

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

NAB1526627950 **OPERATOR** ☒ Initial Report ☐ Final Report

Name of Company	RKI E&P, LLC	Contact	Zack Laird
Address	210 Park Ave. - Ste. 700, OKC, OK 73102	Telephone No.	405-987-2213
Facility Name:	North Brushy Draw Fed 35-6H	Facility Type :	Oil and Gas Well
Surface Owner:	Federal	Mineral Owner:	Federal
		API No.	30-015-42293

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	35	25S	29E	175	FNL	2290	FEL	Eddy

Latitude: 32.0929574 Longitude: -103.95337

NATURE OF RELEASE

Type of Release: Drilling Mud/Frac Fluid	Volume of Release: 760 Bbls	Volume Recovered: 600 Bbls
Source of Release 5.5" x 9.625" annulus	Date and Hour of Occurrence 09/17/15 - 0200hrs MT	Date and Hour of Discovery 09/17/15 - 0200hrs MT
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Heather Patterson/Shelly Tucker (R/M)	
By Whom? Zack Laird	Date and Hour: 09/17/15 - 1000hrs and 1715hrs	
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.*

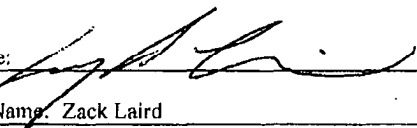
During stage 8 stimulation operations an unknown downhole failure (i.e. casing part) caused communication between 5.5" and 9.625" casing, pressure relief valve plumbed to "B" section of wellhead parted under pressure and allowed well flow on surface for approximately 1.5hrs.

Describe Area Affected and Cleanup Action Taken.*

Fluid accumulated on well pad and ran off location to the South for approximately .5 miles

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.

OIL CONSERVATION DIVISION

Signature: 	Approved by Environmental Specialist: 	
Printed Name: Zack Laird	Approval Date: 9/23/15	Expiration Date: N/A
Title: Sr. EHS Manager	Conditions of Approval:	
E-mail Address: Zlaird@rkixp.com	Attached ☐	
Date: 09/17/15 Phone: 405-987-2213	Remediation per O.C.D. Rules & Guidelines	

* Attach Additional Sheets If Necessary

SUBMIT REMEDIATION PROPOSAL NO
LATER THAN: 10/25/15

2RP- 3278

Incident ID	NAB1526627950
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

Page 4

Incident ID	NAB1526627950
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 Professional
Signature:  Date: 03/31/2021
email: Lynda.Laumbach@wpenergy.com Telephone: (575)725-1647

OCD Only

Received by: _____ Date: _____

Incident ID	NAB1526627950
District RP	2RP-3278
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 Professional
Signature:  Date: 03/31/2021
email: Lynda.Laumbach@wpenergy.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: 5/03/2023
Printed Name: Ashley Maxwell Title: Environmental Specialist



March 31, 2021
Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, NM 88210

Re: North Brushy Federal 35 #006H Release Closure Request (NAB1526627950)

Mr. Bratcher,

This report summarizes the field activities at the North Brushy Federal 35 #006H multi-well pad (Site). The topographic map of the Site is provided as Figure 01. On September 17, 2015, during stimulation operations a casing part failure caused a pressure build up that allowed the well to flow onto the pad surface and into the pasture releasing an estimated 760 barrels (bbls) of drilling mud/frac fluid. 600 bbls of fluid was recovered.

Well Location: North Brushy Federal 35 #006H

API #: 30-015-42293

NMOCD Reference #: NAB1526627950 (2RP-3278)

Site Location Description: Unit Letter A, Section 35, Township 25S, Range 29E

Release Latitude/Longitude: N32.092465, W103.9537659

Land Jurisdiction: Federal

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

NMOCD Site Characterization Standards

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 100 feet below ground surface (bgs). The Site is not located within 300 feet of an OSE waterbody. Based on the criteria outlined above, the closure criteria from the NMOCD Table 1 are as follows:

- 20,000 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 & Sampling Activities

On January 28, 2021, personnel were onsite to collect samples DS01-DS25 at depths 0-2 feet bgs and 2-4 feet bgs. The area of interest is located on Figure 02. Discrete samples were taken throughout the release area to confirm and compliment previous sampling activities provided in Attachment 01. Additional samples, DS26-DS29 were taken on March 26, 2020. All samples were taken with decontaminated equipment, jarred in precleaned glass soil jars, labelled with sample name, date, Site name, and depth, and immediately placed on ice to lower sample temperatures below 4° Celsius, adhering to the chain of custody of Xenco laboratories. Analysis

was completed at Xenco Laboratories in Carlsbad, 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 of impacted soils showed elevated levels of chlorides at DS10 and DS10A at depths 0 to 4 feet bgs. The sample locations are depicted in Figure 02. Samples DS26- DS29 were advanced 15 feet away in every cardinal direction from DS10. All sample results are summarized in Table 01 and complete laboratory results are provided in Attachment 02.

- Chloride samples ranged from below the Laboratory detectable limit to 1,920 mg/kg
- Benzene analysis was below the Laboratory detectable limit
- BTEX analysis was below the Laboratory detectable limit
- TPH ranged from below the Laboratory detectable limit to 399 mg/kg

Closure Request

Sample location DS10 is approximately 910 feet south and west of the pad location. Vegetation in the release area shows little to no affect due to this release of fluids. Based on DS26-DS29 field screens and sample results, less than 900 square feet or approximately 130 cubic yards at four feet bgs will remain in place. WPX would like to request the closure of this release based on the following:

- Less than 130 cubic yards of soil with slightly elevated chloride levels will remain in place. Total impacted area was estimated to be 325,000 square feet and this contaminated area represents 0.2% of the total impacted area.
- Vegetation throughout the release area shows little to no impacts due to the release of this fluid.
- An estimated 9,000 square feet of vegetation would need to be disturbed to address the impacts at DS10 due to heavy equipment operations.

WPX requests that this release, Incident #: NAB1526627950, be closed. The updated C-141 is attached to the beginning of this report. WPX requests no further action for this incident.

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 Topography

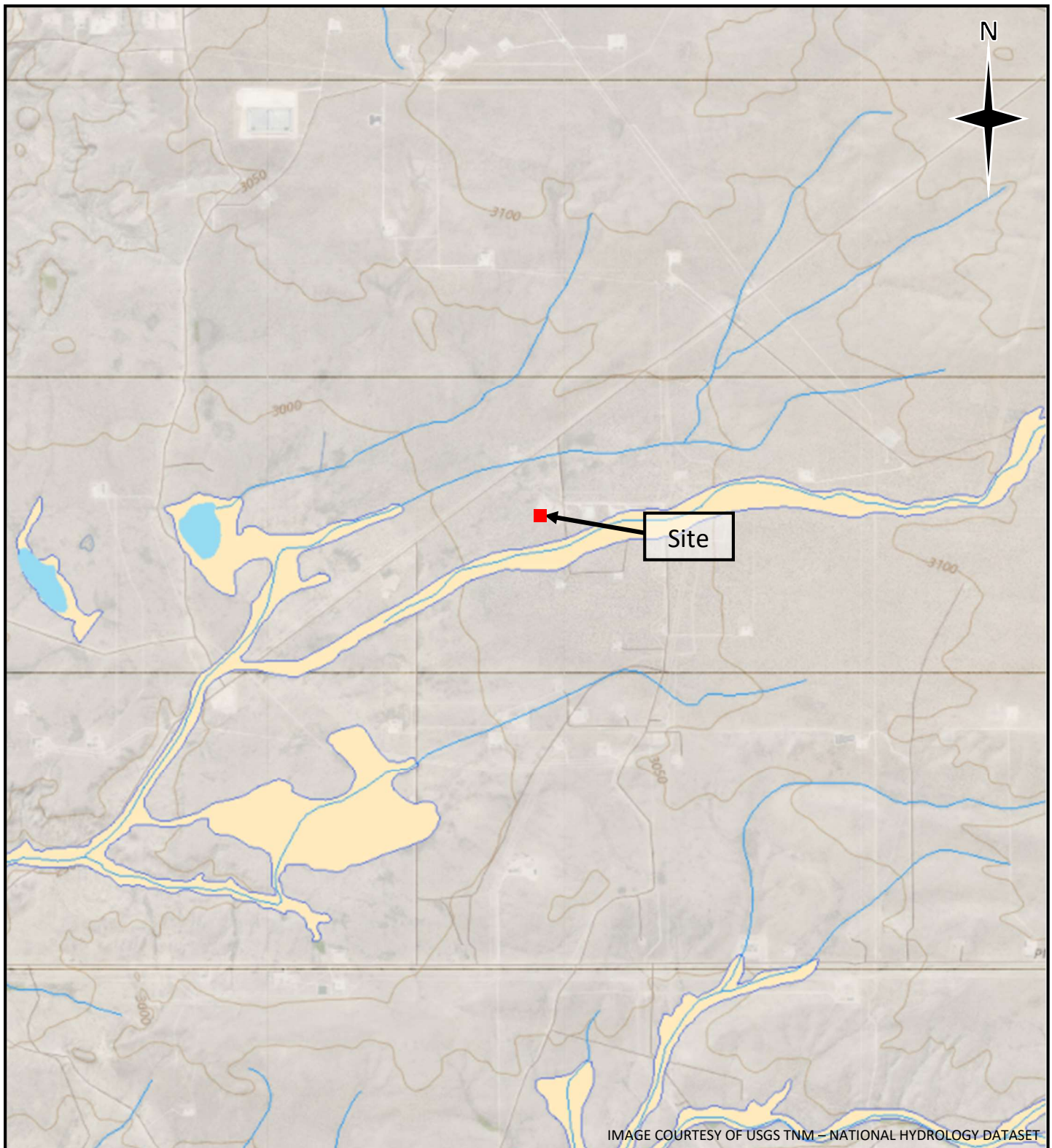
Figure 02 Site Map

Table 01 Soil Sample Results

Attachment 01 Previous Remediation Activities

Attachment 02 Analytical Results

Figures

**WPXENERGY.**

0 0.3 0.6mi

Legend

- Site
- ▬ OSE Water Body
- 100 year Flood Plain

Figure 01

North Brushy Draw Federal 35 #006H

30-015-42293

Permian Basin, Eddy County, NM

32.0924655, -103.9537659



Legend

 Approximated Release Location

Figure 02
North Brushy Draw Federal 35 #006H
30-015-42293
Permian Basin, Eddy County, NM
32.0924655, -103.9537659

Table



TABLE 01
SOIL SAMPLE ANALYTICAL RESULTS
North Brushy Federal 35 #006H
NMOCD REFERENCE NUMBER: NAB1526627950

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)
DS01	0-2	1/28/2021	<0.00201	-	<49.9	<49.9	<49.9	-	-	11.2
DS01A	2-4	1/28/2021	<0.00200	-	<50.0	<50.0	<50.0	-	-	22.6
DS02	0-2	1/28/2021	<0.00199	-	<49.9	<49.9	<49.9	-	-	11.5
DS02A	2-4	1/28/2021	<0.00200	-	<50.0	<50.0	<50.0	-	-	11.5
DS03	0-2	1/28/2021	<0.00200	-	<49.9	<49.9	<49.9	-	-	12
DS03A	2-4	1/28/2021	<0.00200	-	<49.9	<49.9	<49.9	-	-	12.6
DS04	0-2	1/28/2021	<0.00198	-	<50.0	<50.0	<50.0	-	-	12.3
DS04A	2-4	1/28/2021	<0.00200	-	<49.9	<49.9	<49.9	-	-	12.5
DS05	0-2	1/28/2021	<0.00202	-	<50.0	<50.0	<50.0	-	-	216
DS05A	2-4	1/28/2021	<0.00202	-	<49.9	<49.9	<49.9	-	-	<9.92
DS06	0-2	1/28/2021	<0.00200	-	<50.0	<50.0	<50.0	-	-	<9.9
DS06A	2-4	1/28/2021	<0.00200	-	<49.9	<49.9	<49.9	-	-	10.1
DS07	0-2	1/28/2021	<0.00198	-	<50.0	<50.0	<50.0	-	-	<9.92
DS07A	2-4	1/28/2021	<0.00200	-	<49.8	<49.8	<49.8	-	-	<9.98
DS08	0-2	1/28/2021	<0.00199	-	<49.9	<49.9	<49.9	-	-	<9.92
DS08A	2-4	1/28/2021	<0.00200	-	<50.0	<50.0	<50.0	-	-	<9.96
DS09	0-2	1/28/2021	<0.00199	-	<50.0	<50.0	<50.0	-	-	<9.94
DS09A	2-4	1/28/2021	<0.00198	-	<49.9	<49.9	<49.9	-	-	<9.94
DS10	0-2	1/28/2021	<0.00198	-	<49.8	<49.8	<49.8	-	-	1320.0
DS10A	2-4	1/28/2021	<0.00202	-	<50.0	<50.0	<50.0	-	-	1920.0
DS11	0-2	1/28/2021	<0.00198	-	<50.0	<50.0	<50.0	-	-	10.5
NMOCD Table 1 Closure Criteria			10	50	NE	NE	NE	1,000	2,500	10,000



TABLE 01
SOIL SAMPLE ANALYTICAL RESULTS
North Brushy Federal 35 #006H
NMOCD REFERENCE NUMBER: NAB1526627950

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)
DS11A	2-4	1/28/2021	<0.00198	-	<50.0	<50.0	<50.0	-	-	11
DS12	0-2	1/28/2021	<0.00201	-	<50.0	<50.0	<50.0	-	-	55.1
DS12A	2-4	1/28/2021	<0.00200	-	<49.9	<49.9	<49.9	-	-	10.3
DS13	0-2	1/28/2021	<0.00198	-	<50.0	<50.0	<50.0	-	-	10.4
DS13A	2-4	1/28/2021	<0.00201	-	<49.9	<49.9	<49.9	-	-	<9.9
DS14	0-2	1/28/2021	<0.00200	-	<50.0	<50.0	<50.0	-	-	<9.92
DS14A	2-4	1/28/2021	<0.00201	-	<49.9	<49.9	<49.9	-	-	10.2
DS15	0-2	1/28/2021	<0.00198	-	<49.8	<49.8	<49.8	-	-	10
DS15A	2-4	1/28/2021	<0.00202	-	<50.0	<50.0	<50.0	-	-	<9.92
DS16	0-2	1/28/2021	<0.00201	-	<49.8	<49.8	<49.8	-	-	<9.94
DS16A	2-4	1/28/2021	<0.00198	-	<50.0	<50.0	<50.0	-	-	<10.0
DS17	0-2	1/28/2021	<0.00202	-	<49.9	<49.9	<49.9	-	-	10.2
DS17A	2-4	1/28/2021	<0.00200	-	<50.0	<50.0	<50.0	-	-	10.2
DS18	0-2	1/28/2021	<0.00200	-	<49.8	<49.8	<49.8	-	-	<10.0
DS18A	2-4	1/28/2021	<0.00199	-	<49.9	<49.9	<49.9	-	-	10.2
DS19	0-2	1/28/2021	<0.00198	-	<49.9	<49.9	<49.9	-	-	21.7
DS19A	2-4	1/28/2021	<0.00200	-	<49.9	<49.9	<49.9	-	-	19.7
DS20	0-2	1/28/2021	<0.00198	-	<50.0	<50.0	<50.0	-	-	25.8
DS20A	2-4	1/28/2021	<0.00200	-	<50.0	<50.0	<50.0	-	-	349
DS21	0-2	1/28/2021	<0.00199	-	<50.0	<50.0	<50.0	-	-	14.9
DS21A	2-4	1/28/2021	<0.00201	-	<49.8	<49.8	<49.8	-	-	10.1
DS22	0-2	1/28/2021	<0.00200	-	<50.0	<50.0	<50.0	-	-	11.2
DS22A	2-4	1/28/2021	<0.00200	-	<49.9	<49.9	<49.9	-	-	10.9
NMOCD Table 1 Closure Criteria			10	50	NE	NE	NE	1,000	2,500	10,000



TABLE 01
SOIL SAMPLE ANALYTICAL RESULTS
North Brushy Federal 35 #006H
NMOCD REFERENCE NUMBER: NAB1526627950

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)
DS23	0-2	1/28/2021	<0.00200	-	<49.9	324	74.5	399	399	10.5
DS23A	2-4	1/28/2021	<0.00199	-	<49.8	150	<49.8	150	150	11
DS24	0-2	1/28/2021	<0.00200	-	<50.0	<50.0	<50.0	-	-	13.8
DS24A	2-4	1/28/2021	<0.00200	-	<49.9	<49.9	<49.9	-	-	10.8
DS25	0-2	1/28/2021	<0.00200	-	<49.9	<49.9	<49.9	-	-	19.6
DS25A	2-4	1/28/2021	<0.00198	-	<49.8	<49.8	<49.8	-	-	27.1
DS26	2	3/26/2021								<128*
DS26A	4	3/26/2021								
DS27	2	3/26/2021								<128*
DS27A	4	3/26/2021								
DS28	2	3/26/2021								<128*
DS28A	4	3/26/2021								
DS29	2	3/26/2021								<128*
DS29A	4	3/26/2021								
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	
	* Samples were field screened with Hach® Chloride strips	

Attachment 01: Photograph Log

District I
1625 N. French Dr., Hobbs, NM 88240
District II
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1000 Rio Brazos Road, Aztec, NM 87410
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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 April 3, 2017

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: RKI Exploration/ WPX Energy	Contact: James Raley
Address: 5315 Buena Vista Dr.	Telephone No: 575-689-7597
Facility Name: NORTH BRUSHY DRAW FEDERAL 35 No. 006H	Facility Type: Production Facility

Surface Owner: Federal	Mineral Owner: Federal	API No. 35-015-42293
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	35	25S	29E	175	FNL	2290	FEL	Eddy

Latitude 32.0930557 Longitude -103.9538727 NAD83

NATURE OF RELEASE

Type of Release: Drilling Mud/Frac Fluid	Volume of Release: 760 bbls	Volume Recovered: 600 bbls
Source of Release: 5.5" x 9.675" annulus	Date and Hour of Occurrence 9/17/2015	Date and Hour of Discovery 9/17/2015
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Heather Patterson/Shelly Tucker	
By Whom? Zack Laird	Date and Hour: 09/17/2015	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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

Describe Cause of Problem and Remedial Action Taken.*

During stage 8 stimulation operations, an unknown failure (i.e. casing part) caused communication between 5.5" and 9.625" casing. Pressure relief valve plumbed to "B" section of wellhead parted under pressure and allowed well flow on surface for approx. 1.5 hrs.

Describe Area Affected and Cleanup Action Taken.*

See attached closure report.

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: 	OIL CONSERVATION DIVISION	
	Approved by Environmental Specialist:	
Printed Name: Jim Raley		
Title: Environmental Specialist	Approval Date:	Expiration Date:
E-mail Address: james.ralej@wpxenergy.com	Conditions of Approval:	Attached ☐
Date: 1/29/2018 Phone: 575-689-7597		

* Attach Additional Sheets If Necessary



December 15, 2017

Vertex Project #: 17E-00043

Spill Closure Report: North Brushy Draw 35-6H (Section 35 TS 25S R29E)
API: 30-015-42293
Incident Report: 2RP-3278

Prepared For: **WPX Energy Inc.**
5315 Buena Vista
Carlsbad, New Mexico 88220

NMOCD District 2
811 S. 1st Street
Artesia, New Mexico 88210

Mr. Mike Bratcher,

WPX Energy Inc. retained Vertex Resource Services Inc. (Vertex) to conduct a Spill Assessment for a historical spill on North Brushy Draw 35-6H API 30-015-42293 (hereafter referred to as "site"). This letter provides a description of the Spill Assessment and includes a request for Closure.

Site Information

The site is located approximately 28 miles southeast of Carlsbad, New Mexico. The legal location for the site is Section 35, Township 25 South and Range 29 East in Eddy County, New Mexico (approximately 32°05'34.89"N 103° 57'13.94"W). The API number for the site is 30-015-42293; the site can be identified in the attached aerial photograph (Attachment 1). The affected property is leased from the Bureau of Land Management (BLM).

The Geological Map of New Mexico (New Mexico Bureau of Geology and Mineral Resources, 2014-2017 indicates the site's surface geology is comprised primarily of Qep ---- Eolian and Piedmont deposits (Holocene to middle Pleistocene). This usually includes deposits of higher gradient tributaries bordering major stream valleys, alluvial veneers of the piedmont slope and alluvial fans. The Natural Resource Conservation Services identifies the local soils as PA ---- Pajarito, 0-3 percent slope. These soils are typically loamy, fine sand. These descriptions are consistent with observations during the site visit. Site photographs obtained during the Spill Assessment are included in Attachment 2.

Incident Description

The spill, reported on September 17, 2015, involved the well stimulation operations releasing 760 barrels (bbls) of drilling mud and fracking fluids off-site. The release was caused by a downhole failure of communication between the 5.5inch and 9.325inch casing. The initial C-141 Report: 2RP-3278 is included in Attachment 3.

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WPX Energy Inc.
North Brushy Draw 35-6H

2017 Spill Closure Report
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Groundwater, Point of Diversion and Site Ranking

The New Mexico State Engineer website (New Mexico Water Rights Reporting System – Water Column Report) indicates that the nearest groundwater data available for S35-T25S-R29E are approximately 14,281 ft from the site. The groundwater in the area is reported to be at an average depth of 60 feet below ground surface (fbgs). The referenced groundwater data are included in Attachment 4.

Based on the information obtained, the ranking for the site in question is **10** based on the following:

Depth to Groundwater	60 ft.
Wellhead Protection Area	>1,000 ft.
Distance to Surface Water Body	>1,000 ft.

Based on a site ranking of **10**, NMOCD Recommended Remedial Action Levels (RRALs) are 50 mg/kg for BTEX, 10 mg/kg for benzene and 1,000 mg/kg for total petroleum hydrocarbons. Based on previous communications with the NMOCD, 1,000 mg/kg for total chlorides is considered to be an acceptable threshold for remediation.

The New Mexico State Engineer website (New Mexico Water Rights Reporting System – Active & Inactive Points of Diversion) indicates that there are no diversions within 11,079 ft. (Attachment 5).

Remedial Actions Taken

Initial spill response activities included the removal of the drilling fluid and frac fluid (600 bbls of 760 bbls). Enviro Clean Services, LLC (ECS) conducted a soil sampling investigation following the release on September 18, 2015. Findings of the initial soil sampling investigation by ECS indicated chloride impacts existed at surface within three separate locations of the spill footprint, see Table 1 (ECS, 2015). No petroleum hydrocarbon impacts were identified (ECS, 2015). The ECS sample map is included in Attachment 1. Follow-up investigatory soil sampling for chloride was completed by Vertex on October 2, 2017. No further remedial actions on record were completed.

Table 1 - Soil Sampling Results from EnviroClean September 15, 2015

Sample ID	Depth (feet)	TPH	Benzene	BTEX	Chlorides	Units
001	0	18.5	–	–	3030	mg/Kg-dry
001A	1	<15	–	–	375	mg/Kg-dry
002	0	103	–	–	1750	mg/Kg-dry
002A	1	<15	–	–	185	mg/Kg-dry
003	0	<14.9	–	–	3350	mg/Kg-dry
003A	1	<15	–	–	1620	mg/Kg-dry
004	0	<15	–	–	<2.00	mg/Kg-dry
005	0	<15	–	–	<2.00	mg/Kg-dry
006	0	<15	–	–	<2.00	mg/Kg-dry

RRAL - 50 mg/kg BTEX, 10 mg/kg Benzene, 1,000 mg/kg TPH, 1,000 mg/kg Chloride

A site visit and soil assessment was completed on October 2, 2017, to identify and sample evidence of the spill in

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WPX Energy Inc.
North Brushy Draw 35-6H

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and around the location specified in the Initial C-141. Soil sample locations were georeferenced from the ECS report in order to investigate previously identified impacted areas. There was no evidence of surface staining or crystallization of salts. It was noted that there was infrastructure present associated to the site.

Twelve boreholes were advanced at the site using a hand auger to assess the soils within the previous spill footprint area as well as site background. Soils were observed and field screened for chloride and hydrocarbon impacts prior to sampling. Using hand sampling techniques and dedicated sample containers, soil samples were collected and submitted to ALS Laboratories. The Site Visit Report is included in Attachment 6. Laboratory Results of the soil sampling investigation are included in attachment 7.

No impacts were identified during the site assessment within the former spill path area as parameters of all analyzed samples were below the established RRLs for the site (Table 2). The Site Visit Report is included in Attachment 6. Laboratory results of the soil sampling investigation are included in Attachment 7.

Table 2 - Soil Sampling Results October 2, 2017

Sample ID	Depth	Test	Result	Units
BH17-01	0-2'	Chloride	15	mg/Kg-dry
BH17-01	2-4'	Chloride	0	mg/Kg-dry
BH17-02	0-2'	Chloride	12	mg/Kg-dry
BH17-02	2-4'	Chloride	17	mg/Kg-dry
BH17-03	0-2'	Chloride	12	mg/Kg-dry
BH17-03	2-4'	Chloride	0	mg/Kg-dry
BH17-04	0-2'	Chloride	0	mg/Kg-dry
BH17-04	2-4'	Chloride	0	mg/Kg-dry
BH17-05	0-2'	Chloride	0	mg/Kg-dry
BH17-05	2-4'	Chloride	0	mg/Kg-dry
BH17-06	0-2'	Chloride	0	mg/Kg-dry
BH17-06	2-4'	Chloride	0	mg/Kg-dry
BH17-07	0-2'	Chloride	0	mg/Kg-dry
BH17-07	2-4'	Chloride	0	mg/Kg-dry
BH17-08	0-2'	Chloride	0	mg/Kg-dry
BH17-08	2-4'	Chloride	0	mg/Kg-dry
BH17-09	0-2'	Chloride	0	mg/Kg-dry
BH17-09	2-4'	Chloride	16	mg/Kg-dry
BH17-10	0-2'	Chloride	0	mg/Kg-dry
BH17-10	2-4'	Chloride	0	mg/Kg-dry
BH17-11	0-2'	Chloride	0	mg/Kg-dry
BH17-11	2-4'	Chloride	0	mg/Kg-dry
BH17-12	0-2'	Chloride	0	mg/Kg-dry
BH17-12	2-4'	Chloride	0	mg/Kg-dry

RRL - 50 mg/kg BTEX, 10 mg/kg Benzene, 1,000 mg/kg TPH, 1,000 mg/kg Chloride

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WPX Energy Inc.
North Brushy Draw 35-6H

2017 Spill Closure Report
December 2017

Closure Request

A site assessment was completed on October 2, 2017, to hand auger and take soil samples. No vegetation stress, salt crystallization or hydrocarbon staining was present anywhere on or near the spill area or pad site.

According to NMOCD guidelines for remediation, the RRALs suggested for this site are the most conservative based on depth to groundwater, wellhead protection area and distance to the nearest surface water diversion. The soil sampling investigation performed in conjunction with the site visit October 2, 2017 indicated that no residual impacts in excess of the established RRALs exist at site (Table 2). Impacts noted within the 2015 ECS report immediately after the spill occurred are believed to have naturally attenuated. Based on these findings, WPX Energy Inc. requests that this spill be closed.

Should you have any questions or concerns, please do not hesitate to contact the undersigned at 403.542.6426 or cdavison@vertex.ca.

Sincerely,



Carl Davison, B.Sc.
PROJECT MANAGER

Attachments

- Attachment 1. Aerial Photograph
- Attachment 2. Site Photographs
- Attachment 3. Initial C-141 Report
- Attachment 4. Groundwater Information
- Attachment 5. Diversion Information
- Attachment 6. Site Visit Daily Field Report
- Attachment 7. Laboratory Results

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WPX Energy Inc.
North Brushy Draw 35-6H

2017 Spill Closure Report
December 2017

References

- Enviro Clean Services. (October, 2015). *OCD Work Plan for Release at Brushy Draw Fed 35-6H and Interim C-141 Report*. Eddy County, New Mexico.
- New Mexico Bureau of Geology and Mineral Resources. (2014 – 2017). *Interactive Geologic Map*. Retrieved from <http://geoinfo.nmt.edu> on October 30, 2017.
- New Mexico Oil Conservation Division. (1993). *Guidelines for Remediation of Leaks, Spills and Releases*. Santa Fe, New Mexico.
- New Mexico Water Rights Reporting System. (2010a). *Water Column Average Depth to Water Report*. Retrieved from <http://nmwrrs.ose.state.nm.us/index.html> on October 30, 2017.
- New Mexico Water Rights Reporting System. (2010b). *Point of Diversion Location Report*. Retrieved from <http://nmwrrs.ose.state.nm.us/index.html> on October 30, 2017.
- USDA Natural Resources Conservation Service. (2017). *Web Soil Survey*. Retrieved from <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> on October 30, 2017.

WPX Energy Inc.
North Brushy Draw 35-6H

2017 Spill Closure Report
December 2017

Limitations

This report has been prepared for the sole benefit of WPX Energy Inc. This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division, without the express written consent of Vertex Resource Services Ltd. (Vertex) and WPX Energy Inc. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

ATTACHMENT 1



Area of Release and Soil Sample Locations

WPX Energy, Inc.
Brushy Draw 35-6H
Unit B, Sec. 35, Township 25S, Range 29E
Eddy County, New Mexico

Scale:	Not to Scale		Drawn By:	ECS
Date:	10/2/2015		Project Mgr.:	ECS
2405 East County Road 123, Midland, Texas 79706				
Project No.: RKIRTX0005			Figure:	1



Legend

◆ Borehole

0 75 150 300 ft
SCALE 1:3,000

Notes: Aerial Image from Google, 2015

		Site Schematic with Borehole North Brushy Draw 35-6H	
	DRAWN: KU	FIGURE: 1	
	APPROVED: RF		
	DATE: OCT 31/17		

VERSATILITY. EXPERTISE.

ATTACHMENT 2

WPX Energy
North Brushy Draw 35-6H

Spill Assessment
November 2017



Photo 1. Northeast to padsite from end of spill area

Photo Date: October 1, 2017

GPS: N: 32.093025

W: 103.953873



Photo 2. View of Spill area southwest from padsite

Photo Date: October 1, 2017

GPS: N: 32.093025

W: 103.953873

WPX Energy
North Brushy Draw 35-6H

Spill Assessment
November 2017



Photo 3. Borehole 1 sample area

Photo Date: October 1, 2017

GPS: N: 32.093025

W: 103.953873



Photo 4. Borehole 1 sample area Filled in

Photo Date: October 1, 2017

GPS: N: 32.093025

W: 103.953873

WPX Energy
North Brushy Draw 35-6H

Spill Assesment
November 2017



Photo 5. Borehole 6 sample area

Photo Date: October 1, 2017

GPS: N: 32.093025

W: 103.953873



Photo 6. Borehole 6 sample area filled in

Photo Date: October 1, 2017

GPS: N: 32.093025

W: 103.953873

ATTACHMENT 3

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

NAB1526627950

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	RKI E&P, LLC	Contact	Zack Laird
Address	210 Park Ave. - Ste. 700, OKC, OK 73102	Telephone No.	405-987-2213
Facility Name:	North Brushy Draw Fed 35-6H	Facility Type :	Oil and Gas Well

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-42293
------------------------	------------------------	----------------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	35	25S	29E	175	FNL	2290	FEL	Eddy

Latitude: 32.0929574 Longitude: -103.95337

NATURE OF RELEASE

Type of Release: Drilling Mud/Frac Fluid	Volume of Release: 760 Bbls	Volume Recovered: 600 Bbls
Source of Release 5.5" x 9.675" annulus	Date and Hour of Occurrence 09/17/15 - 0200hrs MT	Date and Hour of Discovery 09/17/15 - 0200hrs MT
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Heather Patterson/Shelly Tucker (R/M)	
By Whom? Zack Laird	Date and Hour: 09/17/15 - 1000hrs and 1715hrs	
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.*

During stage 8 stimulation operations an unknown downhole failure (i.e. casing part) caused communication between 5.5" and 9.625" casing, pressure relief valve plumbed to "B" section of wellhead parted under pressure and allowed well flow on surface for approximately 1.5hrs.

Describe Area Affected and Cleanup Action Taken.*

Fluid accumulated on well pad and ran off location to the South for approximately .5 miles

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:

Printed Name: Zack Laird

Title: Sr. EHS Manager

E-mail Address: Zlaird@rkixp.com

Date: 09/17/15

Phone: 405-987-2213

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 9/23/15

Expiration Date: N/A

Conditions of Approval:

Attached ☐

Remediation per O.C.D. Rules & Guidelines

SUBMIT REMEDIATION PROPOSAL NO
LATER THAN: 10/25/15

* Attach Additional Sheets If Necessary

2RP-3278

ATTACHMENT 4



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	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02371	C	ED		2	3	15	25S	29E		596741	3555106*	4353	200	60	140
C 02680	C	ED		2	3	15	25S	29E		596741	3555106*	4353	200		

Average Depth to Water: **60 feet**

Minimum Depth: **60 feet**

Maximum Depth: **60 feet**

Record Count: 2

Basin/County Search:

Basin: Carlsbad

UTMNAD83 Radius Search (in meters):

Easting (X): 598714.8

Northing (Y): 3551225.72

Radius: 5000

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/15/17 1:46 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER

ATTACHMENT 5



New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)
C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

(acre ft per annum)																			
WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Code Grant	Source	q	q	q	6416 4	Sec	Tws	Rng	X	Y	Distance	
C 03617	C	STK		0 W.P. RANCHES FAMILY	ED	C 03617 POD1			3	4	3	14	25S	29E		598207	3554566		3378
C 02371	C	STK		3 TRAN KING & WESTERN COMM. BANK	ED	C 02371		Shallow	2	3	15	25S	29E			596741	3555106*		4353
C 02680	C	STK		3 TRAN KING AND WESTERN COMMERCE BANK	ED	C 02680			2	3	15	25S	29E			596741	3555106*		4353

Record Count: 3

POD Search:

POD Basin: Carlsbad

UTMNAD83 Radius Search (in meters):

Easting (X): 598714.8 Northing (Y): 3551225.72 Radius: 5000

Sorted by: Distance

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

ATTACHMENT 6

Client:	WPX	Date:	October 1, 2017
Site Location:	North Brushy Draw 35-6H	Shift:	Day
Field Consultant:	Jason Crabtree	Project #:	17E-00043
Project Manager:	Carl Davison	AFE #:	

Summary of Daily Operations

- Arrived on-site at 09:30 hours to Hand Auger the proposed locations.
- Dug down to 4 feet taking samples every foot for samples. (0-2, 2-4)
 - Hand Augered 3 of the sample locations
- Took pictures of each sample location after each hole is dug and after each hole is filled back in.
 - Completed field Screening using quantabs for chlorides and PID for VOC and hydrocarbons.
 - Packing Samples in jars supplied by ALS Environmental Labs.
- Left site and drove back to Carlsbad at 19:30 hours and put all samples collected into the fridge.

Planned Activities and Recommendations

- Return to site tomorrow to finish collecting samples

Cost Summary

Vertex

Name	Hours	Rate	Total	Equipment	Units	Rate	Total
Jason Crabtree	12.5		\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
Total:			\$0.00	Total:			\$0.00

Vertex Total:

\$0.00

Laboratory Analysis

Laboratory	Lab Report	Estimate

Third Party Service

Date	Contractor	Work Description	Ticket #	Estimate
Third Party Service Total:				\$0.00

Client:	WPX	Date:	October 2, 2017
Site Location:	North Brushy Draw 35-6H	Shift:	Day
Field Consultant:	Jason Crabtree	Project #:	17E-00043
Project Manager:	Carl Davison	AFE #:	

Summary of Daily Operations

- Arrived on-site at 09:30 hours to Hand Auger the proposed locations.
- Dug down to 4 feet taking samples every foot for samples. (0-2, 2-4)
- Hand Augered 9 remaining of the sample locations
- Took pictures of each sample location after each hole is dug and after each hole is filled back in.
- Completed field Screening using quantabs for chlorides and PID for VOC and hydrocarbons.
- Packing Samples in jars supplied by ALS Environmental Labs.
- Left site and drove back to Carlsbad at 19:00 hours and put all samples collected into the fridge.

Planned Activities and Recommendations

—No new planned activities or recommendations at this point

Cost Summary

Vertex

Name	Hours	Rate	Total	Equipment	Units	Rate	Total
Jason Crabtree	12		\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
			\$0.00				\$0.00
Total:			\$0.00	Total:			\$0.00

Vertex Total:

\$0.00

Laboratory Analysis

Laboratory	Lab Report	Estimate

Third Party Service

Date	Contractor	Work Description	Ticket #	Estimate
Third Party Service Total:				\$0.00

ATTACHMENT 7



16-Oct-2017

Karolina Blaney
WPX Energy
5315 Buena Vista Dr.
Carlsbad, NM 88220

Re: **North Brushy Draw 35-6H**

Work Order: **1710410**

Dear Karolina,

ALS Environmental received 6 samples on 06-Oct-2017 10:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 15.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: MN 998501

Report of Laboratory Analysis

ADDRESS 3352 128th Ave Holland, Michigan 49424 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

ALS Group, USA

Date: 16-Oct-17

Client: WPX Energy
Project: North Brushy Draw 35-6H
Work Order: 1710410

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1710410-01	BH17-10 0-2'	Soil		10/2/2017	10/6/2017 10:00	☐
1710410-02	BH17-10 2-4'	Soil		10/2/2017	10/6/2017 10:00	☐
1710410-03	BH17-11 0-2'	Soil		10/2/2017	10/6/2017 10:00	☐
1710410-04	BH17-11 2-4'	Soil		10/2/2017	10/6/2017 10:00	☐
1710410-05	BH17-12 0-2'	Soil		10/2/2017	10/6/2017 10:00	☐
1710410-06	BH17-12 2-4'	Soil		10/2/2017	10/6/2017 10:00	☐

ALS Group, USA

Date: 16-Oct-17

Client: WPX Energy
Project: North Brushy Draw 35-6H
WorkOrder: 1710410

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group, USA**Date:** 16-Oct-17**Client:** WPX Energy**Project:** North Brushy Draw 35-6H**Work Order:** 1710410**Sample ID:** BH17-10 0-2'**Lab ID:** 1710410-01**Collection Date:** 10/2/2017**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT 10/12/17 14:30		Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/12/2017 08:35 PM
MOISTURE			SW3550C			Analyst: NW
Moisture	10		0.050	% of sample	1	10/7/2017 09:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 16-Oct-17**Client:** WPX Energy**Project:** North Brushy Draw 35-6H**Work Order:** 1710410**Sample ID:** BH17-10 2-4'**Lab ID:** 1710410-02**Collection Date:** 10/2/2017**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT 10/12/17 14:30		Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/12/2017 08:35 PM
MOISTURE			SW3550C			Analyst: NW
Moisture	11		0.050	% of sample	1	10/7/2017 09:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 16-Oct-17**Client:** WPX Energy**Project:** North Brushy Draw 35-6H**Work Order:** 1710410**Sample ID:** BH17-11 0-2'**Lab ID:** 1710410-03**Collection Date:** 10/2/2017**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT 10/12/17 14:30		Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/12/2017 08:35 PM
MOISTURE			SW3550C			Analyst: NW
Moisture	10		0.050	% of sample	1	10/7/2017 09:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 16-Oct-17**Client:** WPX Energy**Project:** North Brushy Draw 35-6H**Work Order:** 1710410**Sample ID:** BH17-11 2-4'**Lab ID:** 1710410-04**Collection Date:** 10/2/2017**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT 10/12/17 22:30		Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: NW
Moisture	13		0.050	% of sample	1	10/7/2017 09:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client:	WPX Energy		
Project:	North Brushy Draw 35-6H	Work Order:	1710410
Sample ID:	BH17-12 0-2'	Lab ID:	1710410-05
Collection Date:	10/2/2017	Matrix:	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT 10/12/17 22:30		Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: NW
Moisture	10		0.050	% of sample	1	10/7/2017 09:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 16-Oct-17**Client:** WPX Energy**Project:** North Brushy Draw 35-6H**Work Order:** 1710410**Sample ID:** BH17-12 2-4'**Lab ID:** 1710410-06**Collection Date:** 10/2/2017**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT 10/12/17 22:30		Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	12		0.050	% of sample	1	10/10/2017 03:20 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client: WPX Energy

QC BATCH REPORT

Work Order: 1710410

Project: North Brushy Draw 35-6H

Batch ID: 108941

Instrument ID GALLERY

Method: A4500-CI E-11

MBLK		Sample ID: MBLK-108941-108941				Units: mg/Kg		Analysis Date: 10/12/2017 08:35 PM		
Client ID:		Run ID: GALLERY_171012B		SeqNo: 4699164		Prep Date: 10/12/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 10

MS		Sample ID: 1710409-04A MS				Units: mg/Kg		Analysis Date: 10/12/2017 08:35 PM		
Client ID:		Run ID: GALLERY_171012B		SeqNo: 4699180		Prep Date: 10/12/2017		DF: 30		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 20580 300 493.1 19540 210 75-125 0 SO

MSD		Sample ID: 1710409-04A MSD				Units: mg/Kg		Analysis Date: 10/12/2017 08:35 PM		
Client ID:		Run ID: GALLERY_171012B		SeqNo: 4699181		Prep Date: 10/12/2017		DF: 30		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 20590 300 493.1 19540 212 75-125 20580 0.0407 25 SO

LCS1		Sample ID: LCS1-108941-108941				Units: mg/Kg		Analysis Date: 10/12/2017 08:35 PM		
Client ID:		Run ID: GALLERY_171012B		SeqNo: 4699165		Prep Date: 10/12/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 101.1 10 100 0 101 80-120 0

LCS2		Sample ID: LCS2-108941-108941				Units: mg/Kg		Analysis Date: 10/12/2017 08:35 PM		
Client ID:		Run ID: GALLERY_171012B		SeqNo: 4699182		Prep Date: 10/12/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 490.3 10 500 0 98.1 80-120 0

The following samples were analyzed in this batch:

1710410-01A 1710410-02A 1710410-03A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 1 of 4

Client: WPX Energy
Work Order: 1710410
Project: North Brushy Draw 35-6H

QC BATCH REPORT

Batch ID: **109019** Instrument ID **GALLERY** Method: **A4500-CI E-11**

MBLK		Sample ID: MBLK-109019-109019				Units: mg/Kg		Analysis Date: 10/13/2017 02:00 PM		
Client ID:		Run ID: GALLERY_171013A		SeqNo: 4699189		Prep Date: 10/12/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 10

MS		Sample ID: 1710410-06A MS				Units: mg/Kg		Analysis Date: 10/13/2017 02:00 PM		
Client ID: BH17-12 2-4'		Run ID: GALLERY_171013A		SeqNo: 4699215		Prep Date: 10/12/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 504 9.7 487.3 6.394 102 75-125 0

MSD		Sample ID: 1710410-06A MSD				Units: mg/Kg		Analysis Date: 10/13/2017 02:00 PM		
Client ID: BH17-12 2-4'		Run ID: GALLERY_171013A		SeqNo: 4699216		Prep Date: 10/12/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 509.1 9.8 489.2 6.394 103 75-125 504 1.01 25

LCS1		Sample ID: LCS1-109019-109019				Units: mg/Kg		Analysis Date: 10/13/2017 02:00 PM		
Client ID:		Run ID: GALLERY_171013A		SeqNo: 4699190		Prep Date: 10/12/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 97.09 10 100 0 97.1 80-120 0

LCS2		Sample ID: LCS2-109019-109019				Units: mg/Kg		Analysis Date: 10/13/2017 02:00 PM		
Client ID:		Run ID: GALLERY_171013A		SeqNo: 4699214		Prep Date: 10/12/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 515.3 10 500 0 103 80-120 0

The following samples were analyzed in this batch:

1710410-04A 1710410-05A 1710410-06A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 2 of 4

Client: WPX Energy
Work Order: 1710410
Project: North Brushy Draw 35-6H

QC BATCH REPORT

Batch ID: **R221740** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R221740				Units: % of sample		Analysis Date: 10/7/2017 09:30 PM		
Client ID:		Run ID: MOIST_171007D				SeqNo: 4685784		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

LCS		Sample ID: LCS-R221740				Units: % of sample		Analysis Date: 10/7/2017 09:30 PM		
Client ID:		Run ID: MOIST_171007D				SeqNo: 4685783		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP		Sample ID: 17091514-12A DUP				Units: % of sample		Analysis Date: 10/7/2017 09:30 PM		
Client ID:		Run ID: MOIST_171007D				SeqNo: 4685765		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 3.88 0.050 0 0 0 0-0 3.59 7.76 5 RH

DUP		Sample ID: 1710410-01A DUP				Units: % of sample		Analysis Date: 10/7/2017 09:30 PM		
Client ID: BH17-10 0-2'		Run ID: MOIST_171007D				SeqNo: 4685778		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 10.07 0.050 0 0 0 0-0 10.29 2.16 5

The following samples were analyzed in this batch:

1710410-01A	1710410-02A	1710410-03A
1710410-04A	1710410-05A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 3 of 4

Client: WPX Energy
Work Order: 1710410
Project: North Brushy Draw 35-6H

QC BATCH REPORT

Batch ID: **R221945** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R221945				Units: % of sample		Analysis Date: 10/10/2017 03:20 PM		
Client ID:		Run ID: MOIST_171010C				SeqNo: 4691557		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	0.03	0.050								J

LCS		Sample ID: LCS-R221945				Units: % of sample		Analysis Date: 10/10/2017 03:20 PM		
Client ID:		Run ID: MOIST_171010C				SeqNo: 4691555		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP		Sample ID: 1710445-01A DUP				Units: % of sample		Analysis Date: 10/10/2017 03:20 PM		
Client ID:		Run ID: MOIST_171010C				SeqNo: 4691533		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	18.69	0.050	0	0	0	0-0	18.47	1.18	5	

DUP		Sample ID: 1710445-02A DUP				Units: % of sample		Analysis Date: 10/10/2017 03:20 PM		
Client ID:		Run ID: MOIST_171010C				SeqNo: 4691536		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	17.48	0.050	0	0	0	0-0	17.82	1.93	5	

The following samples were analyzed in this batch:

1710410-06A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 4 of 4



ALS Laboratory Group

HOLLAND, Michigan 49424

Chain-of-Custody

Form 202r0

WORKORDER

1710410

PROJECT NAME		SAMPLER		DATE		05/10/2017		PAGE		1 of 1	
PROJECT No.		SITE ID		TURNAROUND		5 days		DISPOSAL		By Lab or Return to Client	
17E-00043		North Brushy Draw 35-6H									
EDD FORMAT		PURCHASE ORDER									
COMPANY NAME		BILL TO COMPANY									
WPX Energy		WPX Energy									
SEND REPORT TO		INVOICE ATTN TO									
Blaney		Karolina Blaney									
ADDRESS		ADDRESS									
		5315 Buena Vista Dr									
CITY/STATE/ZIP		CITY/STATE/ZIP									
		Carlsbad, NM 88220									
PHONE		PHONE									
		970 589 0743									
FAX		FAX									
E-MAIL		E-MAIL									
Karolina.blaney@wpxenergy.com; james.raley@wpxenergy.com		Karolina.blaney@wpxenergy.com; James.Raley@wpxenergy.com									
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	DRO + GRO + QRO	BTEX	Chloride	Hold
1	BH17-10 0-2'	S	02/10/2017		3						
2	BH17-10 2-4'	S	02/10/2017		3						
3	BH17-11 0-2'	S	02/10/2017		3						
4	BH17-11 2-4'	S	02/10/2017		3						
5	BH17-12 0-2'	S	02/10/2017		3						
6	BH17-12 2-4'	S	02/10/2017		3						

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)
SRZ 4.8°C	X LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + new data)
Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035	

SIGNATURE	PRINTED NAME	DATE	TIME
Karolina Blaney	Karolina Blaney	05/10/2017	15:00
RECEIVED BY	Kenneth H. E. E. E. E.	10/10/17	1000
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			

ALS Group, USA

Sample Receipt Checklist

Client Name: **WPX - NM**Date/Time Received: **06-Oct-17 10:00**Work Order: **1710410**Received by: **KRW**Checklist completed by Keith Wurenga
eSignature06-Oct-17
DateReviewed by: Chad Whelton
eSignature09-Oct-17
DateMatrices: **Soil**Carrier name: **FedEx**

Shipping container/cooler in good condition?

Yes ☒No ☐Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐No ☐Not Present ☒

Custody seals intact on sample bottles?

Yes ☐No ☐Not Present ☒

Chain of custody present?

Yes ☒No ☐

Chain of custody signed when relinquished and received?

Yes ☒No ☐

Chain of custody agrees with sample labels?

Yes ☒No ☐

Samples in proper container/bottle?

Yes ☒No ☐

Sample containers intact?

Yes ☒No ☐

Sufficient sample volume for indicated test?

Yes ☒No ☐

All samples received within holding time?

Yes ☒No ☐

Container/Temp Blank temperature in compliance?

Yes ☒No ☐

Sample(s) received on ice?

Yes ☒No ☐

Temperature(s)/Thermometer(s):

4.8/4.8 CSR2

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage:

10/6/2017 11:44:30 AM

Water - VOA vials have zero headspace?

Yes ☐No ☐No VOA vials submitted ☒

Water - pH acceptable upon receipt?

Yes ☐No ☐N/A ☒

pH adjusted?

Yes ☐No ☐N/A ☒

pH adjusted by:

-

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



16-Oct-2017

Karolina Blaney
WPX Energy
5315 Buena Vista Dr.
Carlsbad, NM 88220

Re: **North Brushy Draw 35-6H**

Work Order: **1710468**

Dear Karolina,

ALS Environmental received 18 samples on 06-Oct-2017 10:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 28.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: MN 998501

Report of Laboratory Analysis

ADDRESS 3352 128th Ave Holland, Michigan 49424 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

ALS Group, USA

Date: 16-Oct-17

Client: WPX Energy
Project: North Brushy Draw 35-6H
Work Order: 1710468

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1710468-01	BH17-01 0-2'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-02	BH17-01 2-4'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-03	BH17-02 0-2'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-04	BH17-02 2-4'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-05	BH17-03 0-2'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-06	BH17-03 2-4'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-07	BH17-04 0-2'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-08	BH17-04 2-4'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-09	BH17-05 0-2'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-10	BH17-05 2-4'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-11	BH17-06 0-2'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-12	BH17-06 2-4'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-13	BH17-07 0-2'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-14	BH17-07 2-4'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-15	BH17-08 0-2'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-16	BH17-08 2-4'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-17	BH17-09 0-2'	Soil		10/2/2017	10/6/2017 10:00	☐
1710468-18	BH17-09 2-4'	Soil		10/2/2017	10/6/2017 10:00	☐

ALS Group, USA

Date: 16-Oct-17

Client: WPX Energy
Project: North Brushy Draw 35-6H
WorkOrder: 1710468

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group, USA

Date: 16-Oct-17

Client:	WPX Energy		
Project:	North Brushy Draw 35-6H	Work Order:	1710468
Sample ID:	BH17-01 0-2'	Lab ID:	1710468-01
Collection Date:	10/2/2017	Matrix:	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT	10/12/17 22:30	Analyst: ED
Chloride	15		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	8.2		0.050	% of sample	1	10/10/2017 02:27 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 16-Oct-17**Client:** WPX Energy**Project:** North Brushy Draw 35-6H**Sample ID:** BH17-01 2-4'**Collection Date:** 10/2/2017**Work Order:** 1710468**Lab ID:** 1710468-02**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT 10/12/17 22:30		Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	12		0.050	% of sample	1	10/10/2017 02:27 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 16-Oct-17**Client:** WPX Energy**Project:** North Brushy Draw 35-6H**Work Order:** 1710468**Sample ID:** BH17-02 0-2'**Lab ID:** 1710468-03**Collection Date:** 10/2/2017**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT	10/12/17 22:30	Analyst: ED
Chloride	12		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	6.9		0.050	% of sample	1	10/10/2017 02:27 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client:	WPX Energy		
Project:	North Brushy Draw 35-6H	Work Order:	1710468
Sample ID:	BH17-02 2-4'	Lab ID:	1710468-04
Collection Date:	10/2/2017	Matrix:	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT 10/12/17 22:30		Analyst: ED
Chloride	17		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	9.8		0.050	% of sample	1	10/10/2017 02:27 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client:	WPX Energy		
Project:	North Brushy Draw 35-6H	Work Order:	1710468
Sample ID:	BH17-03 0-2'	Lab ID:	1710468-05
Collection Date:	10/2/2017	Matrix:	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT	10/12/17 22:30	Analyst: ED
Chloride	12		10	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	7.7		0.050	% of sample	1	10/10/2017 02:27 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client:	WPX Energy		
Project:	North Brushy Draw 35-6H	Work Order:	1710468
Sample ID:	BH17-03 2-4'	Lab ID:	1710468-06
Collection Date:	10/2/2017	Matrix:	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT	10/12/17 22:30	Analyst: ED
Chloride	ND		10	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	4.2		0.050	% of sample	1	10/10/2017 02:27 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 16-Oct-17**Client:** WPX Energy**Project:** North Brushy Draw 35-6H**Work Order:** 1710468**Sample ID:** BH17-04 0-2'**Lab ID:** 1710468-07**Collection Date:** 10/2/2017**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT 10/12/17 22:30		Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	9.7		0.050	% of sample	1	10/10/2017 02:27 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client:	WPX Energy		
Project:	North Brushy Draw 35-6H	Work Order:	1710468
Sample ID:	BH17-04 2-4'	Lab ID:	1710468-08
Collection Date:	10/2/2017	Matrix:	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT 10/12/17 22:30		Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	5.9		0.050	% of sample	1	10/10/2017 02:27 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client: WPX Energy

Project: North Brushy Draw 35-6H

Sample ID: BH17-05 0-2'

Collection Date: 10/2/2017

Work Order: 1710468

Lab ID: 1710468-09

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT	10/12/17 22:30	Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	10		0.050	% of sample	1	10/10/2017 02:27 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client: WPX Energy

Project: North Brushy Draw 35-6H

Sample ID: BH17-05 2-4'

Collection Date: 10/2/2017

Work Order: 1710468

Lab ID: 1710468-10

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT	10/12/17 22:30	Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	12		0.050	% of sample	1	10/10/2017 02:27 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client:	WPX Energy		
Project:	North Brushy Draw 35-6H	Work Order:	1710468
Sample ID:	BH17-06 0-2'	Lab ID:	1710468-11
Collection Date:	10/2/2017	Matrix:	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT	10/12/17 22:30	Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	14		0.050	% of sample	1	10/10/2017 02:27 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 16-Oct-17**Client:** WPX Energy**Project:** North Brushy Draw 35-6H**Work Order:** 1710468**Sample ID:** BH17-06 2-4'**Lab ID:** 1710468-12**Collection Date:** 10/2/2017**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT 10/12/17 22:30		Analyst: ED
Chloride	ND		10	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	6.3		0.050	% of sample	1	10/10/2017 05:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA**Date:** 16-Oct-17**Client:** WPX Energy**Project:** North Brushy Draw 35-6H**Sample ID:** BH17-07 0-2'**Collection Date:** 10/2/2017**Work Order:** 1710468**Lab ID:** 1710468-13**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT 10/12/17 22:30		Analyst: ED
Chloride	ND		10	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	5.5		0.050	% of sample	1	10/10/2017 05:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client:	WPX Energy		
Project:	North Brushy Draw 35-6H	Work Order:	1710468
Sample ID:	BH17-07 2-4'	Lab ID:	1710468-14
Collection Date:	10/2/2017	Matrix:	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT	10/12/17 22:30	Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	8.5		0.050	% of sample	1	10/10/2017 05:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client:	WPX Energy		
Project:	North Brushy Draw 35-6H	Work Order:	1710468
Sample ID:	BH17-08 0-2'	Lab ID:	1710468-15
Collection Date:	10/2/2017	Matrix:	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT	10/12/17 22:30	Analyst: ED
Chloride	ND		11	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	8.7		0.050	% of sample	1	10/10/2017 05:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client:	WPX Energy		
Project:	North Brushy Draw 35-6H	Work Order:	1710468
Sample ID:	BH17-08 2-4'	Lab ID:	1710468-16
Collection Date:	10/2/2017	Matrix:	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT	10/12/17 22:30	Analyst: ED
Chloride	ND		10	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	5.7		0.050	% of sample	1	10/10/2017 05:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client:	WPX Energy		
Project:	North Brushy Draw 35-6H	Work Order:	1710468
Sample ID:	BH17-09 0-2'	Lab ID:	1710468-17
Collection Date:	10/2/2017	Matrix:	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT	10/12/17 22:30	Analyst: ED
Chloride	ND		10	mg/Kg-dry	1	10/13/2017 02:00 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	4.7		0.050	% of sample	1	10/10/2017 05:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client:	WPX Energy		
Project:	North Brushy Draw 35-6H	Work Order:	1710468
Sample ID:	BH17-09 2-4'	Lab ID:	1710468-18
Collection Date:	10/2/2017	Matrix:	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
CHLORIDE			A4500-CL E-11	Prep: EXTRACT 10/13/17 14:45		Analyst: ED
Chloride	16		11	mg/Kg-dry	1	10/13/2017 05:15 PM
MOISTURE			SW3550C			Analyst: MT
Moisture	9.2		0.050	% of sample	1	10/10/2017 05:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 16-Oct-17

Client: WPX Energy

QC BATCH REPORT

Work Order: 1710468

Project: North Brushy Draw 35-6H

Batch ID: 109019

Instrument ID GALLERY

Method: A4500-CI E-11

MBLK		Sample ID: MBLK-109019-109019				Units: mg/Kg		Analysis Date: 10/13/2017 02:00 PM		
Client ID:		Run ID: GALLERY_171013A		SeqNo: 4699189		Prep Date: 10/12/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 10

MS		Sample ID: 1710410-06A MS				Units: mg/Kg		Analysis Date: 10/13/2017 02:00 PM		
Client ID:		Run ID: GALLERY_171013A		SeqNo: 4699215		Prep Date: 10/12/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 504 9.7 487.3 6.394 102 75-125 0

MSD		Sample ID: 1710410-06A MSD				Units: mg/Kg		Analysis Date: 10/13/2017 02:00 PM		
Client ID:		Run ID: GALLERY_171013A		SeqNo: 4699216		Prep Date: 10/12/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 509.1 9.8 489.2 6.394 103 75-125 504 1.01 25

LCS1		Sample ID: LCS1-109019-109019				Units: mg/Kg		Analysis Date: 10/13/2017 02:00 PM		
Client ID:		Run ID: GALLERY_171013A		SeqNo: 4699190		Prep Date: 10/12/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 97.09 10 100 0 97.1 80-120 0

LCS2		Sample ID: LCS2-109019-109019				Units: mg/Kg		Analysis Date: 10/13/2017 02:00 PM		
Client ID:		Run ID: GALLERY_171013A		SeqNo: 4699214		Prep Date: 10/12/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 515.3 10 500 0 103 80-120 0

The following samples were analyzed in this batch:

1710468-01B	1710468-02B	1710468-03B
1710468-04B	1710468-05B	1710468-06B
1710468-07B	1710468-08B	1710468-09B
1710468-10B	1710468-11B	1710468-12B
1710468-13B	1710468-14B	1710468-15B
1710468-16B	1710468-17B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 1 of 4

Client: WPX Energy
Work Order: 1710468
Project: North Brushy Draw 35-6H

QC BATCH REPORT

Batch ID: **109025** Instrument ID **GALLERY** Method: **A4500-CI E-11**

MBLK		Sample ID: MBLK-109025-109025				Units: mg/Kg		Analysis Date: 10/13/2017 05:15 PM		
Client ID:		Run ID: GALLERY_171013B		SeqNo: 4699221		Prep Date: 10/13/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride ND 10

MS		Sample ID: 1710511-01A MS				Units: mg/Kg		Analysis Date: 10/13/2017 05:15 PM		
Client ID:		Run ID: GALLERY_171013B		SeqNo: 4699235		Prep Date: 10/13/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 570.4 10 500 32.34 108 75-125 0

MSD		Sample ID: 1710511-01A MSD				Units: mg/Kg		Analysis Date: 10/13/2017 05:15 PM		
Client ID:		Run ID: GALLERY_171013B		SeqNo: 4699236		Prep Date: 10/13/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 565.3 9.9 496 32.34 107 75-125 570.4 0.902 25

LCS1		Sample ID: LCS1-109025-109025				Units: mg/Kg		Analysis Date: 10/13/2017 05:15 PM		
Client ID:		Run ID: GALLERY_171013B		SeqNo: 4699222		Prep Date: 10/13/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 97.55 10 100 0 97.5 80-120 0

LCS2		Sample ID: LCS2-109025-109025				Units: mg/Kg		Analysis Date: 10/13/2017 05:15 PM		
Client ID:		Run ID: GALLERY_171013B		SeqNo: 4699234		Prep Date: 10/13/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chloride 514.8 10 500 0 103 80-120 0

The following samples were analyzed in this batch:

1710468-18B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 2 of 4

Client: WPX Energy
Work Order: 1710468
Project: North Brushy Draw 35-6H

QC BATCH REPORT

Batch ID: **R221950** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R221950				Units: % of sample		Analysis Date: 10/10/2017 02:27 PM		
Client ID:		Run ID: MOIST_171010D				SeqNo: 4691646		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

LCS		Sample ID: LCS-R221950				Units: % of sample		Analysis Date: 10/10/2017 02:27 PM		
Client ID:		Run ID: MOIST_171010D				SeqNo: 4691645		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP		Sample ID: 1710455-04C DUP				Units: % of sample		Analysis Date: 10/10/2017 02:27 PM		
Client ID:		Run ID: MOIST_171010D				SeqNo: 4691627		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 13.01 0.050 0 0 0 0-0 13.05 0.307 5

DUP		Sample ID: 1710468-02A DUP				Units: % of sample		Analysis Date: 10/10/2017 02:27 PM		
Client ID: BH17-01 2-4'		Run ID: MOIST_171010D				SeqNo: 4691635		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 12.05 0.050 0 0 0 0-0 12.1 0.414 5

The following samples were analyzed in this batch:

1710468-01A	1710468-02A	1710468-03A
1710468-04A	1710468-05A	1710468-06A
1710468-07A	1710468-08A	1710468-09A
1710468-10A	1710468-11A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 3 of 4

Client: WPX Energy
Work Order: 1710468
Project: North Brushy Draw 35-6H

QC BATCH REPORT

Batch ID: **R221953** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R221953				Units: % of sample		Analysis Date: 10/10/2017 05:00 PM		
Client ID:		Run ID: MOIST_171010E		SeqNo: 4691683		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	0.03	0.050								J

LCS		Sample ID: LCS-R221953				Units: % of sample		Analysis Date: 10/10/2017 05:00 PM		
Client ID:		Run ID: MOIST_171010E		SeqNo: 4691682		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP		Sample ID: 1710468-12A DUP				Units: % of sample		Analysis Date: 10/10/2017 05:00 PM		
Client ID: BH17-06 2-4'		Run ID: MOIST_171010E		SeqNo: 4691656		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	6.19	0.050	0	0	0	0-0	6.26	1.12	5	

DUP		Sample ID: 1710468-13A DUP				Units: % of sample		Analysis Date: 10/10/2017 05:00 PM		
Client ID: BH17-07 0-2'		Run ID: MOIST_171010E		SeqNo: 4691659		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	5.66	0.050	0	0	0	0-0	5.52	2.5	5	

The following samples were analyzed in this batch:

1710468-12A	1710468-13A	1710468-14A
1710468-15A	1710468-16A	1710468-17A
1710468-18A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC Page: 4 of 4



ALS Laboratory Group

HOLLAND, Michigan 49424

Chain-of-Custody

Form 2021

WORKORDER	1710468
PAGE	1 of 1
DISPOSAL	By Lab or Return to Client

PROJECT NAME	North Brushy Draw 35-6H	SAMPLER		DATE	05/10/2017	TURNAROUND	5 days
PROJECT No.	17E-00043	SITE ID	North Brushy Draw 35-6H				
COMPANY NAME	WPX Energy	EDD FORMAT					
SEND REPORT TO	Blaney	PURCHASE ORDER					
ADDRESS		BILL TO COMPANY	WPX Energy				
CITY / STATE / ZIP		INVOICE ATTN TO	Karolina Blaney				
PHONE		ADDRESS	5315 Buena Vista Dr				
FAX		CITY / STATE / ZIP	Carlsbad, NM 88220				
E-MAIL	Karolina.blaney@wpxenergy.com; james.raley@wpxenergy.com	PHONE	970 589 0743				
		FAX					
		E-MAIL	Karolina.blaney@wpxenergy.com; James.Raley@wpxenergy.com				

Lab ID	Field ID	Matrix	Sample Date	Sample Time	Bottles	Pres.	QC	DRO + GRO + ORO	BTEX	Chloride	Hold
1	BH17-01 0-2'	S	02/10/2017		3				x		
2	BH17-01 2-4'	S	02/10/2017		3				x		
3	BH17-02 0-2'	S	02/10/2017		3				x		
4	BH17-02 2-4'	S	02/10/2017		3				x		
5	BH17-03 0-2'	S	02/10/2017		3				x		
6	BH17-03 2-4'	S	02/10/2017		3				x		
7	BH17-04 0-2'	S	02/10/2017		3				x		
8	BH17-04 2-4'	S	02/10/2017		3				x		
9	BH17-05 0-2'	S	02/10/2017		3				x		

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)
SER 42°C 	☒ LEVEL II (Standard QC)
	☐ LEVEL III (Std QC + forms)
	☐ LEVEL IV (Std QC + forms + raw data)
	☐

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	Karolina Blaney	Karolina Blaney	05/10/2017	15:00
RECEIVED BY		Kevin Wierman	5/6/17	1000
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				



ALS Laboratory Group

HOLLAND, Michigan 49424

Chain-of-Custody

Form 202-0

WORKORDER		1710468	
DATE		05/10/2017	
PAGE		1 of 1	
DISPOSAL		By Lab or Return to Client	
TURNAROUND		5 days	

PROJECT NAME	North Brushy Draw 35-8H	SAMPLER		DATE	05/10/2017																
PROJECT No.	17E-00043	SITE ID	North Brushy Draw 35-8H	TURNAROUND	5 days																
EDD FORMAT		PURCHASE ORDER																			
COMPANY NAME	WPX Energy	BILL TO COMPANY	WPX Energy																		
SEND REPORT TO	Blaney	INVOICE ATTN TO	Karolina Blaney																		
ADDRESS		ADDRESS	5315 Buena Vista Dr																		
CITY/STATE/ZIP		CITY/STATE/ZIP	Carlsbad, NM 88220																		
PHONE		PHONE	870 588 0743																		
FAX		FAX																			
E-MAIL	Karolina.blaney@wpxenergy.com; james.raley@wpxenergy.com	E-MAIL	Karolina.blaney@wpxenergy.com; James.Raley@wpxenergy.com																		
Lab ID	Field ID	Matrix	Sample Date	Sample Time	Bottles	Pres.	QC	DRD + GRO + ORO	BTEX	Chloride	Hold										
10	BH17-05 2-4'	S	02/10/2017		3				x												
11	BH17-06 0-2'	S	02/10/2017		3				x												
12	BH17-06 2-4' ✓	S	02/10/2017		3				x												
	BH17-07 0-2' ✓	S	02/10/2017		3				x												
	BH17-07 2-4' ✓	S	02/10/2017		3				x												
	BH17-08 0-2' ✓	S	02/10/2017		3				x												
	BH17-08 2-4' ✓	S	02/10/2017		3				x												
	BH17-08 0-2' ✓	S	02/10/2017		3				x												
	BH17-09 0-2' ✓	S	02/10/2017		3				x												
	BH17-09 2-4' ✓	S	02/10/2017		3				x												

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)
	☒ LEVEL II (Standard QC)
	☐ LEVEL III (Std QC + forms)
	☐ LEVEL IV (Std QC + forms + raw data)
	☐

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

SIGNATURE	PRINTED NAME	DATE	TIME
<i>Karolina Blaney</i>	Karolina Blaney	05/10/2017	16:00
<i>Keith W. JENNER</i>	Keith W. JENNER	10/6/17	1000
RECEIVED BY			
RECEIVED BY			
RECEIVED BY			
RECEIVED BY			

ALS Group, USA

Sample Receipt Checklist

Client Name: **WPX - NM**Date/Time Received: **06-Oct-17 10:00**Work Order: **1710468**Received by: **KRW**Checklist completed by Keith Wurenga
eSignature06-Oct-17
DateReviewed by: Chad Whelton
eSignature09-Oct-17
DateMatrices: **Soil**Carrier name: **FedEx**

Shipping container/cooler in good condition?

Yes ☒No ☐Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐No ☐Not Present ☒

Custody seals intact on sample bottles?

Yes ☐No ☐Not Present ☒

Chain of custody present?

Yes ☒No ☐

Chain of custody signed when relinquished and received?

Yes ☒No ☐

Chain of custody agrees with sample labels?

Yes ☒No ☐

Samples in proper container/bottle?

Yes ☒No ☐

Sample containers intact?

Yes ☒No ☐

Sufficient sample volume for indicated test?

Yes ☒No ☐

All samples received within holding time?

Yes ☒No ☐

Container/Temp Blank temperature in compliance?

Yes ☒No ☐

Sample(s) received on ice?

Yes ☒No ☐

Temperature(s)/Thermometer(s):

4.2/4.2 CSR2

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage:

10/6/2017 4:00:13 PM

Water - VOA vials have zero headspace?

Yes ☐No ☐No VOA vials submitted ☒

Water - pH acceptable upon receipt?

Yes ☐No ☐N/A ☒

pH adjusted?

Yes ☐No ☐N/A ☒

pH adjusted by:

-

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

Analytical Report 515940

for
Enviroclean- Midland

Project Manager: BILL GREEN

RKI Brushy Draw

28-SEP-15

Collected By: Client



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-15-19), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)



28-SEP-15

Project Manager: **BILL GREEN**
Enviroclean- Midland
2405 ECR 123
Midland, TX 79706

Reference: XENCO Report No(s): **515940**
RKI Brushy Draw
Project Address: NM

BILL GREEN:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 515940. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 515940 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks

Project Manager

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**Sample Cross Reference 515940****Enviroclean- Midland, Midland, TX**

RKI Brushy Draw

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
001	S	09-18-15 12:40		515940-001
001-A	S	09-18-15 12:45	- 1 ft	515940-002
002	S	09-18-15 12:50		515940-003
002-A	S	09-18-15 12:55	- 1 ft	515940-004
003	S	09-18-15 13:05		515940-005
003-A	S	09-18-15 13:10	- 1 ft	515940-006
004	S	09-18-15 13:20		515940-007
005	S	09-18-15 13:25		515940-008
006	S	09-18-15 13:35		515940-009



CASE NARRATIVE

Client Name: Enviroclean- Midland

Project Name: RKI Brushy Draw

Project ID:

Work Order Number(s): 515940

Report Date: 28-SEP-15

Date Received: 09/21/2015

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-977731 TPH By SW8015B Mod

Surrogate 1-Chlorooctane, Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 515940-004.



Certificate of Analysis Summary 515940

Enviroclean- Midland, Midland, TX

Project Name: RKI Brushy Draw



Project Id:

Contact: BILL GREEN

Project Location: NM

Date Received in Lab: Mon Sep-21-15 01:55 pm

Report Date: 28-SEP-15

Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	515940-001	515940-002	515940-003	515940-004	515940-005	515940-006
	<i>Field Id:</i>	001	001-A	002	002-A	003	003-A
	<i>Depth:</i>		1 ft		1 ft		1 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Sep-18-15 12:40	Sep-18-15 12:45	Sep-18-15 12:50	Sep-18-15 12:55	Sep-18-15 13:05	Sep-18-15 13:10
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	Sep-26-15 10:00	Sep-26-15 10:00	Sep-26-15 10:00	Sep-26-15 10:00	Sep-26-15 10:00	Sep-26-15 10:00
	<i>Analyzed:</i>	Sep-26-15 14:42	Sep-26-15 15:27	Sep-26-15 15:50	Sep-26-15 16:12	Sep-26-15 16:35	Sep-26-15 16:58
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		3030 200	375 40.0	1750 100	185 10.0	3350 200	1620 100
TPH By SW8015B Mod	<i>Extracted:</i>	Sep-25-15 15:00	Sep-25-15 15:00	Sep-25-15 15:00	Sep-25-15 15:00	Sep-25-15 15:00	Sep-25-15 15:00
	<i>Analyzed:</i>	Sep-25-15 20:50	Sep-25-15 21:14	Sep-25-15 21:38	Sep-25-15 22:02	Sep-25-15 22:26	Sep-25-15 23:14
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
C6-C10 Gasoline Range Hydrocarbons		18.5 14.9	ND 15.0	24.6 15.0	ND 15.0	ND 14.9	ND 15.0
C10-C28 Diesel Range Hydrocarbons		ND 14.9	ND 15.0	78.4 15.0	ND 15.0	ND 14.9	ND 15.0
C28-C35 Oil Range Hydrocarbons		ND 14.9	ND 15.0	ND 15.0	ND 15.0	ND 14.9	ND 15.0
Total TPH		18.5 14.9	ND 15.0	103 15.0	ND 15.0	ND 14.9	ND 15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Kelsey Brooks
Project Manager



Certificate of Analysis Summary 515940

Enviroclean- Midland, Midland, TX

Project Name: RKI Brushy Draw



Project Id:

Contact: BILL GREEN

Project Location: NM

Date Received in Lab: Mon Sep-21-15 01:55 pm

Report Date: 28-SEP-15

Project Manager: Kelsey Brooks

<i>Analysis Requested</i>	<i>Lab Id:</i>	515940-007	515940-008	515940-009			
	<i>Field Id:</i>	004	005	006			
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL			
	<i>Sampled:</i>	Sep-18-15 13:20	Sep-18-15 13:25	Sep-18-15 13:35			
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	Sep-26-15 10:00	Sep-26-15 10:00	Sep-26-15 10:00			
	<i>Analyzed:</i>	Sep-26-15 18:06	Sep-26-15 18:28	Sep-26-15 18:51			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		ND 2.00	ND 2.00	ND 2.00			
TPH By SW8015B Mod	<i>Extracted:</i>	Sep-25-15 15:00	Sep-25-15 15:00	Sep-25-15 15:00			
	<i>Analyzed:</i>	Sep-25-15 23:38	Sep-26-15 00:02	Sep-26-15 00:25			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
C6-C10 Gasoline Range Hydrocarbons		ND 15.0	ND 15.0	ND 15.0			
C10-C28 Diesel Range Hydrocarbons		ND 15.0	ND 15.0	ND 15.0			
C28-C35 Oil Range Hydrocarbons		ND 15.0	ND 15.0	ND 15.0			
Total TPH		ND 15.0	ND 15.0	ND 15.0			

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Kelsey Brooks
Project Manager



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **SQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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 2505 North Falkenburg Rd, Tampa, FL 33619
 12600 West I-20 East, Odessa, TX 79765
 6017 Financial Drive, Norcross, GA 30071
 3725 E. Atlanta Ave, Phoenix, AZ 85040

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	



Form 2 - Surrogate Recoveries

Project Name: RKI Brushy Draw

Work Orders : 515940,

Lab Batch #: 977731

Sample: 515940-001 / SMP

Project ID:

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/25/15 20:50

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	99.6	117	70-135	
o-Terphenyl	58.6	49.8	118	70-135	

Lab Batch #: 977731

Sample: 515940-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/25/15 21:14

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	73.1	99.7	73	70-135	
o-Terphenyl	35.9	49.9	72	70-135	

Lab Batch #: 977731

Sample: 515940-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/25/15 21:38

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.9	106	70-135	
o-Terphenyl	53.1	50.0	106	70-135	

Lab Batch #: 977731

Sample: 515940-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/25/15 22:02

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	137	100	137	70-135	**
o-Terphenyl	68.9	50.0	138	70-135	**

Lab Batch #: 977731

Sample: 515940-005 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/25/15 22:26

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	80.1	99.0	81	70-135	
o-Terphenyl	40.2	49.5	81	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: RKI Brushy Draw

Work Orders : 515940,

Lab Batch #: 977731

Sample: 515940-006 / SMP

Project ID:

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/25/15 23:14

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.5	100	84	70-135	
o-Terphenyl	41.4	50.0	83	70-135	

Lab Batch #: 977731

Sample: 515940-007 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/25/15 23:38

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	99.9	128	70-135	
o-Terphenyl	63.4	50.0	127	70-135	

Lab Batch #: 977731

Sample: 515940-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/26/15 00:02

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.7	106	70-135	
o-Terphenyl	53.5	49.9	107	70-135	

Lab Batch #: 977731

Sample: 515940-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/26/15 00:25

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	100	125	70-135	
o-Terphenyl	63.7	50.0	127	70-135	

Lab Batch #: 977731

Sample: 698641-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 09/25/15 15:43

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	78.0	100	78	70-135	
o-Terphenyl	39.6	50.0	79	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: RKI Brushy Draw

Work Orders : 515940,

Lab Batch #: 977731

Sample: 698641-1-BKS / BKS

Project ID:

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 09/25/15 16:07

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.3	100	87	70-135	
o-Terphenyl	39.9	50.0	80	70-135	

Lab Batch #: 977731

Sample: 698641-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 09/25/15 16:55

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	49.0	50.0	98	70-135	

Lab Batch #: 977731

Sample: 516203-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/25/15 19:26

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	42.4	50.0	85	70-135	

Lab Batch #: 977731

Sample: 516203-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 09/25/15 19:51

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.2	99.6	98	70-135	
o-Terphenyl	42.5	49.8	85	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



BS / BSD Recoveries

Project Name: RKI Brushy Draw

Work Order #: 515940

Project ID:

Analyst: JUM

Date Prepared: 09/26/2015

Date Analyzed: 09/26/2015

Lab Batch ID: 977774

Sample: 698661-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
Chloride	<2.00	50.0	49.6	99	50.0	48.4	97	2	90-110	20	

Analyst: PJB

Date Prepared: 09/25/2015

Date Analyzed: 09/25/2015

Lab Batch ID: 977731

Sample: 698641-1-BKS

Batch #: 1

Matrix: Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes											
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	708	71	1000	855	86	19	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	752	75	1000	842	84	11	70-135	35	

Relative Percent Difference RPD = $200 * |(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100 * (C)/[B]$ Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$

All results are based on MDL and Validated for QC Purposes



Form 3 - MS Recoveries



Project Name: RKI Brushy Draw

Work Order #: 515940

Lab Batch #: 977774

Date Analyzed: 09/26/2015

QC- Sample ID: 515940-001 S

Reporting Units: mg/kg

Date Prepared: 09/26/2015

Batch #: 1

Project ID:

Analyst: JUM

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	3030	5000	8610	112	80-120	

Lab Batch #: 977774

Date Analyzed: 09/26/2015

QC- Sample ID: 516319-002 S

Reporting Units: mg/kg

Date Prepared: 09/26/2015

Batch #: 1

Analyst: JUM

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	423	500	949	105	80-120	

Matrix Spike Percent Recovery [D] = $100 \times (C-A)/B$ Relative Percent Difference [E] = $200 \times (C-A)/(C+B)$

All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit



Form 3 - MS / MSD Recoveries



Project Name: RKI Brushy Draw

Work Order # : 515940

Project ID:

Lab Batch ID: 977731

QC- Sample ID: 516203-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 09/25/2015

Date Prepared: 09/25/2015

Analyst: PJB

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	30.9	1000	911	88	996	880	85	3	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	747	75	996	739	74	1	70-135	35	

Matrix Spike Percent Recovery [D] = $100 \times (C-A)/B$
 Relative Percent Difference RPD = $200 \times |(C-F)/(C+F)|$

Matrix Spike Duplicate Percent Recovery [G] = $100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



515940

Final 1.000



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Enviroclean- Midland

Date/ Time Received: 09/21/2015 01:55:00 PM

Work Order #: 515940

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	No
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	N/A
#21 <2 for all samples preserved with HNO ₃ , HCL, H ₂ SO ₄ ? Except for samples for the analysis of HEM or HEM-SGT which are verified by the analysts.	N/A
#22 >10 for all samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

Kelsey Brooks

Date: 09/21/2015

Checklist reviewed by:

Kelsey Brooks

Date: 09/22/2015

Attachment 02: Analytical Reports

Certificate of Analysis Summary 686581



WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: North Brushy Draw 35-6 H

Project Id:

Date Received in Lab: Fri 01.29.2021 10:20

Contact: Lynda Laumbach

Report Date: 02.04.2021 16:30

Project Location: Eddy County, New Mexico

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	686581-001	686581-002	686581-003	686581-004	686581-005	686581-006
	Field Id:	DS01	DS01 A	DS02	DS02 A	DS03	DS03 A
	Depth:	0-2 ft	2-4 ft	0-2 ft	2-4 ft	0-2 ft	2-4 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	01.28.2021 10:00	01.28.2021 10:05	01.28.2021 10:15	01.28.2021 10:20	01.28.2021 10:30	01.28.2021 10:35
BTEX by EPA 8021B	Extracted:	01.29.2021 17:24	01.29.2021 17:24	01.29.2021 17:24	01.29.2021 17:24	01.29.2021 17:24	01.29.2021 17:24
	Analyzed:	01.30.2021 13:57	01.30.2021 14:20	01.30.2021 14:42	01.30.2021 15:04	01.31.2021 03:10	01.30.2021 15:49
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00402 0.00402	<0.00401 0.00401	<0.00398 0.00398	<0.00399 0.00399	<0.00400 0.00400	<0.00399 0.00399
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Inorganic Anions by EPA 300	Extracted:	01.30.2021 08:59	01.30.2021 08:59	01.30.2021 08:59	01.30.2021 08:59	01.30.2021 08:59	01.30.2021 08:59
	Analyzed:	01.30.2021 12:57	01.30.2021 13:03	01.30.2021 13:20	01.30.2021 13:25	01.30.2021 13:31	01.30.2021 13:37
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		11.2 10.1	22.6 9.98	11.5 9.92	11.5 9.98	12.0 9.98	12.6 9.92
TPH by SW8015 Mod SUB: T104704400-20-21	Extracted:	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00
	Analyzed:	02.03.2021 13:07	02.03.2021 14:11	02.03.2021 14:32	02.03.2021 14:54	02.03.2021 15:15	02.03.2021 15:37
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.9 49.9
Total TPH		<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.9 49.9

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 686581



WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: North Brushy Draw 35-6 H

Project Id:

Date Received in Lab: Fri 01.29.2021 10:20

Contact: Lynda Laumbach

Report Date: 02.04.2021 16:30

Project Location: Eddy County, New Mexico

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	686581-007	686581-008	686581-009	686581-010	686581-011	686581-012
	Field Id:	DS04	DS04 A	DS05	DS05 A	DS06	DS06A
	Depth:	0-2 ft	2-4 ft	0-2 ft	2-4 ft	0-2 ft	2-4 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	01.28.2021 10:50	01.28.2021 10:55	01.28.2021 11:10	01.28.2021 11:15	01.28.2021 11:25	01.28.2021 11:30
BTEX by EPA 8021B	Extracted:	01.29.2021 17:24	01.29.2021 17:24	01.29.2021 17:24	01.29.2021 17:24	01.29.2021 17:24	01.29.2021 17:24
	Analyzed:	01.30.2021 17:07	01.30.2021 17:29	01.30.2021 17:52	01.30.2021 18:14	01.30.2021 18:37	01.30.2021 18:59
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00397 0.00397	<0.00399 0.00399	<0.00404 0.00404	<0.00403 0.00403	<0.00401 0.00401	<0.00399 0.00399
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	0.00867 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	0.00867 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	0.00867 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200
Inorganic Anions by EPA 300	Extracted:	01.30.2021 08:59	01.30.2021 08:59	01.30.2021 08:59	01.30.2021 10:01	01.30.2021 10:01	01.30.2021 10:01
	Analyzed:	01.30.2021 13:42	01.30.2021 13:48	01.30.2021 13:54	01.30.2021 14:28	01.30.2021 14:45	01.30.2021 14:51
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		12.3 9.98	12.5 9.96	216 199	<9.92 9.92	<9.90 9.90	10.1 9.90
TPH by SW8015 Mod SUB: T104704400-20-21	Extracted:	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00
	Analyzed:	02.03.2021 15:58	02.03.2021 16:20	02.03.2021 16:41	02.03.2021 17:03	02.03.2021 17:46	02.03.2021 18:07
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 686581



WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: North Brushy Draw 35-6 H

Project Id:

Date Received in Lab: Fri 01.29.2021 10:20

Contact: Lynda Laumbach

Report Date: 02.04.2021 16:30

Project Location: Eddy County, New Mexico

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	686581-013	686581-014	686581-015	686581-016	686581-017	686581-018
	Field Id:	DS07	DS07 A	DS08	DS08 A	DS09	DS09 A
	Depth:	0-2 ft	2-4 ft	0-2 ft	2-4 ft	0-2 ft	2-4 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	01.28.2021 11:50	01.28.2021 11:55	01.28.2021 12:10	01.28.2021 12:15	01.28.2021 12:25	01.28.2021 12:30
BTEX by EPA 8021B	Extracted:	01.29.2021 17:24	01.29.2021 17:24	01.29.2021 17:24	01.29.2021 17:24	01.30.2021 17:26	01.30.2021 17:26
	Analyzed:	01.30.2021 19:22	01.30.2021 19:44	01.30.2021 20:06	01.30.2021 20:29	01.31.2021 10:48	01.31.2021 11:10
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
m,p-Xylenes		<0.00397 0.00397	<0.00399 0.00399	<0.00398 0.00398	<0.00399 0.00399	<0.00398 0.00398	<0.00396 0.00396
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00198 0.00198
Inorganic Anions by EPA 300	Extracted:	01.30.2021 10:01	01.30.2021 10:01	01.30.2021 10:01	01.30.2021 10:01	01.30.2021 10:01	01.30.2021 10:01
	Analyzed:	01.30.2021 14:56	01.30.2021 15:02	01.30.2021 15:19	01.30.2021 15:25	01.30.2021 15:30	01.30.2021 15:36
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		<9.92 9.92	<9.98 9.98	<9.92 9.92	<9.96 9.96	<9.94 9.94	<9.94 9.94
Chloride		<9.92 9.92	<9.98 9.98	<9.92 9.92	<9.96 9.96	<9.94 9.94	<9.94 9.94
TPH by SW8015 Mod SUB: T104704400-20-21	Extracted:	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00
	Analyzed:	02.03.2021 18:28	02.03.2021 18:50	02.03.2021 19:11	02.03.2021 19:32	02.03.2021 19:53	02.03.2021 20:14
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
		<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<49.8 49.8	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 686581



WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: North Brushy Draw 35-6 H

Project Id:

Date Received in Lab: Fri 01.29.2021 10:20

Contact: Lynda Laumbach

Report Date: 02.04.2021 16:30

Project Location: Eddy County, New Mexico

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	686581-019	686581-020	686581-021	686581-022	686581-023	686581-024
	Field Id:	DS10	DS10 A	DS11	DS11 A	DS12	DS12 A
	Depth:	0-2 ft	2-4 ft	0-2 ft	2-4 ft	0-2 ft	2-4 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	01.28.2021 14:10	01.28.2021 14:15	01.27.2021 13:50	01.27.2021 13:55	01.27.2021 13:30	01.27.2021 13:35
BTEX by EPA 8021B	Extracted:	01.30.2021 17:26	01.30.2021 17:26	01.30.2021 17:26	01.30.2021 17:26	01.30.2021 17:26	01.30.2021 17:26
	Analyzed:	01.31.2021 11:33	01.31.2021 11:55	01.31.2021 12:18	01.31.2021 12:40	01.31.2021 13:02	01.31.2021 13:25
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200
Toluene		<0.00198 0.00198	<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		<0.00198 0.00198	<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200
m,p-Xylenes		<0.00396 0.00396	<0.00403 0.00403	<0.00396 0.00396	<0.00397 0.00397	<0.00402 0.00402	<0.00401 0.00401
o-Xylene		<0.00198 0.00198	<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200
Total Xylenes		<0.00198 0.00198	<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200
Total BTEX		<0.00198 0.00198	<0.00202 0.00202	<0.00198 0.00198	<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200
Inorganic Anions by EPA 300	Extracted:	01.30.2021 10:01	01.30.2021 10:01	01.30.2021 10:01	01.30.2021 10:01	01.30.2021 10:01	01.30.2021 10:01
	Analyzed:	01.30.2021 15:42	01.30.2021 15:47	01.30.2021 16:04	01.30.2021 16:10	01.30.2021 16:27	01.30.2021 16:33
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		1320 99.0	1920 X 101	10.5 9.92	11.0 9.92	55.1 9.98	10.3 10.1
TPH by SW8015 Mod SUB: T104704400-20-21	Extracted:	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00
	Analyzed:	02.03.2021 20:36	02.03.2021 20:57	02.03.2021 13:07	02.03.2021 14:11	02.03.2021 14:32	02.03.2021 14:54
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<49.8 49.8	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 686581



WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: North Brushy Draw 35-6 H

Project Id:

Date Received in Lab: Fri 01.29.2021 10:20

Contact: Lynda Laumbach

Report Date: 02.04.2021 16:30

Project Location: Eddy County, New Mexico

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	686581-025	686581-026	686581-027	686581-028	686581-029	686581-030
	Field Id:	DS13	DS13 A	DS14	DS14 A	DS15	DS15 A
	Depth:	0-2 ft	2-4 ft	0-2 ft	2-4 ft	0-2 ft	2-4 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	01.27.2021 13:10	01.27.2021 13:15	01.27.2021 14:30	01.27.2021 14:35	01.28.2021 12:45	01.28.2021 12:50
BTEX by EPA 8021B	Extracted:	01.30.2021 17:26	01.30.2021 17:26	01.30.2021 17:26	01.30.2021 17:26	01.30.2021 17:26	01.30.2021 17:26
	Analyzed:	01.31.2021 13:47	01.31.2021 14:10	01.31.2021 15:30	01.31.2021 15:52	01.31.2021 16:15	01.31.2021 16:37
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202
Toluene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202
Ethylbenzene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202
m,p-Xylenes		<0.00396 0.00396	<0.00402 0.00402	<0.00400 0.00400	<0.00402 0.00402	<0.00398 0.00398	<0.00404 0.00404
o-Xylene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202
Total Xylenes		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202
Total BTEX		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00202 0.00202
Inorganic Anions by EPA 300	Extracted:	01.30.2021 10:01	01.30.2021 10:01	01.30.2021 10:01	01.30.2021 10:01	01.30.2021 10:01	01.30.2021 11:03
	Analyzed:	01.30.2021 16:38	01.30.2021 16:44	01.30.2021 16:50	01.30.2021 16:56	01.30.2021 17:01	01.30.2021 17:35
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		10.4 10.0	<9.90 9.90	<9.92 9.92	10.2 9.96	10.0 9.96	<9.92 9.92
TPH by SW8015 Mod SUB: T104704400-20-21	Extracted:	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00
	Analyzed:	02.03.2021 15:15	02.03.2021 15:37	02.03.2021 15:58	02.03.2021 16:20	02.03.2021 16:41	02.03.2021 17:03
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 686581



WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: North Brushy Draw 35-6 H

Project Id:

Date Received in Lab: Fri 01.29.2021 10:20

Contact: Lynda Laumbach

Report Date: 02.04.2021 16:30

Project Location: Eddy County, New Mexico

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	686581-031	686581-032	686581-033	686581-034	686581-035	686581-036
	Field Id:	DS16	DS16 A	DS17	DS17 A	DS18	DS18 A
	Depth:	0-2 ft	2-4 ft	0-2 ft	2-4 ft	0-2 ft	2-4 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	01.28.2021 13:00	01.28.2021 13:05	01.28.2021 14:15	01.28.2021 14:20	01.28.2021 14:30	01.28.2021 14:35
BTEX by EPA 8021B	Extracted:	01.30.2021 17:26	01.30.2021 17:26	01.30.2021 17:26	01.30.2021 17:26	01.30.2021 17:26	01.30.2021 17:26
	Analyzed:	01.31.2021 17:00	01.31.2021 17:22	01.31.2021 17:45	01.31.2021 18:07	01.31.2021 18:29	01.31.2021 18:52
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00198 0.00198	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00201 0.00201	<0.00198 0.00198	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00201 0.00201	<0.00198 0.00198	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00402 0.00402	<0.00396 0.00396	<0.00403 0.00403	0.00417 0.00399	<0.00401 0.00401	<0.00398 0.00398
o-Xylene		<0.00201 0.00201	<0.00198 0.00198	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00201 0.00201	<0.00198 0.00198	<0.00202 0.00202	0.00417 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00201 0.00201	<0.00198 0.00198	<0.00202 0.00202	0.00417 0.00200	<0.00200 0.00200	<0.00199 0.00199
Inorganic Anions by EPA 300	Extracted:	01.30.2021 11:03	01.30.2021 11:03	01.30.2021 11:03	01.30.2021 11:03	01.30.2021 11:03	01.30.2021 11:03
	Analyzed:	01.30.2021 17:52	01.30.2021 17:58	01.30.2021 18:04	01.30.2021 18:10	01.30.2021 18:27	01.30.2021 18:32
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<9.94 9.94	<10.0 10.0	10.2 9.92	10.2 10.0	<10.0 10.0	10.2 10.1
TPH by SW8015 Mod SUB: T104704400-20-21	Extracted:	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00
	Analyzed:	02.03.2021 17:46	02.03.2021 18:07	02.03.2021 18:28	02.03.2021 18:50	02.03.2021 19:11	02.03.2021 19:32
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.8 49.8	<49.9 49.9
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.8 49.8	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.8 49.8	<49.9 49.9
Total TPH		<49.8 49.8	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.8 49.8	<49.9 49.9

BRL - Below Reporting Limit

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Certificate of Analysis Summary 686581



WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: North Brushy Draw 35-6 H

Project Id:

Date Received in Lab: Fri 01.29.2021 10:20

Contact: Lynda Laumbach

Report Date: 02.04.2021 16:30

Project Location: Eddy County, New Mexico

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	686581-037	686581-038	686581-039	686581-040	686581-041	686581-042
	<i>Field Id:</i>	DS19	DS19 A	DS20	DS20 A	DS21	DS21 A
	<i>Depth:</i>	0-2 ft	2-4 ft	0-2 ft	2-4 ft	0-2 ft	2-4 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.28.2021 14:45	01.28.2021 14:50	01.28.2021 15:00	01.28.2021 15:05	01.28.2021 15:15	01.28.2021 15:20
BTEX by EPA 8021B	<i>Extracted:</i>	01.30.2021 17:28	01.30.2021 17:28	01.30.2021 17:28	01.30.2021 17:28	01.30.2021 17:28	01.30.2021 17:28
	<i>Analyzed:</i>	01.30.2021 22:54	01.30.2021 23:17	01.30.2021 23:39	01.31.2021 00:01	01.31.2021 00:24	01.31.2021 00:46
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201
m,p-Xylenes		<0.00397 0.00397	<0.00399 0.00399	<0.00397 0.00397	<0.00401 0.00401	<0.00398 0.00398	<0.00402 0.00402
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201
Inorganic Anions by EPA 300	<i>Extracted:</i>	01.30.2021 11:03	01.30.2021 11:03	01.30.2021 11:03	01.30.2021 11:03	01.30.2021 11:03	01.30.2021 11:03
	<i>Analyzed:</i>	01.30.2021 18:38	01.30.2021 18:44	01.30.2021 18:49	01.30.2021 18:55	01.30.2021 19:12	01.30.2021 19:18
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		21.7 9.92	19.7 9.98	25.8 D 9.96	349 49.9	14.9 9.98	10.1 10.1
TPH by SW8015 Mod SUB: T104704400-20-21	<i>Extracted:</i>	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 17:00	02.03.2021 17:00
	<i>Analyzed:</i>	02.03.2021 19:53	02.03.2021 20:14	02.03.2021 20:36	02.03.2021 20:57	02.03.2021 22:32	02.03.2021 23:36
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 686581



WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: North Brushy Draw 35-6 H

Project Id:

Date Received in Lab: Fri 01.29.2021 10:20

Contact: Lynda Laumbach

Report Date: 02.04.2021 16:30

Project Location: Eddy County, New Mexico

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	686581-043	686581-044	686581-045	686581-046	686581-047	686581-048
	Field Id:	DS22	DS22 A	DS23	DS23 A	DS24	DS24 A
	Depth:	0-2 ft	2-4 ft	0-2 ft	2-4 ft	0-2 ft	2-4 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	01.28.2021 12:50	01.28.2021 13:00	01.28.2021 12:30	01.28.2021 12:40	01.28.2021 12:10	01.28.2021 12:20
BTEX by EPA 8021B	Extracted:	01.30.2021 17:28	01.30.2021 17:28	01.30.2021 17:28	01.30.2021 17:28	01.30.2021 17:28	01.30.2021 17:28
	Analyzed:	01.31.2021 01:09	01.31.2021 01:31	01.31.2021 01:54	01.31.2021 02:16	01.31.2021 03:36	01.31.2021 03:59
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
m,p-Xylenes		<0.00400 0.00400	<0.00401 0.00401	<0.00401 0.00401	<0.00398 0.00398	<0.00401 0.00401	<0.00399 0.00399
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200
Inorganic Anions by EPA 300	Extracted:	01.30.2021 11:03	01.30.2021 11:03	01.30.2021 11:03	01.30.2021 11:03	01.30.2021 11:03	01.30.2021 11:03
	Analyzed:	01.30.2021 19:35	01.30.2021 19:40	01.30.2021 19:46	01.30.2021 19:52	01.30.2021 19:57	01.30.2021 20:03
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		11.2 9.96	10.9 9.94	10.5 9.90	11.0 10.0	13.8 9.92	10.8 10.0
TPH by SW8015 Mod SUB: T104704400-20-21	Extracted:	02.03.2021 17:00	02.03.2021 17:00	02.03.2021 17:00	02.03.2021 17:00	02.03.2021 17:00	02.03.2021 17:00
	Analyzed:	02.03.2021 23:57	02.04.2021 00:18	02.04.2021 00:39	02.04.2021 01:00	02.04.2021 01:21	02.04.2021 01:42
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	324 49.9	150 49.8	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	74.5 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<49.9 49.9	399 49.9	150 49.8	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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Certificate of Analysis Summary 686581



WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: North Brushy Draw 35-6 H

Project Id:

Date Received in Lab: Fri 01.29.2021 10:20

Contact: Lynda Laumbach

Report Date: 02.04.2021 16:30

Project Location: Eddy County, New Mexico

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	686581-049	686581-050				
	Field Id:	DS25	DS25 A				
	Depth:	0-2 ft	2-4 ft				
	Matrix:	SOIL	SOIL				
	Sampled:	01.28.2021 11:00	01.28.2021 11:10				
BTEX by EPA 8021B	Extracted:	01.30.2021 17:28	01.30.2021 17:28				
	Analyzed:	01.31.2021 04:22	01.31.2021 04:44				
	Units/RL:	mg/kg RL	mg/kg RL				
		<0.00200 0.00200	<0.00199 0.00199				
Benzene		<0.00200 0.00200	<0.00199 0.00199				
Toluene		<0.00200 0.00200	<0.00199 0.00199				
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199				
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398				
o-Xylene		<0.00200 0.00200	<0.00199 0.00199				
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199				
Total BTEX		<0.00200 0.00200	<0.00199 0.00199				
Inorganic Anions by EPA 300	Extracted:	01.30.2021 11:03	01.30.2021 13:05				
	Analyzed:	01.30.2021 20:09	01.30.2021 22:25				
	Units/RL:	mg/kg RL	mg/kg RL				
		19.6 10.1	27.1 10.0				
Chloride		19.6 10.1	27.1 10.0				
TPH by SW8015 Mod SUB: T104704400-20-21	Extracted:	02.03.2021 17:00	02.03.2021 17:00				
	Analyzed:	02.04.2021 02:04	02.04.2021 02:25				
	Units/RL:	mg/kg RL	mg/kg RL				
		<49.9 49.9	<49.8 49.8				
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8				
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8				
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8				
Total TPH		<49.9 49.9	<49.8 49.8				

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 686581

for

WPX Energy Permian Basin, LLC

Project Manager: Lynda Laumbach

North Brushy Draw 35-6 H

02.04.2021

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



02.04.2021

Project Manager: **Lynda Laumbach**
WPX Energy Permian Basin, LLC
5315 Buena Vista Dr.
Carlsbad, NM 88220

Reference: Eurofins Xenco, LLC Report No(s): **686581**
North Brushy Draw 35-6 H
Project Address: Eddy County, New Mexico

Lynda Laumbach:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 686581. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 686581 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Sample Cross Reference 686581

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
DS01	S	01.28.2021 10:00	0 - 2 ft	686581-001
DS01 A	S	01.28.2021 10:05	2 - 4 ft	686581-002
DS02	S	01.28.2021 10:15	0 - 2 ft	686581-003
DS02 A	S	01.28.2021 10:20	2 - 4 ft	686581-004
DS03	S	01.28.2021 10:30	0 - 2 ft	686581-005
DS03 A	S	01.28.2021 10:35	2 - 4 ft	686581-006
DS04	S	01.28.2021 10:50	0 - 2 ft	686581-007
DS04 A	S	01.28.2021 10:55	2 - 4 ft	686581-008
DS05	S	01.28.2021 11:10	0 - 2 ft	686581-009
DS05 A	S	01.28.2021 11:15	2 - 4 ft	686581-010
DS06	S	01.28.2021 11:25	0 - 2 ft	686581-011
DS06A	S	01.28.2021 11:30	2 - 4 ft	686581-012
DS07	S	01.28.2021 11:50	0 - 2 ft	686581-013
DS07 A	S	01.28.2021 11:55	2 - 4 ft	686581-014
DS08	S	01.28.2021 12:10	0 - 2 ft	686581-015
DS08 A	S	01.28.2021 12:15	2 - 4 ft	686581-016
DS09	S	01.28.2021 12:25	0 - 2 ft	686581-017
DS09 A	S	01.28.2021 12:30	2 - 4 ft	686581-018
DS10	S	01.28.2021 14:10	0 - 2 ft	686581-019
DS10 A	S	01.28.2021 14:15	2 - 4 ft	686581-020
DS11	S	01.27.2021 13:50	0 - 2 ft	686581-021
DS11 A	S	01.27.2021 13:55	2 - 4 ft	686581-022
DS12	S	01.27.2021 13:30	0 - 2 ft	686581-023
DS12 A	S	01.27.2021 13:35	2 - 4 ft	686581-024
DS13	S	01.27.2021 13:10	0 - 2 ft	686581-025
DS13 A	S	01.27.2021 13:15	2 - 4 ft	686581-026
DS14	S	01.27.2021 14:30	0 - 2 ft	686581-027
DS14 A	S	01.27.2021 14:35	2 - 4 ft	686581-028
DS15	S	01.28.2021 12:45	0 - 2 ft	686581-029
DS15 A	S	01.28.2021 12:50	2 - 4 ft	686581-030
DS16	S	01.28.2021 13:00	0 - 2 ft	686581-031
DS16 A	S	01.28.2021 13:05	2 - 4 ft	686581-032
DS17	S	01.28.2021 14:15	0 - 2 ft	686581-033
DS17 A	S	01.28.2021 14:20	2 - 4 ft	686581-034
DS18	S	01.28.2021 14:30	0 - 2 ft	686581-035
DS18 A	S	01.28.2021 14:35	2 - 4 ft	686581-036
DS19	S	01.28.2021 14:45	0 - 2 ft	686581-037
DS19 A	S	01.28.2021 14:50	2 - 4 ft	686581-038
DS20	S	01.28.2021 15:00	0 - 2 ft	686581-039
DS20 A	S	01.28.2021 15:05	2 - 4 ft	686581-040
DS21	S	01.28.2021 15:15	0 - 2 ft	686581-041
DS21 A	S	01.28.2021 15:20	2 - 4 ft	686581-042
DS22	S	01.28.2021 12:50	0 - 2 ft	686581-043

**Sample Cross Reference 686581****WPX Energy Permian Basin, LLC, Carlsbad, NM**

North Brushy Draw 35-6 H

DS22 A	S	01.28.2021 13:00	2 - 4 ft	686581-044
DS23	S	01.28.2021 12:30	0 - 2 ft	686581-045
DS23 A	S	01.28.2021 12:40	2 - 4 ft	686581-046
DS24	S	01.28.2021 12:10	0 - 2 ft	686581-047
DS24 A	S	01.28.2021 12:20	2 - 4 ft	686581-048
DS25	S	01.28.2021 11:00	0 - 2 ft	686581-049
DS25 A	S	01.28.2021 11:10	2 - 4 ft	686581-050

**CASE NARRATIVE****Client Name: WPX Energy Permian Basin, LLC****Project Name: North Brushy Draw 35-6 H**Project ID:
Work Order Number(s): 686581Report Date: 02.04.2021
Date Received: 01.29.2021**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3149499 Inorganic Anions by EPA 300

Lab Sample ID 686581-020 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 686581-010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3149548 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 686581-008,686581-015,686581-011,686581-010.

Batch: LBA-3150000 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 686581-004.

Batch: LBA-3150007 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 686581-029.



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS01** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-001 Date Collected: 01.28.2021 10:00 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 08:59 % Moisture:
 Seq Number: 3149466 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.2	10.1	mg/kg	01.30.2021 12:57		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 13:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 13:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 13:07	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 13:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-130	02.03.2021 13:07	
o-Terphenyl	84-15-1	128	%	70-130	02.03.2021 13:07	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS01**
Lab Sample Id: 686581-001

Matrix: Soil
Date Collected: 01.28.2021 10:00

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.30.2021 13:57	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.30.2021 13:57	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.30.2021 13:57	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.30.2021 13:57	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.30.2021 13:57	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.30.2021 13:57	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.30.2021 13:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.30.2021 13:57		
4-Bromofluorobenzene	460-00-4	122	%	70-130	01.30.2021 13:57		



Certificate of Analytical Results 686581

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS01 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-002 Date Collected: 01.28.2021 10:05 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 08:59 % Moisture:
 Seq Number: 3149466 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.6	9.98	mg/kg	01.30.2021 13:03		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 14:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 14:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 14:11	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 14:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	02.03.2021 14:11	
o-Terphenyl	84-15-1	113	%	70-130	02.03.2021 14:11	



Certificate of Analytical Results 686581

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS01 A**
Lab Sample Id: 686581-002

Matrix: Soil
Date Collected: 01.28.2021 10:05

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 14:20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 14:20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 14:20	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.30.2021 14:20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 14:20	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 14:20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 14:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.30.2021 14:20	
4-Bromofluorobenzene	460-00-4	125	%	70-130	01.30.2021 14:20	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS02** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-003 Date Collected: 01.28.2021 10:15 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 08:59 % Moisture:
 Seq Number: 3149466 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.5	9.92	mg/kg	01.30.2021 13:20		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 14:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 14:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 14:32	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 14:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	02.03.2021 14:32	
o-Terphenyl	84-15-1	92	%	70-130	02.03.2021 14:32	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS02**
Lab Sample Id: 686581-003

Matrix: Soil
Date Collected: 01.28.2021 10:15

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.2021 14:42	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.30.2021 14:42	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.30.2021 14:42	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.30.2021 14:42	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.30.2021 14:42	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.30.2021 14:42	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.30.2021 14:42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	124	%	70-130	01.30.2021 14:42		
1,4-Difluorobenzene	540-36-3	92	%	70-130	01.30.2021 14:42		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS02 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-004 Date Collected: 01.28.2021 10:20 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 08:59 % Moisture:
 Seq Number: 3149466 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.5	9.98	mg/kg	01.30.2021 13:25		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 14:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 14:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 14:54	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 14:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-130	02.03.2021 14:54	
o-Terphenyl	84-15-1	134	%	70-130	02.03.2021 14:54	**



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS02 A**
Lab Sample Id: 686581-004

Matrix: Soil
Date Collected: 01.28.2021 10:20

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 15:04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 15:04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 15:04	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 15:04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 15:04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 15:04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 15:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	128	%	70-130	01.30.2021 15:04		
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.30.2021 15:04		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS03** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-005 Date Collected: 01.28.2021 10:30 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 08:59 % Moisture:
 Seq Number: 3149466 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.0	9.98	mg/kg	01.30.2021 13:31		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 15:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 15:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 15:15	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 15:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-130	02.03.2021 15:15	
o-Terphenyl	84-15-1	90	%	70-130	02.03.2021 15:15	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS03**
Lab Sample Id: 686581-005

Matrix: Soil
Date Collected: 01.28.2021 10:30

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 03:10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 03:10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 03:10	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.31.2021 03:10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 03:10	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 03:10	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 03:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	129	%	70-130	01.31.2021 03:10		
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.31.2021 03:10		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS03 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-006 Date Collected: 01.28.2021 10:35 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 08:59 % Moisture:
 Seq Number: 3149466 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.6	9.92	mg/kg	01.30.2021 13:37		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 15:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 15:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 15:37	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 15:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	02.03.2021 15:37	
o-Terphenyl	84-15-1	117	%	70-130	02.03.2021 15:37	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS03 A**
Lab Sample Id: 686581-006

Matrix: Soil
Date Collected: 01.28.2021 10:35

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 15:49	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 15:49	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 15:49	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 15:49	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 15:49	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 15:49	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 15:49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	123	%	70-130	01.30.2021 15:49		
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.30.2021 15:49		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS04** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-007 Date Collected: 01.28.2021 10:50 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 08:59 % Moisture:
 Seq Number: 3149466 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.3	9.98	mg/kg	01.30.2021 13:42		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 15:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 15:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 15:58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 15:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	02.03.2021 15:58	
o-Terphenyl	84-15-1	122	%	70-130	02.03.2021 15:58	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS04**
Lab Sample Id: 686581-007

Matrix: Soil
Date Collected: 01.28.2021 10:50

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.30.2021 17:07	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.30.2021 17:07	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.30.2021 17:07	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.30.2021 17:07	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.30.2021 17:07	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.30.2021 17:07	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.30.2021 17:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	91	%	70-130	01.30.2021 17:07		
4-Bromofluorobenzene	460-00-4	118	%	70-130	01.30.2021 17:07		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS04 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-008 Date Collected: 01.28.2021 10:55 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 08:59 % Moisture:
 Seq Number: 3149466 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.5	9.96	mg/kg	01.30.2021 13:48		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 16:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 16:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 16:20	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 16:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-130	02.03.2021 16:20	
o-Terphenyl	84-15-1	123	%	70-130	02.03.2021 16:20	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS04 A**
Lab Sample Id: 686581-008

Matrix: Soil
Date Collected: 01.28.2021 10:55

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 17:29	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 17:29	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 17:29	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 17:29	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 17:29	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 17:29	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 17:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	01.30.2021 17:29	
4-Bromofluorobenzene	460-00-4	133	%	70-130	01.30.2021 17:29	**



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS05** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-009 Date Collected: 01.28.2021 11:10 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 08:59 % Moisture:
 Seq Number: 3149466 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	216	199	mg/kg	01.30.2021 13:54		20

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 16:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 16:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 16:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 16:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	108	%	70-130	02.03.2021 16:41		
o-Terphenyl	84-15-1	113	%	70-130	02.03.2021 16:41		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS05**
Lab Sample Id: 686581-009

Matrix: Soil
Date Collected: 01.28.2021 11:10

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.30.2021 17:52	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.30.2021 17:52	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.30.2021 17:52	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.30.2021 17:52	U	1
o-Xylene	95-47-6	0.00867	0.00202	mg/kg	01.30.2021 17:52		1
Total Xylenes	1330-20-7	0.00867	0.00202	mg/kg	01.30.2021 17:52		1
Total BTEX		0.00867	0.00202	mg/kg	01.30.2021 17:52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	129	%	70-130	01.30.2021 17:52	
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.30.2021 17:52	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS05 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-010 Date Collected: 01.28.2021 11:15 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	01.30.2021 14:28	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 17:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 17:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 17:03	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 17:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-130	02.03.2021 17:03	
o-Terphenyl	84-15-1	121	%	70-130	02.03.2021 17:03	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS05 A**
Lab Sample Id: 686581-010

Matrix: Soil
Date Collected: 01.28.2021 11:15

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.30.2021 18:14	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.30.2021 18:14	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.30.2021 18:14	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.30.2021 18:14	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.30.2021 18:14	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.30.2021 18:14	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.30.2021 18:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	136	%	70-130	01.30.2021 18:14	**	
1,4-Difluorobenzene	540-36-3	81	%	70-130	01.30.2021 18:14		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS06** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-011 Date Collected: 01.28.2021 11:25 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.90	9.90	mg/kg	01.30.2021 14:45	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 17:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 17:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 17:46	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 17:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-130	02.03.2021 17:46	
o-Terphenyl	84-15-1	125	%	70-130	02.03.2021 17:46	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS06**
Lab Sample Id: 686581-011

Matrix: Soil
Date Collected: 01.28.2021 11:25

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 18:37	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 18:37	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 18:37	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.30.2021 18:37	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 18:37	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 18:37	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 18:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	01.30.2021 18:37	
4-Bromofluorobenzene	460-00-4	132	%	70-130	01.30.2021 18:37	**



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS06A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-012 Date Collected: 01.28.2021 11:30 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.1	9.90	mg/kg	01.30.2021 14:51		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 18:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 18:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 18:07	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 18:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-130	02.03.2021 18:07	
o-Terphenyl	84-15-1	82	%	70-130	02.03.2021 18:07	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS06A**
Lab Sample Id: 686581-012

Matrix: Soil
Date Collected: 01.28.2021 11:30

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 18:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 18:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 18:59	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 18:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 18:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 18:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 18:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	128	%	70-130	01.30.2021 18:59		
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.30.2021 18:59		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS07** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-013 Date Collected: 01.28.2021 11:50 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	01.30.2021 14:56	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 18:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 18:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 18:28	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 18:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	02.03.2021 18:28	
o-Terphenyl	84-15-1	124	%	70-130	02.03.2021 18:28	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS07**
Lab Sample Id: 686581-013

Matrix: Soil
Date Collected: 01.28.2021 11:50

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.30.2021 19:22	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.30.2021 19:22	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.30.2021 19:22	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.30.2021 19:22	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.30.2021 19:22	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.30.2021 19:22	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.30.2021 19:22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	130	%	70-130	01.30.2021 19:22		
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.30.2021 19:22		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS07 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-014 Date Collected: 01.28.2021 11:55 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.98	9.98	mg/kg	01.30.2021 15:02	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.03.2021 18:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.03.2021 18:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.03.2021 18:50	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.03.2021 18:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	02.03.2021 18:50	
o-Terphenyl	84-15-1	125	%	70-130	02.03.2021 18:50	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS07 A**
Lab Sample Id: 686581-014

Matrix: Soil
Date Collected: 01.28.2021 11:55

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 19:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 19:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 19:44	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 19:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 19:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 19:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 19:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	127	%	70-130	01.30.2021 19:44		
1,4-Difluorobenzene	540-36-3	90	%	70-130	01.30.2021 19:44		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS08** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-015 Date Collected: 01.28.2021 12:10 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	01.30.2021 15:19	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 19:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 19:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 19:11	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 19:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	02.03.2021 19:11	
o-Terphenyl	84-15-1	118	%	70-130	02.03.2021 19:11	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS08**
Lab Sample Id: 686581-015

Matrix: Soil
Date Collected: 01.28.2021 12:10

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.2021 20:06	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.30.2021 20:06	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.30.2021 20:06	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.30.2021 20:06	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.30.2021 20:06	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.30.2021 20:06	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.30.2021 20:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	89	%	70-130	01.30.2021 20:06	
4-Bromofluorobenzene	460-00-4	134	%	70-130	01.30.2021 20:06	**



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS08 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-016 Date Collected: 01.28.2021 12:15 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.96	9.96	mg/kg	01.30.2021 15:25	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 19:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 19:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 19:32	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 19:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	75	%	70-130	02.03.2021 19:32	
o-Terphenyl	84-15-1	80	%	70-130	02.03.2021 19:32	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS08 A**
Lab Sample Id: 686581-016

Matrix: Soil
Date Collected: 01.28.2021 12:15

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.29.2021 17:24

% Moisture:
Basis: Wet Weight

Seq Number: 3149548

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 20:29	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 20:29	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 20:29	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 20:29	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 20:29	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 20:29	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 20:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	128	%	70-130	01.30.2021 20:29	
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.30.2021 20:29	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS09** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-017 Date Collected: 01.28.2021 12:25 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.94	9.94	mg/kg	01.30.2021 15:30	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 19:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 19:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 19:53	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 19:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	02.03.2021 19:53	
o-Terphenyl	84-15-1	122	%	70-130	02.03.2021 19:53	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS09**
Lab Sample Id: 686581-017

Matrix: Soil
Date Collected: 01.28.2021 12:25

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.31.2021 10:48	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.31.2021 10:48	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.31.2021 10:48	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.31.2021 10:48	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.31.2021 10:48	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.31.2021 10:48	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.31.2021 10:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.31.2021 10:48		
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.31.2021 10:48		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS09 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-018 Date Collected: 01.28.2021 12:30 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.94	9.94	mg/kg	01.30.2021 15:36	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 20:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 20:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 20:14	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 20:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	02.03.2021 20:14	
o-Terphenyl	84-15-1	126	%	70-130	02.03.2021 20:14	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS09 A**
Lab Sample Id: 686581-018

Matrix: Soil
Date Collected: 01.28.2021 12:30

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.31.2021 11:10	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.31.2021 11:10	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.31.2021 11:10	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.31.2021 11:10	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.31.2021 11:10	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.31.2021 11:10	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.31.2021 11:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.31.2021 11:10	
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.31.2021 11:10	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS10** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-019 Date Collected: 01.28.2021 14:10 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1320	99.0	mg/kg	01.30.2021 15:42		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.03.2021 20:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.03.2021 20:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.03.2021 20:36	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.03.2021 20:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	02.03.2021 20:36	
o-Terphenyl	84-15-1	124	%	70-130	02.03.2021 20:36	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS10**
Lab Sample Id: 686581-019

Matrix: Soil
Date Collected: 01.28.2021 14:10

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.31.2021 11:33	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.31.2021 11:33	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.31.2021 11:33	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.31.2021 11:33	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.31.2021 11:33	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.31.2021 11:33	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.31.2021 11:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.31.2021 11:33	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.31.2021 11:33	



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North Brushy Draw 35-6 H

Sample Id: **DS10 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-020 Date Collected: 01.28.2021 14:15 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1920	101	mg/kg	01.30.2021 15:47	X	10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150000 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 20:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 20:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 20:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 20:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	02.03.2021 20:57	
o-Terphenyl	84-15-1	113	%	70-130	02.03.2021 20:57	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS10 A**
Lab Sample Id: 686581-020

Matrix: Soil
Date Collected: 01.28.2021 14:15

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.31.2021 11:55	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.31.2021 11:55	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.31.2021 11:55	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.31.2021 11:55	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.31.2021 11:55	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.31.2021 11:55	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.31.2021 11:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.31.2021 11:55		
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.31.2021 11:55		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS11** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-021 Date Collected: 01.27.2021 13:50 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.5	9.92	mg/kg	01.30.2021 16:04		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 13:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 13:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 13:07	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 13:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	111	%	70-130	02.03.2021 13:07		
o-Terphenyl	84-15-1	122	%	70-130	02.03.2021 13:07		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS11**
Lab Sample Id: 686581-021

Matrix: Soil
Date Collected: 01.27.2021 13:50

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.31.2021 12:18	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.31.2021 12:18	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.31.2021 12:18	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.31.2021 12:18	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.31.2021 12:18	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.31.2021 12:18	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.31.2021 12:18	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.31.2021 12:18		
1,4-Difluorobenzene	540-36-3	104	%	70-130	01.31.2021 12:18		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS11 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-022 Date Collected: 01.27.2021 13:55 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.0	9.92	mg/kg	01.30.2021 16:10		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 14:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 14:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 14:11	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 14:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	02.03.2021 14:11	
o-Terphenyl	84-15-1	106	%	70-130	02.03.2021 14:11	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS11 A**
Lab Sample Id: 686581-022

Matrix: Soil
Date Collected: 01.27.2021 13:55

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.31.2021 12:40	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.31.2021 12:40	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.31.2021 12:40	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.31.2021 12:40	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.31.2021 12:40	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.31.2021 12:40	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.31.2021 12:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.31.2021 12:40		
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.31.2021 12:40		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS12** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-023 Date Collected: 01.27.2021 13:30 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	55.1	9.98	mg/kg	01.30.2021 16:27		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 14:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 14:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 14:32	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 14:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	02.03.2021 14:32	
o-Terphenyl	84-15-1	110	%	70-130	02.03.2021 14:32	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS12**
Lab Sample Id: 686581-023

Matrix: Soil
Date Collected: 01.27.2021 13:30

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.31.2021 13:02	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.31.2021 13:02	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.31.2021 13:02	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.31.2021 13:02	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.31.2021 13:02	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.31.2021 13:02	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.31.2021 13:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.31.2021 13:02	
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.31.2021 13:02	



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North Brushy Draw 35-6 H

Sample Id: **DS12 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-024 Date Collected: 01.27.2021 13:35 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.3	10.1	mg/kg	01.30.2021 16:33		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 14:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 14:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 14:54	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 14:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	02.03.2021 14:54	
o-Terphenyl	84-15-1	115	%	70-130	02.03.2021 14:54	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS12 A**
Lab Sample Id: 686581-024

Matrix: Soil
Date Collected: 01.27.2021 13:35

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 13:25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 13:25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 13:25	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.31.2021 13:25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 13:25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 13:25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 13:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.31.2021 13:25	
1,4-Difluorobenzene	540-36-3	91	%	70-130	01.31.2021 13:25	



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North Brushy Draw 35-6 H

Sample Id: **DS13** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-025 Date Collected: 01.27.2021 13:10 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.4	10.0	mg/kg	01.30.2021 16:38		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 15:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 15:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 15:15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 15:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	02.03.2021 15:15	
o-Terphenyl	84-15-1	99	%	70-130	02.03.2021 15:15	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS13**
Lab Sample Id: 686581-025

Matrix: Soil
Date Collected: 01.27.2021 13:10

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.31.2021 13:47	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.31.2021 13:47	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.31.2021 13:47	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.31.2021 13:47	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.31.2021 13:47	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.31.2021 13:47	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.31.2021 13:47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.31.2021 13:47		
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.31.2021 13:47		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS13 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-026 Date Collected: 01.27.2021 13:15 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.90	9.90	mg/kg	01.30.2021 16:44	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 15:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 15:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 15:37	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 15:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	02.03.2021 15:37	
o-Terphenyl	84-15-1	125	%	70-130	02.03.2021 15:37	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS13 A**
Lab Sample Id: 686581-026

Matrix: Soil
Date Collected: 01.27.2021 13:15

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.31.2021 14:10	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.31.2021 14:10	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.31.2021 14:10	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.31.2021 14:10	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.31.2021 14:10	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.31.2021 14:10	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.31.2021 14:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.31.2021 14:10		
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.31.2021 14:10		



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North Brushy Draw 35-6 H

Sample Id: **DS14** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-027 Date Collected: 01.27.2021 14:30 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	01.30.2021 16:50	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 15:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 15:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 15:58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 15:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	02.03.2021 15:58	
o-Terphenyl	84-15-1	114	%	70-130	02.03.2021 15:58	



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North Brushy Draw 35-6 H

Sample Id: **DS14**
Lab Sample Id: 686581-027

Matrix: Soil
Date Collected: 01.27.2021 14:30

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 15:30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 15:30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 15:30	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.31.2021 15:30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 15:30	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 15:30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 15:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.31.2021 15:30		
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.31.2021 15:30		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS14 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-028 Date Collected: 01.27.2021 14:35 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.2	9.96	mg/kg	01.30.2021 16:56		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 16:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 16:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 16:20	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 16:20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	106	%	70-130	02.03.2021 16:20		
o-Terphenyl	84-15-1	114	%	70-130	02.03.2021 16:20		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS14 A**
Lab Sample Id: 686581-028

Matrix: Soil
Date Collected: 01.27.2021 14:35

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.31.2021 15:52	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.31.2021 15:52	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.31.2021 15:52	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.31.2021 15:52	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.31.2021 15:52	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.31.2021 15:52	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.31.2021 15:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.31.2021 15:52		
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.31.2021 15:52		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS15** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-029 Date Collected: 01.28.2021 12:45 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 10:01 % Moisture:
 Seq Number: 3149499 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.0	9.96	mg/kg	01.30.2021 17:01		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.03.2021 16:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.03.2021 16:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.03.2021 16:41	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.03.2021 16:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-130	02.03.2021 16:41	
o-Terphenyl	84-15-1	135	%	70-130	02.03.2021 16:41	**



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS15**
Lab Sample Id: 686581-029

Matrix: Soil
Date Collected: 01.28.2021 12:45

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.31.2021 16:15	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.31.2021 16:15	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.31.2021 16:15	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.31.2021 16:15	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.31.2021 16:15	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.31.2021 16:15	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.31.2021 16:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	114	%	70-130	01.31.2021 16:15		
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.31.2021 16:15		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS15 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-030 Date Collected: 01.28.2021 12:50 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	01.30.2021 17:35	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 17:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 17:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 17:03	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 17:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	02.03.2021 17:03	
o-Terphenyl	84-15-1	102	%	70-130	02.03.2021 17:03	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS15 A**
Lab Sample Id: 686581-030

Matrix: Soil
Date Collected: 01.28.2021 12:50

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.31.2021 16:37	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.31.2021 16:37	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.31.2021 16:37	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.31.2021 16:37	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.31.2021 16:37	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.31.2021 16:37	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.31.2021 16:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.31.2021 16:37		
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.31.2021 16:37		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS16**
Lab Sample Id: 686581-031

Matrix: Soil
Date Collected: 01.28.2021 13:00

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 11:03

% Moisture:
Basis: Wet Weight

Seq Number: 3149500

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.94	9.94	mg/kg	01.30.2021 17:52	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.03.2021 12:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3150007

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.03.2021 17:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.03.2021 17:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.03.2021 17:46	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.03.2021 17:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	02.03.2021 17:46	
o-Terphenyl	84-15-1	97	%	70-130	02.03.2021 17:46	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS16**
Lab Sample Id: 686581-031

Matrix: Soil
Date Collected: 01.28.2021 13:00

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.31.2021 17:00	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.31.2021 17:00	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.31.2021 17:00	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.31.2021 17:00	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.31.2021 17:00	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.31.2021 17:00	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.31.2021 17:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.31.2021 17:00		
1,4-Difluorobenzene	540-36-3	103	%	70-130	01.31.2021 17:00		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS16 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-032 Date Collected: 01.28.2021 13:05 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	01.30.2021 17:58	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 18:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 18:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 18:07	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 18:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	02.03.2021 18:07	
o-Terphenyl	84-15-1	110	%	70-130	02.03.2021 18:07	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS16 A**
Lab Sample Id: 686581-032

Matrix: Soil
Date Collected: 01.28.2021 13:05

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.31.2021 17:22	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.31.2021 17:22	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.31.2021 17:22	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.31.2021 17:22	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.31.2021 17:22	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.31.2021 17:22	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.31.2021 17:22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.31.2021 17:22		
1,4-Difluorobenzene	540-36-3	104	%	70-130	01.31.2021 17:22		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS17** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-033 Date Collected: 01.28.2021 14:15 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.2	9.92	mg/kg	01.30.2021 18:04		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 18:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 18:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 18:28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 18:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	02.03.2021 18:28	
o-Terphenyl	84-15-1	123	%	70-130	02.03.2021 18:28	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS17**
Lab Sample Id: 686581-033

Matrix: Soil
Date Collected: 01.28.2021 14:15

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.31.2021 17:45	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.31.2021 17:45	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.31.2021 17:45	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.31.2021 17:45	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.31.2021 17:45	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.31.2021 17:45	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.31.2021 17:45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	01.31.2021 17:45		
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.31.2021 17:45		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS17 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-034 Date Collected: 01.28.2021 14:20 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.2	10.0	mg/kg	01.30.2021 18:10		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 18:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 18:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 18:50	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 18:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	02.03.2021 18:50	
o-Terphenyl	84-15-1	120	%	70-130	02.03.2021 18:50	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS17 A**
Lab Sample Id: 686581-034

Matrix: Soil
Date Collected: 01.28.2021 14:20

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 18:07	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 18:07	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 18:07	U	1
m,p-Xylenes	179601-23-1	0.00417	0.00399	mg/kg	01.31.2021 18:07		1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 18:07	U	1
Total Xylenes	1330-20-7	0.00417	0.00200	mg/kg	01.31.2021 18:07		1
Total BTEX		0.00417	0.00200	mg/kg	01.31.2021 18:07		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.31.2021 18:07	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.31.2021 18:07	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS18** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-035 Date Collected: 01.28.2021 14:30 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	01.30.2021 18:27	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.03.2021 19:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.03.2021 19:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.03.2021 19:11	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.03.2021 19:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	02.03.2021 19:11	
o-Terphenyl	84-15-1	117	%	70-130	02.03.2021 19:11	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS18**
Lab Sample Id: 686581-035

Matrix: Soil
Date Collected: 01.28.2021 14:30

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 18:29	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 18:29	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 18:29	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.31.2021 18:29	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 18:29	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 18:29	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 18:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.31.2021 18:29	
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.31.2021 18:29	



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North Brushy Draw 35-6 H

Sample Id: **DS18 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-036 Date Collected: 01.28.2021 14:35 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.2	10.1	mg/kg	01.30.2021 18:32		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 19:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 19:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 19:32	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 19:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-130	02.03.2021 19:32	
o-Terphenyl	84-15-1	127	%	70-130	02.03.2021 19:32	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS18 A**
Lab Sample Id: 686581-036

Matrix: Soil
Date Collected: 01.28.2021 14:35

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:26

% Moisture:
Basis: Wet Weight

Seq Number: 3149553

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.31.2021 18:52	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.31.2021 18:52	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.31.2021 18:52	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.31.2021 18:52	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.31.2021 18:52	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.31.2021 18:52	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.31.2021 18:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.31.2021 18:52		
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.31.2021 18:52		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS19** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-037 Date Collected: 01.28.2021 14:45 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.7	9.92	mg/kg	01.30.2021 18:38		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 19:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 19:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 19:53	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 19:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-130	02.03.2021 19:53	
o-Terphenyl	84-15-1	123	%	70-130	02.03.2021 19:53	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS19**
Lab Sample Id: 686581-037

Matrix: Soil
Date Collected: 01.28.2021 14:45

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.30.2021 22:54	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.30.2021 22:54	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.30.2021 22:54	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.30.2021 22:54	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.30.2021 22:54	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.30.2021 22:54	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.30.2021 22:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.30.2021 22:54		
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.30.2021 22:54		



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North Brushy Draw 35-6 H

Sample Id: **DS19 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-038 Date Collected: 01.28.2021 14:50 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.7	9.98	mg/kg	01.30.2021 18:44		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 20:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 20:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 20:14	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 20:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	02.03.2021 20:14	
o-Terphenyl	84-15-1	117	%	70-130	02.03.2021 20:14	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS19 A**
Lab Sample Id: 686581-038

Matrix: Soil
Date Collected: 01.28.2021 14:50

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 23:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.2021 23:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 23:17	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 23:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 23:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 23:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.2021 23:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.30.2021 23:17	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.30.2021 23:17	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS20** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-039 Date Collected: 01.28.2021 15:00 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25.8	9.96	mg/kg	02.01.2021 11:43	D	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 20:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 20:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 20:36	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 20:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	02.03.2021 20:36	
o-Terphenyl	84-15-1	117	%	70-130	02.03.2021 20:36	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS20**
Lab Sample Id: 686581-039

Matrix: Soil
Date Collected: 01.28.2021 15:00

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.30.2021 23:39	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.30.2021 23:39	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.30.2021 23:39	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.30.2021 23:39	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.30.2021 23:39	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.30.2021 23:39	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.30.2021 23:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.30.2021 23:39	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.30.2021 23:39	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS20 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-040 Date Collected: 01.28.2021 15:05 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	349	49.9	mg/kg	01.30.2021 18:55		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 12:00 % Moisture:
 Seq Number: 3150007 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 20:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 20:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 20:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 20:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	02.03.2021 20:57	
o-Terphenyl	84-15-1	108	%	70-130	02.03.2021 20:57	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS20 A**
Lab Sample Id: 686581-040

Matrix: Soil
Date Collected: 01.28.2021 15:05

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 00:01	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 00:01	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 00:01	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.31.2021 00:01	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 00:01	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 00:01	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 00:01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.31.2021 00:01		
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.31.2021 00:01		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS21**
Lab Sample Id: 686581-041

Matrix: Soil
Date Collected: 01.28.2021 15:15

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 11:03

% Moisture:
Basis: Wet Weight

Seq Number: 3149500

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.9	9.98	mg/kg	01.30.2021 19:12		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.03.2021 17:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3149995

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 22:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 22:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 22:32	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 22:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	02.03.2021 22:32	
o-Terphenyl	84-15-1	109	%	70-130	02.03.2021 22:32	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS21**
Lab Sample Id: 686581-041

Matrix: Soil
Date Collected: 01.28.2021 15:15

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.31.2021 00:24	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.31.2021 00:24	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.31.2021 00:24	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.31.2021 00:24	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.31.2021 00:24	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.31.2021 00:24	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.31.2021 00:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.31.2021 00:24		
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.31.2021 00:24		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS21 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-042 Date Collected: 01.28.2021 15:20 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.1	10.1	mg/kg	01.30.2021 19:18		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 17:00 % Moisture:
 Seq Number: 3149995 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.03.2021 23:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.03.2021 23:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.03.2021 23:36	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.03.2021 23:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-130	02.03.2021 23:36	
o-Terphenyl	84-15-1	119	%	70-130	02.03.2021 23:36	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS21 A**
Lab Sample Id: 686581-042

Matrix: Soil
Date Collected: 01.28.2021 15:20

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.31.2021 00:46	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.31.2021 00:46	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.31.2021 00:46	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.31.2021 00:46	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.31.2021 00:46	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.31.2021 00:46	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.31.2021 00:46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.31.2021 00:46		
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.31.2021 00:46		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS22** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-043 Date Collected: 01.28.2021 12:50 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.2	9.96	mg/kg	01.30.2021 19:35		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 17:00 % Moisture:
 Seq Number: 3149995 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.03.2021 23:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.03.2021 23:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.03.2021 23:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.03.2021 23:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-130	02.03.2021 23:57	
o-Terphenyl	84-15-1	114	%	70-130	02.03.2021 23:57	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS22**
Lab Sample Id: 686581-043

Matrix: Soil
Date Collected: 01.28.2021 12:50

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 01:09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 01:09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 01:09	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.31.2021 01:09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 01:09	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 01:09	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 01:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.31.2021 01:09		
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.31.2021 01:09		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS22 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-044 Date Collected: 01.28.2021 13:00 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.9	9.94	mg/kg	01.30.2021 19:40		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 17:00 % Moisture:
 Seq Number: 3149995 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.04.2021 00:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.04.2021 00:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.04.2021 00:18	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.04.2021 00:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-130	02.04.2021 00:18	
o-Terphenyl	84-15-1	113	%	70-130	02.04.2021 00:18	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS22 A**
Lab Sample Id: 686581-044

Matrix: Soil
Date Collected: 01.28.2021 13:00

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 01:31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 01:31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 01:31	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.31.2021 01:31	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 01:31	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 01:31	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 01:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.31.2021 01:31	
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.31.2021 01:31	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS23** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-045 Date Collected: 01.28.2021 12:30 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.5	9.90	mg/kg	01.30.2021 19:46		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 17:00 % Moisture:
 Seq Number: 3149995 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.04.2021 00:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	324	49.9	mg/kg	02.04.2021 00:39		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	74.5	49.9	mg/kg	02.04.2021 00:39		1
Total TPH	PHC635	399	49.9	mg/kg	02.04.2021 00:39		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	107	%	70-130	02.04.2021 00:39		
o-Terphenyl	84-15-1	113	%	70-130	02.04.2021 00:39		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS23**
Lab Sample Id: 686581-045

Matrix: Soil
Date Collected: 01.28.2021 12:30

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 01:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 01:54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 01:54	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.31.2021 01:54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 01:54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 01:54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 01:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	01.31.2021 01:54		
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.31.2021 01:54		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS23 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-046 Date Collected: 01.28.2021 12:40 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.0	10.0	mg/kg	01.30.2021 19:52		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 17:00 % Moisture:
 Seq Number: 3149995 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.04.2021 01:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	150	49.8	mg/kg	02.04.2021 01:00		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.04.2021 01:00	U	1
Total TPH	PHC635	150	49.8	mg/kg	02.04.2021 01:00		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	113	%	70-130	02.04.2021 01:00		
o-Terphenyl	84-15-1	126	%	70-130	02.04.2021 01:00		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS23 A**
Lab Sample Id: 686581-046

Matrix: Soil
Date Collected: 01.28.2021 12:40

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.31.2021 02:16	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.31.2021 02:16	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.31.2021 02:16	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.31.2021 02:16	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.31.2021 02:16	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.31.2021 02:16	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.31.2021 02:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.31.2021 02:16		
1,4-Difluorobenzene	540-36-3	104	%	70-130	01.31.2021 02:16		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS24** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-047 Date Collected: 01.28.2021 12:10 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.8	9.92	mg/kg	01.30.2021 19:57		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 17:00 % Moisture:
 Seq Number: 3149995 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.04.2021 01:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.04.2021 01:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.04.2021 01:21	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.04.2021 01:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	02.04.2021 01:21	
o-Terphenyl	84-15-1	117	%	70-130	02.04.2021 01:21	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS24**
Lab Sample Id: 686581-047

Matrix: Soil
Date Collected: 01.28.2021 12:10

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 03:36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 03:36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 03:36	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.31.2021 03:36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 03:36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 03:36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 03:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.31.2021 03:36		
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.31.2021 03:36		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS24 A**
Lab Sample Id: 686581-048

Matrix: Soil
Date Collected: 01.28.2021 12:20

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 11:03

% Moisture:
Basis: Wet Weight

Seq Number: 3149500

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.8	10.0	mg/kg	01.30.2021 20:03		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.03.2021 17:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3149995

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.04.2021 01:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.04.2021 01:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.04.2021 01:42	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.04.2021 01:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-130	02.04.2021 01:42	
o-Terphenyl	84-15-1	118	%	70-130	02.04.2021 01:42	



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS24 A**
Lab Sample Id: 686581-048

Matrix: Soil
Date Collected: 01.28.2021 12:20

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 03:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 03:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 03:59	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.31.2021 03:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 03:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 03:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 03:59	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.31.2021 03:59		
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.31.2021 03:59		



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WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS25** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-049 Date Collected: 01.28.2021 11:00 Sample Depth: 0 - 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 11:03 % Moisture:
 Seq Number: 3149500 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.6	10.1	mg/kg	01.30.2021 20:09		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 17:00 % Moisture:
 Seq Number: 3149995 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.04.2021 02:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.04.2021 02:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.04.2021 02:04	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.04.2021 02:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-130	02.04.2021 02:04	
o-Terphenyl	84-15-1	107	%	70-130	02.04.2021 02:04	



Certificate of Analytical Results 686581

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS25**
Lab Sample Id: 686581-049

Matrix: Soil
Date Collected: 01.28.2021 11:00

Date Received: 01.29.2021 10:20
Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.2021 04:22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.2021 04:22	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.2021 04:22	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.31.2021 04:22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.2021 04:22	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.2021 04:22	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.2021 04:22	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.31.2021 04:22		
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.31.2021 04:22		



Certificate of Analytical Results 686581

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS25 A** Matrix: Soil Date Received: 01.29.2021 10:20
 Lab Sample Id: 686581-050 Date Collected: 01.28.2021 11:10 Sample Depth: 2 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.30.2021 13:05 % Moisture:
 Seq Number: 3149503 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	27.1	10.0	mg/kg	01.30.2021 22:25		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 02.03.2021 17:00 % Moisture:
 Seq Number: 3149995 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.04.2021 02:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.04.2021 02:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.04.2021 02:25	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.04.2021 02:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	02.04.2021 02:25	
o-Terphenyl	84-15-1	109	%	70-130	02.04.2021 02:25	



Certificate of Analytical Results 686581

WPX Energy Permian Basin, LLC, Carlsbad, NM

North Brushy Draw 35-6 H

Sample Id: **DS25 A**
Lab Sample Id: 686581-050

Matrix: Soil
Date Collected: 01.28.2021 11:10

Date Received: 01.29.2021 10:20
Sample Depth: 2 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.30.2021 17:28

% Moisture:
Basis: Wet Weight

Seq Number: 3149554

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.31.2021 04:44	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.31.2021 04:44	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.31.2021 04:44	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.31.2021 04:44	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.31.2021 04:44	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.31.2021 04:44	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.31.2021 04:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.31.2021 04:44		
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.31.2021 04:44		

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



WPX Energy Permian Basin, LLC

North Brushy Draw 35-6 H

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3149466

Matrix: Solid

Prep Method: E300P

Date Prep: 01.30.2021

MB Sample Id: 7720394-1-BLK

LCS Sample Id: 7720394-1-BKS

LCSD Sample Id: 7720394-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	200	206	103	204	102	90-110	1	20	mg/kg	01.30.2021 11:09	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3149499

Matrix: Solid

Prep Method: E300P

Date Prep: 01.30.2021

MB Sample Id: 7720395-1-BLK

LCS Sample Id: 7720395-1-BKS

LCSD Sample Id: 7720395-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	200	206	103	203	102	90-110	1	20	mg/kg	01.30.2021 14:16	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3149500

Matrix: Solid

Prep Method: E300P

Date Prep: 01.30.2021

MB Sample Id: 7720396-1-BLK

LCS Sample Id: 7720396-1-BKS

LCSD Sample Id: 7720396-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	200	205	103	203	102	90-110	1	20	mg/kg	01.30.2021 17:24	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3149503

Matrix: Solid

Prep Method: E300P

Date Prep: 01.30.2021

MB Sample Id: 7720397-1-BLK

LCS Sample Id: 7720397-1-BKS

LCSD Sample Id: 7720397-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	200	205	103	202	101	90-110	1	20	mg/kg	01.30.2021 20:31	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3149466

Matrix: Soil

Prep Method: E300P

Date Prep: 01.30.2021

Parent Sample Id: 686580-001

MS Sample Id: 686580-001 S

MSD Sample Id: 686580-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.96	199	208	105	207	104	90-110	0	20	mg/kg	01.30.2021 11:26	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3149466

Matrix: Soil

Prep Method: E300P

Date Prep: 01.30.2021

Parent Sample Id: 686580-011

MS Sample Id: 686580-011 S

MSD Sample Id: 686580-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	184	200	396	106	402	109	90-110	2	20	mg/kg	01.30.2021 12:46	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



WPX Energy Permian Basin, LLC

North Brushy Draw 35-6 H

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3149499

Parent Sample Id: 686581-010

Matrix: Soil

MS Sample Id: 686581-010 S

Prep Method: E300P

Date Prep: 01.30.2021

MSD Sample Id: 686581-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	200	205	103	205	103	90-110	0	20	mg/kg	01.30.2021 14:34	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3149499

Parent Sample Id: 686581-020

Matrix: Soil

MS Sample Id: 686581-020 S

Prep Method: E300P

Date Prep: 01.30.2021

MSD Sample Id: 686581-020 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1920	202	2090	84	2030	56	90-110	3	20	mg/kg	01.30.2021 15:53	X

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3149500

Parent Sample Id: 686581-030

Matrix: Soil

MS Sample Id: 686581-030 S

Prep Method: E300P

Date Prep: 01.30.2021

MSD Sample Id: 686581-030 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.1	202	211	104	210	104	90-110	0	20	mg/kg	01.30.2021 17:41	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3149500

Parent Sample Id: 686581-040

Matrix: Soil

MS Sample Id: 686581-040 S

Prep Method: E300P

Date Prep: 01.30.2021

MSD Sample Id: 686581-040 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	349	1010	1350	99	1350	99	90-110	0	20	mg/kg	01.30.2021 19:01	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3149503

Parent Sample Id: 686527-010

Matrix: Soil

MS Sample Id: 686527-010 S

Prep Method: E300P

Date Prep: 01.30.2021

MSD Sample Id: 686527-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	220	199	416	98	402	91	90-110	3	20	mg/kg	01.30.2021 20:48	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3149503

Parent Sample Id: 686532-006

Matrix: Soil

MS Sample Id: 686532-006 S

Prep Method: E300P

Date Prep: 01.30.2021

MSD Sample Id: 686532-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	206	201	393	93	409	100	90-110	4	20	mg/kg	01.30.2021 22:08	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



WPX Energy Permian Basin, LLC

North Brushy Draw 35-6 H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150000

MB Sample Id: 7720758-1-BLK

Matrix: Solid

LCS Sample Id: 7720758-1-BKS

Prep Method: SW8015P

Date Prep: 02.03.2021

LCSD Sample Id: 7720758-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1050	105	1060	106	70-130	1	20	mg/kg	02.03.2021 12:24	
Diesel Range Organics (DRO)	<50.0	1000	997	100	1010	101	70-130	1	20	mg/kg	02.03.2021 12:24	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	94		100		103		70-130	%	02.03.2021 12:24			
o-Terphenyl	114		107		107		70-130	%	02.03.2021 12:24			

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150007

MB Sample Id: 7720761-1-BLK

Matrix: Solid

LCS Sample Id: 7720761-1-BKS

Prep Method: SW8015P

Date Prep: 02.03.2021

LCSD Sample Id: 7720761-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	897	90	871	87	70-130	3	20	mg/kg	02.03.2021 12:24	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	993	99	70-130	4	20	mg/kg	02.03.2021 12:24	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	106		105		101		70-130	%	02.03.2021 12:24			
o-Terphenyl	126		109		105		70-130	%	02.03.2021 12:24			

Analytical Method: TPH by SW8015 Mod

Seq Number: 3149995

MB Sample Id: 7720754-1-BLK

Matrix: Solid

LCS Sample Id: 7720754-1-BKS

Prep Method: SW8015P

Date Prep: 02.03.2021

LCSD Sample Id: 7720754-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	966	97	1020	102	70-130	5	20	mg/kg	02.03.2021 21:49	
Diesel Range Organics (DRO)	<50.0	1000	1020	102	1090	109	70-130	7	20	mg/kg	02.03.2021 21:49	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	107		114		119		70-130	%	02.03.2021 21:49			
o-Terphenyl	120		118		124		70-130	%	02.03.2021 21:49			

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150000

Matrix: Solid
MB Sample Id: 7720758-1-BLK

Prep Method: SW8015P

Date Prep: 02.03.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.03.2021 12:02	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



WPX Energy Permian Basin, LLC

North Brushy Draw 35-6 H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150007

Matrix: Solid

Prep Method: SW8015P

Date Prep: 02.03.2021

MB Sample Id: 7720761-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.03.2021 12:02	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3149995

Matrix: Solid

Prep Method: SW8015P

Date Prep: 02.03.2021

MB Sample Id: 7720754-1-BLK

Parameter

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.03.2021 21:28	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150000

Matrix: Soil

Prep Method: SW8015P

Date Prep: 02.03.2021

Parent Sample Id: 686581-001

MS Sample Id: 686581-001 S

MSD Sample Id: 686581-001 SD

Parameter

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	996	1190	119	1160	116	70-130	3	20	mg/kg	02.03.2021 13:28	
Diesel Range Organics (DRO)	<49.8	996	1090	109	1050	105	70-130	4	20	mg/kg	02.03.2021 13:28	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		113		70-130	%	02.03.2021 13:28
o-Terphenyl	108		103		70-130	%	02.03.2021 13:28

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150007

Matrix: Soil

Prep Method: SW8015P

Date Prep: 02.03.2021

Parent Sample Id: 686581-021

MS Sample Id: 686581-021 S

MSD Sample Id: 686581-021 SD

Parameter

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	834	84	923	93	70-130	10	20	mg/kg	02.03.2021 13:28	
Diesel Range Organics (DRO)	<49.9	998	900	90	923	93	70-130	3	20	mg/kg	02.03.2021 13:28	

Surrogate

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		99		70-130	%	02.03.2021 13:28
o-Terphenyl	95		98		70-130	%	02.03.2021 13:28

 MS/MSD Percent Recovery
 Relative Percent Difference
 LCS/LCSD Recovery
 Log Difference

 $[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

 LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

 MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



WPX Energy Permian Basin, LLC

North Brushy Draw 35-6 H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3149995

Parent Sample Id: 686581-041

Matrix: Soil

MS Sample Id: 686581-041 S

Prep Method: SW8015P

Date Prep: 02.03.2021

MSD Sample Id: 686581-041 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	989	99	978	98	70-130	1	20	mg/kg	02.03.2021 22:53	
Diesel Range Organics (DRO)	<49.9	997	912	91	966	97	70-130	6	20	mg/kg	02.03.2021 22:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	100		105		70-130	%	02.03.2021 22:53
o-Terphenyl	104		109		70-130	%	02.03.2021 22:53

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149548

MB Sample Id: 7720403-1-BLK

Matrix: Solid

LCS Sample Id: 7720403-1-BKS

Prep Method: SW5035A

Date Prep: 01.29.2021

LCSD Sample Id: 7720403-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0765	77	0.0800	80	70-130	4	35	mg/kg	01.30.2021 10:35	
Toluene	<0.00200	0.100	0.0928	93	0.0983	98	70-130	6	35	mg/kg	01.30.2021 10:35	
Ethylbenzene	<0.00200	0.100	0.103	103	0.107	107	71-129	4	35	mg/kg	01.30.2021 10:35	
m,p-Xylenes	<0.00400	0.200	0.223	112	0.229	115	70-135	3	35	mg/kg	01.30.2021 10:35	
o-Xylene	<0.00200	0.100	0.112	112	0.119	119	71-133	6	35	mg/kg	01.30.2021 10:35	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		86		88		70-130	%	01.30.2021 10:35
4-Bromofluorobenzene	120		124		122		70-130	%	01.30.2021 10:35

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149553

MB Sample Id: 7720404-1-BLK

Matrix: Solid

LCS Sample Id: 7720404-1-BKS

Prep Method: SW5035A

Date Prep: 01.30.2021

LCSD Sample Id: 7720404-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0946	95	0.0974	97	70-130	3	35	mg/kg	01.31.2021 08:43	
Toluene	<0.00200	0.100	0.0922	92	0.0947	95	70-130	3	35	mg/kg	01.31.2021 08:43	
Ethylbenzene	<0.00200	0.100	0.0922	92	0.0951	95	71-129	3	35	mg/kg	01.31.2021 08:43	
m,p-Xylenes	<0.00400	0.200	0.183	92	0.191	96	70-135	4	35	mg/kg	01.31.2021 08:43	
o-Xylene	<0.00200	0.100	0.0953	95	0.0955	96	71-133	0	35	mg/kg	01.31.2021 08:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		101		96		70-130	%	01.31.2021 08:43
4-Bromofluorobenzene	98		100		100		70-130	%	01.31.2021 08:43

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



WPX Energy Permian Basin, LLC

North Brushy Draw 35-6 H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149554

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.30.2021

MB Sample Id: 7720405-1-BLK

LCS Sample Id: 7720405-1-BKS

LCSD Sample Id: 7720405-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0957	96	0.0963	96	70-130	1	35	mg/kg	01.30.2021 20:50	
Toluene	<0.00200	0.100	0.0930	93	0.0976	98	70-130	5	35	mg/kg	01.30.2021 20:50	
Ethylbenzene	<0.00200	0.100	0.0953	95	0.0962	96	71-129	1	35	mg/kg	01.30.2021 20:50	
m,p-Xylenes	<0.00400	0.200	0.190	95	0.194	97	70-135	2	35	mg/kg	01.30.2021 20:50	
o-Xylene	<0.00200	0.100	0.0949	95	0.0987	99	71-133	4	35	mg/kg	01.30.2021 20:50	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		97		99		70-130	%	01.30.2021 20:50
4-Bromofluorobenzene	102		100		104		70-130	%	01.30.2021 20:50

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149548

Matrix: Soil

Prep Method: SW5035A

Date Prep: 01.29.2021

Parent Sample Id: 686580-008

MS Sample Id: 686580-008 S

MSD Sample Id: 686580-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0789	78	0.0790	78	70-130	0	35	mg/kg	01.30.2021 11:20	
Toluene	<0.00201	0.101	0.0889	88	0.0943	93	70-130	6	35	mg/kg	01.30.2021 11:20	
Ethylbenzene	<0.00201	0.101	0.0984	97	0.106	105	71-129	7	35	mg/kg	01.30.2021 11:20	
m,p-Xylenes	<0.00402	0.201	0.209	104	0.223	110	70-135	6	35	mg/kg	01.30.2021 11:20	
o-Xylene	<0.00201	0.101	0.109	108	0.113	112	71-133	4	35	mg/kg	01.30.2021 11:20	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		89		70-130	%	01.30.2021 11:20
4-Bromofluorobenzene	128		127		70-130	%	01.30.2021 11:20

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149553

Matrix: Soil

Prep Method: SW5035A

Date Prep: 01.30.2021

Parent Sample Id: 686581-017

MS Sample Id: 686581-017 S

MSD Sample Id: 686581-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0990	0.0869	88	0.0842	83	70-130	3	35	mg/kg	01.31.2021 09:28	
Toluene	<0.00198	0.0990	0.0806	81	0.0761	75	70-130	6	35	mg/kg	01.31.2021 09:28	
Ethylbenzene	<0.00198	0.0990	0.0825	83	0.0789	78	71-129	4	35	mg/kg	01.31.2021 09:28	
m,p-Xylenes	<0.00396	0.198	0.165	83	0.157	78	70-135	5	35	mg/kg	01.31.2021 09:28	
o-Xylene	<0.00198	0.0990	0.0834	84	0.0807	80	71-133	3	35	mg/kg	01.31.2021 09:28	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		100		70-130	%	01.31.2021 09:28
4-Bromofluorobenzene	100		103		70-130	%	01.31.2021 09:28

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



WPX Energy Permian Basin, LLC

North Brushy Draw 35-6 H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149554

Parent Sample Id: 686581-037

Matrix: Soil

MS Sample Id: 686581-037 S

Prep Method: SW5035A

Date Prep: 01.30.2021

MSD Sample Id: 686581-037 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0889	88	0.0861	86	70-130	3	35	mg/kg	01.30.2021 21:35	
Toluene	<0.00202	0.101	0.0838	83	0.0781	78	70-130	7	35	mg/kg	01.30.2021 21:35	
Ethylbenzene	<0.00202	0.101	0.0835	83	0.0798	80	71-129	5	35	mg/kg	01.30.2021 21:35	
m,p-Xylenes	<0.00404	0.202	0.164	81	0.160	80	70-135	2	35	mg/kg	01.30.2021 21:35	
o-Xylene	<0.00202	0.101	0.0861	85	0.0832	83	71-133	3	35	mg/kg	01.30.2021 21:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		96		70-130	%	01.30.2021 21:35
4-Bromofluorobenzene	104		99		70-130	%	01.30.2021 21:35

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No: 16816581

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Project Manager:	Lynda Laumbach	Bill to: (if different)	
Company Name:	WPE Energy Permian LLC	Company Name:	
Address:	555 Beaverlark Dr.	Address:	
City, State ZIP:	Curtisland NM 88220	City, State ZIP:	
Phone:	575 725 1647	Email:	lynda.laumbach@wpe-energy.com
Project Name:	North Bishop Draw 3564A	Turn Around	☒
Project Number:		Routine	☒
Project Location	Eddy Co. NM	Rush:	
Sampler's Name:		Due Date:	
PO #:		Quote #:	

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level I ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Number:		Routine		Pres. Code		
Project Location		Rush:				
Sampler's Name:		Due Date:				
PO #:		Quote #:				
SAMPLE RECEIPT						
Temperature (°C):	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Received Intact:	Thermometer ID	TINW07				
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes	No	N/A	Total Containers:	50	
Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers
0301		S	1-28-21	10:00	0-2'	1
05014		S	1-28-21	10:05	2-4'	1
0502		S	1-28-21	10:15	0-2'	1
05024		S	1-28-21	10:20	2-4'	1
0503		S	1-28-21	10:30	0-2'	1
05034		S	1-28-21	10:35	2-4'	1
0504		S	1-28-21	10:50	0-2'	1
05044		S	1-28-21	10:55	2-4'	1
0505		S	1-28-21	11:10	0-2'	1
05054		S	1-28-21	11:15	2-4'	1
Total 200.7 / 6010 200.8 / 6020:						
8RCRA 13PPM Towed 44 AL 2						
ANALYSIS REQUEST						
MeOH: Me						
None/NO						
HNO3: HN						
H2SO4: H2						
HCL: HL						
NaOH: Na						
Zn Acetate+ NaOH: Zn						
TAT starts the day received by the lab, if received by 4:00pm						
Sample Comments						

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
TC1P / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		12/21/21 10:30			



Chain of Custody

Work Order No: 1586581

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
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Project Manager: Lynda Laumbach
Company Name: WTX Energy Services LLC
Address: 5315 Adena Vista Dr.
City, State ZIP: Carlsbad, NM 88228
Phone: 575 725 1447
Project Name: North brashy draw 35+6H
Project Number: EddyCo. NM
Project Location: North brashy draw 35+6H
Sample's Name: EddyCo. NM
PO #:
Quote #:
Due Date:
Routine: ☒ Rush:
City, State ZIP: Lynda Laumbach @ WTX Energy, NM

Bill to: (if different)
Company Name:
Address:
City, State ZIP:
Program: ☐ UST/PRP ☐ Brownfields ☐ RRC ☐ Superfund
State of Project:
Reporting Level: ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADAPT ☐ Other:
Work Order Comments:
Preservative Codes:
MeOH: Me
None: NO
HNO3: HN
H2SO4: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn
TAT starts the day received by the lab, if received by 4:00pm

SAMPLE RECEIPT
Temperature (C):
Received In tact: ☒ Yes ☐ No
Cooler Custody Seals: ☒ Yes ☐ No
Sample Custody Seals: ☒ Yes ☐ No
Correction Factor:
Total Containers:
Number of Containers:
ANALYSIS REQUEST
Preservative Codes

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Chlorides (EPA 300.0)	BTEX (Method 8021)	PH (Method 8015)	Other
	0506	S	1.28.21.11	25	0-2'	X	X	X	
	0506A	S	1.28.21.11	30	2-4'	X	X	X	
	0507	S	1.28.21.11	50	0-2'	X	X	X	
	0507A	S	1.28.21.11	55	2-4'	X	X	X	
	0508	S	1.28.21.12	10	0-2'	X	X	X	
	0508A	S	1.28.21.12	15	2-4'	X	X	X	
	0509	S	1.28.21.12	25	0-2'	X	X	X	
	0509A	S	1.28.21.12	30	2-4'	X	X	X	
	0510	S	1.27.21.14	10	0-2'	X	X	X	
	0510A	S	1.27.21.14	15	2-4'	X	X	X	
Total 200.7 / 6010 200.8 / 6020:									

Circle Method(s) and Metal(s) to be analyzed
8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

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Relinquished by: (Signature)
Received by: (Signature)
Date/Time: 12/29/21 10:20
Relinquished by: (Signature)
Received by: (Signature)
Date/Time:
1631 / 245.117470 / 7471 : Hg



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
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Work Order No: 1086581

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Project Manager:	Lynda Laumbach	Bill to: (if different)	
Company Name:	WEX Energy Permian, LLC	Company Name:	
Address:	5315 Buckhorn Dr.	Address:	
City, State ZIP:	Carlsbad NM 88220	City, State ZIP:	
Phone:	505 725 1647	Email:	Lynda.Laumbach@wexenergy.com
Project Name:	North Brushy Draw 356	Turn Around	☒
Project Number:		Routine	☒
Project Location:	Edhy Co. NM	Rush:	
Sampler's Name:		Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):		Received Intact:	Yes	No	Thermometer ID		
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:			
Sample Custody Seals:	Yes	No	N/A	Total Containers:			

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	ANALYSIS REQUEST	Preservative Codes	Sample Comments
	05111	S	1-27-21	13:50	0-2'	1	Chlorides (FPA 300-00)		
	05114	S	1-27-21	13:55	2-4'	1	BTEX (Method 8021)		
	05112	S	1-27-21	13:55	2-4'	1	TPH (Method 8015)		
	05112A	S	1-27-21	13:20	0-2'	1			
	05113	S	1-27-21	13:35	2-4'	1			
	05134	S	1-27-21	13:10	0-2'	1			
	05114	S	1-27-21	13:15	2-4'	1			
	05114A	S	1-27-21	14:30	0-2'	1			
	05115	S	1-27-21	14:35	2-4'	1			
	0515A	S	1-28-21	12:50	2-4'	1			

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texs 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Pb Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		1/29/21 10:20			



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Work Order No: 686581

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Project Manager:	Lynda Landahl	Bill to: (if different)	
Company Name:	LYNDA ENERGY PARTNERS LLC	Company Name:	
Address:	5315 Leavelle Vista Dr	Address:	
City, State ZIP:	Cortisbur NM 88220	City, State ZIP:	
Phone:	505 795 1647	Email:	Lynda.Landahl@lynx.org
Project Name:	Northbrook Hwy 35-6	Turn Around	
Project Number:		Routine	☒
Project Location:	Calleyco. NM	Rush:	
Sampler's Name:		Due Date:	
PO #:		Quote #:	

Program: ☒ UST/ST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level: ☐ I ☐ II ☐ III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: ☐ EDD ☐ ADAPT ☐ Other:	

SAMPLE RECEIPT				ANALYSIS REQUEST			
Temperature (°C):	Temp Blank:	Yes	No	Wet Ice:	Yes	No	Pres. Code
Received Intact:	Yes	No	N/A	Thermometer ID			
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:			
Sample Custody Seals:	Yes	No	N/A	Total Containers:			

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Preservative Codes	Sample Comments
0516			1.28.21/3:00	0-2'	1	1	MeOH: Me	
0516A			1.28.21/3:05	2-4'	1	1	None: NO	
0517			1.28.21/4:15	0-2'	1	1	HNO3: HN	
0517A			1.28.21/4:20	2-4'	1	1	H2SO4: H2	
0518			1.28.21/4:30	0-2'	1	1	HCL: HL	
0518A			1.28.21/4:35	2-4'	1	1	NaOH: Na	
0519			1.28.21/4:45	0-2'	1	1	Zn Acetate+ NaOH: Zn	
0519A			1.28.21/4:50	2-4'	1	1		
0520			1.28.21/5:00	0-2'	1	1		
0520A			1.28.21/5:05	2-4'	1	1		
Total 200.7 / 6010	200.8 / 6020:							

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						1/29/21 10:20	



Chain of Custody

Work Order No:

1086581

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Project Manager:	Lynda Laumad	Bill to: (if different)	
Company Name:	Wp Energy Permian LLC	Company Name:	
Address:	5315 Energy Vista Dr	Address:	
City, State ZIP:	Corsado NM 88220	City, State ZIP:	
Phone:	505 725 1647	Email:	Lynda.Laumad@wpenergy.com

Project Name:	North brashy draw 35-b	Turn Around	
Project Number:		Routine	☒
Project Location:	Edleyco. NM	Rush:	
Sampler's Name:		Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):						
Received In tact:	Yes	No	Thermometer ID			
Cooler Custody Seals:	Yes	No	Correction Factor:			
Sample Custody Seals:	Yes	No	Total Containers:			

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Chlorides (EPA 300.00)	BTEX (method 8014)	TPH (method 8015)	Preservative Codes	Sample Comments
0521		S	1.28.21	15:15	0-2'	1	X	X	X		
0521A		S	1.28.21	15:20	2-4'	1	X	X	X		
0522		S	1.28.21	12:50	6-2'	1	X	X	X		
0522A		S	1.28.21	13:00	2-4'	1	X	X	X		
0523A		S	1.28.21	12:30	0-2'	1	X	X	X		
0524		S	1.28.21	12:40	2-4'	1	X	X	X		
0524A		S	1.28.21	12:10	0-2'	1	X	X	X		
0525		S	1.28.21	11:20	2-4'	1	X	X	X		
0525A		S	1.28.21	11:00	0-2'	1	X	X	X		

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Pb Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Program: UST/PST	☐	PRP	☐	Brownfields	☐	RRC	☐	Superfund	☐	
State of Project:										
Reporting Level:	Level II	☐	Level III	☐	PST/UST	☐	TRRP	☐	Level IV	☐
Deliverables:	EDD	☐	ADAPT	☐	Other:					



Chain of Custody

Work Order No: 6856580

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

www.xenco.com Page 1 of 2

Project Manager:	Kalei Jennings	Bill to: (if different)	Ike Tavaraz
Company Name:	WSP USA Inc., Permian office	Company Name:	Concho Operating
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(432) 236-3849	Email:	will.mather@wsp.com, kalei.jennings@wsp.com, itavaraz@concho.com
Project Name:	Columbus Federal 021H & 022H CTB	Turn Around	
Project Number:	31402909.01	Routine	☒
P.O. Number:	Lea	Rush:	
Sampler's Name:	William Mather	Due Date:	

SAMPLE RECEIPT		Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
Temperature (°C):	04/0.2	Thermometer ID	TMM007		
Received Intact:	☒ Yes ☐ No	Correction Factor:	-0.2		
Cooler Custody Seals:	☒ Yes ☐ No	Total Containers:	11		
Sample Custody Seals:	☒ Yes ☐ No				

10:44:12 AM

Sample Identification					Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (EPA)	BTEX (EPA)	Chloride	lab, if received by 4:30pm																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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SW03	S	1/27/2021	13:24	0-4'	1	X	X	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											</

Total 200.7 / 6010 200.8 / 6020:		8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn			
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U			
Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.		Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.			
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		1/29/21 09:35			

Work Order No: 1086580

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

Page -

of

Work Order Comments									
Program: UST/PST ☐ RP ☐ Growfields ☐ RC ☐ \$perfund ☐									
State of Project:									
Reporting Level II ☐ Level III ☐ ST/UST ☐ RP ☐ Level IV ☐									
Deliverables: EDD ☐ ADAPT ☐ Other:									

[illegible][illegible]

1631 / 245.1 / 7470 / 7471 : Hg

Date/Time

Date/Time

Inter-Office Shipment

IOS Number : **77326**

Date/Time: 01.29.2021

Created by: Cloe Clifton

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Midland**

Air Bill No.:

E-Mail: jessica.kramer@eurofinset.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
686581-001	S	DS01	01.28.2021 10:00	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-002	S	DS01 A	01.28.2021 10:05	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-003	S	DS02	01.28.2021 10:15	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-004	S	DS02 A	01.28.2021 10:20	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-005	S	DS03	01.28.2021 10:30	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-006	S	DS03 A	01.28.2021 10:35	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-007	S	DS04	01.28.2021 10:50	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-008	S	DS04 A	01.28.2021 10:55	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-009	S	DS05	01.28.2021 11:10	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-010	S	DS05 A	01.28.2021 11:15	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-011	S	DS06	01.28.2021 11:25	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-012	S	DS06A	01.28.2021 11:30	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-013	S	DS07	01.28.2021 11:50	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-014	S	DS07 A	01.28.2021 11:55	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-015	S	DS08	01.28.2021 12:10	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-016	S	DS08 A	01.28.2021 12:15	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-017	S	DS09	01.28.2021 12:25	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-018	S	DS09 A	01.28.2021 12:30	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-019	S	DS10	01.28.2021 14:10	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-020	S	DS10 A	01.28.2021 14:15	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-021	S	DS11	01.27.2021 13:50	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.10.2021	JKR	PHCC10C28 PHCC28C35	
686581-022	S	DS11 A	01.27.2021 13:55	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.10.2021	JKR	PHCC10C28 PHCC28C35	
686581-023	S	DS12	01.27.2021 13:30	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.10.2021	JKR	PHCC10C28 PHCC28C35	
686581-024	S	DS12 A	01.27.2021 13:35	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.10.2021	JKR	PHCC10C28 PHCC28C35	
686581-025	S	DS13	01.27.2021 13:10	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.10.2021	JKR	PHCC10C28 PHCC28C35	

Inter-Office Shipment

IOS Number : **77326**

Date/Time: 01.29.2021

Created by: Cloe Clifton

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Midland**

Air Bill No.:

E-Mail: jessica.kramer@eurofinset.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
686581-026	S	DS13 A	01.27.2021 13:15	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.10.2021	JKR	PHCC10C28 PHCC28C35	
686581-027	S	DS14	01.27.2021 14:30	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.10.2021	JKR	PHCC10C28 PHCC28C35	
686581-028	S	DS14 A	01.27.2021 14:35	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.10.2021	JKR	PHCC10C28 PHCC28C35	
686581-029	S	DS15	01.28.2021 12:45	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-030	S	DS15 A	01.28.2021 12:50	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-031	S	DS16	01.28.2021 13:00	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-032	S	DS16 A	01.28.2021 13:05	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-033	S	DS17	01.28.2021 14:15	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-034	S	DS17 A	01.28.2021 14:20	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-035	S	DS18	01.28.2021 14:30	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-036	S	DS18 A	01.28.2021 14:35	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-037	S	DS19	01.28.2021 14:45	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-038	S	DS19 A	01.28.2021 14:50	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-039	S	DS20	01.28.2021 15:00	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-040	S	DS20 A	01.28.2021 15:05	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-041	S	DS21	01.28.2021 15:15	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-042	S	DS21 A	01.28.2021 15:20	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-043	S	DS22	01.28.2021 12:50	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-044	S	DS22 A	01.28.2021 13:00	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-045	S	DS23	01.28.2021 12:30	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-046	S	DS23 A	01.28.2021 12:40	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-047	S	DS24	01.28.2021 12:10	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-048	S	DS24 A	01.28.2021 12:20	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-049	S	DS25	01.28.2021 11:00	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	
686581-050	S	DS25 A	01.28.2021 11:10	SW8015MOD_NM	TPH by SW8015 Mod	02.04.2021	02.11.2021	JKR	PHCC10C28 PHCC28C35	

Inter Office Shipment or Sample Comments:

Inter-Office Shipment

IOS Number : 77326

Date/Time: 01.29.2021

Created by: Cloe Clifton

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Midland**

Air Bill No.:

E-Mail: jessica.kramer@eurofinset.com

Inter Office Shipment or Sample Comments:

Relinquished By:

Cloe Clifton

Received By:

Jessica Kramer

Date Relinquished: Cloe Clifton

Date Received: Jessica Kramer

01.29.2021

02.01.2021

Cooler Temperature: 2.5

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 77326

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: Cloe Clifton

Date Sent: 01.29.2021 01.00 PM

Received By: Jessica Kramer

Date Received: 02.01.2021 10.00 AM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:



Jessica Kramer

Date: 02.01.2021

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WPX Energy Permian Basin, LLC

Date/ Time Received: 01.29.2021 10.20.00 AM

Work Order #: 686581

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T_NM_007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

TPH sent to Midland

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:



Cloe Clifton

Date: 01.29.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.29.2021

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 200990

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 200990
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	5/3/2023