Plan Received** |
| Incident Well | **[30-015-39957] RDX 16 #013** |

| **Location of Release Source** | |
|---|---|
| *Please answer all the questions in this group.* | |
| Site Name | RDX 16 #013 |
| Date Release Discovered | 04/11/2025 |
| Surface Owner | State |

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

| **Nature and Volume of Release** | |
|---|---|
| *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.* | |
| Crude Oil Released (bbls) Details | Cause: Overflow - Tank, Pit, Etc. \| Separator \| Crude Oil \| Released: 10 BBL \| Recovered: 9 BBL \| Lost: 1 BBL. |
| Produced Water Released (bbls) Details | *Not answered.* |
| Is the concentration of chloride in the produced water >10,000 mg/l | Yes |
| Condensate Released (bbls) Details | *Not answered.* |
| Natural Gas Vented (Mcf) Details | *Not answered.* |
| Natural Gas Flared (Mcf) Details | *Not answered.* |
| Other Released Details | *Not answered.* |
| Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts) | Treater high leveled and allowed fluids to be released via pressure relief valve. This allowed fluids to impact pad surface and light misting offsite. |

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## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289 |
| | Action Number:<br>511637 |
| | Action Type:<br>[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan) |

**QUESTIONS**

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

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

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

| | |
|---|---|
| I hereby agree and sign off to the above statement | Name: James Raley<br>Title: EHS Professional<br>Email: jim.raley@dvn.com<br>Date: 10/02/2025 |

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# Santa Fe, NM 87505



## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289 |
| | Action Number:<br>511637 |
| | Action Type:<br>[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan) |

**QUESTIONS**

| **Site Characterization** | |
|---|---|
| *Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.* | |
| What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs) | Between 100 and 500 (ft.) |
| What method was used to determine the depth to ground water | NM OSE iWaters Database Search |
| Did this release impact groundwater or surface water | No |
| **What is the minimum distance, between the closest lateral extents of the release and the following surface areas:** | |
| A continuously flowing watercourse or any other significant watercourse | Between 300 and 500 (ft.) |
| Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) | Greater than 5 (mi.) |
| An occupied permanent residence, school, hospital, institution, or church | Greater than 5 (mi.) |
| A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes | Greater than 5 (mi.) |
| Any other fresh water well or spring | Greater than 5 (mi.) |
| Incorporated municipal boundaries or a defined municipal fresh water well field | Greater than 5 (mi.) |
| A wetland | Between 300 and 500 (ft.) |
| A subsurface mine | Greater than 5 (mi.) |
| An (non-karst) unstable area | Greater than 5 (mi.) |
| Categorize the risk of this well / site being in a karst geology | Medium |
| A 100-year floodplain | Between 500 and 1000 (ft.) |
| Did the release impact areas not on an exploration, development, production, or storage site | Yes |

| **Remediation Plan** | | |
|---|---|---|
| *Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.* | | |
| Requesting a remediation plan approval with this submission | | Yes |
| *Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.* | | |
| Have the lateral and vertical extents of contamination been fully delineated | | Yes |
| Was this release entirely contained within a lined containment area | | No |
| **Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.) | | |
| Chloride | (EPA 300.0 or SM4500 Cl B) | 8140 |
| TPH (GRO+DRO+MRO) | (EPA SW-846 Method 8015M) | 5650 |
| GRO+DRO | (EPA SW-846 Method 8015M) | 2870 |
| BTEX | (EPA SW-846 Method 8021B or 8260B) | 0 |
| Benzene | (EPA SW-846 Method 8021B or 8260B) | 0 |
| | | |
| *Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.* | | |
| On what estimated date will the remediation commence | | 12/31/2025 |
| On what date will (or did) the final sampling or liner inspection occur | | 08/28/2025 |
| On what date will (or was) the remediation complete(d) | | 12/31/2025 |
| What is the estimated surface area (in square feet) that will be reclaimed | | 200 |
| What is the estimated volume (in cubic yards) that will be reclaimed | | 30 |
| What is the estimated surface area (in square feet) that will be remediated | | 1064 |
| What is the estimated volume (in cubic yards) that will be remediated | | 94 |
| *These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.* | | |
| *The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.* | | |

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## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289 |
| | Action Number:<br>511637 |
| | Action Type:<br>[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan) |

**QUESTIONS**

| | |
|---|---|
| **Remediation Plan (continued)** | |
| *Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.* | |
| **This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:** | |
| *(Select all answers below that apply.)* | |
| (Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.) | Yes |
| Which OCD approved facility will be used for **off-site** disposal | *Not answered.* |
| **OR** which OCD approved well (API) will be used for **off-site** disposal | *Not answered.* |
| **OR** is the **off-site** disposal site, to be used, out-of-state | Yes |
| In which state is the disposal taking place | Texas |
| What is the name of the out-of-state facility | R360 Red Bluff |
| **OR** is the **off-site** disposal site, to be used, an NMED facility | *Not answered.* |
| (Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms) | *Not answered.* |
| (In Situ) Soil Vapor Extraction | *Not answered.* |
| (In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.) | *Not answered.* |
| (In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.) | *Not answered.* |
| (In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.) | *Not answered.* |
| Ground Water Abatement pursuant to 19.15.30 NMAC | *Not answered.* |
| OTHER (Non-listed remedial process) | *Not answered.* |
| *Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.* | |
| | |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. | |
| I hereby agree and sign off to the above statement | Name: James Raley<br>Title: EHS Professional<br>Email: jim.raley@dvn.com<br>Date: 10/02/2025 |
| *The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.* | |

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## QUESTIONS (continued)

| | |
|---|---|
| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289 |
| | Action Number:<br>511637 |
| | Action Type:<br>[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan) |

**QUESTIONS**

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

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## QUESTIONS (continued)

| Operator: | OGRID: |
|---|---|
| WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | 246289 |
| | Action Number:<br>511637 |
| | Action Type:<br>[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan) |

**QUESTIONS**

| **Sampling Event Information** | |
|---|---|
| Last sampling notification (C-141N) recorded | **498435** |
| Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC | **08/28/2025** |
| What was the (estimated) number of samples that were to be gathered | **76** |
| What was the sampling surface area in square feet | **1531** |

| **Remediation Closure Request** | |
|---|---|
| *Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.* | |
| Requesting a remediation closure approval with this submission | No |

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## CONDITIONS

| | |
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| Operator:<br>WPX Energy Permian, LLC<br>Devon Energy - Regulatory<br>Oklahoma City, OK 73102 | OGRID:<br>246289 |
| | Action Number:<br>511637 |
| | Action Type:<br>[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| scwells | Remediation plan approved with the following conditions: The sampling variance is approved to collect bottom confirmation samples at a frequency no greater than 400 ft2 and sidewall confirmation samples at a frequency no greater than 200 ft2. In addition, remediation on an active site can be deferred in areas immediately under or around production equipment such as production tanks, wellheads, and pipelines where remediation could cause a major facility deconstruction so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water. The deferral request must specify which sample points are being requested for deferral including an explanation why the contaminants can't be removed. Submit report to the OCD by 1/5/2026. | 10/7/2025 |