NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 26 2017
RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

nABITO2749185

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company WPX Energy Inc/RKI 246289	Contact Karolina Blaney
Address 5315 Buena Vista Dr.	Telephone No. 970 589 0743
Facility Name: RDU 12	Facility Type: Well Pad

Surface Owner: Federal	Mineral Owner: Federal	API No. 30- 015-24793

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	33	26S	30E	467	FNL	660	FEL	Eddy

Latitude: 32.01139288N **Longitude:** -103.86641694W

NATURE OF RELEASE

Type of Release. Produced Water and Oil	Volume of Release: 12 Bbls	Volume Recovered: 4.5 Bbls
Source of Release Tank Stuffing Box	Date and Hour of Occurrence 1/11/2017	Date and Hour of Discovery 1/11/2017 – 10:00 hrs MT
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? NMOCD Crystal Weaver & Michael Bratcher, BLM Shelly Tucker	
By Whom? Karolina Blaney	Date and Hour: 1/12/17– 8:33 hrs MT	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.*

This spill was caused by human error; stuffing box failure. Approximately 12 bbls of oil and water was spilled with 4.5 bbls recovered from the pad. The spill migrated west of the pad, entered a dry drainage and migrated for about 100 yards. To prevent from further migration, the oil was absorbed with dirt.

Describe Area Affected and Cleanup Action Taken.*

The impacted area was mapped with a Trimble. The impacted soil from the pad's surface and the drainage will be removed and hauled off for disposal. The impacted area will be sampled for BTEX, TPH, and chlorides in accordance with NM OCD Guidelines for Remediation of Leaks, Spills, and Releases. Further remediation will be based on these results.

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

Signature: Karolina Blaney	OIL CONSERVATION DIVISION Signed By Approved by Environmental Specialist:
Printed Name: Karolina Blaney	
Title: Environmental Specialist	Approval Date: 1/27/17 Expiration Date: N/A
E-mail Address: Karolina.blaney@wpxenergy.com	Conditions of Approval: See attached ☐ Attached
Date: 1/26/2016 Phone: 970-589-0743	

* Attach Additional Sheets If Necessary

2RP-4095

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State of New Mexico
Energy Minerals and Natural Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAB1702749185
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: WPX Energy Permian, LLC	OGRID: 246289
Contact Name: Jim Raley	Contact Telephone: 575-689-7597
Contact email: Jim.Raley@dvn.com	Incident # *(assigned by OCD)*: nAB1702749185
Contact mailing address: 5315 Buena Vista Drive, Carlsbad NM	

Location of Release Source

Latitude 32.00476 Longitude -103.87977
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Ross Draw Unit 12	Site Type: Well pad
Date Release Discovered: 01/11/2017	API# *(if applicable)*: 30-015-24793

Unit Letter	Section	Township	Range	County
A	33	26S	30E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil/Produced Water	Volume Released (bbls): 12	Volume Recovered (bbls): 4.5
☐ Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:
The spill was caused by human error; stuffing box failure. Approximately 12 bbls of oil and water was spilled with 4.5 bbls recovered from the pad. The spill migrated west of the pad, entered a dry drainage and migrated for about 100 yards. To prevent from further migration, the oil was absorbed with dirt.

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

State of New Mexico
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

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

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 8/16/2023

email: Jim.Raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

Incident ID	nAB1702749185
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

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Printed Name: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 8/16/2023

email: Jim.Raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

Incident ID	nAB1702749185
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Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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

Printed Name: Jim Raley Title: Environmental Professional

Signature: Jim Raley Date: 8/16/2023

email: Jim.Raley@dvn.com Telephone: 575-689-7597

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Ashley Maxwell Date: 09/01/2023

Printed Name: Ashley Maxwell Title: Environmental Specialist

CLOSURE REQUEST ADDENDUM

Ross Draw Unit 12

Eddy County, New Mexico

Incident Number nAB1702749185

Prepared for:

WPX Energy Permian, LLC

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

SYNOPSIS

In response to a meeting with the New Mexico Oil Conservation Division (NMOCD) for the denial of a Closure Request Addendum (CRA), which addressed a concern of inadequate determination of depth to groundwater from a denial associated with a previously submitted Closure Report (CR) for the Ross Draw Unit 12 (Site), Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy Permian, LLC (WPX), presents the following updated CRA that includes the CR with the complete remediation and laboratory analytical summaries. The previous CR and CRA were denied on March 29, 2023, and June 21, 2023, respectively due to the following reason(s):

March 29, 2023

- "The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater."

- The lat and long on the initial C-141 dated January 26, 2017 (2RP-4095) does not match the lat and long for the site sampled in the report."

June 21, 2023

- "Closure denied due to incomplete closure report. The following are missing: scaled site map/sampling diagram, description of remediation activities, photographs of the remediated site, and final sampling lab analyses."

Shelly Wells and Ashley Maxwell from NMOCD requested to resubmit this CRA with the updated groundwater determination and specifically the CR as an attachment, due to their inability to reference the CR in the NMOCD permitting files (OCD Permitting - Incidents (nm.gov)). Based on the updated CRA, correspondence and requests from NMOCD, WPX is requesting No Further Action (NFA) for Incident Number nAB1702749185.

SITE LOCATION AND BACKGROUND

The Site is located in Unit A, Section 33, Township 26 South, Range 30 East, in Eddy County, New Mexico (32.00476° N, 103.87977° W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM). (**Figure 1** in **Appendix A**).

On January 11, 2017, a wellhead stuffing box failure caused approximately 12 barrels (bbls) of produced water and crude oil to be released onto the well pad. Vacuum trucks were immediately dispatched and recovered approximately 4.5 bbls of fluid. WPX reported the release to the NMOCD on a Release Notification and Corrective Action Form C-141 (Form C-141), which was received by the NMOCD on January 26, 2017, and was subsequently assigned Incident Number nAB1702749185. It should be noted that the original Form C-141 included incorrect Global Positioning System (GPS) coordinates for the release and are updated on the provided Final Form C-141. Photographic documentation and coordination with the BLM for remediation oversight certified that remediation activities described in the CR were conducted in the correct location.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

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

The nearest permitted water well used in the CR with depth to water data was United States Geological Survey (USGS) well 320125103514701, located approximately 1.6 miles northeast of the Site. USGS well 320125103514701 has a reported depth of water 117 feet below ground surface (bgs) from 1987. Due to the age of the groundwater measurement and the distance of the well from the Site (greater than 25 years old and greater than 0.5 miles), NMOCD determined the data to be insufficient to assist with the regional groundwater depth estimate at the Site.

Since the submittal of the CR, on December 9, 2020, Talon LPE drilled a soil boring (MW-1), located approximately 0.5 miles northeast of the Site on the Ross Draw Unit #57 well pad. Using a truck mounted drill rig equipped with hollow stem auger, the soil boring was advanced to a total depth of 110 feet bgs. No fluids were observed throughout the drilling process nor after a 72-hour observation period. Following the observation period, the boring was plugged and abandoned according to the appropriate regulations. Well records for referenced wells are provided in **Appendix B**.

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

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

Constituents of Concern (COCs)	Laboratory Analytical Method	Closure Criteria
Chloride	(Environmental Protection Agency) EPA 300.0	20,000 milligram per kilogram (mg/kg)
Total Petroleum Hydrocarbon (TPH)	EPA 8015 M/D	2,500 mg/kg
TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO)	EPA 8021B	1,000 mg/kg
Benzene	EPA 8021B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8021B	50 mg/kg

CLOSURE REQUEST

Following the recent completion of soil boring MW-1, located within 0.5 miles of the Site, depth to water determination at the Site has been further supported to be greater than 100 feet bgs. With the supplemental groundwater data and the confirmation of the Site location, WPX has addressed all concerns in the denial responses from the NMOCD. NFA appears warranted at this time and the Site should be respectfully considered for Closure by the NMOCD. The previously submitted CR can be referenced in **Appendix C**.

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

Sincerely,

Etech Environmental and Safety Solutions, Inc.

Anna Byers
Senior Geologist

Joseph S. Hernandez
Senior Managing Geologist

cc: Jim Raley, WPX
New Mexico Oil Conservation Division
Bureau of Land Management

Appendices:

Appendix A: Figure 1: Site Map
Appendix B: Referenced Well Records
Appendix C: Previously Submitted Closure Report

APPENDIX A

Figure 1: Site Map

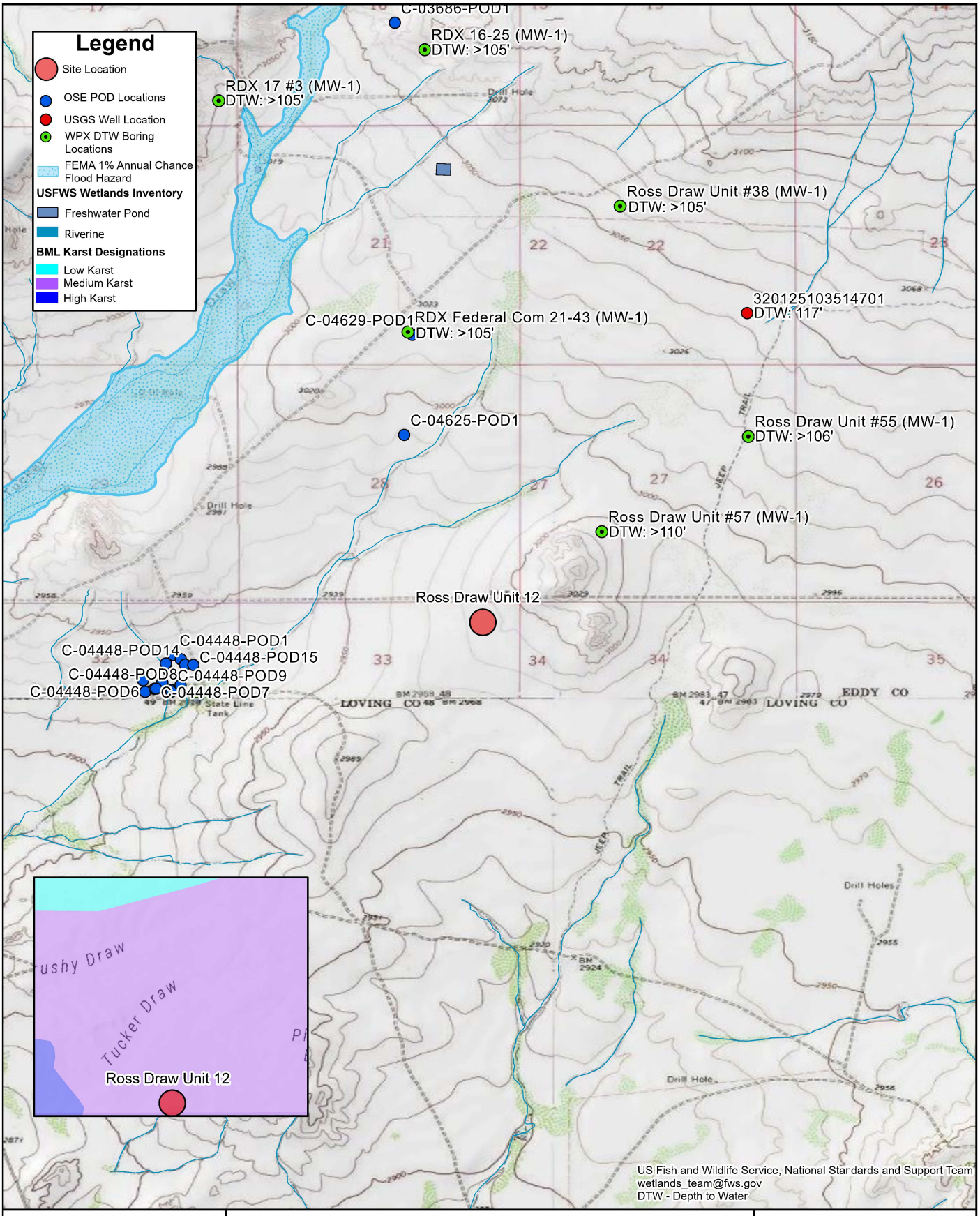

FIGURE 1

Site Map

WPX ENERGY PERMIAN, LLC
Ross Draw Unit 12
Unit A Sec 33 T26S R30E
Eddy County, New Mexico

N

0 1,500 3,000 Feet

APPENDIX B

Referenced Well Records

USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320125103514701

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320125103514701 26S.30E.22.44124

Eddy County, New Mexico
Latitude 32°01'25", Longitude 103°51'47" NAD27
Land-surface elevation 3,044 feet above NGVD29
This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1987-10-21		D	62610		2926.97	NGVD29	1	S			A
1987-10-21		D	62611		2928.54	NAVD88	1	S			A
1987-10-21		D	72019	117.03			1	S			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

Questions or Comments
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2023-06-02 14:53:54 EDT
0.28 0.24 nadww02

HRL COMPLIANCE SOLUTIONS

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-1		Location: Ross Draw Unit #57	
Date: 12/9/2020		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: 32.01032
Casing Type: PVC / Diameter: 2-inch / Depth Interval: 0-105 feet bgs		Boring Total Depth (ft. BGS): 110	Longitude: -103.87246
Screen Type: PVC / Slot: 0.010-inch / Diameter: 2-inch / Depth Interval: 105-110 ft		Well Total Depth (ft. BGS): 110	Depth to Water (ft. BTOC): > 110 / 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/M	D	N	N	NM	SM	NS	Tan/pale orange/pale brown poorly graded fine sand	
5										
10										
15										
20										
25										
30										
35										
40	NM	M	D	N	N	NM	SW	NS	Hard, dry pale pink orange well graded sand with gravel	
45										
50	NM	M	D	N	N	NM	SM	NS	Pale orange red tan silty fine sand	
55										
60	NM	L	D	N	N	NM	SW	NS	Dark brown greyish well graded sand	
65										
70	NM	L/M	D to SL M	N	N	NM	SW	NS	Grey well graded sand	
75										
80										
85										
90										
95										
100	NM	L/M	D	N	N	NM	SM	NS	Tan/pale orange/pale brown poorly graded fine sand - TD 110' bgs	
105										

APPENDIX C

Previously Submitted Closure Report

March 26, 2020
Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, NM 88210

Re: Ross Draw Unit #12 Release Closure Request (2RP-2211 & 2RP-4095)

Mr. Bratcher,

The attached report summarizes the sampling activities at the Ross Draw Unit (RDU) #12 well pad. WPX requests no further action be taken until the reclamation of the Pad. Please contact me with any questions or concerns.

Best regards,

Lynda Laumbach
Environmental Specialist

CC: Robert Hamlet, NMOCD
Victoria Venegas, NMOCD

Attachments:
Attachment 01 Site Characterization Report & Soil Closure Report

NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 26 2017
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Revised August 8, 2011

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Release Notification and Corrective Action

nAB1702749185

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company WPX Energy Inc/RKI 246289	Contact Karolina Blaney
Address 5315 Buena Vista Dr.	Telephone No. 970 589 0743
Facility Name: RDU 12	Facility Type: Well Pad

Surface Owner: Federal	Mineral Owner: Federal	API No. 30- 015-24793

LOCATION OF RELEASE

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Latitude: 32.01139288N **Longitude**: -103.86641694W

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By Whom? Karolina Blaney	Date and Hour: 1/12/17– 8:33 hrs MT	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

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Describe Cause of Problem and Remedial Action Taken.*

This spill was caused by human error; stuffing box failure. Approximately 12 bbls of oil and water was spilled with 4.5 bbls recovered from the pad. The spill migrated west of the pad, entered a dry drainage and migrated for about 100 yards. To prevent from further migration, the oil was absorbed with dirt.

Describe Area Affected and Cleanup Action Taken.*

The impacted area was mapped with a Trimble. The impacted soil from the pad's surface and the drainage will be removed and hauled off for disposal. The impacted area will be sampled for BTEX, TPH, and chlorides in accordance with NM OCD Guidelines for Remediation of Leaks, Spills, and Releases. Further remediation will be based on these results.

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

Signature: Karolina Blaney	OIL CONSERVATION DIVISION Approved by Environmental Specialist: Signed By
Printed Name: Karolina Blaney	
Title: Environmental Specialist	Approval Date: 1/27/17 Expiration Date: N/A
E-mail Address: Karolina.blaney@wpxenergy.com	Conditions of Approval: See attached ☐ Attached
Date: 1/26/2016 Phone: 970-589-0743	

* Attach Additional Sheets If Necessary

2RP-4095

State of New Mexico
Oil Conservation Division

Incident ID	2RP-4095
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	2RP-2211
District RP	
Facility ID	
Application ID	

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

Printed Name: Lynda Laumbach Title: Environmental Specialist

Signature: Lynda Laumbach Date: 03/26/2020

email: Lynda.Laumbach@wpxenergy.com Telephone: (575)725-1647

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	2RP-4095
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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

Printed Name: Lynda Laumbach Title: Environmental Specialist

Signature: Lynda Laumbach Date: 03/26/2020

email: Lynda.Laumbach@wpxenergy.com Telephone: (575)725-1647

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

RECEIVED
MAR 06 2014
NMOCD ARTESIA

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

nHMP1407325518 246289 **OPERATOR** ☒ Initial Report ☐ Final Report

Name of Company RKI EXPLORATION & PRODUCTION	Contact HEATHER BREHM
Address 210 PARK AVE, STE 900, OKC, OK 73102	Telephone No. 405-996-5769
Facility Name ROSS DRAW 12	Facility Type POW

Surface Owner	Mineral Owner	API No. 30-015-24793

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	33	26S	30E	467'	NORTH	660'	EAST	EDDY

Latitude_____ **Longitude**_____

NATURE OF RELEASE

Type of Release OIL/WATER	Volume of Release 15 BBLS	Volume Recovered 0 BBLS
Source of Release TRANSFER PUMP	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? 2-25-14 UKN TIME	BLM DISCOVERED 3/5/14 @ 9:00 AM
By Whom? M. BALLIET, BLM	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
WATER TANK RAN OVER, TRANSFER PUMP OVERLOAD

Describe Area Affected and Cleanup Action Taken.*
SPILL WAS CONTAINED IN DIRT CONTAINMENT; DYKE

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Signature: Heather Brehm
Printed Name: Heather Brehm
Title: Regulatory Analyst
E-mail Address: hbrehm@rkixp.com
Date: 3/06/2014 Phone: 405-996-5769

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 3-14-14 Expiration Date: NA

Conditions of Approval:
Remediation per OCD Rule & Guidelines, & like approval by BLM. SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 4-14-14

Attached ☐

2RP 2211

* Attach Additional Sheets If Necessary

State of New Mexico
Oil Conservation Division

Incident ID	2RP-2211
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	2RP-2211
District RP	
Facility ID	
Application ID	

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Printed Name: Lynda Laumbach Title: Environmental Specialist

Signature: Lynda Laumbach Date: 03/26/2020

email: Lynda.Laumbach@wpxenergy.com Telephone: (575)725-1647

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	2RP-2211
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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

Printed Name: Lynda Laumbach Title: Environmental Specialist

Signature: Lynda Laumbach Date: 03/26/2020

email: Lynda.Laumbach@wpxenergy.com Telephone: (575)725-1647

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Site Characterization Report & Soil Closure Request

WPX Energy, Inc.
RDU 12
Eddy County, New Mexico
Unit Letter A, Section 33, Township 26 South, Range 30 East
Latitude 32.004760 North, Longitude 103.879775 West
NMOCD Reference No. 2RP-2211 & 2RP-4095

Prepared By:

Etech Environmental & Safety Solutions, Inc.
13000 W County Road 100
Odessa, TX 79765

Joseph S. Hernandez - Project Manager

Intentional Blank

Midland • San Antonio • Lubbock • Lovington • Lafayette

TABLE OF CONTENTS

1.0 PROJECT INFORMATION (2RP-2211)

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy, Inc, has prepared this Site Characterization Report and Soil Closure Report for the Release Site Known as the Ross Draw 12. Details of the release are summarized below:

Location of Release Source

Latitude: 32.004760 Longitude: -103.8797758

Provided GPS are in WGS84 format.

Site Name:	ROSS DRAW 12	Site Type:	Wellhead
Date Release Discovered:	2/25/2014	API # (if applicable):	30-015-24793

Unit Letter	Section	Township	Range	County
A	33	26S	30E	Eddy

Surface Owner: [ ] State [X] Federal [ ] Tribal [ ] Private (Name _____)

Nature and Volume of Release

[X] Crude Oil [X] Produced Water	Volume Released (bbls) 15	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water > 10,000 mg/L?	[ ] Yes [ ] No [X] N/A
[ ] Condensate	Volume Released (bbls)	Volume Recovered (bbls)
[ ] Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
[ ] Other (describe)	Volume/Weight Released	Volume/Weight Recovered

Cause of Release:
This release was caused by a transfer pump overload, resulting in the water tank to overflow.

Initial Response

[X] The source of the release has been stopped.
[X] The impacted area has been secured to protect human health and the environment.
[X] Release materials have been contained via the use of berms or dikes, absorbent pad, or other containment devices
[X] All free liquids and recoverable materials have been removed and managed appropriately.

Previously submitted portions of the NMOCD Form C-141 are available on the NMOCD Imaging System.

1.0A PROJECT INFORMATION (2RP-4095)

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy, Inc, has prepared this Site Characterization Report and Soil Closure Report for the Release Site Known as the RDU 12. Details of the release are summarized below:

Location of Release Source

Latitude: 32.004760 Longitude: -103.8797758

Provided GPS are in WGS84 format.

Site Name:	RDU 12	Site Type:	Wellhead
Date Release Discovered:	1/11/2017	API # (if applicable):	30-015-24793

Unit Letter	Section	Township	Range	County
A	33	26S	30E	Eddy

Surface Owner: [ ] State [X] Federal [ ] Tribal [ ] Private (Name _____)

Nature and Volume of Release

[X] Crude Oil [X] Produced Water	Volume Released (bbls) 12	Volume Recovered (bbls) 4.5
	Is the concentration of dissolved chloride in the produced water > 10,000 mg/L?	[ ] Yes [ ] No [X] N/A
[ ] Condensate	Volume Released (bbls)	Volume Recovered (bbls)
[ ] Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
[ ] Other (describe)	Volume/Weight Released	Volume/Weight Recovered

Cause of Release:
This release was caused by human error; stuffing box failure. The spill migrated west of the pad, entered a dry drainage and migrated for about 100 yards.

Initial Response

- [X] The source of the release has been stopped.
- [X] The impacted area has been secured to protect human health and the environment.
- [X] Release materials have been contained via the use of berms or dikes, absorbent pad, or other containment devices
- [X] All free liquids and recoverable materials have been removed and managed appropriately.

Previously submitted portions of the NMOCD Form C-141 are available on the NMOCD Imaging System.

2.0 SITE CHARACTERIZATION (2RP-2211)

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) was conducted in an effort to determine the horizontal distance to known water sources within a half mile radius of the Release Site. Probable groundwater depth was determined using data generated by numeric models based on available water well data and published information. Depth to groundwater information is provided as Appendix A.

What is the shallowest depth to groundwater beneath the area affected by the release?	>100' bgs
Did the release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of any occupied permanent residence, school, hospital, institution or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
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Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production or storage site?	☐ Yes ☒ No

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted on Figure 2.

3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

Based on the volume and nature of the release, inferred depth to groundwater and NMOCD Siting Criteria, the NMOCD Closure Criteria for the Site is as follows:

Closure Criteria for Soil Impacted by a Release			
Probable Depth to Groundwater	**Constituent**	**Method**	**Limit**
>100' bgs	Chloride	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	2,500 mg/kg
	DRO + GRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Methods 8021b or 8260b	50 mg/kg
	Benzene	EPA SW-846 Methods 8021b or 8260b	10 mg/kg

2.0A SITE CHARACTERIZATION (2RP-4095)

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) was conducted in an effort to determine the horizontal distance to known water sources within a half mile radius of the Release Site. Probable groundwater depth was determined using data generated by numeric models based on available water well data and published information. Depth to groundwater information is provided as Appendix A.

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Did the release impact areas not on an exploration, development, production or storage site?	☒ Yes ☐ No

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted on Figure 2.

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>100' bgs	Chloride	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	2,500 mg/kg
	DRO + GRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Methods 8021b or 8260b	50 mg/kg
	Benzene	EPA SW-846 Methods 8021b or 8260b	10 mg/kg

4.0 REMEDIATION ACTIVITIES SUMMARY

On **January 15, 2020,** Etech personnel conducted initial site assessments for **two (2)** releases, **2RP-2211** and **2RP-4095**, that occurred at the RDU 12 Site in Eddy County, NM. The assessments consisted of generating a footprint via GPS receiver of the aforementioned releases and photo documentation of the current Site conditions. Based on visual observation, approximately **eight hundred and nineteen (819)** square feet of surface area was impacted from the release assigned **2RP-2211**; approximately **five thousand and fifty-three (5,053)** square feet of surface area was impacted from the release assigned **2RP-4095**. Between **January 22, 2020** and **February 25, 2020**, a series of test trenches and/or hand-augered soil bores were advanced within the release footprints in an effort to define the vertical and horizontal extent of impacted soil. Field soil samples were collected and field-screened for the presence of Volatile Organic Compounds utilizing a Photoionization Detector (PID) and concentrations of chloride utilizing a Hach Quantab ® chloride test kit. A "Site & Sample Location Map" is provided as Figure 3 **(2RP-2211)** and Figure 3A **(2RP-4095)**. Field data and soil profile logs, if applicable, are provided as Appendix B.

Based on field observations and field test data associated with **2RP-2011**, **thirteen (13)** delineation soil samples (TT1@2', TT1@4', TT2@2', TT2@4', AH1@2', AH1@4', AH1@6', AH2@2', AH2@4', AH3@2', AH3@4', AH4@2' and AH4@4) were relinquished to an accredited laboratory for analysis of BTEX, TPH and Chloride concentrations. Laboratory analytical results indicated soil was not affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard. A "Soil Chemistry Table" is provided as Table 1. Laboratory Analytical Reports are provided in Appendix C.

Based on field observations and field test data associated with **2RP-4095**, **twenty (20)** delineation soil samples (TT1@2', TT1@12', TT2@2', TT2@4', TT3@2', TT3@4', AH1@2', AH1@4', AH2@2', AH2@4', AH3@2', AH3@4', AH4@2', AH4@4', AH5@2', AH5@4', AH6@2', AH6@4', AH7@2' and AH7@4') were relinquished to an accredited laboratory for analysis of BTEX, TPH and Chloride concentrations. Laboratory analytical results indicated soil was not affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard. A "Soil Chemistry Table" is provided as Table 1. Laboratory Analytical Reports are provided in Appendix C.

Based on laboratory analytical data, soil within the affected areas associated with **2RP-2211** and **2RP-4095** yielded concentrations below the NMOCD Closure Criteria and/or NMOCD Reclamation Standard, therefore the soil has not been excavated from the affected areas.

5.0 RESTORATION, RECLAMATION AND RE-VEGETATION PLAN

Laboratory analytical results from soil samples collected during delineation events indicated remediation was not required, therefore the affected area was left in-situ and not altered. Vegetation within the affected area will be monitored and may be reseeded with an agency-approved seed mixture free of noxious weeds during the first favorable growing season following closure of the site, if necessary.

6.0 SOIL CLOSURE REQUEST

Delineation activities were conducted in accordance with applicable NMOCD Regulations. Laboratory analytical from the collected soil samples indicated soil in the affected area(s) was not impacted above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard. Laboratory analytical results from confirmation soil samples indicate concentrations of BTEX, TPH and chloride was below the NMOCD Closure Criteria and/or NMOCD Reclamation Standard in each of the submitted soil samples.

Based on laboratory analytical results and field activities conducted to date, Etech recommends WPX Energy, Inc. provide copies of this Remediation Summary and Soil Closure Request to the appropriate agencies and request closure be granted to the RDU 12 Site (**2RP-2211 and 2RP-4095**).

7.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this Site Characterization Report and Soil Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents reference in the report and on oral statements made by certain individuals. Basis has not conducted an independent examination of the facts contained in referenced materials and statements. Etech has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Etech has prepared the report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of WPX Energy, Inc. Use of the information contained in this report is prohibited within the consent of Etech and/or WPX Energy, Inc.

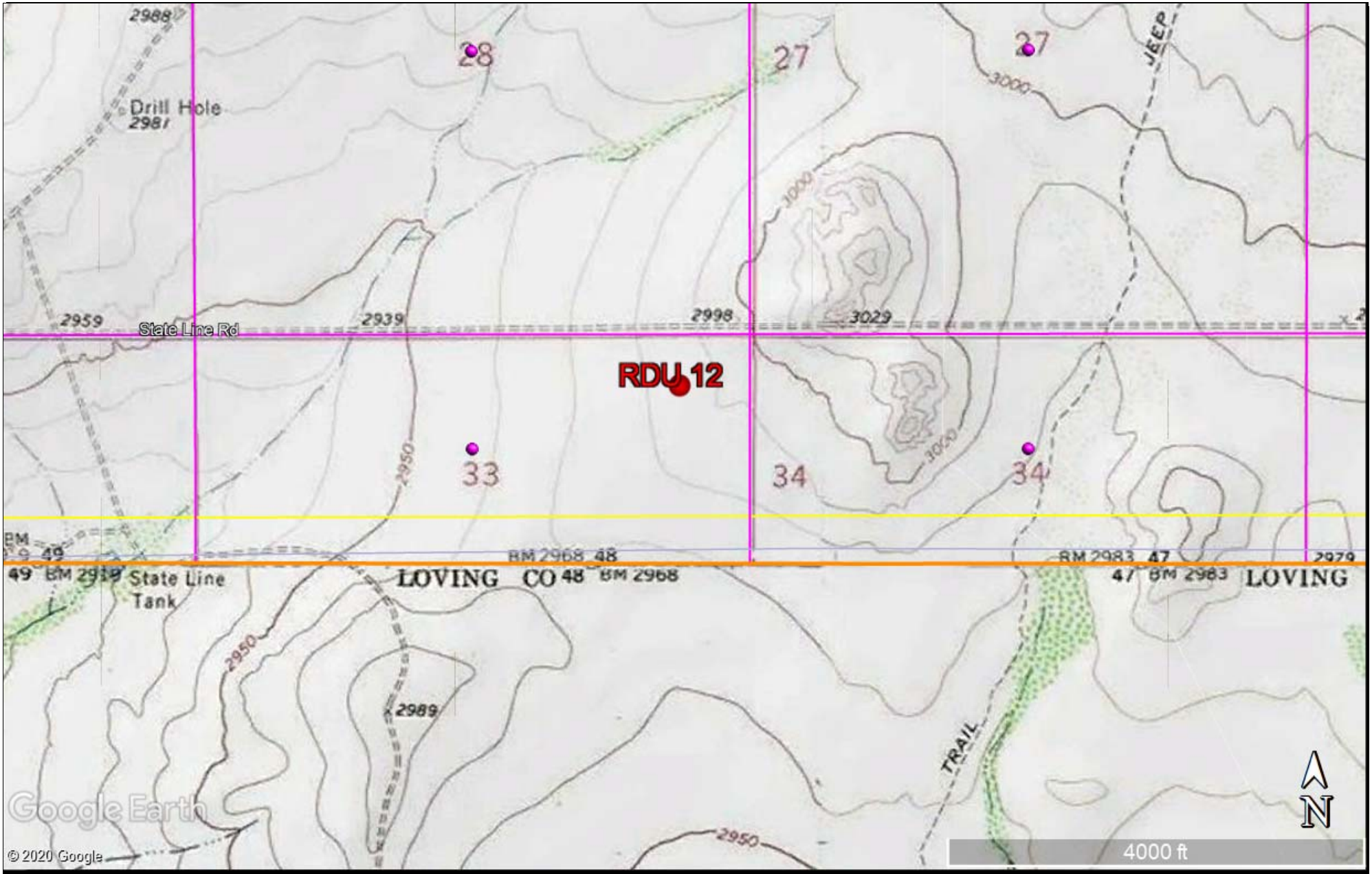
8.0 DISTRIBUTION

WPX Energy, Inc.
5315 Buena Vista Dr.
Carlsbad, NM 88220

New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 2
811 S. First Street
Artesia, NM 88210

(Electronic Submission)

Figure 1
Topographic Map



Legend:

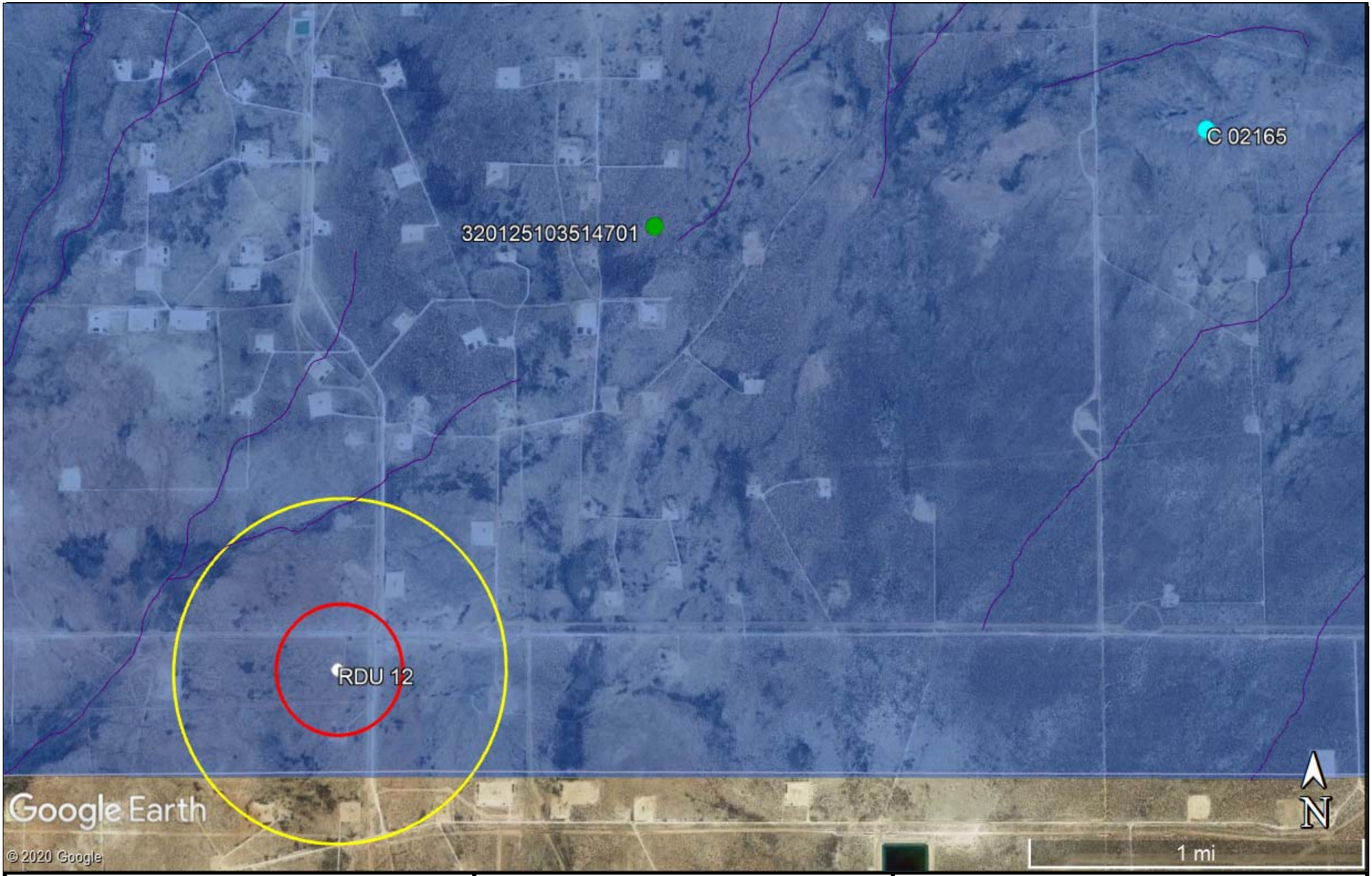
- Site Location

Figure 1
Topographic Map
WPX Energy, Inc.
RDU 12
GPS: 32.004760, -103.8797758
Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: JH Checked: JH Date: 3/2/20

Figure 2
Aerial Proximity Map



Legend:

- Site Location
- 1,000 ft. radius
- 0.5 mi. radius
- Low/Medium Karst zone
- High Karst
- Well - USGS
- Well - NMOSE
- Surface Water
- 1% Annual Flood Chance
- Potash Mine Workings

Figure 2
Aerial Map
WPX Energy, Inc.
RDU 12
GPS: 32.004760, -103.8797758
Eddy County

eTECH Environmental & Safety Solutions, Inc.

Drafted: JH Checked: JH Date: 3/2/20

Figure 3
Site and Sample Location Map

Note: If VOC/hydrocarbon or chloride value is above NMOCD Closure Criteria and/or NMOCD Reclamation Standard , a data box will note concentration exceedances of present analyte.

Legend:

- Delineation Point
- Release outline

Figure 3

Site and Sample Location

RDU 12

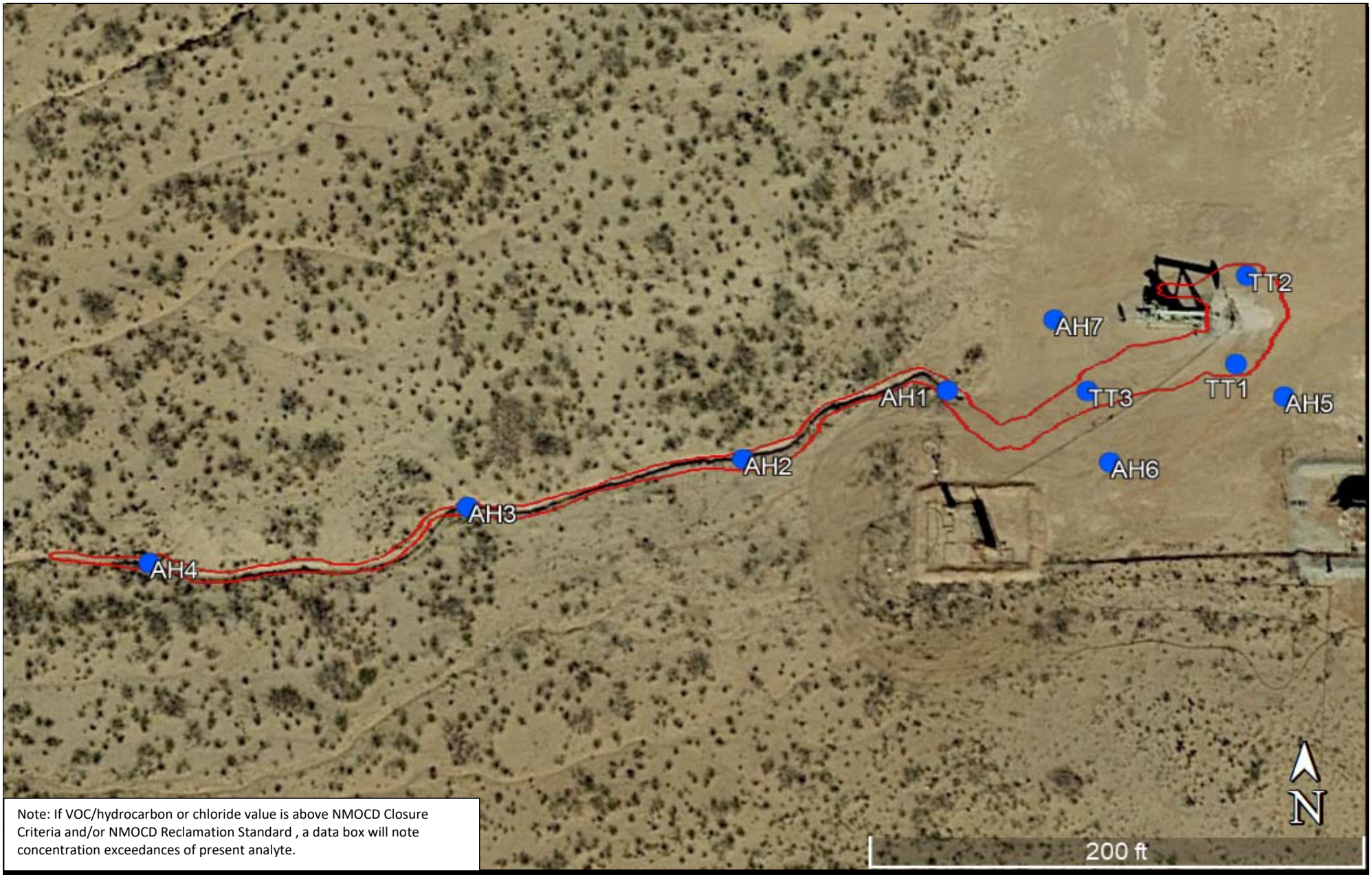
2RP-2211

WPX Energy, Inc.

GPS: 31.004760, -103.879775

eTECH Environmental & Safety Solutions, Inc.

Drafted: JH Checked: JH Date: 2/28/20



Note: If VOC/hydrocarbon or chloride value is above NMOCD Closure Criteria and/or NMOCD Reclamation Standard , a data box will note concentration exceedances of present analyte.

Legend:

- Delineation Point
- Release outline

Figure 3A

Site and Sample Location

RDU 12

2RP-4095

WPX Energy, Inc.

GPS: 31.004760, -103.879775

eTECH Environmental & Safety Solutions, Inc.

Drafted: JH Checked: JH Date: 2/28/20

Table 1
Concentrations of BTEX, TPH, and/or Chloride in Soil

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX TPH AND CHLORIDE IN SOIL
WPX Energy, Inc.
ROSS DRAW 12
2RP-2211

Sample ID	Date	Depth	Soil Status	SW 846 8026B		SW 846 8015M Ext.					300.0 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C_6-C_{10} (mg/kg)	DRO C_{10}-C_{28} (mg/kg)	GRO + DRO C_6-C_{28} (mg/kg)	ORO C_{28}-C_{36} (mg/kg)	TPH C_6-C_{36} (mg/kg)	Chloride (mg/kg)
TT 1	1/22/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
TT 1	1/22/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
TT 2	1/22/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
TT 2	1/22/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
AH 1	1/23/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	5,310
AH 1	1/23/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	1,970
AH 1	2/25/2020	6'	In-situ	ND	ND	ND	ND	ND	ND	ND	153
AH 2	2/25/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	166
AH 2	2/25/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
AH 3	2/25/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	156
AH 3	2/25/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	129
AH 4	2/25/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
AH 4	2/25/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	165
Closure Criteria				10	50	-	-	1,000	-	2,500	20,000

NOTES:

- = feet

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

ND text denotes non-detectable concentrations

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX TPH AND CHLORIDE IN SOIL
WPX Energy, Inc.
RDU 12
2RP-4095

Sample ID	Date	Depth	Soil Status	SW 846 8026B		SW 846 8015M Ext.					300.0 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C_6-C_{10} (mg/kg)	DRO C_{10}-C_{28} (mg/kg)	GRO + DRO C_6-C_{28} (mg/kg)	ORO C_{28}-C_{36} (mg/kg)	TPH C_6-C_{36} (mg/kg)	Chloride (mg/kg)
TT 1	1/22/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	1,360
TT 1	1/22/2020	12'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
TT 2	1/23/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	36.0
TT 2	1/23/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	108
TT 3	1/23/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	891
TT 3	1/23/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
AH 1	1/23/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	222
AH 1	1/23/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	302
AH 2	1/23/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
AH 2	1/23/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
AH 3	1/23/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
AH 3	1/23/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
AH 4	1/23/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
AH 4	1/23/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
AH 5	2/25/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	ND
AH 5	2/25/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	178
AH 6	2/25/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	173
AH 6	2/25/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	155
AH 7	2/25/2020	2'	In-situ	ND	ND	ND	ND	ND	ND	ND	212
AH 7	2/25/2020	4'	In-situ	ND	ND	ND	ND	ND	ND	ND	142
Closure Criteria				10	50	-	-	1,000	-	2,500	20,000

NOTES:

- = feet

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

ND text denotes non-detectable concentrations

Appendix A
Depth to Groundwater Information

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320125103514701

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320125103514701 26S.30E.22.44124

Eddy County, New Mexico
Latitude 32°01'25", Longitude 103°51'47" NAD27
Land-surface elevation 3,044 feet above NGVD29

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurem
1987-10-21		D	117.03			2		S		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2020-03-02 09:57:48 EST
0.28 0.26 nadww01

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320125103514701

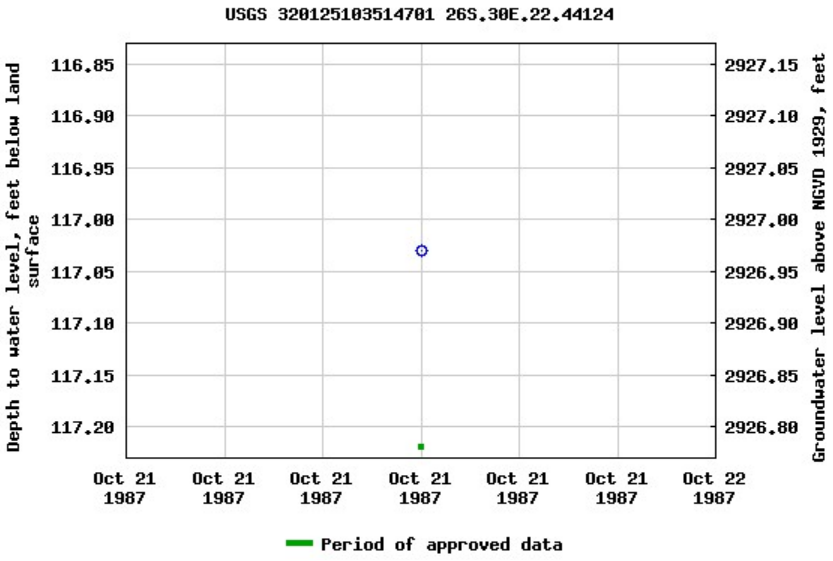
Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320125103514701 26S.30E.22.44124

Available data for this site Groundwater: Field measurements | GO
Eddy County, New Mexico
Hydrologic Unit Code 13070001
Latitude 32°01'25", Longitude 103°51'47" NAD27
Land-surface elevation 3,044 feet above NGVD29

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility Plug-Ins FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2020-03-02 09:55:57 EST
0.66 0.55 nadww01

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 04068 POD1		CUB	ED	1	3	1	16	26S	30E	604397	3546018	4722			
C 02165		C	ED				24	26S	30E	610036	3544121*	4967	440	180	260
C 02038		C	ED	3	2	4	26	26S	29E	599204	3541992*	6622	200		
C 03483		C	ED	4	4	4	05	26S	30E	604296	3548251	6907	700	200	500
C 03581 POD1		CUB	ED	4	4	4	05	26S	30E	604298	3548291	6946	800	320	480
C 01361		CUB	ED	3	4	3	05	26S	30E	603240	3548157	7124	775	184	591
C 01360		CUB	ED	4	3	3	05	26S	30E	602997	3548152	7211	770	173	597
C 01354 X-3		CUB	ED	2	1	3	23	26S	29E	598323	3543837	7838	170		
C 03605 POD1		CUB	ED	4	2	3	27	26S	29E	596990	3541983	8831	45	0	45
C 02248		CUB	ED	1	2	3	08	26S	31E	612942	3547316*	9196	300	292	8
C 02249		CUB	ED	1	2	3	08	26S	31E	612942	3547316*	9196	300	292	8
C 01777		C	ED				08	26S	31E	613245	3547409*	9490	325	300	25

Average Depth to Water: **215 feet**
Minimum Depth: **0 feet**
Maximum Depth: **320 feet**

Record Count: 12

UTMNAD83 Radius Search (in meters):

Easting (X): 605808.6733984414 **Northing (Y):** 3541511.5491144983 **Radius:** 10000

***UTM location was derived from PLSS - see Help**

3/1/20 1:47 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: C 02165 **Subbasin:** C **Cross Reference:** -

Primary Purpose: PRO 72-12-1 PROSPECTING OR DEVELOPMENT OF NATURAL RESOURCE

Primary Status: PMT PERMIT

Total Acres: **Subfile:** - **Header:** -

Total Diversion: 0 **Cause/Case:** -

Owner: GRACE OIL

Contact: CORKY GLENN

Documents on File

	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	468923	72121	1988-05-02	PMT	LOG	C 02165	T		3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y		Other Location Desc
C 02165		Shallow				24	26S	30E	610036	3544121*		1780 FEL 460 FSL

***An (*) after northing value indicates UTM location was derived from PLSS - see Help**

Appendix B
Field Data and Soil Profile Logs

eTECH Environmental & Safety Solutions, Inc.

Sample Log

Date: Jan 22-23, 2020

Project: RDU 12 (2RP-2211, 2RP-4095)

Project Number: 11755 Latitude: 32.00476033 Longitude: -103.8797759

Sample ID	PID/Odor	Chloride Conc.		GPS
TT 1 @ 1' @ 3:10 pm	1.7 / none	4.0	580	32.004571, -103.879486
2' @ 3:15 pm	0 / none	3.8	528	
4' @ 3:20 pm	" "	1.2	<108	
TT 2 @ 1' @ 3:30 pm	2.0 / none	4.2	632	32.004572, -103.879565
2' @ 3:45 pm	0 / none	4.0	580	
4' @ 3:50 pm	" "	1.8	132	
AH 1 @ 1' @ 1:00 pm	1.3 / none	7.6	2,076	32.004553, -103.879662
2' @ 1:15 pm	0 / none	6.6	1,488	
4' @ 1:30 pm	1.7 / none	7.0	1,696	* Auger max depth

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples= SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

eTECH Environmental & Safety Solutions, Inc.

Soil Profile

Date: Jan 22-23, 2020

Project: RDU 12 (2RP-2211)

Project Number: 11755 Latitude: 32.00476033 Longitude: -103.8797759

Depth (ft. bgs)	Description
1	light medium brown silty sand trace caliche
2	medium brown silty sand
3	
4	"
5	" caliche in part
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
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25	
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29	
30	
31	
32	
33	
34	
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36	
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38	
39	
40	

eTECH Environmental & Safety Solutions, Inc.

Sample Log

Date: 2.25.20

Project: RDU 12 (2RP-2211)

Project Number: 11755 Latitude: 32.00476033 Longitude: -103.8797759

Sample ID	PID/Odor	Chloride Conc.	GPS
AH2@ 1' 3:20pm	0/none	2.2 → 220	32.004631, -103.879679
2' 3:25pm	0.4/none	1.6 → 148	
3' 3:30pm	0/none	1.4 → 124	
4' 3:40pm	" "	1.0 → <124	
AH3@ 1' 3:50pm	0.7/none	1.8 → 168	32.004560, -103.879742
2' 4:00pm	0/none	1.4 → 124	
3' 4:10pm	" "	1.0 → <124	
4' 4:15pm	" "	1.0 → <124	
AH4 @ 1' 4:20pm	1.3/none	1.2 → <124	32.004450, -103.879646
2' 4:25pm	0/none	1.8 → 168	
3' 4:30pm	" "	2.0 → 196	
4' 4:45pm	" "	1.0 → <124	
AH1 @ 6' 5:25pm	0/none	1.4 → 124	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples= SP #1 @ Sb or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas

ETECH Environmental & Safety Solutions, Inc.

Soil Profile

Date: 2.25.20

Project: RDU 12 (2RP-2211)

Project Number: 11755 Latitude: 32.00476033 Longitude: -103.8797759

Depth (ft. bgs)	Description
1	light-medium brown silty sand, poorly sorted
2	medium brown silty sand
3	" "
4	medium brown silty sand, trace caliche
5	
AH 1 @ 6	brown silty sand, trace of clays
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
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eTECH Environmental & Safety Solutions, Inc.

Sample Log

Date: Jan 22-23, 2020

Project: RDU 12 (2RP-2211) (2RP-4095)

Project Number: 11755 Latitude: 32.00476033 Longitude: -103.8797759

Sample ID	PID/Odor	Chloride Conc.		GPS
TT1 @ 1' @ 1:35 pm	10.0 / mild	7.2	1,812	32.004723, -103.879774
2' @ 1:45 pm	0.2 / none	4.6	744	
4' @ 1:50 pm	40.0 / mild	5.4	996	
6' @ 1:55 pm	20.5 / mild	6.8	1,588	
8' @ 2:00 pm	30.0 / mild	~4.8	804	
10' @ 2:15 pm	5.6 / mild	5.0	864	
12' @ 2:20 pm	0.1 / none	1.0	<108	
TT2 @ 1' @ 10:30 am	2.0 / none	5.6	1,068	32.004828, -103.879758
2' @ 10:45 am	0 / none	4.6	744	
4' @ 10:50 am	" "	2.0	164	
TT3 @ 1' @ 11:00 am	1.3 / none	6.2	1,304	32.004690, -103.879971
2' @ 11:15 am	0 / none	6.0	1,220	
4' @ 11:20 am	" "	1.4	<108	
AH 1 @ 1' @ 11:57 am	0 / none	3.0	348	32.004691, -103.880156
2' @ 12:00 pm	" "	1.8	132	
4' @ 12:05 pm	" "	1.2	<108	
AH 2 @ 1' @ 12:07 pm	0 / none	2.4	232	32.004609, -107.880425
2' @ 12:10 pm	" "	1.0	<108	
4' @ 12:15 pm	" "	0.8	" "	
AH 3 @ 1' @ 12:17 pm	0 / none	2.0	164	32.004552, -107.880790
2' @ 12:20 pm	" "	1.6	108	
4' @ 12:25 pm	" "	1.0	<108	
AH 4 @ 1' @ 12:27 pm	0 / none	1.8	132	32.004484, -103.881212
2' @ 12:30 pm	" "	0.8	<108	
4' @ 12:35 pm	" "	0.6	<108	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples= SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Area

ETECH Environmental & Safety Solutions, Inc.

Soil Profile

Project: RDU 12 (2RP-4095)

Project Number: 11755 Latitude: 32.00476033 Longitude: -103.8797759

Date: Jan 22-23-2020

Depth (ft. bgs)	Description
1	Caliche, tan brown silty sand
2	light – med brown silty sand
3	
4	medium brown silty sand, caliche in part
5	
6	medium dk brown clay w/ silty sand
7	
8	medium brown silty sand, clay in part, trace caliche
9	
10	clays w/ trace red sandstone
11	
12	" SAA "
13	
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eTECH Environmental & Safety Solutions, Inc.

Sample Log

Project: RDU 12 (2RP-4095) Date: 2.25.20

Project Number: 11755 Latitude: 32.00476033 Longitude: -103.8797759

Sample ID	PID/Odor	Chloride Conc.			GPS
AH 5 @ 1:55pm 1'	1.6/none	2.2	→	220	32.004674, -103.879735
2:00pm 2'	1.0/none	1.8	→	168	
2:10pm 3'	" "	1.0	→	<124	
2:15pm 4'	0/none	~1.0	→	<124	
AH 6 @ 2:20pm 1'	2.7/none	1.6	→	148	32.004593, -103.879937
2:30pm 2'	1.3/none	1.0	→	<124	
2:35pm 3'	0/none	~1.0	→	<124	
2:45pm 4'	" "	" "	→	<124	
AH 7 @ 2:50pm 1'	0/none	~2.4	→	~248	32.004753, -103.880030
3:00pm 2'	" "	1.2	→	<124	
3:10pm 3'	" "	1.6	→	148	
3:15pm 4'	" "	1.0	→	<124	

Sample Point = SP #1 @ ## etc
Floor = FL #1 etc
Sidewall = SW #1 etc

Test Trench = TT #1 @ ##
Refusal = SP #1 @ 4'-R
Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples= SP #1 @ 5b or SW #1b
Stockpile = Stockpile #1
GPS Sample Points, Center of Comp Areas

ETECH Environmental & Safety Solutions, Inc.

Soil Profile

Date: 2.25.20

Project: RDU 12 (2RP-4095)

Project Number: 11755 Latitude: 32.00476033 Longitude: -103.8797759

Depth (ft. bgs)	Description
1	light - med dk brown, silty sand
2	med dk brown silty sand
3	med brown silty sand, caliche in part
4	med brown silty sand trace of caliche
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
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3

Location RDU12 (2RP-2211, 4095) Date 1.15.20

Project / Client WPX Energy

Scale 32.00476033, -103.8797759

0912 - Arrive onsite / prepare JSA

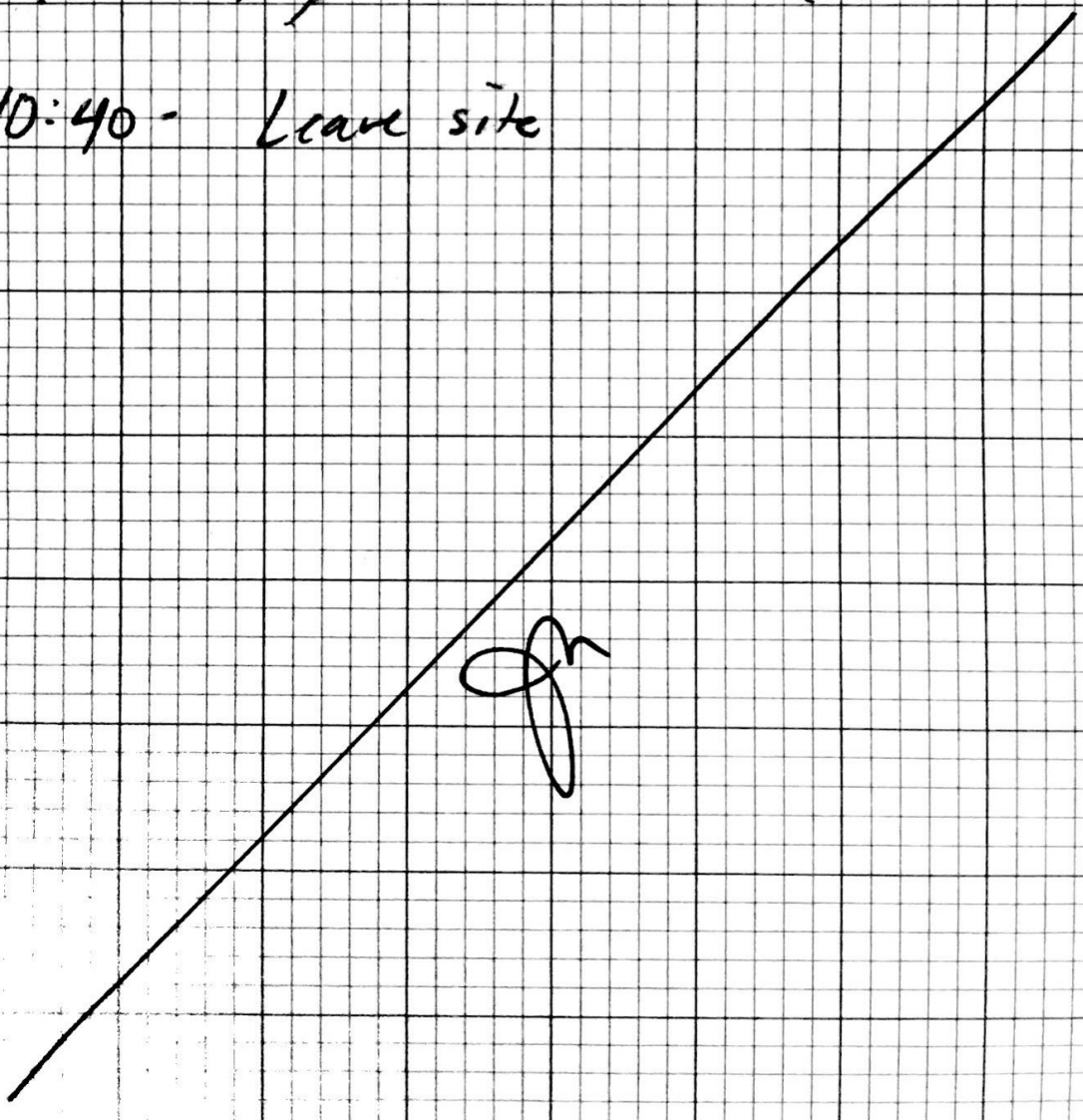
0930 - Tailgate safety meeting

0945 - Take photos of releases

0955 - Stake white flags for one-call

10:15 - Begin release track(s)

10:40 - Leave site



Rite in the Rain

Location RDU 12 Date 1.22.20

Project / Client ZRP-4095 / ZRP-2211 (WPX)

32.00476033, -103.8797759

1:20 pm - Onsite w/ Kemp (operator) prepare JSA, conduct tailgate safety meeting, calibrate PID

1:25 pm - Site walkthrough, confirm utilize locates: Yellow flags down

1:27 pm - Began delineation activities for ZRP-4095

2:30 pm - Call Delaware Basin to schedule line remark to confirm subsurface gas line. (west of pad from meter run

2:45 pm - Prep for delineation activities (ZRP-2211) inside tank battery

3:00 pm - Utilize backhoe to pothole over fence.

3:05 pm - Begin delineation activities for (-2211)

4:15 pm - finish, load equipment

4:30 pm - offsite

JM

Location RDU 12 Date 1.23.20

Project / Client ZRP-4095 / ZRP-2211 (WPX)

32.004760332, -103.879775899

10:15 am - Confirmed w/ Delaware Basin, site has been remarked, can cont. to delineate on pad.

10:20 am - Prep JSA - tailgate safety meeting w/ temp. take equipment, calibrate ~~JSA~~ PID

10:25 am - Continue delineating ZRP-4095

11:45 am - Install ~~Install~~ borings in pasture / wash

12:35 pm - Finish borings for ZRP-4095

1:00 pm - Install auger hole inside tank battery inaccessible w/ equipment for -2211.

1:45 pm - Finish delineation activities

2:30 pm - load equipment

3:00 pm - offsite to submit samples.

* reference Sample map / log for Screening

26

Location RDV12 (2RP-2211, 4095) Date 2/25/20

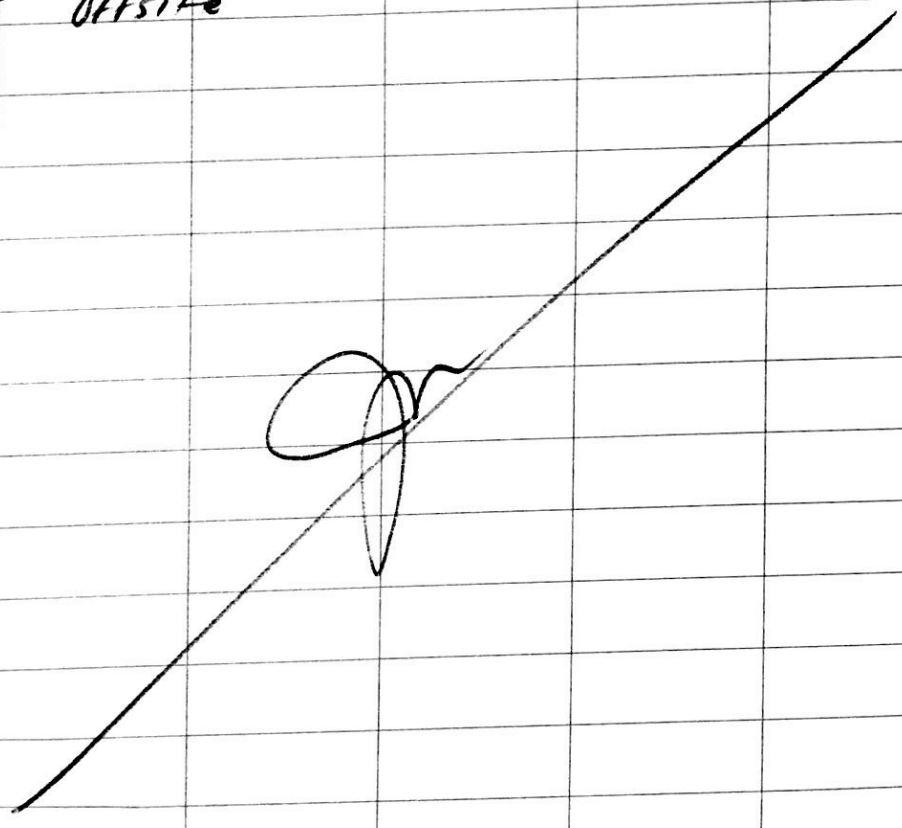
Project / Client WPX Energy

1:00 pm - Onsite, JSA prep, tailgate safety meeting, calibrate PID, prep screening equipment

1:30 pm - Begin delineating (cont.) 2211 & 4095

5:30 pm - Finish delineating site / screening. Begin jarring samples to take to lab

5:50 pm - Offsite



Appendix C
Laboratory Analytical Reports

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Analytical Laboratory

Analytical Report

Report Summary

Client: WPX (Carlsbad)

Samples Received: 1/24/2020
Job Number: 04108-0639
Work Order: P001079
Project Name/Location: RDU 12 (2RP-2211)

Report Reviewed By: Walter Hinchman Date: 1/30/20

Walter Hinchman, Laboratory Director

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
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Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	01/30/20 16:46

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
TT2 @ 2'	P001079-01A	Soil	01/22/20	01/24/20	Glass Jar, 4 oz.
TT2 @ 4'	P001079-02A	Soil	01/22/20	01/24/20	Glass Jar, 4 oz.
TT1 @ 2'	P001079-03A	Soil	01/22/20	01/24/20	Glass Jar, 4 oz.
TT1 @ 4'	P001079-04A	Soil	01/22/20	01/24/20	Glass Jar, 4 oz.
AH1 @ 2'	P001079-05A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.
AH1 @ 4'	P001079-06A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	01/30/20 16:46

TT2 @ 2'

P001079-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*100 %*		*50-150*	*2005010*	*01/27/20*	*01/29/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005001	01/27/20	01/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005001	01/27/20	01/27/20	EPA 8015D	
Surrogate: n-Nonane		*90.0 %*		*50-200*	*2005001*	*01/27/20*	*01/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.5 %*		*50-150*	*2005010*	*01/27/20*	*01/29/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	2005019	01/28/20	01/29/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	01/30/20 16:46

TT2 @ 4'

P001079-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*		*50-150*	*2005010*	*01/27/20*	*01/29/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005001	01/27/20	01/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005001	01/27/20	01/27/20	EPA 8015D	
Surrogate: n-Nonane		*101 %*		*50-200*	*2005001*	*01/27/20*	*01/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.6 %*		*50-150*	*2005010*	*01/27/20*	*01/29/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	2005019	01/28/20	01/29/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	01/30/20 16:46

TT1 @ 2'

P001079-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*100 %*		*50-150*	*2005010*	*01/27/20*	*01/29/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005001	01/27/20	01/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005001	01/27/20	01/27/20	EPA 8015D	
Surrogate: n-Nonane		*87.9 %*		*50-200*	*2005001*	*01/27/20*	*01/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*88.3 %*		*50-150*	*2005010*	*01/27/20*	*01/29/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	2005019	01/28/20	01/29/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	01/30/20 16:46

TT1 @ 4'

P001079-04 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*		*50-150*	*2005010*	*01/27/20*	*01/29/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005001	01/27/20	01/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005001	01/27/20	01/27/20	EPA 8015D	
Surrogate: n-Nonane		*93.5 %*		*50-200*	*2005001*	*01/27/20*	*01/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.7 %*		*50-150*	*2005010*	*01/27/20*	*01/29/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	2005019	01/28/20	01/29/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	01/30/20 16:46

AH1 @ 2'

P001079-05 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*		*50-150*	*2005010*	*01/27/20*	*01/29/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005001	01/27/20	01/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005001	01/27/20	01/27/20	EPA 8015D	
Surrogate: n-Nonane		*85.4 %*		*50-200*	*2005001*	*01/27/20*	*01/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.8 %*		*50-150*	*2005010*	*01/27/20*	*01/29/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**5310**	100	mg/kg	5	2005019	01/28/20	01/29/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	01/30/20 16:46

AH1 @ 4'

P001079-06 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*		*50-150*	*2005010*	*01/27/20*	*01/29/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005001	01/27/20	01/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005001	01/27/20	01/27/20	EPA 8015D	
Surrogate: n-Nonane		*89.8 %*		*50-200*	*2005001*	*01/27/20*	*01/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005010	01/27/20	01/29/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.7 %*		*50-150*	*2005010*	*01/27/20*	*01/29/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**1970**	100	mg/kg	5	2005019	01/28/20	01/29/20	EPA 300.0/9056A	

envirotech Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	01/30/20 16:46

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005010 - Purge and Trap EPA 5030A										
Blank (2005010-BLK1)				Prepared: 01/27/20 1 Analyzed: 01/30/20 1						
Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	*7.96*		*"*	*8.00*		*99.5*	*50-150*			
LCS (2005010-BS1)				Prepared: 01/27/20 1 Analyzed: 01/28/20 1						
Benzene	5.07	0.0250	mg/kg	5.00		101	70-130			
Toluene	5.15	0.0250	"	5.00		103	70-130			
Ethylbenzene	5.07	0.0250	"	5.00		101	70-130			
p,m-Xylene	10.1	0.0500	"	10.0		101	70-130			
o-Xylene	5.03	0.0250	"	5.00		101	70-130			
Total Xylenes	15.1	0.0250	"	15.0		101	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*8.10*		*"*	*8.00*		*101*	*50-150*			
Matrix Spike (2005010-MS1)		**Source: P001077-01**		Prepared: 01/27/20 1 Analyzed: 01/28/20 2						
Benzene	4.90	0.0250	mg/kg	5.00	ND	97.9	54.3-133			
Toluene	5.02	0.0250	"	5.00	ND	100	61.4-130			
Ethylbenzene	4.95	0.0250	"	5.00	ND	99.0	61.4-133			
p,m-Xylene	9.84	0.0500	"	10.0	ND	98.4	63.3-131			
o-Xylene	4.92	0.0250	"	5.00	ND	98.4	63.3-131			
Total Xylenes	14.8	0.0250	"	15.0	ND	98.4	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	*8.20*		*"*	*8.00*		*103*	*50-150*			
Matrix Spike Dup (2005010-MSD1)		**Source: P001077-01**		Prepared: 01/27/20 1 Analyzed: 01/28/20 2						
Benzene	4.87	0.0250	mg/kg	5.00	ND	97.5	54.3-133	0.454	20	
Toluene	5.00	0.0250	"	5.00	ND	100	61.4-130	0.454	20	
Ethylbenzene	4.94	0.0250	"	5.00	ND	98.8	61.4-133	0.212	20	
p,m-Xylene	9.82	0.0500	"	10.0	ND	98.2	63.3-131	0.258	20	
o-Xylene	4.91	0.0250	"	5.00	ND	98.2	63.3-131	0.239	20	
Total Xylenes	14.7	0.0250	"	15.0	ND	98.2	63.3-131	0.252	20	
Surrogate: 4-Bromochlorobenzene-PID	*8.21*		*"*	*8.00*		*103*	*50-150*			

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	01/30/20 16:46

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005001 - DRO Extraction EPA 3570										
Blank (2005001-BLK1)				Prepared: 01/27/20 0 Analyzed: 01/27/20 1						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*53.3*		*"*	*50.0*		*107*	*50-200*			
LCS (2005001-BS1)				Prepared: 01/27/20 0 Analyzed: 01/27/20 1						
Diesel Range Organics (C10-C28)	450	25.0	mg/kg	500		90.1	38-132			
Surrogate: n-Nonane	*50.2*		*"*	*50.0*		*100*	*50-200*			
Matrix Spike (2005001-MS1)	**Source: P001072-01**			Prepared: 01/27/20 0 Analyzed: 01/27/20 1						
Diesel Range Organics (C10-C28)	479	25.0	mg/kg	500	29.1	90.0	38-132			
Surrogate: n-Nonane	*47.3*		*"*	*50.0*		*94.7*	*50-200*			
Matrix Spike Dup (2005001-MSD1)	**Source: P001072-01**			Prepared: 01/27/20 0 Analyzed: 01/27/20 1						
Diesel Range Organics (C10-C28)	483	25.0	mg/kg	500	29.1	90.9	38-132	0.962	20	
Surrogate: n-Nonane	*47.5*		*"*	*50.0*		*95.0*	*50-200*			

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	01/30/20 16:46

Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005010 - Purge and Trap EPA 5030A										
Blank (2005010-BLK1)				Prepared: 01/27/20 1 Analyzed: 01/30/20 1						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.05*		*"*	*8.00*		*88.1*	*50-150*			
LCS (2005010-BS2)				Prepared: 01/27/20 1 Analyzed: 01/28/20 1						
Gasoline Range Organics (C6-C10)	46.6	20.0	mg/kg	50.0		93.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.08*		*"*	*8.00*		*88.5*	*50-150*			
Matrix Spike (2005010-MS2)		**Source: P001077-01**		Prepared: 01/27/20 1 Analyzed: 01/28/20 2						
Gasoline Range Organics (C6-C10)	48.2	20.0	mg/kg	50.0	ND	96.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.12*		*"*	*8.00*		*89.0*	*50-150*			
Matrix Spike Dup (2005010-MSD2)		**Source: P001077-01**		Prepared: 01/27/20 1 Analyzed: 01/28/20 2						
Gasoline Range Organics (C6-C10)	45.1	20.0	mg/kg	50.0	ND	90.2	70-130	6.61	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.15*		*"*	*8.00*		*89.4*	*50-150*			

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	01/30/20 16:46

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005019 - Anion Extraction EPA 300.0/9056A										
Blank (2005019-BLK1)				Prepared & Analyzed: 01/28/20 1						
Chloride	ND	20.0	mg/kg							
LCS (2005019-BS1)				Prepared & Analyzed: 01/28/20 1						
Chloride	254	20.0	mg/kg	250		102	90-110			
Matrix Spike (2005019-MS1)		**Source: P001076-01**		Prepared & Analyzed: 01/28/20 1						
Chloride	1600	100	mg/kg	250	1360	96.3	80-120			
Matrix Spike Dup (2005019-MSD1)		**Source: P001076-01**		Prepared & Analyzed: 01/28/20 1						
Chloride	1620	100	mg/kg	250	1360	104	80-120	1.26	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 my differ slightly.

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	01/30/20 16:46

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information | Chain of Custody | Page 1 of 1

Project Information		Report Attention	
Client:		Report due by:	
Project:	RDU12 (ZRP-2211)	Attention:	
Project Manager:		Address:	
Address:		City, State, Zip	
City, State, Zip		Phone:	
Phone:		Email:	joseph@etechenv.com
Email:	Lynda@WPX		

Lab Use Only		TAT		EPA Program		
Lab WO#	Job Number	1D	3D	RCRA	CWA	SDWA
P001079	04108-0039					

State			
NM	CO	UT	A
X			

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BLDOCM	Remarks
3:45pm	1.22.20	S	1	TT2 @ 2'	1							X	
3:50pm	1.22.20	S	1	TT2 @ 4'	2								
3:15pm	1.22.20		1	TT1 @ 2'	3								
3:20pm	1.22.20		1	TT1 @ 4'	4								
1:15pm	1.23.20		1	AH1 @ 2'	5								
1:30pm	↓	↓	1	AH1 @ 4'	6								

Additional Instructions:

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	1.23.20	4:25pm		1-23-2020	1625
	1.24.2020	1915	Raine Lopez	1/24/20	19:30

Lab Use Only
Received on ice: (Y) / N
T1 _____ T2 _____ T3 _____
AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other _____
Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

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

envirotech Analytical Laboratory
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Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 | Ph (970) 259-0615 Fr (800) 362-1879
envirotech-Inc.com
laboratory@envirotech-Inc.com

Project Information | Chain of Custody | Page 1 of 1

Client:	WPX
Project:	RDU 12 (ZEP-2211)
Project Manager:	Lynda Laumbach
Address:	
City, State, Zip	
Phone:	
Email:	Lynda @ WPX

Report Attention

Report due by:	
Attention:	
Address:	
City, State, Zip	
Phone:	
Email:	joseph @ etechenv.com

Lab Use Only

Lab WO#	Job Number
P001079	04108-0039

TAT: 1D | 3D

EPA Program: RCRA | CWA | SDWA

State: NM | CO | UT | A

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC-NM	Remarks
3:45pm	1.22.20	S	1	TT2 @ 2'	1							X	
3:50pm	1.22.20	S	1	TT2 @ 4'	2								
3:15pm	1.22.20		1	TT1 @ 2'	3								
3:20pm	1.22.20		1	TT1 @ 4'	4								
1:15pm	1.23.20		1	AH1 @ 2'	5								
1:30pm	↓	↓	1	AH1 @ 4'	6								

Additional Instructions:

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	1.23.20	4:25pm		1-23-2020	1625
	1.24.2020	1915	Raina Lopez	1/24/20	19:30

Lab Use Only
Received on ice: (Y) N
T1 _____ T2 _____ T3 _____
AVG Temp °C 4

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

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

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

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laboratory@envirotech-inc.com

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Analytical Laboratory

Analytical Report

Report Summary

Client: WPX (Carlsbad)

Samples Received: 2/27/2020
Job Number: 04108-0639
Work Order: P002091
Project Name/Location: RDU 12 (2RP-2211)

Report Reviewed By: Walter Hinchman Date: 2/28/20

Walter Hinchman, Laboratory Director

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.
Envirotech, Inc, holds the Utah TNI certification NM009792018-1 for the data reported.
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:37

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
AH1 @ 6'	P002091-01A	Soil	02/25/20	02/27/20	Glass Jar, 4 oz.
AH2 @ 2'	P002091-02A	Soil	02/25/20	02/27/20	Glass Jar, 4 oz.
AH2 @ 4'	P002091-03A	Soil	02/25/20	02/27/20	Glass Jar, 4 oz.
AH3 @ 2'	P002091-04A	Soil	02/25/20	02/27/20	Glass Jar, 4 oz.
AH3 @ 4'	P002091-05A	Soil	02/25/20	02/27/20	Glass Jar, 4 oz.
AH4 @ 2'	P002091-06A	Soil	02/25/20	02/27/20	Glass Jar, 4 oz.
AH4 @ 4'	P002091-07A	Soil	02/25/20	02/27/20	Glass Jar, 4 oz.

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:37

AH1 @ 6'

P002091-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Surrogate: n-Nonane		*89.5 %*		*50-200*	*2009029*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.4 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**153**	100	mg/kg	5	2009031	02/27/20	02/27/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:37

AH2 @ 2'

P002091-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Surrogate: n-Nonane		*84.8 %*		*50-200*	*2009029*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.6 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**166**	100	mg/kg	5	2009031	02/27/20	02/27/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:37

AH2 @ 4'

P002091-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Surrogate: n-Nonane		*92.0 %*		*50-200*	*2009029*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.0 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	2009031	02/27/20	02/27/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:37

AH3 @ 2'

P002091-04 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Surrogate: n-Nonane		*93.8 %*		*50-200*	*2009029*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.4 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**156**	100	mg/kg	5	2009031	02/27/20	02/27/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:37

AH3 @ 4'

P002091-05 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Surrogate: n-Nonane		*95.2 %*		*50-200*	*2009029*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.3 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**129**	100	mg/kg	5	2009031	02/27/20	02/27/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:37

AH4 @ 2'
P002091-06 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*100 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Surrogate: n-Nonane		*87.2 %*		*50-200*	*2009029*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.1 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	2009031	02/27/20	02/27/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:37

AH4 @ 4'

P002091-07 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*99.9 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Surrogate: n-Nonane		*96.7 %*		*50-200*	*2009029*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.4 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**165**	100	mg/kg	5	2009031	02/27/20	02/27/20	EPA 300.0/9056A	

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:37

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2009030 - Purge and Trap EPA 5030A										
Blank (2009030-BLK1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	*8.34*		*"*	*8.00*		*104*	*50-150*			
LCS (2009030-BS1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Benzene	4.94	0.0250	mg/kg	5.00		98.7	70-130			
Toluene	4.94	0.0250	"	5.00		98.8	70-130			
Ethylbenzene	4.93	0.0250	"	5.00		98.6	70-130			
p,m-Xylene	9.84	0.0500	"	10.0		98.4	70-130			
o-Xylene	4.93	0.0250	"	5.00		98.6	70-130			
Total Xylenes	14.8	0.0250	"	15.0		98.5	0-200			
Surrogate: 4-Bromochlorobenzene-PID	*8.42*		*"*	*8.00*		*105*	*50-150*			
Matrix Spike (2009030-MS1)		**Source: P002090-01**		Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Benzene	4.96	0.0250	mg/kg	5.00	ND	99.1	54.3-133			
Toluene	4.96	0.0250	"	5.00	ND	99.2	61.4-130			
Ethylbenzene	4.96	0.0250	"	5.00	ND	99.1	61.4-133			
p,m-Xylene	9.90	0.0500	"	10.0	ND	99.0	63.3-131			
o-Xylene	4.96	0.0250	"	5.00	ND	99.3	63.3-131			
Total Xylenes	14.9	0.0250	"	15.0	ND	99.1	0-200			
Surrogate: 4-Bromochlorobenzene-PID	*8.40*		*"*	*8.00*		*105*	*50-150*			
Matrix Spike Dup (2009030-MSD1)		**Source: P002090-01**		Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Benzene	5.11	0.0250	mg/kg	5.00	ND	102	54.3-133	3.13	20	
Toluene	5.09	0.0250	"	5.00	ND	102	61.4-130	2.55	20	
Ethylbenzene	5.07	0.0250	"	5.00	ND	101	61.4-133	2.31	20	
p,m-Xylene	10.1	0.0500	"	10.0	ND	101	63.3-131	2.15	20	
o-Xylene	5.07	0.0250	"	5.00	ND	101	63.3-131	2.20	20	
Total Xylenes	15.2	0.0250	"	15.0	ND	101	0-200	2.17	200	
Surrogate: 4-Bromochlorobenzene-PID	*8.44*		*"*	*8.00*		*105*	*50-150*			

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:37

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2009029 - DRO Extraction EPA 3570										
Blank (2009029-BLK1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*46.1*		*"*	*50.0*		*92.2*	*50-200*			
LCS (2009029-BS1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Diesel Range Organics (C10-C28)	453	25.0	mg/kg	500		90.6	38-132			
Surrogate: n-Nonane	*47.5*		*"*	*50.0*		*95.0*	*50-200*			
Matrix Spike (2009029-MS1)	**Source: P002090-01**			Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Diesel Range Organics (C10-C28)	462	25.0	mg/kg	500	ND	92.4	38-132			
Surrogate: n-Nonane	*48.3*		*"*	*50.0*		*96.5*	*50-200*			
Matrix Spike Dup (2009029-MSD1)	**Source: P002090-01**			Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Diesel Range Organics (C10-C28)	466	25.0	mg/kg	500	ND	93.2	38-132	0.836	20	
Surrogate: n-Nonane	*48.6*		*"*	*50.0*		*97.2*	*50-200*			

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:37

Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2009030 - Purge and Trap EPA 5030A										
Blank (2009030-BLK1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.53*		*"*	*8.00*		*94.1*	*50-150*			
LCS (2009030-BS2)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Gasoline Range Organics (C6-C10)	46.6	20.0	mg/kg	50.0		93.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.45*		*"*	*8.00*		*93.1*	*50-150*			
Matrix Spike (2009030-MS2)		**Source: P002090-01**		Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Gasoline Range Organics (C6-C10)	46.4	20.0	mg/kg	50.0	ND	92.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.53*		*"*	*8.00*		*94.2*	*50-150*			
Matrix Spike Dup (2009030-MSD2)		**Source: P002090-01**		Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Gasoline Range Organics (C6-C10)	47.5	20.0	mg/kg	50.0	ND	94.9	70-130	2.15	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.39*		*"*	*8.00*		*92.4*	*50-150*			

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:37

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2009031 - Anion Extraction EPA 300.0/9056A										
Blank (2009031-BLK1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Chloride	ND	20.0	mg/kg							
LCS (2009031-BS1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Chloride	263	20.0	mg/kg	250		105	90-110			
Matrix Spike (2009031-MS1)		**Source: P002090-01**		Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Chloride	331	100	mg/kg	250	ND	132	80-120			M1
Matrix Spike Dup (2009031-MSD1)		**Source: P002090-01**		Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Chloride	324	100	mg/kg	250	ND	130	80-120	2.05	20	M1

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 my differ slightly.

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-2211)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:37

Notes and Definitions

M1	Matrix spike recovery was above acceptance limits. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information

Chain of Custody

Page 1 of 1

Client:	WPX
Project:	RDU 12 (2RP-2211)
Project Manager:	
Address:	
City, State, Zip	
Phone:	
Email:	Lynda @ WPX

Report Attention

Report due by:	
Attention:	
Address:	
City, State, Zip	
Phone:	
Email:	joseph@etechenv.com

Lab Use Only

Lab WO#: P 002091

Job Number: 04108-0639

TAT: 1D X, 3D

EPA Program: RCRA, CWA, SDW

State: NM X, CO, UT, A

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005	BGDOC - NM	BGDOC - TX				Remarks
5:25pm	2.25.20	S	1	AH1@6'	1						X							
3:25pm		S	1	AH2@2'	2						X							
3:40pm		S	1	AH2@4'	3						X							
4:00pm		S	1	AH3@2'	4						X							
4:15pm		S	1	AH3@4'	5						X							
4:25pm		S	1	AH4@2'	6						X							
4:45pm		S	1	AH4@4'	7						X							

Additional Instructions: * 24 hr TAT

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	2.25.20	5:15pm		2.25.20	1715
	2.26.2020	1325	Raina Lopez	2/27/20	9:30

Lab Use Only

Received on ice: (Y) / N

T1 T2 T3

AVG Temp °C 4

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

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

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

envirotech Analytical Laboratory

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24 Hour Emergency Response Phone (800) 362-1879

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labadmin@envirotech-inc.com

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Analytical Laboratory

Analytical Report

Report Summary

Client: WPX (Carlsbad)

Samples Received: 1/24/2020
Job Number: 04108-0639
Work Order: P001076
Project Name/Location: RDU 12 (2RP-4095)

Report Reviewed By: Walter Hinchman Date: 1/30/20

Walter Hinchman, Laboratory Director

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
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Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
TT1 @ 2'	P001076-01A	Soil	01/22/20	01/24/20	Glass Jar, 4 oz.
TT1 @ 12'	P001076-02A	Soil	01/22/20	01/24/20	Glass Jar, 4 oz.
TT2 @ 2'	P001076-03A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.
TT2 @ 4'	P001076-04A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.
TT3 @ 2'	P001076-05A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.
TT3 @ 4'	P001076-06A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.
AH 1 @ 2'	P001076-07A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.
AH 1 @ 4'	P001076-08A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.
AH 2 @ 2'	P001076-09A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.
AH 2 @ 4'	P001076-10A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.
AH 3 @ 2'	P001076-11A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.
AH 3 @ 4'	P001076-12A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.
AH 4 @ 2'	P001076-13A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.
AH 4 @ 4'	P001076-14A	Soil	01/23/20	01/24/20	Glass Jar, 4 oz.

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

TT1 @ 2'

P001076-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*110 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*96.2 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*91.6 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Surrogate: n-Nonane		*89.6 %*		*50-200*	*2005012*	*01/27/20*	*01/28/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*110 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*96.2 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*91.6 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**1360**	100	mg/kg	5	2005019	01/28/20	01/28/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

TT1 @ 12'

P001076-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*98.3 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*92.4 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Surrogate: n-Nonane		*90.7 %*	*50-200*		*2005012*	*01/27/20*	*01/28/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*98.3 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*92.4 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	2005019	01/28/20	01/28/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

TT2 @ 2'

P001076-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*106 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*96.5 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*90.5 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Surrogate: n-Nonane		*88.7 %*	*50-200*		*2005012*	*01/27/20*	*01/28/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*106 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*96.5 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*90.5 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**36.0**	20.0	mg/kg	1	2005019	01/28/20	01/28/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

TT2 @ 4'

P001076-04 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*96.7 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*91.1 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Surrogate: n-Nonane		*87.9 %*	*50-200*		*2005012*	*01/27/20*	*01/28/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*96.7 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*91.1 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**108**	100	mg/kg	5	2005019	01/28/20	01/28/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

TT3 @ 2'

P001076-05 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*107 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*96.9 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*91.3 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Surrogate: n-Nonane		*76.9 %*	*50-200*		*2005012*	*01/27/20*	*01/28/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*107 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*96.9 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*91.3 %*	*70-130*		*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**891**	40.0	mg/kg	2	2005019	01/28/20	01/28/20	EPA 300.0/9056A	

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

TT3 @ 4'

P001076-06 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*105 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*96.4 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*88.5 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Surrogate: n-Nonane		*85.5 %*		*50-200*	*2005012*	*01/27/20*	*01/28/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*105 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*96.4 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*88.5 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	2005019	01/28/20	01/28/20	EPA 300.0/9056A	

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

AH 1 @ 2'

P001076-07 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*108 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*95.2 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*89.4 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Surrogate: n-Nonane		*89.8 %*		*50-200*	*2005012*	*01/27/20*	*01/28/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*108 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*95.2 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*89.4 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**222**	100	mg/kg	5	2005019	01/28/20	01/28/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

AH 1 @ 4'

P001076-08 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*110 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*96.8 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*90.2 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Surrogate: n-Nonane		*89.4 %*		*50-200*	*2005012*	*01/27/20*	*01/28/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/28/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*110 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*96.8 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*90.2 %*		*70-130*	*2005016*	*01/28/20*	*01/28/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**302**	100	mg/kg	5	2005019	01/28/20	01/28/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

AH 2 @ 2'

P001076-09 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*107 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*95.9 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*89.5 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Surrogate: n-Nonane		*87.8 %*		*50-200*	*2005012*	*01/27/20*	*01/28/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*107 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*95.9 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*89.5 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	2005019	01/28/20	01/28/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

AH 2 @ 4'

P001076-10 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*111 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*97.3 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*91.0 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Surrogate: n-Nonane		*90.5 %*		*50-200*	*2005012*	*01/27/20*	*01/28/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*111 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*97.3 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*91.0 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	2005019	01/28/20	01/28/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

AH 3 @ 2'

P001076-11 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*107 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*96.2 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*90.3 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/28/20	EPA 8015D	
Surrogate: n-Nonane		*84.6 %*		*50-200*	*2005012*	*01/27/20*	*01/28/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*107 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*96.2 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*90.3 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	2005019	01/28/20	01/28/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

AH 3 @ 4'

P001076-12 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*109 %*	*70-130*		*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*97.7 %*	*70-130*		*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*89.6 %*	*70-130*		*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/29/20	EPA 8015D	
Surrogate: n-Nonane		*91.3 %*	*50-200*		*2005012*	*01/27/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*109 %*	*70-130*		*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*97.7 %*	*70-130*		*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*89.6 %*	*70-130*		*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	2005019	01/28/20	01/29/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

AH 4 @ 2'

P001076-13 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*111 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*95.8 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*90.1 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/29/20	EPA 8015D	
Surrogate: n-Nonane		*92.8 %*		*50-200*	*2005012*	*01/27/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*111 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*95.8 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*90.1 %*		*70-130*	*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	2005019	01/28/20	01/29/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

AH 4 @ 4'

P001076-14 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by 8260									
Benzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Toluene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
o-Xylene	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Total Xylenes	ND	0.0250	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*109 %*	*70-130*		*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Surrogate: Toluene-d8		*96.2 %*	*70-130*		*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Surrogate: Bromofluorobenzene		*89.9 %*	*70-130*		*2005016*	*01/28/20*	*01/29/20*	*EPA 8260B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2005012	01/27/20	01/29/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005012	01/27/20	01/29/20	EPA 8015D	
Surrogate: n-Nonane		*86.9 %*	*50-200*		*2005012*	*01/27/20*	*01/29/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005016	01/28/20	01/29/20	EPA 8015D	
Surrogate: 1,2-Dichloroethane-d4		*109 %*	*70-130*		*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Surrogate: Toluene-d8		*96.2 %*	*70-130*		*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Surrogate: Bromofluorobenzene		*89.9 %*	*70-130*		*2005016*	*01/28/20*	*01/29/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	2005019	01/28/20	01/29/20	EPA 300.0/9056A	

envirotech Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

Volatile Organic Compounds by 8260 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005016 - Purge and Trap EPA 5030A										
Blank (2005016-BLK1)				Prepared & Analyzed: 01/28/20 1						
Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 1,2-Dichloroethane-d4	*0.546*		"	*0.500*		*109*	*70-130*			
Surrogate: Toluene-d8	*0.485*		"	*0.500*		*97.0*	*70-130*			
Surrogate: Bromofluorobenzene	*0.442*		"	*0.500*		*88.3*	*70-130*			
LCS (2005016-BS1)				Prepared & Analyzed: 01/28/20 1						
Benzene	2.54	0.0250	mg/kg	2.50		102	70-130			
Toluene	2.43	0.0250	"	2.50		97.4	70-130			
Ethylbenzene	2.40	0.0250	"	2.50		96.1	70-130			
p,m-Xylene	5.00	0.0500	"	5.00		100	70-130			
o-Xylene	2.38	0.0250	"	2.50		95.1	70-130			
Total Xylenes	7.38	0.0250	"	7.50		98.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.532*		"	*0.500*		*106*	*70-130*			
Surrogate: Toluene-d8	*0.507*		"	*0.500*		*101*	*70-130*			
Surrogate: Bromofluorobenzene	*0.482*		"	*0.500*		*96.4*	*70-130*			
Matrix Spike (2005016-MS1)		**Source: P001076-01**		Prepared & Analyzed: 01/28/20 1						
Benzene	2.30	0.0250	mg/kg	2.50	ND	92.2	48-131			
Toluene	2.17	0.0250	"	2.50	ND	86.9	48-130			
Ethylbenzene	2.15	0.0250	"	2.50	ND	86.1	45-135			
p,m-Xylene	4.48	0.0500	"	5.00	ND	89.5	43-135			
o-Xylene	2.13	0.0250	"	2.50	ND	85.1	43-135			
Total Xylenes	6.60	0.0250	"	7.50	ND	88.0	43-135			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		"	*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.497*		"	*0.500*		*99.3*	*70-130*			
Surrogate: Bromofluorobenzene	*0.475*		"	*0.500*		*95.0*	*70-130*			
Matrix Spike Dup (2005016-MSD1)		**Source: P001076-01**		Prepared & Analyzed: 01/28/20 1						
Benzene	2.46	0.0250	mg/kg	2.50	ND	98.6	48-131	6.69	23	
Toluene	2.33	0.0250	"	2.50	ND	93.1	48-130	6.98	24	
Ethylbenzene	2.31	0.0250	"	2.50	ND	92.2	45-135	6.84	27	
p,m-Xylene	4.78	0.0500	"	5.00	ND	95.5	43-135	6.47	27	
o-Xylene	2.28	0.0250	"	2.50	ND	91.0	43-135	6.75	27	
Total Xylenes	7.05	0.0250	"	7.50	ND	94.0	43-135	6.56	27	
Surrogate: 1,2-Dichloroethane-d4	*0.533*		"	*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.498*		"	*0.500*		*99.5*	*70-130*			
Surrogate: Bromofluorobenzene	*0.486*		"	*0.500*		*97.2*	*70-130*			

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005012 - DRO Extraction EPA 3570										
Blank (2005012-BLK1)				Prepared: 01/27/20 1 Analyzed: 01/29/20 0						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*54.6*		*"*	*50.0*		*109*	*50-200*			
LCS (2005012-BS1)				Prepared: 01/27/20 1 Analyzed: 01/29/20 0						
Diesel Range Organics (C10-C28)	443	25.0	mg/kg	500		88.7	38-132			
Surrogate: n-Nonane	*47.2*		*"*	*50.0*		*94.4*	*50-200*			
Matrix Spike (2005012-MS1)	**Source: P001075-03**			Prepared: 01/27/20 1 Analyzed: 01/28/20 1						
Diesel Range Organics (C10-C28)	481	25.0	mg/kg	500	ND	96.1	38-132			
Surrogate: n-Nonane	*48.9*		*"*	*50.0*		*97.7*	*50-200*			
Matrix Spike Dup (2005012-MSD1)	**Source: P001075-03**			Prepared: 01/27/20 1 Analyzed: 01/28/20 1						
Diesel Range Organics (C10-C28)	464	25.0	mg/kg	500	ND	92.8	38-132	3.50	20	
Surrogate: n-Nonane	*47.8*		*"*	*50.0*		*95.5*	*50-200*			

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005016 - Purge and Trap EPA 5030A										
Blank (2005016-BLK1)				Prepared & Analyzed: 01/28/20 1						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1,2-Dichloroethane-d4	*0.546*		"	*0.500*		*109*	*70-130*			
Surrogate: Toluene-d8	*0.485*		"	*0.500*		*97.0*	*70-130*			
Surrogate: Bromofluorobenzene	*0.442*		"	*0.500*		*88.3*	*70-130*			
LCS (2005016-BS2)				Prepared & Analyzed: 01/28/20 1						
Gasoline Range Organics (C6-C10)	46.1	20.0	mg/kg	50.0		92.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.537*		"	*0.500*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.506*		"	*0.500*		*101*	*70-130*			
Surrogate: Bromofluorobenzene	*0.465*		"	*0.500*		*92.9*	*70-130*			
Matrix Spike (2005016-MS2)	**Source: P001076-01**			Prepared & Analyzed: 01/28/20 1						
Gasoline Range Organics (C6-C10)	43.4	20.0	mg/kg	50.0	ND	86.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.528*		"	*0.500*		*106*	*70-130*			
Surrogate: Toluene-d8	*0.497*		"	*0.500*		*99.3*	*70-130*			
Surrogate: Bromofluorobenzene	*0.466*		"	*0.500*		*93.2*	*70-130*			
Matrix Spike Dup (2005016-MSD2)	**Source: P001076-01**			Prepared & Analyzed: 01/28/20 1						
Gasoline Range Organics (C6-C10)	44.6	20.0	mg/kg	50.0	ND	89.2	70-130	2.61	20	
Surrogate: 1,2-Dichloroethane-d4	*0.501*		"	*0.500*		*100*	*70-130*			
Surrogate: Toluene-d8	*0.503*		"	*0.500*		*101*	*70-130*			
Surrogate: Bromofluorobenzene	*0.472*		"	*0.500*		*94.4*	*70-130*			

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005019 - Anion Extraction EPA 300.0/9056A										
Blank (2005019-BLK1)				Prepared & Analyzed: 01/28/20 1						
Chloride	ND	20.0	mg/kg							
LCS (2005019-BS1)				Prepared & Analyzed: 01/28/20 1						
Chloride	254	20.0	mg/kg	250		102	90-110			
Matrix Spike (2005019-MS1)		**Source: P001076-01**		Prepared & Analyzed: 01/28/20 1						
Chloride	1600	100	mg/kg	250	1360	96.3	80-120			
Matrix Spike Dup (2005019-MSD1)		**Source: P001076-01**		Prepared & Analyzed: 01/28/20 1						
Chloride	1620	100	mg/kg	250	1360	104	80-120	1.26	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 my differ slightly.

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Joseph Hernandez	01/30/20 13:41

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information | Chain of Custody | Page 1 of 2

Client:	WPX
Project:	RDU 12 (2RP-4095)
Project Manager:	Joseph Hernandez
Address:	P.O Box 62228
City, State, Zip	
Phone:	
Email:	Lynda @ WPX

Report Attention

Report due by:	Standard T/A
Attention:	
Address:	
City, State, Zip	
Phone:	
Email:	joseph@etechenv.com

Lab Use Only

Lab WO#	Job Number
P001076	04108-0639

TAT: 1D | 3D

EPA Program: RCRA | CWA | SDWA

State: NM | CO | UT | AZ — NM: X

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	Remarks
1:45pm	1.22.20	S	1	TT 1 @ 2'	1							X	
2:20pm	1.22.20		1	TT 1 @ 12'	2								
10:45am	1.23.20		1	TT 2 @ 2'	3								
10:50am	1.23.20		1	TT 2 @ 4'	4								
11:15am			1	TT 3 @ 2'	5								
11:20am			1	TT 3 @ 4'	6								
12:00pm			1	AH 1 @ 2'	7								
12:05pm			1	AH 1 @ 4'	8								
12:10pm			1	AH 2 @ 2'	9								
12:15pm			1	AH 2 @ 4'	10								

Additional Instructions:

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	1.23.20	4:10 pm		1.23.2020	1610
	1.24.2020	1915	Raina Lopez	1/24/20	19:30

Lab Use Only

Received on ice: (Y) / N

T1 _____ T2 _____ T3 _____

AVG Temp °C 4

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

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

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

envirotech Analytical Laboratory
5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 | Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
laboratory@envirotech-inc.com

Project Information | Chain of Custody | Page 2 of 2

Client:	WPX
Project:	
Project Manager:	
Address:	
City, State, Zip	
Phone:	
Email:	Lynda@WPX

Report Attention

Report due by:	Standard TAT
Attention:	
Address:	
City, State, Zip	
Phone:	
Email:	joseph@etechenv.com

Lab Use Only		TAT		EPA Program		
Lab WO#	Job Number	1D	3D	RCRA	CWA	SDWA
P						

Analysis and Method												State			
DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC	NM					NM	CO	UT	AZ
						X						X			

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	Remarks
12:20pm	1.23.20	S	1	AH 3 @ 2'	11	
12:25pm		S	1	AH 3 @ 4'	12	
12:30pm		S	1	AH 4 @ 2'	13	
12:35pm		S	1	AH 4 @ 4'	14	

Additional Instructions:

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	1.23.20	4:10 pm		1.23.2020	1610
	1.24.2020	1915	Raina Lopez	1/24/20	19:30

Lab Use Only
Received on ice: (Y) / N
T1 _____ T2 _____ T3 _____
AVG Temp °C 4

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

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

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

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laboratory@envirotech-inc.com

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Analytical Laboratory

Analytical Report

Report Summary

Client: WPX (Carlsbad)

Samples Received: 2/27/2020
Job Number: 04108-0639
Work Order: P002090
Project Name/Location: RDU 12 (2RP-4095)

Report Reviewed By: Walter Hinchman Date: 2/28/20

Walter Hinchman, Laboratory Director

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.
Envirotech, Inc, holds the Utah TNI certification NM009792018-1 for the data reported.
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:35

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
AH5 @ 2'	P002090-01A	Soil	02/25/20	02/27/20	Glass Jar, 4 oz.
AH5 @ 4'	P002090-02A	Soil	02/25/20	02/27/20	Glass Jar, 4 oz.
AH6 @ 2'	P002090-03A	Soil	02/25/20	02/27/20	Glass Jar, 4 oz.
AH6 @ 4'	P002090-04A	Soil	02/25/20	02/27/20	Glass Jar, 4 oz.
AH7 @ 2'	P002090-05A	Soil	02/25/20	02/27/20	Glass Jar, 4 oz.
AH7 @ 4'	P002090-06A	Soil	02/25/20	02/27/20	Glass Jar, 4 oz.

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:35

AH5 @ 2'

P002090-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*106 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Surrogate: n-Nonane		*90.6 %*		*50-200*	*2009029*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.6 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	100	mg/kg	5	2009031	02/27/20	02/27/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:35

AH5 @ 4'

P002090-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*104 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Surrogate: n-Nonane		*91.7 %*		*50-200*	*2009029*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.5 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**178**	100	mg/kg	5	2009031	02/27/20	02/27/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:35

AH6 @ 2'

P002090-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*104 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Surrogate: n-Nonane		*94.7 %*		*50-200*	*2009029*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.0 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**173**	100	mg/kg	5	2009031	02/27/20	02/27/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:35

AH6 @ 4'

P002090-04 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*104 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Surrogate: n-Nonane		*95.4 %*		*50-200*	*2009029*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.8 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**155**	100	mg/kg	5	2009031	02/27/20	02/27/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:35

AH7 @ 2'

P002090-05 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*100 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Surrogate: n-Nonane		*87.3 %*		*50-200*	*2009029*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.6 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**212**	100	mg/kg	5	2009031	02/27/20	02/27/20	EPA 300.0/9056A	

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:35

AH7 @ 4'

P002090-06 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2009029	02/27/20	02/27/20	EPA 8015D	
Surrogate: n-Nonane		*93.5 %*		*50-200*	*2009029*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2009030	02/27/20	02/27/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*85.0 %*		*50-150*	*2009030*	*02/27/20*	*02/27/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	**142**	100	mg/kg	5	2009031	02/27/20	02/27/20	EPA 300.0/9056A	

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:35

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2009030 - Purge and Trap EPA 5030A										
Blank (2009030-BLK1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	*8.34*		*"*	*8.00*		*104*	*50-150*			
LCS (2009030-BS1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Benzene	4.94	0.0250	mg/kg	5.00		98.7	70-130			
Toluene	4.94	0.0250	"	5.00		98.8	70-130			
Ethylbenzene	4.93	0.0250	"	5.00		98.6	70-130			
p,m-Xylene	9.84	0.0500	"	10.0		98.4	70-130			
o-Xylene	4.93	0.0250	"	5.00		98.6	70-130			
Total Xylenes	14.8	0.0250	"	15.0		98.5	0-200			
Surrogate: 4-Bromochlorobenzene-PID	*8.42*		*"*	*8.00*		*105*	*50-150*			
Matrix Spike (2009030-MS1)		**Source: P002090-01**		Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Benzene	4.96	0.0250	mg/kg	5.00	ND	99.1	54.3-133			
Toluene	4.96	0.0250	"	5.00	ND	99.2	61.4-130			
Ethylbenzene	4.96	0.0250	"	5.00	ND	99.1	61.4-133			
p,m-Xylene	9.90	0.0500	"	10.0	ND	99.0	63.3-131			
o-Xylene	4.96	0.0250	"	5.00	ND	99.3	63.3-131			
Total Xylenes	14.9	0.0250	"	15.0	ND	99.1	0-200			
Surrogate: 4-Bromochlorobenzene-PID	*8.40*		*"*	*8.00*		*105*	*50-150*			
Matrix Spike Dup (2009030-MSD1)		**Source: P002090-01**		Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Benzene	5.11	0.0250	mg/kg	5.00	ND	102	54.3-133	3.13	20	
Toluene	5.09	0.0250	"	5.00	ND	102	61.4-130	2.55	20	
Ethylbenzene	5.07	0.0250	"	5.00	ND	101	61.4-133	2.31	20	
p,m-Xylene	10.1	0.0500	"	10.0	ND	101	63.3-131	2.15	20	
o-Xylene	5.07	0.0250	"	5.00	ND	101	63.3-131	2.20	20	
Total Xylenes	15.2	0.0250	"	15.0	ND	101	0-200	2.17	200	
Surrogate: 4-Bromochlorobenzene-PID	*8.44*		*"*	*8.00*		*105*	*50-150*			

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:35

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2009029 - DRO Extraction EPA 3570										
Blank (2009029-BLK1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*46.1*		*"*	*50.0*		*92.2*	*50-200*			
LCS (2009029-BS1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Diesel Range Organics (C10-C28)	453	25.0	mg/kg	500		90.6	38-132			
Surrogate: n-Nonane	*47.5*		*"*	*50.0*		*95.0*	*50-200*			
Matrix Spike (2009029-MS1)	**Source: P002090-01**			Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Diesel Range Organics (C10-C28)	462	25.0	mg/kg	500	ND	92.4	38-132			
Surrogate: n-Nonane	*48.3*		*"*	*50.0*		*96.5*	*50-200*			
Matrix Spike Dup (2009029-MSD1)	**Source: P002090-01**			Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Diesel Range Organics (C10-C28)	466	25.0	mg/kg	500	ND	93.2	38-132	0.836	20	
Surrogate: n-Nonane	*48.6*		*"*	*50.0*		*97.2*	*50-200*			

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:35

Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2009030 - Purge and Trap EPA 5030A										
Blank (2009030-BLK1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.53*		"	*8.00*		*94.1*	*50-150*			
LCS (2009030-BS2)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Gasoline Range Organics (C6-C10)	46.6	20.0	mg/kg	50.0		93.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.45*		"	*8.00*		*93.1*	*50-150*			
Matrix Spike (2009030-MS2)		**Source: P002090-01**		Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Gasoline Range Organics (C6-C10)	46.4	20.0	mg/kg	50.0	ND	92.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.53*		"	*8.00*		*94.2*	*50-150*			
Matrix Spike Dup (2009030-MSD2)		**Source: P002090-01**		Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Gasoline Range Organics (C6-C10)	47.5	20.0	mg/kg	50.0	ND	94.9	70-130	2.15	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.39*		"	*8.00*		*92.4*	*50-150*			

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Analytical Laboratory

WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:35

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2009031 - Anion Extraction EPA 300.0/9056A										
Blank (2009031-BLK1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Chloride	ND	20.0	mg/kg							
LCS (2009031-BS1)				Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Chloride	263	20.0	mg/kg	250		105	90-110			
Matrix Spike (2009031-MS1)		**Source: P002090-01**		Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Chloride	331	100	mg/kg	250	ND	132	80-120			M1
Matrix Spike Dup (2009031-MSD1)		**Source: P002090-01**		Prepared: 02/27/20 0 Analyzed: 02/27/20 1						
Chloride	324	100	mg/kg	250	ND	130	80-120	2.05	20	M1

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 my differ slightly.

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WPX (Carlsbad)	Project Name:	RDU 12 (2RP-4095)	
5315 Buena Vista Dr	Project Number:	04108-0639	**Reported:**
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	02/28/20 13:35

Notes and Definitions

M1	Matrix spike recovery was above acceptance limits. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information

Chain of Custody

Client: WPX
Project: RDU 12 (2RP-4095)
Project Manager:
Address:
City, State, Zip
Phone:
Email: Lynda @ WPX

Report Attention
Report due by:
Attention:
Address:
City, State, Zip
Phone:
Email: joseph@etechenv.com

Lab Use Only
Lab WO# P002090
Job Number 04108-0039

TAT: 1D X, 3D

EPA Program: RCRA, CWA, SD

State: NM X, CO, UT, AZ

Analysis and Method

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC-NM	TCEQ 1005	BGDOC - NM	BGDOC - TX	Remarks
2:00pm	2.25.20	S	1	AH 5 @ 2'	1						X				
2:15pm		S	1	AH 5 @ 4'	2						X				
2:30pm		S	1	AH 6 @ 2'	3						X				
2:45pm		S	1	AH 6 @ 4'	4						X				
3:00pm		S	1	AH 7 @ 2'	5						X				
3:15pm	↓	S	1	AH 7 @ 4'	6						X				

Additional Instructions: * 24 hr TAT

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

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	2.25.20	5:15pm		2-25-20	1715
	2.26.2020	1325	Raina Lopez	2/27/20 or ~~2/26/20~~	9:30

Lab Use Only
Received on ice: (Y) / N
T1 T2 T3
AVG Temp °C 4

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

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

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

envirotech Analytical Laboratory
5795 US Highway 64, Farmington, NM 87401
24 Hour Emergency Response Phone (800) 362-1879
Ph (505) 632-1881 Fx (505) 632-1865
envirotech-inc.com
labadmin@envirotech-inc.com

Appendix D
Photographic Log

Site Name: RDU 12

Photographic Log

Client: WPX Energy, Inc.

Dates: 01/15/2020 - 02/25/2020

Photo Number: 1	
Photo Direction: Southeast	
Photo Description: 2RP-2211 Initial Site Assessment	

Photo Number: 2	
Photo Direction: Southwest	
Photo Description: 2RP-2211 Initial Site Assessment	

Site Name: RDU 12

Photographic Log

Client: WPX Energy, Inc.

Dates: 01/15/2020 - 02/25/2020

Photo Number: 3	
Photo Direction: East	
Photo Description: 2RP-2211 Initial Site Assessment	

Photo Number: 4	
Photo Direction: Northeast	
Photo Description: 2RP-2211 Initial Site Assessment	

Site Name: RDU 12

Photographic Log

Client: WPX Energy, Inc.

Dates: 01/15/2020 - 02/25/2020

Photo Number: 5	
Photo Direction: East	
Photo Description: 2RP-2211 Following delineation activities	

Photo Number: 6	
Photo Direction: Southwest	
Photo Description: 2RP-2211 Following continued delineation activities	

Site Name: RDU 12

Photographic Log

Client: WPX Energy, Inc.

Dates: 01/15/2020 - 02/25/2020

Photo Number: 1	
Photo Direction: Northeast	
Photo Description: 2RP-4095 Initial Site Assessment	

Photo Number: 2	
Photo Direction: Southeast	
Photo Description: 2RP-4095 Initial Site Assessment	

Site Name: RDU 12

Photographic Log

Client: WPX Energy, Inc.

Dates: 01/15/2020 - 02/25/2020

Photo Number: 3	
Photo Direction: West	
Photo Description: 2RP-4095 Initial Site Assessment	

Photo Number: 4	
Photo Direction: Southwest	
Photo Description: 2RP-4095 Following Delineation Activities	

Site Name: RDU 12

Photographic Log

Client: WPX Energy, Inc.

Dates: 01/15/2020 - 02/25/2020

Photo Number: 5	
Photo Direction: West	
Photo Description: 2RP-4095 Following delineation activities	

Photo Number: 6	
Photo Direction: East	
Photo Description: 2RP-4095 Following continued delineation activities	

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

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

COMMENTS

Action 255186

COMMENTS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 255186
	Action Type: [C-141] Release Corrective Action (C-141)

COMMENTS

Created By	Comment	Comment Date
csmith	Returned to OCD Review, Wrong Attachments uploaded during review.	9/5/2023

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

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

CONDITIONS

Action 255186

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 255186
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Closure approved.	9/1/2023
amaxwell	Release area is subject to 19.15.29.13 NMAC, RESTORATION, RECLAMATION AND RE-VEGETATION, upon removal of equipment or plug and abandonment activities, whichever comes first.	9/1/2023