

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

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

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

Incident ID	NRM2003460102
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: WPX Energy Permian, LLC.	OGRID: 246289
Contact Name: Lynda Laumbach	Contact Telephone: (575) 725-1647
Contact email: Lynda.Laumbach@wpxenergy.com	Incident # (assigned by OCD)
Contact mailing address: 5315 Buena Vista Drive, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.00633 Longitude -103.85909
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: RDU 15	Site Type: Production Facility
Date Release Discovered: 12/26/2019	API# (if applicable): 30-015-25389

Unit Letter	Section	Township	Range	County
M	26	26S	30E	Eddy

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

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls): 20	Volume Recovered (bbls): 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:

At 19:00 hours on 12/26/2019 a 3" polyline developed a crack resulting in 20bbls of produced water to be released along Stateline Rd and into the Right-of-Way south of the road. No fluids were recovered, line was repaired on 12/27/2019. An environmental contractor will be retained to remediate the release.

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

Form C-141

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State of New Mexico
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: Fluids were unrecoverable.	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Lynda Laumbach</u>	Title: <u>Environmental Specialist</u>
Signature: <u></u>	Date: <u>12/30/2019</u>
email: <u>Lynda.Laumbach@wpenergy.com</u>	Telephone: <u>(575)725-1647</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>2/3/2020</u>

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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>50 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

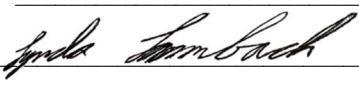
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods,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

State of New Mexico
Oil Conservation Division

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Incident ID	NRM20034601
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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:  Date: 09/25/2020
email: Lynda.Laumbach@wpenergy.com Telephone: (575)725-1647

OCD Only

Received by: Cristina Eads Date: 09/25/2020

Incident ID	NRM20034601
District RP	
Facility ID	
Application ID	

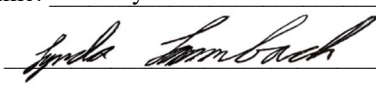
Closure

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:  Date: 09/23/2020
email: Lynda.Laumbach@wpenergy.com Telephone: (575)725-1647

OCD Only

Received by: Cristina Eads Date: 09/25/2020

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: 11/23/2020
Printed Name: Cristina Eads Title: Environmental Specialist



September 25, 2020
Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, NM 88210

Re: Ross Draw Unit #015H Release Closure Request (NRM2003460102)

Mr. Bratcher,

This report summarizes the excavation, and sampling activities at the Ross Draw Unit #015H release along the Stateline Road (Site). The site map is provided as Figure 01. On December 26, 2019, a 3" polyline developed a crack which resulted in 20bbls of produced water to be released along Stateline Rd and into the Right-of-Way south of the road. No fluids were recovered.

Well Location: Ross Draw Unit #015H

API #: 30-015-25389

NMOCD Reference #: NRM2003460102

Site Location Description: Unit Letter M, Section 26, Township 26S, Range 30E

Release Latitude/Longitude: N32.00633, W103.85909

Land Jurisdiction: Federal

Agency Notification: New Mexico Oil Conservation Division (NMOCD), Artesia District Office

Agency Notification Date(s): December 28, 2019

Source of Release: Pipeline corrosion

Release Contents: Produced water

Volume Released: 20 bbls PW

Volume Recovered: 0 bbls

Estimated Depth to Groundwater: >50 feet

Closure Criteria Determination

The Closure criteria of this site was determined based on the New Mexico Administrative Code (NMAC) Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12). Depth to groundwater at the site is estimated to be greater than 50 feet below ground surface (bgs) based on Texas Well Report well #327829. WPX obtained a consultant to confirm depth to groundwater of 58 feet bgs at the well. The well report is provided as Attachment 01. Based on the criteria outlined above, the closure criteria from the NMOCD Table 1 are as follows:

- 10,000 milligrams per kilogram (mg/kg) Chloride
- 50 mg/kg Benzene, Toluene, Ethylbenzene, and xylenes (BTEX)
- 10 mg/kg Benzene
- 2,500 mg/kg Total Petroleum Hydrocarbons (TPH)
- 1,000 mg/kg Diesel range organics (DRO) + Gasoline range organics (GRO)

Field Activities

On December 27, 2019, a consultant was used to map the release area. The visually impacted area is provided in Figure 02. Initial excavation activities were completed January 13 through the 28, 2020. Field screens of the partially completed excavation took place on January 28, 2020. Upon pipeline company request, excavation activities were put on hold to accommodate the installment of the pipeline.

Remediation activities were resumed at the Site on August 20 through 23, 2020 to complete the excavation. A road blade was used to scrape the road and the resulting soil was piled with the spoil from August 23, 2020. A sampling notification was given to the NMOCD on September 14, 2020 with intent to collect final samples on September 16, 2020. Samples FS01-FS17, SW01-SW10 were sampled. Pictures of the sampling activities are provided in Attachment 02. A total of 250 cubic yards was excavated and hauled to disposal. All waste was hauled to R360 Red Bluff Transportation Facility, 5053 US Highway 285, Orla, TX 79770. The excavation covered 3,600 square feet with an average depth of 3 foot bgs.

Sampling Activities

Floor and sidewall samples were collected via 5-point composite sampling over areas no greater than 200 square feet across the excavation area. All samples were taken with decontaminated equipment, jarred in precleaned glass soil jars, with appropriate identification, and immediately placed on ice to lower sample temperatures below 4° Celsius, adhering to strict chain of custody of Envirotech laboratories. Analysis was completed at Envirotech Laboratories in Albuquerque, NM. All samples were analyzed for Chlorides via Method EPA 300.0, TPH via Method 8015M, and BTEX via Method 8021B.

Laboratory Analytical Results

The laboratory analytical results for the excavation of impacted soils confirmed that all floor and sidewall samples were compliant with the closure criteria for this Site. All samples are below the allowable standards for Chloride, BTEX, and TPH. The sample locations are depicted in Figure 03. All sample results are summarized in Table 01 and complete lab results are provided in Attachment 03.

- Chloride analysis for land defined as pasture, or native, were below the Laboratory detectable limit
- Chloride analysis for disturbed area of Stateline Road ranged from below the Laboratory detectable limit to 720 mg/kg
- BTEX analysis was below the Laboratory detectable limit
- Benzene analysis was below the Laboratory detectable limit
- TPH ranged from below the Laboratory detectable limit to 166 mg/kg

Conclusions

The laboratory analytical results to address the impacted soils from NRM2003460102 demonstrates compliance with the Table 1 Closure Criteria set forth by the NMOCD. All samples on land representative of the pasture were remediated to below 600 mg/kg chlorides. Actions to mitigate initial impacts of this site have proven a successful remediation. WPX requests no further action for this incident. The updated C-141 is included at the front of this report. If any questions or further information is warranted, please do not hesitate to contact me by cell phone at (575) 725-1647 or by email at Lynda.Laumbach@wpxenergy.com.

Best regards,



Lynda Laumbach
Environmental Specialist

CC: Robert Hamlet, NMOCD
Victoria Venegas, NMOCD

Attachments:

Figure 01 Site Map

Figure 02 Release Extent

Figure 03 Excavation Extent

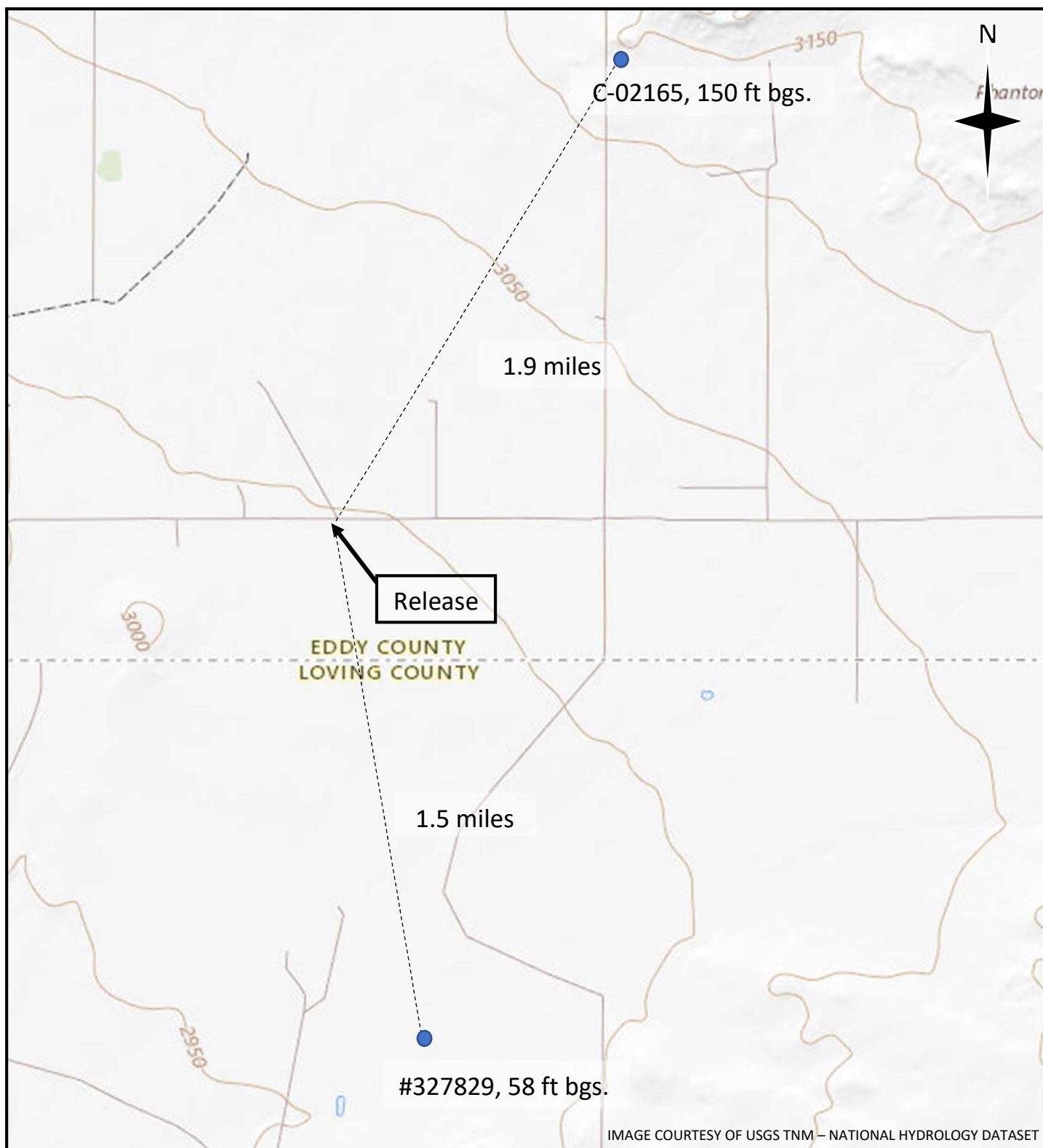
Table 01 Sample Results

Attachment 01 Water Well Texas Well Report #327829

Attachment 02 Photograph Log

Attachment 03 Laboratory Analytical Results

Figures

**WPXENERGY.**

0 0.3 0.6mi

Legend

● Water Wells (DTW
determination)

Figure 01

Ross Draw Unit #015H
30-015-25389

Permian Basin, Eddy County, NM

N32.00633, W103.85909
NRM2003460102

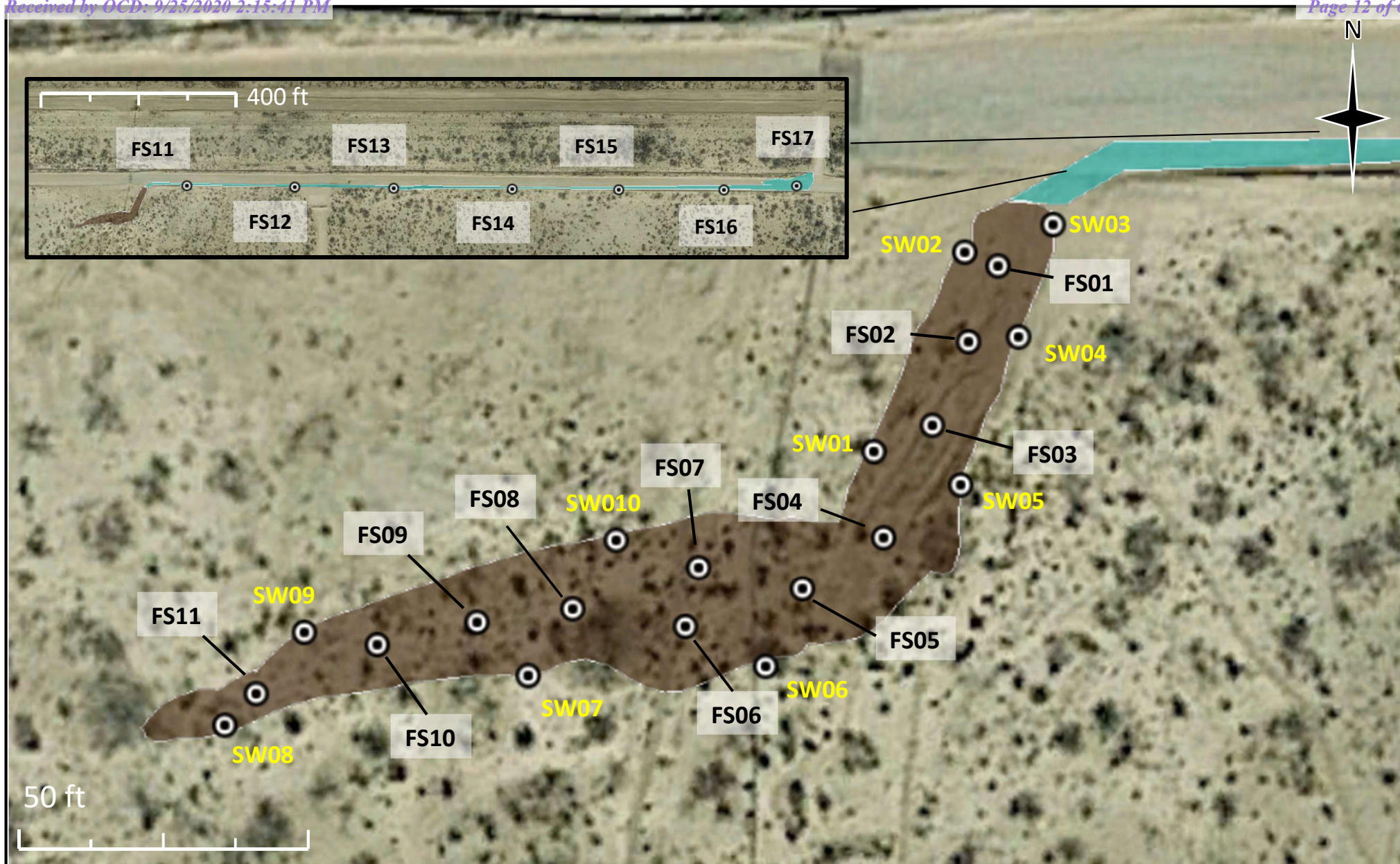


Legend

⊙ Point of Release

Release Extent

Figure 02
Ross Draw Unit #015H
30-015-25389
Permian Basin, Eddy County, NM
N32.00633, W103.85909
NRM2003460102



Legend



-  Excavation Extent
-  Excavation on Road, ~1 foot wide

Figure 03
 Ross Draw Unit #015H
 30-015-25389
 Permian Basin, Eddy County, NM
 N32.00633, W103.85909
 NRM2003460102

TABLE 01
SOIL SAMPLE ANALYTICAL RESULTS
ROSS DRAW UNIT #015
NMOCD REFERENCE NUMBER: NRM2003460102



Sample Name	Depth (ft bgs)	Sample Date	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	GRO + DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SW01	0-4.5	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
SW02	0-4.5	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
SW03	0-4.5	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
SW04	0-4.5	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
SW05	0-4.5	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
SW06	0-4.5	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
SW07	0-3	9/16/2020	<0.025	<0.025	<20.0	58.0	<50.0	58.0	58.0	<20.0
SW08	0-3	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
SW09	0-3	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
SW10	0-3	9/16/2020	<0.025	<0.025	<20.0	63.2	103	63.2	166.2	<20.0
FS01	4.5	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
FS02	4.5	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
FS03	4.5	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
FS04	4.5	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
FS05	4.5	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
FS06	3-4.5	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
FS07	3	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
FS08	3	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
FS09	3	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
FS10	3	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
FS11	0-1	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
FS12	0-1	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
FS13	0-1	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
FS14	0-1	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	673.0
FS15	0-1	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	720.0
FS16	0-1	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	627.0
FS17	0-1	9/16/2020	<0.025	<0.025	<20.0	<25.0	<50.0	-	-	<20.0
NMOCD Table 1 Closure Criteria			10	50	NE	NE	NE	1,000	2,500	10,000



Reference:	BTEX: benzene, toluene, ethylbenzene, and total xylenes	mg/kg: milligrams per kilogram
	GRO: gasoline range organics	NMOCD: New Mexico Oil Conservation Division
	DRO: diesel range organics	TPH: total petroleum hydrocarbons
	ft bgs: feet below ground surface	
	NMOCD Table 1 Closure Criteria: NMAC 19.15.29 August 2018 criteria for soils impacted based on characterization	

Attachment 01

STATE OF TEXAS WELL REPORT for Tracking #327829

Owner: RKI Exploration	Owner Well #: 7
Address: 3817 NW Expressway Ste 950 Oklahoma City, OK 73112	Grid #: 46-02-1
Well Location: No Data	Latitude: 31° 59' 07" N
	Longitude: 103° 50' 52" W
Well County: Loving	Elevation: No Data
Type of Work: New Well	
Proposed Use: Rig Supply	

Drilling Start Date: **6/30/2012** Drilling End Date: **7/5/2012**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9.875	0	640

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	0	640	Gravel	

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	10	15 cement

Seal Method: **hand**

Distance to Property Line (ft.): **No Data**

Sealed By: **Unknown**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Unknown** Yield: **dry GPM**

Water Quality:	Strata Depth (ft.)	Water Type
	No Data	dry

Chemical Analysis Made: **Unknown**Did the driller knowingly penetrate any strata which
contained injurious constituents?: **Unknown**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Clinton Key**
1012 East Second Street
Roswell, NM 88201

Driller Name: **CKey** License Number: **59076**

Comments: **^ycl**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	5	top soil
5	15	white caliche
15	50	tan sandstone
50	75	yellow sandstone
75	140	red sand
140	210	red clay
210	230	red sandstone
230	420	red clay
420	560	red sandstone
560	580	red clay
580	630	red sandstone
630	640	red clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
6"	New	Certa Lok	0 to 540
6"	New	Certa Lok	540 to 640 .035

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

Attachment 02



Picture 1- North face, east of fence

16-Sep-20



Picture 2- North face, east of fence

16-Sep-20



Picture 3- West face, west edge of fence

16-Sep-20






Picture 4- West face, west edge of fence

16-Sep-20





<p>Picture 5- West face, South side of road 16-Sep-20</p>  A photograph showing a long, straight dirt road stretching into the distance under a bright blue sky with scattered white clouds. To the left of the road, there is a large, dark, cylindrical object, possibly a pipe or a large barrel, lying on the ground. The surrounding landscape is arid with sparse, dry vegetation.	<p>Picture 6- Close up of sampled area along the road 16-Sep-20</p>  A close-up photograph of a dirt road surface. The image shows a cross-section of the road, revealing a layered structure of soil and gravel. There are some small rocks and debris scattered on the surface.
<p>Picture 7- East face, facing the point of release 16-Sep-20</p>  A photograph showing a dirt road with a large, dark, cylindrical object (likely a pipe) lying on the ground. The road is surrounded by dry, scrubby vegetation and a clear sky with some clouds.	

Attachment 03

Report to:

Lynda Laumbach

5315 Buena Vista Dr

Carlsbad, NM 88220



5796 U.S. Hwy 64
Farmington, NM 87401

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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: RDU 15

Work Order: P009079

Job Number: 04108-0639

Received: 9/18/2020

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
9/22/20

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

Date Reported: 9/22/20

Lynda Laumbach
5315 Buena Vista Dr
Carlsbad, NM 88220



Project Name: RDU 15
Workorder: P009079
Date Received: 9/18/2020 10:15:00AM

Lynda Laumbach,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/18/2020 10:15:00AM, under the Project Name: RDU 15.

The analytical test results summarized in this report with the Project Name: RDU 15 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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Sample Summary

WPX Energy - Carlsbad	Project Name:	RDU 15	Reported:
5315 Buena Vista Dr	Project Number:	04108-0639	
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	09/22/20 15:58

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW01 0-4.5'	P009079-01A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
SW02 0-4.5'	P009079-02A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
SW03 0-4.5'	P009079-03A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
SW04 0-4.5'	P009079-04A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
SW05 0-4.5'	P009079-05A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
SW06 0-4.5'	P009079-06A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
SW07 0-3'	P009079-07A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
SW08 0-3'	P009079-08A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
SW09 0-3'	P009079-09A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
SW10 0-3'	P009079-10A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS01 4.5'	P009079-11A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS02 4.5'	P009079-12A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS03 4.5'	P009079-13A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS04 4.5'	P009079-14A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS05 4.5'	P009079-15A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS06 4.5-3'	P009079-16A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS07 3'	P009079-17A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS08 3'	P009079-18A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS09 3'	P009079-19A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS10 3'	P009079-20A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS11 0-1'	P009079-21A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS12 0-1'	P009079-22A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS13 0-1'	P009079-23A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS14 0-1'	P009079-24A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS15 0-1'	P009079-25A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS16 0-1'	P009079-26A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.
FS17 0-1'	P009079-27A	Soil	09/16/20	09/18/20	Glass Jar, 4 oz.



Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: RDU 15 Project Number: 04108-0639 Project Manager: Lynda Laumbach	Reported: 9/22/2020 3:58:41PM
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SW01 0-4.5'

P009079-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Benzene	ND	0.0250	1	09/18/20	09/22/20	
Toluene	ND	0.0250	1	09/18/20	09/22/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/22/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/22/20	
o-Xylene	ND	0.0250	1	09/18/20	09/22/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/22/20	
Surrogate: 4-Bromochlorobenzene-PID	102 %	70-130		09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/22/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	87.3 %	70-130		09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038032	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/18/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/18/20	
Surrogate: n-Nonane	104 %	50-200		09/18/20	09/18/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038037	
Chloride	ND	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

SW02 0-4.5'

P009079-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.5 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.4 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038032	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/18/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/18/20	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		09/18/20	09/18/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038037	
Chloride	ND	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

SW03 0-4.5'

P009079-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.5 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.4 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038032	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/18/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/18/20	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		09/18/20	09/18/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038037	
Chloride	ND	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

SW04 0-4.5'

P009079-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.5 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.3 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038032	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/18/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/18/20	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		09/18/20	09/18/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038037	
Chloride	ND	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

SW05 0-4.5'

P009079-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.7 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.3 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038032	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/18/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/18/20	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		09/18/20	09/18/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038037	
Chloride	ND	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

SW06 0-4.5'

P009079-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		86.0 %	70-130	09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2038032
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/18/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/18/20	
<i>Surrogate: n-Nonane</i>						
		100 %	50-200	09/18/20	09/18/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2038037
Chloride	ND	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

SW07 0-3'

P009079-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	100 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.4 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038032	
Diesel Range Organics (C10-C28)	58.0	25.0	1	09/18/20	09/18/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/18/20	
<i>Surrogate: n-Nonane</i>						
	99.0 %	50-200		09/18/20	09/18/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038037	
Chloride	ND	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

SW08 0-3'

P009079-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.9 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.0 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2038032
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/18/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/18/20	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		09/18/20	09/18/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2038037
Chloride	ND	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

SW09 0-3'

P009079-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		105 %	70-130	09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		84.0 %	70-130	09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038032	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
		102 %	50-200	09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038037	
Chloride	ND	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

SW10 0-3'

P009079-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		100 %	70-130	09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		88.6 %	70-130	09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2038032
Diesel Range Organics (C10-C28)	63.2	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	103	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
		105 %	50-200	09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2038037
Chloride	279	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS01 4.5'

P009079-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.4 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	84.3 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038032	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038037	
Chloride	ND	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS02 4.5'

P009079-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.0 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	84.9 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038032	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038037	
Chloride	ND	20.0	1	09/18/20	09/19/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS03 4.5'

P009079-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.1 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.3 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038032	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
	95.5 %	50-200		09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038037	
Chloride	ND	20.0	1	09/18/20	09/19/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS04 4.5'

P009079-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.7 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	84.5 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038032	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038037	
Chloride	ND	20.0	1	09/18/20	09/19/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS05 4.5'

P009079-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.1 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	87.1 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038032	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038037	
Chloride	ND	20.0	1	09/18/20	09/19/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS06 4.5-3'

P009079-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.7 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.5 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2038032
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2038037
Chloride	ND	20.0	1	09/18/20	09/19/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS07 3'

P009079-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		100 %	70-130	09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		86.7 %	70-130	09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2038032
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
		107 %	50-200	09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2038037
Chloride	ND	20.0	1	09/18/20	09/19/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS08 3'

P009079-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		86.4 %	70-130	09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2038032
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
		104 %	50-200	09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2038037
Chloride	ND	20.0	1	09/18/20	09/19/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS09 3'

P009079-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Benzene	ND	0.0250	1	09/18/20	09/21/20	
Toluene	ND	0.0250	1	09/18/20	09/21/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/21/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/21/20	
o-Xylene	ND	0.0250	1	09/18/20	09/21/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	100 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038030	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	85.9 %	70-130		09/18/20	09/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038032	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038037	
Chloride	ND	20.0	1	09/18/20	09/19/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS10 3'

P009079-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Benzene	ND	0.0250	1	09/18/20	09/22/20	
Toluene	ND	0.0250	1	09/18/20	09/22/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/22/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/22/20	
o-Xylene	ND	0.0250	1	09/18/20	09/22/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/22/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038030
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/22/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		85.9 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2038032
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
		112 %	50-200	09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2038037
Chloride	ND	20.0	1	09/18/20	09/19/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS11 0-1'

P009079-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038031
Benzene	ND	0.0250	1	09/18/20	09/22/20	
Toluene	ND	0.0250	1	09/18/20	09/22/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/22/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/22/20	
o-Xylene	ND	0.0250	1	09/18/20	09/22/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/22/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		103 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038031
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/22/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		84.6 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2038033
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
		109 %	50-200	09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2038038
Chloride	ND	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS12 0-1'

P009079-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038031	
Benzene	ND	0.0250	1	09/18/20	09/22/20	
Toluene	ND	0.0250	1	09/18/20	09/22/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/22/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/22/20	
o-Xylene	ND	0.0250	1	09/18/20	09/22/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/22/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		103 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038031	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/22/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		87.7 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038033	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
		106 %	50-200	09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038038	
Chloride	ND	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS13 0-1'

P009079-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038031
Benzene	ND	0.0250	1	09/18/20	09/22/20	
Toluene	ND	0.0250	1	09/18/20	09/22/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/22/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/22/20	
o-Xylene	ND	0.0250	1	09/18/20	09/22/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/22/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038031
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/22/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.5 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2038033
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
		105 %	50-200	09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2038038
Chloride	ND	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS14 0-1'

P009079-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038031	
Benzene	ND	0.0250	1	09/18/20	09/22/20	
Toluene	ND	0.0250	1	09/18/20	09/22/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/22/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/22/20	
o-Xylene	ND	0.0250	1	09/18/20	09/22/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/22/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038031	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/22/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		87.0 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038033	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
		111 %	50-200	09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038038	
Chloride	673	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS15 0-1'

P009079-25

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038031
Benzene	ND	0.0250	1	09/18/20	09/22/20	
Toluene	ND	0.0250	1	09/18/20	09/22/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/22/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/22/20	
o-Xylene	ND	0.0250	1	09/18/20	09/22/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/22/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2038031
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/22/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		85.9 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2038033
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
		113 %	50-200	09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2038038
Chloride	720	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS16 0-1'

P009079-26

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038031	
Benzene	ND	0.0250	1	09/18/20	09/22/20	
Toluene	ND	0.0250	1	09/18/20	09/22/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/22/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/22/20	
o-Xylene	ND	0.0250	1	09/18/20	09/22/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/22/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.7 %	70-130		09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038031	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/22/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	87.0 %	70-130		09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038033	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038038	
Chloride	627	20.0	1	09/18/20	09/18/20	



Sample Data

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

Project Name: RDU 15
Project Number: 04108-0639
Project Manager: Lynda Laumbach

Reported:
9/22/2020 3:58:41PM

FS17 0-1'

P009079-27

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038031	
Benzene	ND	0.0250	1	09/18/20	09/22/20	
Toluene	ND	0.0250	1	09/18/20	09/22/20	
Ethylbenzene	ND	0.0250	1	09/18/20	09/22/20	
p,m-Xylene	ND	0.0500	1	09/18/20	09/22/20	
o-Xylene	ND	0.0250	1	09/18/20	09/22/20	
Total Xylenes	ND	0.0250	1	09/18/20	09/22/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2038031	
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/18/20	09/22/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		85.8 %	70-130	09/18/20	09/22/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2038033	
Diesel Range Organics (C10-C28)	ND	25.0	1	09/18/20	09/19/20	
Oil Range Organics (C28-C40)	ND	50.0	1	09/18/20	09/19/20	
<i>Surrogate: n-Nonane</i>						
		136 %	50-200	09/18/20	09/19/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: NE		Batch: 2038038	
Chloride	ND	20.0	1	09/18/20	09/18/20	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDU 15	Reported:
5315 Buena Vista Dr	Project Number:	04108-0639	
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	9/22/2020 3:58:41PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2038030-BLK1)

Prepared: 09/18/20 Analyzed: 09/21/20

Benzene	ND	0.0250							
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	7.69		8.00		96.2	70-130			

LCS (2038030-BS1)

Prepared: 09/18/20 Analyzed: 09/21/20

Benzene	5.44	0.0250	5.00		109	70-130			
Toluene	5.47	0.0250	5.00		109	70-130			
Ethylbenzene	5.43	0.0250	5.00		109	70-130			
p,m-Xylene	11.0	0.0500	10.0		110	70-130			
o-Xylene	5.48	0.0250	5.00		110	70-130			
Total Xylenes	16.4	0.0250	15.0		110	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.51		8.00		106	70-130			

Matrix Spike (2038030-MS1)

Source: P009079-01 Prepared: 09/18/20 Analyzed: 09/21/20

Benzene	5.49	0.0250	5.00	ND	110	54-133			
Toluene	5.51	0.0250	5.00	ND	110	61-130			
Ethylbenzene	5.46	0.0250	5.00	ND	109	61-133			
p,m-Xylene	11.0	0.0500	10.0	ND	110	63-131			
o-Xylene	5.51	0.0250	5.00	ND	110	63-131			
Total Xylenes	16.5	0.0250	15.0	ND	110	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.47		8.00		106	70-130			

Matrix Spike Dup (2038030-MSD1)

Source: P009079-01 Prepared: 09/18/20 Analyzed: 09/21/20

Benzene	5.38	0.0250	5.00	ND	108	54-133	2.08	20	
Toluene	5.37	0.0250	5.00	ND	107	61-130	2.57	20	
Ethylbenzene	5.32	0.0250	5.00	ND	106	61-133	2.58	20	
p,m-Xylene	10.8	0.0500	10.0	ND	108	63-131	2.60	20	
o-Xylene	5.37	0.0250	5.00	ND	107	63-131	2.57	20	
Total Xylenes	16.1	0.0250	15.0	ND	107	63-131	2.59	20	
Surrogate: 4-Bromochlorobenzene-PID	8.53		8.00		107	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDU 15	Reported:
5315 Buena Vista Dr	Project Number:	04108-0639	
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	9/22/2020 3:58:41PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2038031-BLK1)

Prepared: 09/18/20 Analyzed: 09/22/20

Benzene	ND	0.0250							
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	8.05		8.00		101	70-130			

LCS (2038031-BS1)

Prepared: 09/18/20 Analyzed: 09/22/20

Benzene	5.44	0.0250	5.00		109	70-130			
Toluene	5.45	0.0250	5.00		109	70-130			
Ethylbenzene	5.40	0.0250	5.00		108	70-130			
p,m-Xylene	10.9	0.0500	10.0		109	70-130			
o-Xylene	5.47	0.0250	5.00		109	70-130			
Total Xylenes	16.4	0.0250	15.0		109	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.83		8.00		110	70-130			

Matrix Spike (2038031-MS1)

Source: P009075-01 Prepared: 09/18/20 Analyzed: 09/22/20

Benzene	5.52	0.0250	5.00	ND	110	54-133			
Toluene	5.54	0.0250	5.00	0.0259	110	61-130			
Ethylbenzene	5.47	0.0250	5.00	ND	109	61-133			
p,m-Xylene	11.1	0.0500	10.0	ND	111	63-131			
o-Xylene	5.53	0.0250	5.00	ND	111	63-131			
Total Xylenes	16.6	0.0250	15.0	ND	111	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.67		8.00		108	70-130			

Matrix Spike Dup (2038031-MSD1)

Source: P009075-01 Prepared: 09/18/20 Analyzed: 09/22/20

Benzene	5.31	0.0250	5.00	ND	106	54-133	3.88	20	
Toluene	5.29	0.0250	5.00	0.0259	105	61-130	4.54	20	
Ethylbenzene	5.24	0.0250	5.00	ND	105	61-133	4.35	20	
p,m-Xylene	10.6	0.0500	10.0	ND	106	63-131	4.37	20	
o-Xylene	5.29	0.0250	5.00	ND	106	63-131	4.41	20	
Total Xylenes	15.9	0.0250	15.0	ND	106	63-131	4.38	20	
Surrogate: 4-Bromochlorobenzene-PID	8.68		8.00		109	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDU 15	Reported:
5315 Buena Vista Dr	Project Number:	04108-0639	
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	9/22/2020 3:58:41PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2038030-BLK1)

Prepared: 09/18/20 Analyzed: 09/21/20

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

LCS (2038030-BS2)

Prepared: 09/18/20 Analyzed: 09/21/20

Gasoline Range Organics (C6-C10)	42.1	20.0	50.0		84.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.13		8.00		89.1	70-130			

Matrix Spike (2038030-MS2)

Source: P009079-01 Prepared: 09/18/20 Analyzed: 09/21/20

Gasoline Range Organics (C6-C10)	42.4	20.0	50.0	ND	84.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.03		8.00		87.8	70-130			

Matrix Spike Dup (2038030-MSD2)

Source: P009079-01 Prepared: 09/18/20 Analyzed: 09/21/20

Gasoline Range Organics (C6-C10)	45.4	20.0	50.0	ND	90.7	70-130	6.83	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.95		8.00		86.8	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDU 15	Reported:
5315 Buena Vista Dr	Project Number:	04108-0639	
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	9/22/2020 3:58:41PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2038031-BLK1)

Prepared: 09/18/20 Analyzed: 09/22/20

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.92		8.00		86.6	70-130			

LCS (2038031-BS2)

Prepared: 09/18/20 Analyzed: 09/22/20

Gasoline Range Organics (C6-C10)	40.4	20.0	50.0		80.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.94		8.00		86.8	70-130			

Matrix Spike (2038031-MS2)

Source: P009075-01 Prepared: 09/18/20 Analyzed: 09/22/20

Gasoline Range Organics (C6-C10)	44.2	20.0	50.0	ND	88.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.05		8.00		88.2	70-130			

Matrix Spike Dup (2038031-MSD2)

Source: P009075-01 Prepared: 09/18/20 Analyzed: 09/22/20

Gasoline Range Organics (C6-C10)	42.1	20.0	50.0	ND	84.3	70-130	4.77	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.13		8.00		89.2	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDU 15	Reported:
5315 Buena Vista Dr	Project Number:	04108-0639	
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	9/22/2020 3:58:41PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2038032-BLK1)

Prepared: 09/18/20 Analyzed: 09/18/20

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C40)	ND	50.0							
Surrogate: n-Nonane	53.0		50.0		106	50-200			

LCS (2038032-BS1)

Prepared: 09/18/20 Analyzed: 09/18/20

Diesel Range Organics (C10-C28)	475	25.0	500		94.9	38-132			
Surrogate: n-Nonane	49.0		50.0		98.0	50-200			

Matrix Spike (2038032-MS1)

Source: P009079-01 Prepared: 09/18/20 Analyzed: 09/18/20

Diesel Range Organics (C10-C28)	466	25.0	500	ND	93.1	38-132			
Surrogate: n-Nonane	48.9		50.0		97.9	50-200			

Matrix Spike Dup (2038032-MSD1)

Source: P009079-01 Prepared: 09/18/20 Analyzed: 09/18/20

Diesel Range Organics (C10-C28)	471	25.0	500	ND	94.3	38-132	1.26	20	
Surrogate: n-Nonane	50.8		50.0		102	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDU 15	Reported:
5315 Buena Vista Dr	Project Number:	04108-0639	
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	9/22/2020 3:58:41PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2038033-BLK1)

Prepared: 09/18/20 Analyzed: 09/18/20

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C40)	ND	50.0							
Surrogate: <i>n</i> -Nonane	49.3		50.0		98.6	50-200			

LCS (2038033-BS1)

Prepared: 09/18/20 Analyzed: 09/18/20

Diesel Range Organics (C10-C28)	471	25.0	500		94.1	38-132			
Surrogate: <i>n</i> -Nonane	50.3		50.0		101	50-200			

Matrix Spike (2038033-MS1)

Source: P009078-01 Prepared: 09/18/20 Analyzed: 09/18/20

Diesel Range Organics (C10-C28)	490	25.0	500	ND	97.9	38-132			
Surrogate: <i>n</i> -Nonane	50.5		50.0		101	50-200			

Matrix Spike Dup (2038033-MSD1)

Source: P009078-01 Prepared: 09/18/20 Analyzed: 09/18/20

Diesel Range Organics (C10-C28)	488	25.0	500	ND	97.5	38-132	0.414	20	
Surrogate: <i>n</i> -Nonane	52.7		50.0		105	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDU 15	Reported:
5315 Buena Vista Dr	Project Number:	04108-0639	
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	9/22/2020 3:58:41PM

Anions by EPA 300.0/9056A

Analyst: NE

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2038037-BLK1)

Prepared: 09/18/20 Analyzed: 09/18/20

Chloride ND 20.0

LCS (2038037-BS1)

Prepared: 09/18/20 Analyzed: 09/18/20

Chloride 248 20.0 250 99.2 90-110

Matrix Spike (2038037-MS1)

Source: P009079-01 Prepared: 09/18/20 Analyzed: 09/18/20

Chloride 256 20.0 250 ND 102 80-120

Matrix Spike Dup (2038037-MSD1)

Source: P009079-01 Prepared: 09/18/20 Analyzed: 09/18/20

Chloride 256 20.0 250 ND 102 80-120 0.152 20



QC Summary Data

WPX Energy - Carlsbad	Project Name:	RDU 15	Reported:
5315 Buena Vista Dr	Project Number:	04108-0639	
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	9/22/2020 3:58:41PM

Anions by EPA 300.0/9056A

Analyst: NE

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2038038-BLK1)

Prepared: 09/18/20 Analyzed: 09/18/20

Chloride	ND	20.0
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LCS (2038038-BS1)

Prepared: 09/18/20 Analyzed: 09/18/20

Chloride	250	20.0	250	100	90-110
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Matrix Spike (2038038-MS1)

Source: P009078-01 Prepared: 09/18/20 Analyzed: 09/18/20

Chloride	262	20.0	250	ND	105	80-120
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Matrix Spike Dup (2038038-MSD1)

Source: P009078-01 Prepared: 09/18/20 Analyzed: 09/18/20

Chloride	284	20.0	250	ND	114	80-120	8.07	20
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QC Summary Report Comment:

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



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	RDU 15	
5315 Buena Vista Dr	Project Number:	04108-0639	Reported:
Carlsbad NM, 88220	Project Manager:	Lynda Laumbach	09/22/20 15:58

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

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

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



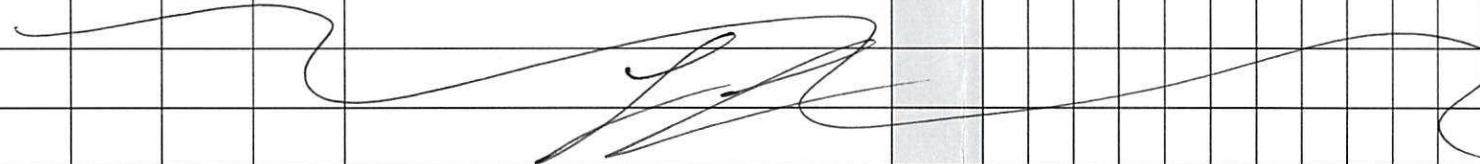


envirotech
Analytical Laboratory

envirotech-inc.com
labadmin@envirotech-inc.com

4 day

Client: <u>WPX Energy</u> Project: <u>RDU 15</u> Project Manager: Address: City, State, Zip Phone: <u>575 725 1647</u> Email: <u>Lynda.Laumbach@wpenergy.com</u> Report due by: <u>09/24/2020</u>					Bill To Attention: <u>Lynda Laumbach</u> Address: City, State, Zip Phone: Email:					Lab Use Only Lab WO# <u>P009079</u> Job Number <u>04108-0039</u> Analysis and Method DRO/ORO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0 BGDOC - NM BGDOC - TX				TAT 1D 3D EPA Program RCRA CWA SDWA State NM CO UT AZ TX OK				
Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	depth	Lab Number												
13:40	09/16/20	S	1	FS01	4.5'	11												
13:45				FS02	4.5'	12												
13:50				FS03	4.5'	13												
13:55				FS04	4.5'	14												
14:05				FS05	4.5'	15												
14:15				FS06	4.5-3'	16												
14:25				FS07	3'	17												
14:30				FS08	3'	18												
14:40				FS09	3'	19												
14:45				FS10	3'	20												
Additional Instructions:																		
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: <u>Lynda Laumbach</u>																		
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) <u>[Signature]</u> Date <u>09/17/2020</u> Time <u></u>						Received by: (Signature) <u>[Signature]</u> Date <u>9-17-2020</u> Time <u>1220</u>						Lab Use Only Received on ice: <u>Y</u> / N						
Relinquished by: (Signature) <u>[Signature]</u> Date <u>9-17-2020</u> Time <u>1655</u>						Received by: (Signature) <u>Rain Lopez</u> Date <u>9/18/20</u> Time <u>10:15</u>						T1 T2 T3						
Relinquished by: (Signature) <u>[Signature]</u> Date <u></u> Time <u></u>						Received by: (Signature) <u></u> Date <u></u> Time <u></u>						AVG Temp °C <u>4</u>						
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____																		
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																		
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.																		

Client: WPX Energy Permian Project: <u>RDU 15</u> Project Manager: <u>Lynda Laumbach</u> Address: <u>5315 Buena Vista Drive</u> City, State, Zip: <u>Carlsbad, NM 88220</u> Phone: <u>(575) 725-1647</u> Email: <u>lynda.laumbach@wpxenergy.com</u> Report due by: <u>09/24/2020</u>				Bill To Attention: <u>Lynda Laumbach</u> Address: <u>5315 Buena Vista Drive</u> City, State, Zip: <u>Carlsbad NM 88220</u> Phone: <u>(575) 725-1647</u> Email: <u>lynda.laumbach@wpxenergy.com</u>				Lab Use Only				TAT		EPA Program					
								Lab WO#		Job Number		1D	3D	RCRA	CWA	SDWA			
								<u>P009079</u>		<u>04108-0639</u>									
								Analysis and Method								State			
Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	depth	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC - NM	BGDOC - TX	NM	CO	UT	AZ	Remarks
14:55	09/16/2020	S	1	FS11	0-1'	21							X		X				
15:05				FS12	0-1'	22							X						
15:10				FS13	0-1'	23							X						
15:20				FS14	0-1'	24							X						
15:25				FS15	0-1'	25							X						
15:30				FS16	0-1'	26							X						
15:40	↓	↓	↓	FS17	0-1'	27							X						
																			
Additional Instructions:																			
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: <u>Lynda Laumbach</u>												Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.							
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Lab Use Only Received on ice: <u>Y</u> / N							
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		T1 _____ T2 _____ T3 _____							
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		AVG Temp °C <u>4</u>							
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____												Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA							
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																			

Envirotech Analytical Laboratory

Printed: 9/18/2020 10:34:19AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client: WPX Energy - Carlsbad
 Phone: (575) 361-5317
 Email: llaumbach@ltenv.com

Date Received: 09/18/20 10:15
 Date Logged In: 09/17/20 16:47
 Due Date: 09/23/20 17:00 (3 day TAT)

Work Order ID: P009079
 Logged In By: Alexa Michaels

Chain of Custody (COC)

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

Yes No

☒ ☐
☒ ☐
☒ ☐
☒ ☐
☒ ☐

Carrier: Lynn Estes

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

Sample Turn Around Time (TAT)

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

Yes No

Standard TAT ☒ 24-hr rush ☐ Immediate ☐ 48-hr rush ☐ 72-hr rush ☐

Sample Cooler

7. Was the sample cooler received in good condition?
8. Was the sample(s) received in tact, i.e., not broken?
9. Was the sample cooler received with custody/security seals intact?
10. Were samples received with custody/security seals intact?
11. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6±2°C

Yes No N/A

☒ ☐ ☐
☒ ☐ ☐
☐ ☐ ☒
☐ ☐ ☒
☒ ☐ ☐

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

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

Sample Container

13. Are VOC samples collected in VOA Vials?
14. Is the head space less than 6-8 mm (pea sized or less)?
15. Was a trip blank (TB) included for VOC analyses?
16. Are non-VOC samples collected in the correct containers?
17. Is the appropriate volume/weight or number of sample containers collected?

Yes No N/A

☐ ☐ ☒
☐ ☐ ☒
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☒ ☐ ☐

Field Label

18. Were field sample labels filled out with the minimum information:

Yes No

Sample ID ☒ Date/time collected ☒ Collectors name ☐

Sample Preservation

19. Does the COC or field labels indicate the samples were preserved?
20. Were VOCs preserved with 1:1 HCl?
21. Are IOC/WET correctly preserved with H2SO4 or other?
22. Is lab filtration required and/or requested for dissolved metals?
23. Are metals preserved with 5N (1:1) HNO3?

Yes No N/A

☐ ☐ ☒
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Multiphase Sample Matrix

24. Does the sample have more than one phase, i.e., multiphase?
25. If so, does the COC specify which phase(s) is to be analyzed?

Yes No N/A

☐ ☐ ☒
☐ ☐ ☒

Subcontract Laboratory Information

26. Was a subcontract laboratory specified by the client and if so who?

Yes No

☐ ☒

Subcontract Lab:

N/AComments/Resolution

Added via Quick Log & Label by AM
 09/17/20 16:47

AM

SCO Initials

9/18/20

Date

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

Page 1 of 1

Date



envirotech Inc.