

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

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141
Revised August 8, 2011

DEC 15 2017

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

RECEIVED

Release Notification and Corrective Action

NAB173522A2A2

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	WPX Energy Inc/RKI✓ 246289	Contact	Karolina Blaney
Address	5315 Buena Vista Dr.	Telephone No.	970 589 0743
Facility Name:	RDU 45 well pad ROSS Draw Unit #45	Facility Type:	Well Pad

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-42018
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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
M	22	26S	30E	990	FSL	430	FWL	Eddy

Latitude: 32.02340222N Longitude: -103.87628756W

NATURE OF RELEASE

Type of Release: Produced Water and Oil	Volume of Release: 5 Bbls	Volume Recovered: 2 Bbls
Source of Release Flowline	Date and Hour of Occurrence 12/2/2017	Date and Hour of Discovery 12/2/2017 - 9:30 hrs MT
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? NMOCD Crystal Weaver & Michael Bratcher, BLM Shelly Tucker	
By Whom? Karolina Blaney	Date and Hour: 12/3/17- 10:37 hrs MT	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.*

The spill was caused by a failure of a buried flowline. Spilled water and oil migrated to the surface and estimated 5 bbls of fluids was spilled on location. None of the fluids has left the pad.

Describe Area Affected and Cleanup Action Taken.*

The impacted area was immediately mapped with a Trimble to establish horizontal extent of impacts. The impacted area was scraped off and sampled for BTEX, TPH, and chlorides in accordance with NM OCD Guidelines for Remediation of Leaks, Spills, and Releases. Further remediation will be based on these results.

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

Signature: <i>Karolina Blaney</i>	OIL CONSERVATION DIVISION	
Printed Name: Karolina Blaney	Approved by Environmental Specialist: <i>Crystal W</i>	
Title: Environmental Specialist	Approval Date: 12/15/17	Expiration Date: N/A
E-mail Address: Karolina.blaney@wpenergy.com	Conditions of Approval: <i>see attached</i>	
Date: 12-14-17 Phone: 970-589-0743	Attached <i>2RP-4519</i>	

* Attach Additional Sheets If Necessary

12/15/17

Incident ID	NAB1735229292
District RP	2RP-4519
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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

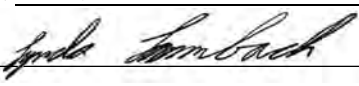
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods,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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	NAB1735229292
District RP	2RP-4519
Facility ID	
Application ID	

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Printed Name: Lynda Laumbach Title: Environmental Professional
Signature:  Date: 05/24/2021
email: Lynda.Laumbach@dnr.com Telephone: (575)725-1647

OCD Only

Received by: _____ Date: _____

Incident ID	NAB1735229292
District RP	2RP-4519
Facility ID	
Application ID	

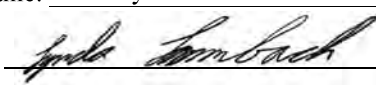
Closure

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: 05/24/2021
email: Lynda.Laumbach@dvn.com Telephone: (575)725-1647

OCD Only

Received by: OCD Date: 9/29/2021

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: 9/14/2022
Printed Name: Ashley Maxwell Title: Environmental Specialist



May 27, 2021
Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, NM 88210

Re: Ross Draw Unit #045 Release Closure Request (NAB1735229292)

Mr. Bratcher,

This report summarizes the sampling activities at the Ross Draw Unit #045 well pad (Site). The site map is provided as Figure 01. On December 12, 2017, a buried flowline failed causing 5 barrels of mixed production fluids (oil and produced water) to be released around the wellhead. 2 barrels of combined fluids was recovered using a vacuum truck.

Well Location: Ross Draw Unit #045

API #: 30-015-42018

NMOCD Reference #: NAB1735229292

Site Location Description: Unit Letter M, Section 22, Township 26S, Range 30E

Release Latitude/Longitude: N32.0234, W103.87628

Land Jurisdiction: Federal

Estimated Depth to Groundwater: >100 feet, Attachment 01 RDX/RDU Depth to Water Report

NMOCD Site Characterization Standards: 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)

*Characterization in C-141 at the beginning of this report

Field Activities

On March 25, 2021, personnel were onsite to delineate the release area and collect samples DS01-DS13 at depths ranging from one to 6 feet below ground surface. All delineation sample locations and the release area are depicted in Figure 02 and photographs of the location are in Attachment 02.

Sampling Activities and Laboratory Analytical Results

Delineation samples were taken via one-point discrete sampling. All delineation samples were below the allowable standards for Chlorides, BTEX, and TPH and confirm complete lateral delineation of the release. All sample results are summarized in Table 01 and complete lab results are provided in Attachment 03.

- Chlorides analysis ranged from below the detectable limit to 2,090 mg/kg
- Benzene analysis ranged from below the detectable limit to 0.382 mg/kg
- BTEX analysis ranged from below the detectable limit to 0.536 mg/kg
- TPH analysis ranged from below the detectable limit to 526 mg/kg

Conclusions

The laboratory analytical results to address the impacted soils from NAB1735229292 demonstrates compliance with the Table 1 Closure Criteria set forth by the NMOCD. Actions to

mitigate initial impacts of this site have proven a successful remediation. WPX requests no further action for this incident. The updated C-141 is included at the front of this report. If any questions or further information is warranted, please do not hesitate to contact me by cell phone at (575) 725-1647 or by email at Lynda.Laumbach@dvn.com.

Best regards,



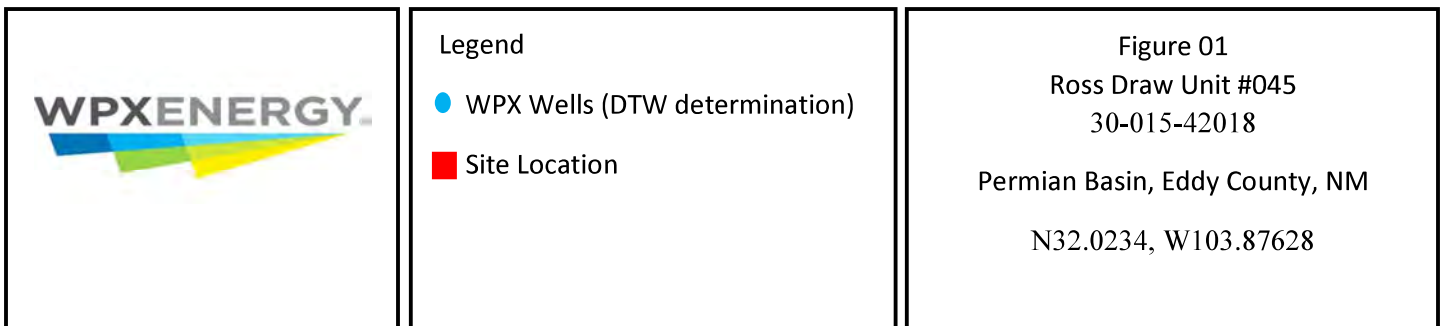
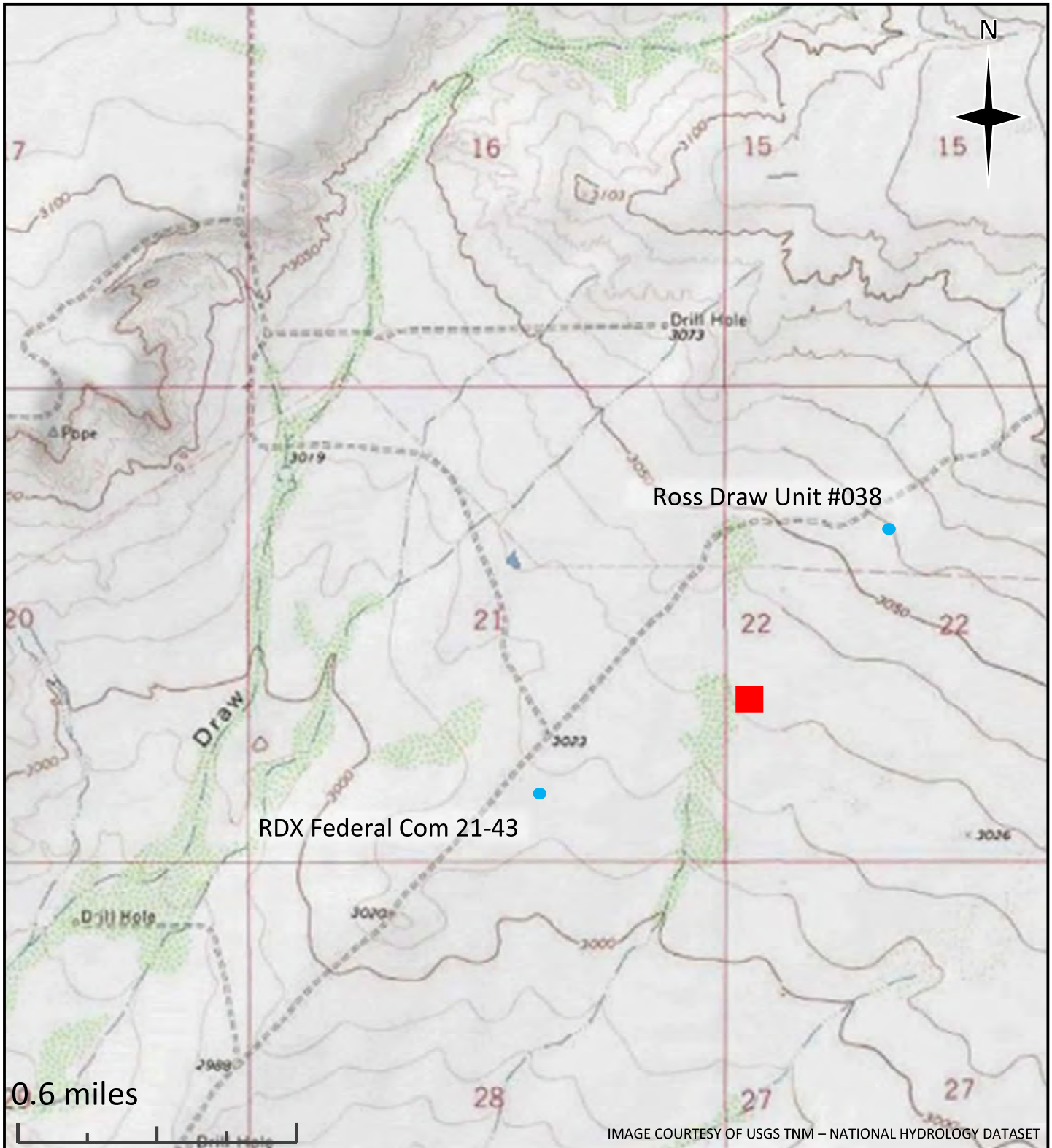
Lynda Laumbach
Environmental Professional

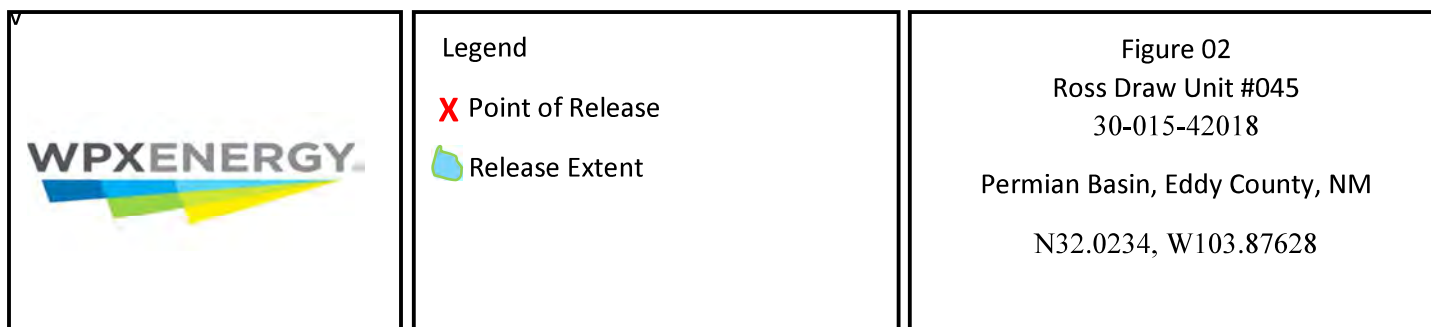
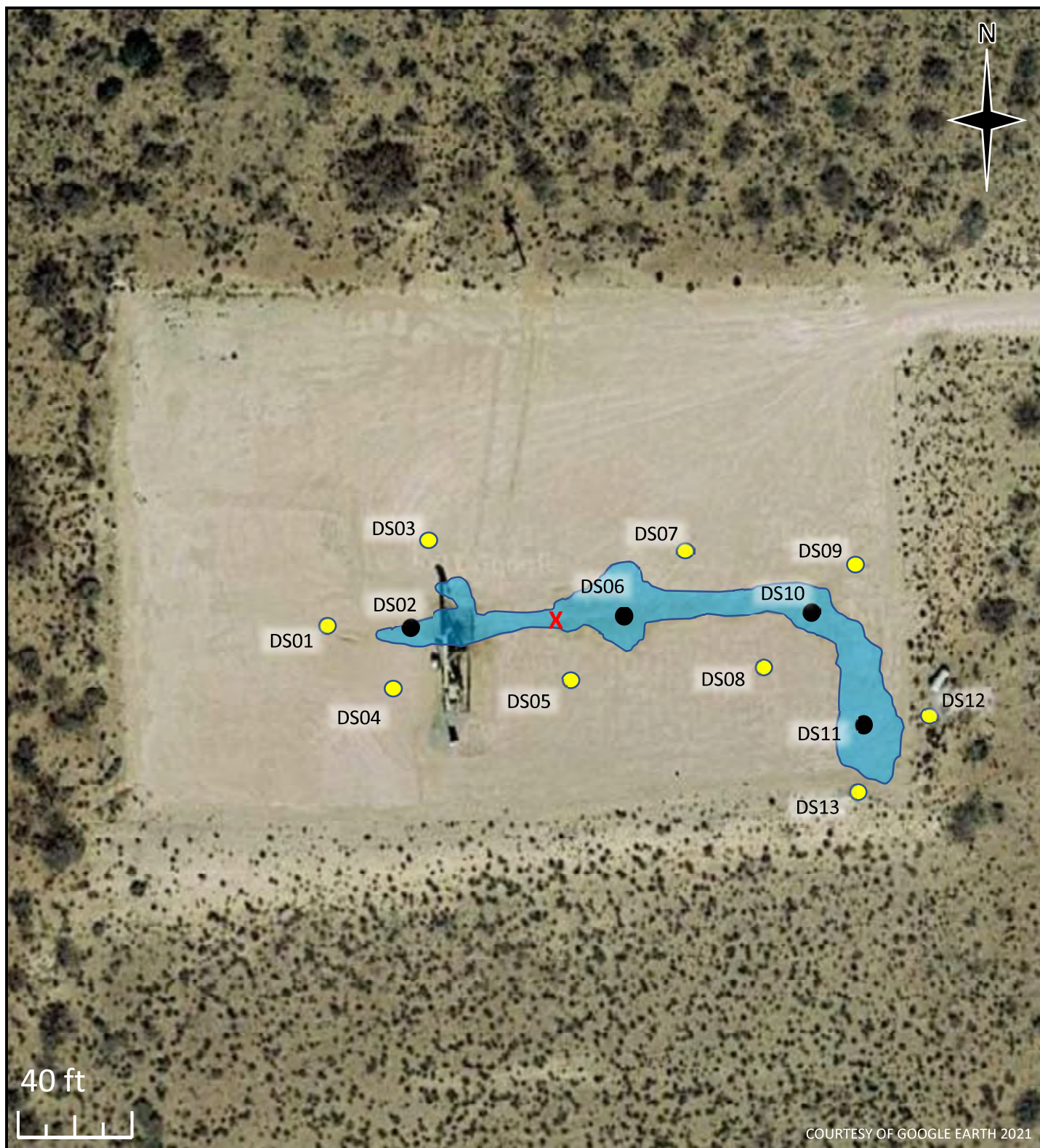
CC: Robert Hamlet, NMOCD
Victoria Venegas, NMOCD
Chad Hensley, NMOCD

Attachments:

Figure 01 Site Map
Figure 02 Delineation Activities
Table 01 Sample Results
Attachment 01 RDX/RDU Depth to Water Report
Attachment 02 Photograph Log
Attachment 03 Laboratory Analytical Results

Figures





Table(s)



TABLE 01
SOIL SAMPLE ANALYTICAL RESULTS
ROSS DRAW UNIT #045
NMOCD REFERENCE NUMBER: NAB1735229292 (2RP-4519)

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	1	3/25/2021	<0.00201	<0.00201	<49.9	<49.9	<49.9	-	-	62
DS01 A	2	3/25/2021	<0.00200	<0.00200	<49.9	<49.9	<49.9	-	-	65
DS02	1	3/25/2021	0.00248	0.00248	<50.0	<50.0	<50.0	-	-	1010
DS02 A	2	3/25/2021	<0.00200	<0.00200	<50.1	<50.1	<50.1	-	-	1430
DS02 B	4	3/25/2021	<0.00202	<0.00202	<50.0	<50.0	<50.0	-	-	2090
DS02 C	6	3/25/2021	<0.00198	<0.00198	<50.0	<50.0	<50.0	-	-	1490
DS03	1	3/25/2021	0.00784	0.156	<49.9	<49.9	<49.9	-	-	31
DS03 A	2	3/25/2021	<0.00202	0.0104	53.7	<49.9	<49.9	53.7	53.7	18
DS04	1	3/25/2021	<0.00200	<0.00200	<50.0	<50.0	<50.0	-	-	34
DS04 A	2	3/25/2021	0.00448	0.0313	<0.0132	<0.0132	<0.0132	-	-	244
DS05	1	3/25/2021	<0.00198	<0.00198	204	<49.8	<49.8	204	204	17
DS05 A	2	3/25/2021	<0.00199	<0.00199	<50.0	<50.0	<50.0	-	-	113
DS06	1	3/25/2021	<0.00200	<0.00200	<49.9	<49.9	<49.9	-	-	30
DS06 A	2	3/25/2021	0.00642	0.0374	<49.9	<49.9	<49.9	-	-	52
DS06 B	4	3/25/2021	<0.00201	<0.00201	<50.1	<50.1	<50.1	-	-	91
DS07	1	3/25/2021	0.00235	0.00235	<50.0	526	<50.0	526	526	129
NMOCD Table 1 Closure Criteria			10	50	NE	NE	NE	1,000	2,500	20,000

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	

All samples were taken with decontaminated equipment, jarred in precleaned glass soil jars, with appropriate identification, and immediately placed on ice to lower sample temperatures below 4° Celsius, adhering to strict chain of custody of 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.



TABLE 01
SOIL SAMPLE ANALYTICAL RESULTS
ROSS DRAW UNIT #045
NMOCD REFERENCE NUMBER: NAB1735229292 (2RP-4519)

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)
DS07 A	2	3/25/2021	0.382	0.536	<49.9	380.0	<49.9	380.0	380	149
DS08	1	3/25/2021	<0.00199	<0.00199	<50.0	<50.0	<50.0	-	-	28
DS08 A	2	3/25/2021	<0.00200	<0.00200	<50.0	<50.0	<50.0	-	-	<4.98
DS09	1	3/25/2021	<0.00200	<0.00200	<49.8	<49.8	<49.8	-	-	126
DS09 A	2	3/25/2021	<0.00202	<0.00202	<49.9	<49.9	<49.9	-	-	9
DS09 B	4	3/25/2021	<0.00198	<0.00198	<49.9	<49.9	<49.9	-	-	5
DS10	1	3/25/2021	<0.00199	<0.00199	<50.0	<50.0	<50.0	-	-	807
DS10 A	2	3/25/2021	<0.00202	<0.00202	<50.1	<50.1	<50.1	-	-	50
DS11	1	3/25/2021	<0.00200	<0.00200	<50.0	<50.0	<50.0	-	-	20
DS11 A	2	3/25/2021	<0.00200	<0.00200	<49.9	<49.9	<49.9	-	-	<4.98
DS11 B	4	3/25/2021	<0.00200	<0.00200	<49.9	<49.9	<49.9	-	-	<5.00
DS12	1	3/25/2021	<0.00201	<0.00201	<50.0	<50.0	<50.0	-	-	117
DS12 A	2	3/25/2021	<0.00200	<0.00200	<0.0132	<0.0132	<0.0132	-	-	27
DS13	1	3/25/2021	<0.00199	<0.00199	<49.8	<49.8	<49.8	-	-	<4.96
DS13 A	2	3/25/2021	<0.00199	<0.00199	<50.0	<50.0	<50.0	-	-	<5.00
NMOCD Table 1 Closure Criteria			10	50	NE	NE	NE	1,000	2,500	20,000

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	

All samples were taken with decontaminated equipment, jarred in precleaned glass soil jars, with appropriate identification, and immediately placed on ice to lower sample temperatures below 4° Celsius, adhering to strict chain of custody of 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.

Attachment 02:

RDX/ RDU Depth to Water Report



Site Investigation Report

Date of report: 1/5/2021
Site Names: RDX 16-25 Ross Draw Unit #38
RDX 17 #3 Ross Draw Unit #55
RDX Fed Com 17-44H Ross Draw Unit #57
RDX Fed Com 21-43 N Brushy Fed 35 #010H
County: Eddy County, New Mexico
Project No: 0397

Site Activities

Earth Systems Response and Restoration (ESRR) field activities were conducted December 8th through the 10th in Eddy county, New Mexico. ESRR oversaw the advancement of one soil boring at the eight above-mentioned locations to an approximate depth of 105 feet (ft.) below grade surface utilizing an air-rotary drilling rig operated by a State of New Mexico licensed driller. Additionally, HRL Compliance Solutions (HRL) conducted on-site soil logging activities during the advancement of the soil borings. Please see the detailed lithologic descriptions attached.

Upon completion of the soil borings, a PVC casing fitted with 5 ft. of machine-slotted well screen at the bottom was inserted into each soil boring. The PVC casing was left in place for a minimum of 72 hours prior to being gauged by HRL Consulting on December 12th with a water level meter to determine the presence or absence of groundwater. Subsequent to gauging activities, each soil boring had the PVC casing removed and was then backfilled with its associated native soil cuttings to grade surface.

Conclusions

Groundwater was not detected in any of the eight soil borings as determined by utilizing a water level meter after 72 hours of development. It can be reasonably determined groundwater is deeper than 105 ft. bgs in the vicinity of the advanced soil borings.

Respectfully,

Kris Williams, CHMM, REM
Operations Manager

Attached: Drilling Locations Maps
Soil Boring Logs




Drilling Location Site Map


RDX 16-25	(32.039900, -103.883337)	Ross Draw Unit #38
RDX 17 #3	(32.036765, -103.895993)	Ross Draw Unit #55
RDX Federal Com 17-44H	(32.049656, -103.904054)	Ross Draw Unit #57
RDX Federal Com 21-43	(32.022571, -103.884371)	





Drilling Location Site Map


North Brushy Federal 35 #010H	(32.079909, -103.951386)
RDX Federal Com 17-44H	(32.049656, -103.904054)


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


 HRL COMPLIANCE SOLUTIONS							BORING LOG/MONITORING WELL COMPLETION DIAGRAM						
							Boring/Well Number:			Location:			
							MW-1			RDX 17 #3			
							Date:			Client:			
							12/8/2020			WPX Energy			
Drilling Method:			Sampling Method:				Logged By:			Drilled By:			
Air Rotary			None				J. Linn, PG			Talon LPE			
Gravel Pack Type:			Gravel Pack Depth Interval:				Seal Type:		Seal Depth Interval:		Latitude:		
10/20 Sand			3 Bags				None		None		32.036765		
Casing Type:		Diameter:		Depth Interval:			Boring Total Depth (ft. BGS):			Longitude:			
PVC		2-inch		0-102 feet bgs			107			-103.895993			
Screen Type:		Slot:		Diameter:		Depth Interval:		Well Total Depth (ft. BGS):			Depth to Water (ft. BTOC):		
PVC		0.010-inch		2-inch		102-107 ft		107			> 107		
DTW Date:		12/16/2020											
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks			Well Completion	
0	NM	L	D	N	N	NM	SP	NS	Pale orange poorly graded fine sand				
5													
10													
15													
20													
25	NM	L	D	N	N	NM	SP	NS	Same as above with slight increase in coarse sand and gravel				
30													
35													
40													
45													
45	NM	L	D	N	N	NM	SP	NS	Pale orange poorly graded fine sand with very slight silt				
50													
55													
60													
65													
65	NM	M	SL M	N	N	NM	SM	NS	Pale red orange clayey silty fine sand with minor coarse sand and gravel				
70													
75													
80													
85													
90	NM	L	SL M	N	N	NM	SP	NS	Pale orange poorly sorted fine sand - TD 107' BGS				
95													
100													
105													
105													


 HRL COMPLIANCE SOLUTIONS							BORING LOG/MONITORING WELL COMPLETION DIAGRAM							
							Boring/Well Number:		MW-1		Location:		RDX Federal Com 17-44H	
							Date:		12/8/2020		Client:		WPX Energy	
Drilling Method:			Air Rotary				Sampling Method:			None				
Gravel Pack Type:			10/20 Sand				Gravel Pack Depth Interval:			3 Bags				
Casing Type:			PVC				Seal Type:			None				
Screen Type:			PVC				Seal Depth Interval:			None				
Diameter:			2-inch				Boring Total Depth (ft. BGS):			110				
Depth Interval:			0-105 ft bgs				Longitude:			-103.904054				
Slot:			0.010-inch				Well Total Depth (ft. BGS):			110				
Diameter:			2-inch				Depth to Water (ft. BTOC):			> 110				
Depth Interval:			105 - 110 ft				DTW Date:			12/16/2020				
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks	Well Completion				
0	NM	L	D	N	N	NM	CE	NS	Buff to pale pink colored caliche					
5														
10														
15														
20														
25														
30														
35														
40	NM	L	D	N	N	NM	SW	NS	Pinky orange well graded sand with minor silt					
45														
50														
55														
60	NM	L	D	N	N	NM	SP	NS	Pinky pale brown orange poorly graded fine sand with minor silt					
65														
70														
75	NM	L	D	N	N	NM	SW-SM SW-SC	NS	Pinky brown orange well-graded sand with silt and clay					
80														
85														
90	NM	L	D	N	N	NM	SP	NS	Pinky pale brown orange poorly graded fine sand with minor silt - TD: 110' bgs					
95														
100														
105														

							BORING LOG/MONITORING WELL COMPLETION DIAGRAM																	
Drilling Method: Air Rotary							Sampling Method: None			Boring/Well Number: MW-1			Location: RDX Federal Com 21-43											
Gravel Pack Type: 10/20 Sand							Gravel Pack Depth Interval: 3 Bags			Date: 12/9/2020			Client: WPX Energy											
Casing Type: PVC							Diameter: 2-inch			Depth Interval: 0-100 feet bgs			Logged By: J. Linn, P.G.			Drilled By: Talon LPE								
Screen Type: PVC							Slot: 0.010-inch			Diameter: 2-inch			Depth Interval: 100 - 105 ft			Seal Type: None			Seal Depth Interval: None			Latitude: 32.022571		
													Boring Total Depth (ft. BGS): 110			Longitude: -103.884371								
													Well Total Depth (ft. BGS): 105			Depth to Water (ft. BTWC): > 105			DTW Date: 12/16/2020					
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks				Well Completion											
0	NM	L	D	N	N	NM	SP	NS	Pale orange to tan poorly graded fine sand															
5																								
10																								
15																								
20	NM	H	D	N	N	NM	CL	NS	Pale orange/tan/pale red clay, dry, with silt, fine sand, and minor caliche															
25																								
30																								
35																								
40	NM	L	D	N	N	NM	SP	NS	Pale orange to pale red poorly graded fine sand															
45																								
50																								
55																								
60	NM	L	D	N	N	NM	SP	NS	Golden yellow poorly graded fine sand with minor silt and clay															
65																								
70																								
75																								
80	NM	L	D	N	N	NM	SP	NS	Pale orange to pale red poorly graded fine sand with minor silt/clay															
85																								
90																								
95																								
100	NM	M	D	N	N	NM	SC	NS	Buff to orange color fine sand with medium sand and clay															
85																								
90																								
95																								
95	NM	H	D	N	N	NM	CL	NS	Brown orange clay with silt and fine sand															
100																								
105																								
105																								
100	NM	H	D	N	N	NM	SC	NS	Golden yellow and buff colored clay with fine sand - TD Boring: 110' BGS; Sand 110' - 105' BGS															
105																								

 HRL COMPLIANCE SOLUTIONS							BORING LOG/MONITORING WELL COMPLETION DIAGRAM							
Boring/Well Number:							Location:							
MW-1							Ross Draw Unit #38							
Date:							Client:							
12/8/2020							WPX Energy							
Drilling Method:				Sampling Method:			Logged By:				Drilled By:			
Air Rotary				None			J. Linn, PG				Talon LPE			
Gravel Pack Type:				Gravel Pack Depth Interval:			Seal Type:		Seal Depth Interval:		Latitude:			
10/20 Sand				3 Bags			None		None		32.030300			
Casing Type:		Diameter:		Depth Interval:			Boring Total Depth (ft. BGS):				Longitude:			
PVC		2-inch		0-100 feet bgs			105				-103.871338			
Screen Type:		Slot:		Diameter:		Depth Interval:		Well Total Depth (ft. BGS):				Depth to Water (ft. BTOC):		DTW Date:
PVC		0.010-inch		2-inch		100-105 ft		105				> 105		12/16/2020
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks			Well Completion		
0	NM	L	D	N	N	NM	SW	NS	Pale orange/pale pink to buff colored fine sand with minor medium and coarse sand					
5														
10														
15														
20	NM	L	D	N	N	NM	SP	NS	Pale orange/pale pink poorly graded fine sand					
25														
30														
35	NM	L	D	N	N	NM	SP	NS	Tan/pale brown/pale orange poorly graded fine sand					
40														
45														
50														
55														
60														
65	NM	L	D	N	N	NM	SP	NS	Brick red brown poorly graded fine sand					
70														
75														
80														
85														
90														
95	NM	L	D	N	N	NM	SP	NS	Tan/pale brown/pale orange poorly graded fine sand - TD 105' BGS					
100														

 HRL COMPLIANCE SOLUTIONS							BORING LOG/MONITORING WELL COMPLETION DIAGRAM						
							Boring/Well Number:		Location:				
							MW-1		Ross Draw Unit #55				
							Date:		Client:				
							12/9/2020		WPX Energy				
Drilling Method:			Sampling Method:				Logged By:		Drilled By:				
Air Rotary			None				J. Linn, PG		Talon LPE				
Gravel Pack Type:			Gravel Pack Depth Interval:				Seal Type:		Seal Depth Interval:		Latitude:		
10/20 Sand			3 Bags				None		None		32.016165		
Casing Type:		Diameter:		Depth Interval:			Boring Total Depth (ft. BGS):			Longitude:			
PVC		2-inch		0-101'7"			106'7"			-103.86346			
Screen Type:		Slot:		Diameter:		Depth Interval:		Well Total Depth (ft. BGS):			Depth to Water (ft. BTOC):		
PVC		0.010-inch		2-inch		101'7" - 106'7"		106'7"			>106' 7"		
DTW Date:													
12/16/2020													
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks			Well Completion	
0	NM	L	D	N	N	NM	SP	NS	Pale pink to buff colored poorly graded sand with minor silt				
5													
10													
15													
20	NM	L	D	N	N	NM	SW	NS	Pale tan orange well graded fine sand with minor medium and coarse sand				
25													
30													
35	NM	L	D	N	N	NM	SP	NS	Pale orange brown poorly graded fine sand with minor gravel				
40													
45													
50													
55													
60	NM	L	D	N	N	NM	SP	NS	Grey poorly graded fine sand with minor gravel				
65													
70													
75													
80													
85	NM	L	D	N	N	NM	SP	NS	Darker grey poorly graded fine sand with minor silt and minor medium sand				
90													
95													
100	NM	M	D	N	N	NM	SC	NS	Dark grey fine sand with moderate silt and clay - TD 106'7"				
106'7"													

 HRL COMPLIANCE SOLUTIONS							BORING LOG/MONITORING WELL COMPLETION DIAGRAM						
							Boring/Well Number: MW-1			Location: Ross Draw Unit #57			
							Date: 12/9/2020			Client: WPX Energy			
Drilling Method: Air Rotary			Sampling Method: None				Logged By: J. Linn, PG			Drilled By: Talon LPE			
Gravel Pack Type: 10/20 Sand			Gravel Pack Depth Interval: 3 Bags				Seal Type: None		Seal Depth Interval: None		Latitude: 32.01032		
Casing Type: PVC		Diameter: 2-inch		Depth Interval: 0-105 feet bgs			Boring Total Depth (ft. BGS): 110			Longitude: -103.87246			
Screen Type: PVC		Slot: 0.010-inch		Diameter: 2-inch		Depth Interval: 105-110 ft		Well Total Depth (ft. BGS): 110			Depth to Water (ft. BTOC): > 110		
DTW Date: 12/16/2020													
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks			Well Completion	
0	NM	L/M	D	N	N	NM	SM	NS	Tan/pale orange/pale brown poorly graded fine sand				
5													
10													
15													
20													
25													
30													
35	NM	M	D	N	N	NM	SW	NS	Hard, dry pale pink orange well graded sand with gravel				
40													
45													
50	NM	M	D	N	N	NM	SM	NS	Pale orange red tan silty fine sand				
55													
60	NM	L	D	N	N	NM	SW	NS	Dark brown greyish well graded sand				
65													
70													
75													
80													
85	NM	L/M	D to SL M	N	N	NM	SW	NS	Grey well graded sand				
90													
95													
100													
105	NM	L/M	D	N	N	NM	SM	NS	Tan/pale orange/pale brown poorly graded fine sand - TD 110' bgs				

							BORING LOG/MONITORING WELL COMPLETION DIAGRAM						
							Boring/Well Number:			Location:			
							MW-1			North Brushy Federal 35 # 010H			
							Date:			Client:			
							12/8/2020			WPX Energy			
Drilling Method:			Sampling Method:				Logged By:			Drilled By:			
Air Rotary			None				J. Linn, PG			Talon LPE			
Gravel Pack Type:			Gravel Pack Depth Interval:				Seal Type:		Seal Depth Interval:		Latitude:		
10/20 Sand			3 Bags				None		None		32.079909		
Casing Type:		Diameter:		Depth Interval:			Boring Total Depth (ft. BGS):			Longitude:			
PVC		2-inch		0-100 feet bgs			105			-103.951386			
Screen Type:		Slot:		Diameter:		Depth Interval:		Well Total Depth (ft. BGS):			Depth to Water (ft. BTWC):		
PVC		0.010-inch		2-inch		100 - 105 ft		105			> 105		
DTW Date:		12/16/2020											
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks			Well Completion	
0	NM	L	D	N	N	NM	CE	NS	Buff to pale pink caliche				
5													
10													
15													
20	NM	L	D	N	N	NM	SM	NS	Tan to pale red silty sand				
25													
30													
35													
40													
45													
50	NM	M	M	N	N	NM	ML	NS	Tan to pale red sandy silt with minor medium sand				
55													
60	NM	H	M	N	N	NM	CL	NS	Tan clay with minor gravel				
65													
70													
75	NM	L	D	N	N	NM	SP	NS	Pale red poorly graded fine sand with minor silt				
80													
85													
90	NM	H	D/SLM	N	N	NM	CL	NS	Grey sandy lean clay with minor medium sand and minor angular gravel				
95													
100													
90	NM	M/H	M	N	N	NM	CL	NS	Brown with orange sandy lean clay with minor medium sand and angular gravel - TD Boring: 105'				
95													
100													

Attachment 02



Picture 1-East face, west edge of Site

21-Mar-21



Picture 2-South east face

21-Mar-21



Picture 3- South face

12-May-21



Picture 4- West face, east edge of Site

12-May-21



Attachment 03



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-437-1
Client Project/Site: RDU 45

For:
WPX Energy Production LLC
5315 Buena Vista Dr
Carlsbad, New Mexico 88220

Attn: Lynda Laumbach

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

Authorized for release by:
4/6/2021 5:17:37 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: WPX Energy Production LLC
Project/Site: RDU 45

Laboratory Job ID: 890-437-1

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Definitions/Glossary

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Eurofins Xenco, Carlsbad

Case Narrative

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Job ID: 890-437-1**Laboratory: Eurofins Xenco, Carlsbad****Narrative****Job Narrative
890-437-1****Receipt**

The samples were received on 3/26/2021 8:03 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: DS01 (890-437-1), DS01 A (890-437-2), DS02 (890-437-3), DS02 A (890-437-4), DS02 B (890-437-5), DS03 (890-437-6), DS03 A (890-437-7), DS04 (890-437-8), DS04 A (890-437-9), DS05 (890-437-10), DS05 A (890-437-11), DS06 (890-437-12), DS06 A (890-437-13), DS06 B (890-437-14), DS07 (890-437-15), DS07 A (890-437-16), DS02 C (890-437-17), DS08 (890-437-18), DS08 A (890-437-19), DS09 (890-437-20), DS09 A (890-437-21), DS09 B (890-437-22), DS10 (890-437-23), DS10 A (890-437-24), DS11 (890-437-25), DS11 A (890-437-26), DS11 B (890-437-27), DS12 (890-437-28), DS12 A (890-437-29), DS13 (890-437-30) and DS13 A (890-437-31).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: DS02 (890-437-3), DS02 A (890-437-4), DS03 (890-437-6) and DS03 A (890-437-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: DS09 (890-437-20), DS10 A (890-437-24) and DS12 (890-437-28). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS01

Lab Sample ID: 890-437-1

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 07:50	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 07:50	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 07:50	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/31/21 14:38	04/01/21 07:50	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 07:50	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/31/21 14:38	04/01/21 07:50	1
Total BTEX	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 07:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	03/31/21 14:38	04/01/21 07:50	1
1,4-Difluorobenzene (Surr)	100		70 - 130	03/31/21 14:38	04/01/21 07:50	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 11:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 11:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 11:31	1
Total TPH	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 11:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	03/30/21 10:16	03/31/21 11:31	1
o-Terphenyl	75		70 - 130	03/30/21 10:16	03/31/21 11:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.3	F1	5.04		mg/Kg			04/03/21 21:36	1

Client Sample ID: DS01 A

Lab Sample ID: 890-437-2

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 08:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 08:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 08:10	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/31/21 14:38	04/01/21 08:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 08:10	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/31/21 14:38	04/01/21 08:10	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 08:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	03/31/21 14:38	04/01/21 08:10	1
1,4-Difluorobenzene (Surr)	100		70 - 130	03/31/21 14:38	04/01/21 08:10	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS01 A

Lab Sample ID: 890-437-2

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 12:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 12:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 12:34	1
Total TPH	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 12:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/30/21 10:16	03/31/21 12:34	1
o-Terphenyl	85		70 - 130	03/30/21 10:16	03/31/21 12:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.4		4.99		mg/Kg			04/03/21 21:53	1

Client Sample ID: DS02

Lab Sample ID: 890-437-3

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00248		0.00199		mg/Kg		03/31/21 14:38	04/01/21 08:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 08:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 08:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/31/21 14:38	04/01/21 08:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 08:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/31/21 14:38	04/01/21 08:31	1
Total BTEX	0.00248		0.00199		mg/Kg		03/31/21 14:38	04/01/21 08:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	03/31/21 14:38	04/01/21 08:31	1
1,4-Difluorobenzene (Surr)	97		70 - 130	03/31/21 14:38	04/01/21 08:31	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 12:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 12:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 12:55	1
Total TPH	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 12:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	03/30/21 10:16	03/31/21 12:55	1
o-Terphenyl	79		70 - 130	03/30/21 10:16	03/31/21 12:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1010		4.96		mg/Kg			04/03/21 21:58	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS02 A

Lab Sample ID: 890-437-4

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 08:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 08:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 08:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/31/21 14:38	04/01/21 08:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 08:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/31/21 14:38	04/01/21 08:51	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 08:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	175	S1+	70 - 130	03/31/21 14:38	04/01/21 08:51	1
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130	03/31/21 14:38	04/01/21 08:51	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/30/21 10:16	03/31/21 13:16	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/30/21 10:16	03/31/21 13:16	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/30/21 10:16	03/31/21 13:16	1
Total TPH	<50.1	U	50.1		mg/Kg		03/30/21 10:16	03/31/21 13:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	03/30/21 10:16	03/31/21 13:16	1
o-Terphenyl	82		70 - 130	03/30/21 10:16	03/31/21 13:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1430		4.96		mg/Kg			04/03/21 22:04	1

Client Sample ID: DS02 B

Lab Sample ID: 890-437-5

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/31/21 14:38	04/01/21 09:12	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/31/21 14:38	04/01/21 09:12	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/31/21 14:38	04/01/21 09:12	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/31/21 14:38	04/01/21 09:12	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/31/21 14:38	04/01/21 09:12	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/31/21 14:38	04/01/21 09:12	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		03/31/21 14:38	04/01/21 09:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	03/31/21 14:38	04/01/21 09:12	1
1,4-Difluorobenzene (Surr)	105		70 - 130	03/31/21 14:38	04/01/21 09:12	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS02 B

Lab Sample ID: 890-437-5

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 4

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 13:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 13:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 13:37	1
Total TPH	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 13:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	03/30/21 10:16	03/31/21 13:37	1
o-Terphenyl	80		70 - 130	03/30/21 10:16	03/31/21 13:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2090		25.3		mg/Kg			04/02/21 13:08	5

Client Sample ID: DS03

Lab Sample ID: 890-437-6

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00784		0.00200		mg/Kg		03/31/21 14:38	04/01/21 09:33	1
Toluene	0.0395		0.00200		mg/Kg		03/31/21 14:38	04/01/21 09:33	1
Ethylbenzene	0.0494		0.00200		mg/Kg		03/31/21 14:38	04/01/21 09:33	1
m-Xylene & p-Xylene	0.0298		0.00401		mg/Kg		03/31/21 14:38	04/01/21 09:33	1
o-Xylene	0.0293		0.00200		mg/Kg		03/31/21 14:38	04/01/21 09:33	1
Xylenes, Total	0.0591		0.00401		mg/Kg		03/31/21 14:38	04/01/21 09:33	1
Total BTEX	0.156		0.00200		mg/Kg		03/31/21 14:38	04/01/21 09:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	174	S1+	70 - 130	03/31/21 14:38	04/01/21 09:33	1
1,4-Difluorobenzene (Surr)	100		70 - 130	03/31/21 14:38	04/01/21 09:33	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 13:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 13:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 13:58	1
Total TPH	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 13:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	03/30/21 10:16	03/31/21 13:58	1
o-Terphenyl	77		70 - 130	03/30/21 10:16	03/31/21 13:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.6		4.97		mg/Kg			04/02/21 13:23	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS03 A

Lab Sample ID: 890-437-7

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/31/21 14:38	04/01/21 09:53	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/31/21 14:38	04/01/21 09:53	1
Ethylbenzene	0.00399		0.00202		mg/Kg		03/31/21 14:38	04/01/21 09:53	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/31/21 14:38	04/01/21 09:53	1
o-Xylene	0.00638		0.00202		mg/Kg		03/31/21 14:38	04/01/21 09:53	1
Xylenes, Total	0.00638		0.00404		mg/Kg		03/31/21 14:38	04/01/21 09:53	1
Total BTEX	0.0104		0.00202		mg/Kg		03/31/21 14:38	04/01/21 09:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	216	S1+	70 - 130	03/31/21 14:38	04/01/21 09:53	1
1,4-Difluorobenzene (Surr)	93		70 - 130	03/31/21 14:38	04/01/21 09:53	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	53.7		49.9		mg/Kg		03/30/21 10:16	03/31/21 14:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 14:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 14:19	1
Total TPH	53.7		49.9		mg/Kg		03/30/21 10:16	03/31/21 14:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	03/30/21 10:16	03/31/21 14:19	1
o-Terphenyl	79		70 - 130	03/30/21 10:16	03/31/21 14:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.7		5.03		mg/Kg			04/02/21 13:28	1

Client Sample ID: DS04

Lab Sample ID: 890-437-8

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 10:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 10:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 10:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/31/21 14:38	04/01/21 10:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 10:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/31/21 14:38	04/01/21 10:14	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 10:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/31/21 14:38	04/01/21 10:14	1
1,4-Difluorobenzene (Surr)	101		70 - 130	03/31/21 14:38	04/01/21 10:14	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS04

Lab Sample ID: 890-437-8

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 14:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 14:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 14:41	1
Total TPH	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 14:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	03/30/21 10:16	03/31/21 14:41	1
o-Terphenyl	83		70 - 130	03/30/21 10:16	03/31/21 14:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.1		4.96		mg/Kg			04/02/21 13:33	1

Client Sample ID: DS04 A

Lab Sample ID: 890-437-9

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00448		0.00199		mg/Kg		03/31/21 14:38	04/01/21 11:36	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 11:36	1
Ethylbenzene	0.0206		0.00199		mg/Kg		03/31/21 14:38	04/01/21 11:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/31/21 14:38	04/01/21 11:36	1
o-Xylene	0.00624		0.00199		mg/Kg		03/31/21 14:38	04/01/21 11:36	1
Xylenes, Total	0.00624		0.00398		mg/Kg		03/31/21 14:38	04/01/21 11:36	1
Total BTEX	0.0313		0.00199		mg/Kg		03/31/21 14:38	04/01/21 11:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	194	S1+	70 - 130	03/31/21 14:38	04/01/21 11:36	1
1,4-Difluorobenzene (Surr)	92		70 - 130	03/31/21 14:38	04/01/21 11:36	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.0132	U	0.0132		mg/Kg		03/30/21 10:16	03/31/21 15:02	1
Diesel Range Organics (Over C10-C28)	<0.0132	U	0.0132		mg/Kg		03/30/21 10:16	03/31/21 15:02	1
Oil Range Organics (Over C28-C36)	<0.0132	U	0.0132		mg/Kg		03/30/21 10:16	03/31/21 15:02	1
Total TPH	<0.0132	U	0.0132		mg/Kg		03/30/21 10:16	03/31/21 15:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	03/30/21 10:16	03/31/21 15:02	1
o-Terphenyl	85		70 - 130	03/30/21 10:16	03/31/21 15:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	244		5.00		mg/Kg			04/02/21 13:38	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS05

Lab Sample ID: 890-437-10

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/31/21 14:38	04/01/21 11:57	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/31/21 14:38	04/01/21 11:57	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/31/21 14:38	04/01/21 11:57	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/31/21 14:38	04/01/21 11:57	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/31/21 14:38	04/01/21 11:57	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/31/21 14:38	04/01/21 11:57	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		03/31/21 14:38	04/01/21 11:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/31/21 14:38	04/01/21 11:57	1
1,4-Difluorobenzene (Surr)	107		70 - 130	03/31/21 14:38	04/01/21 11:57	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	204		49.8		mg/Kg		03/30/21 10:16	03/31/21 15:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/30/21 10:16	03/31/21 15:23	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/30/21 10:16	03/31/21 15:23	1
Total TPH	204		49.8		mg/Kg		03/30/21 10:16	03/31/21 15:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	03/30/21 10:16	03/31/21 15:23	1
o-Terphenyl	93		70 - 130	03/30/21 10:16	03/31/21 15:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.4		4.99		mg/Kg			04/02/21 13:53	1

Client Sample ID: DS05 A

Lab Sample ID: 890-437-11

Date Collected: 03/25/21 12:20

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 12:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 12:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 12:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/31/21 14:38	04/01/21 12:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 12:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/31/21 14:38	04/01/21 12:18	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 12:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	03/31/21 14:38	04/01/21 12:18	1
1,4-Difluorobenzene (Surr)	98		70 - 130	03/31/21 14:38	04/01/21 12:18	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS05 A

Lab Sample ID: 890-437-11

Date Collected: 03/25/21 12:20

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 16:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 16:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 16:05	1
Total TPH	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	03/30/21 10:16	03/31/21 16:05	1
o-Terphenyl	89		70 - 130	03/30/21 10:16	03/31/21 16:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	113		4.95		mg/Kg			04/02/21 13:58	1

Client Sample ID: DS06

Lab Sample ID: 890-437-12

Date Collected: 03/25/21 12:25

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 12:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 12:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 12:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/31/21 14:38	04/01/21 12:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 12:38	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/31/21 14:38	04/01/21 12:38	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 12:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	03/31/21 14:38	04/01/21 12:38	1
1,4-Difluorobenzene (Surr)	91		70 - 130	03/31/21 14:38	04/01/21 12:38	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 16:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 16:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 16:26	1
Total TPH	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 16:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	03/30/21 10:16	03/31/21 16:26	1
o-Terphenyl	83		70 - 130	03/30/21 10:16	03/31/21 16:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.1		5.02		mg/Kg			04/02/21 14:03	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS06 A

Lab Sample ID: 890-437-13

Date Collected: 03/25/21 12:30

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00642		0.00200		mg/Kg		03/31/21 14:38	04/01/21 12:59	1
Toluene	0.0121		0.00200		mg/Kg		03/31/21 14:38	04/01/21 12:59	1
Ethylbenzene	0.00815		0.00200		mg/Kg		03/31/21 14:38	04/01/21 12:59	1
m-Xylene & p-Xylene	0.0107		0.00399		mg/Kg		03/31/21 14:38	04/01/21 12:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 12:59	1
Xylenes, Total	0.0107		0.00399		mg/Kg		03/31/21 14:38	04/01/21 12:59	1
Total BTEX	0.0374		0.00200		mg/Kg		03/31/21 14:38	04/01/21 12:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	03/31/21 14:38	04/01/21 12:59	1
1,4-Difluorobenzene (Surr)	124		70 - 130	03/31/21 14:38	04/01/21 12:59	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 16:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 16:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 16:48	1
Total TPH	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 16:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	03/30/21 10:16	03/31/21 16:48	1
o-Terphenyl	90		70 - 130	03/30/21 10:16	03/31/21 16:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	52.1		5.01		mg/Kg			04/02/21 14:08	1

Client Sample ID: DS06 B

Lab Sample ID: 890-437-14

Date Collected: 03/25/21 12:35

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 13:20	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 13:20	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 13:20	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/31/21 14:38	04/01/21 13:20	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 13:20	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/31/21 14:38	04/01/21 13:20	1
Total BTEX	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 13:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	03/31/21 14:38	04/01/21 13:20	1
1,4-Difluorobenzene (Surr)	106		70 - 130	03/31/21 14:38	04/01/21 13:20	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS06 B

Lab Sample ID: 890-437-14

Date Collected: 03/25/21 12:35

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 4

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/30/21 10:16	03/31/21 17:09	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/30/21 10:16	03/31/21 17:09	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/30/21 10:16	03/31/21 17:09	1
Total TPH	<50.1	U	50.1		mg/Kg		03/30/21 10:16	03/31/21 17:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	03/30/21 10:16	03/31/21 17:09	1
o-Terphenyl	88		70 - 130	03/30/21 10:16	03/31/21 17:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	91.1		5.01		mg/Kg			04/02/21 14:13	1

Client Sample ID: DS07

Lab Sample ID: 890-437-15

Date Collected: 03/25/21 12:40

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00235		0.00201		mg/Kg		03/31/21 14:38	04/01/21 13:40	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 13:40	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 13:40	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/31/21 14:38	04/01/21 13:40	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 13:40	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/31/21 14:38	04/01/21 13:40	1
Total BTEX	0.00235		0.00201		mg/Kg		03/31/21 14:38	04/01/21 13:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/31/21 14:38	04/01/21 13:40	1
1,4-Difluorobenzene (Surr)	97		70 - 130	03/31/21 14:38	04/01/21 13:40	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 17:30	1
Diesel Range Organics (Over C10-C28)	526		50.0		mg/Kg		03/30/21 10:16	03/31/21 17:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 17:30	1
Total TPH	526		50.0		mg/Kg		03/30/21 10:16	03/31/21 17:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	03/30/21 10:16	03/31/21 17:30	1
o-Terphenyl	87		70 - 130	03/30/21 10:16	03/31/21 17:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		4.97		mg/Kg			04/02/21 14:18	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS07 A

Lab Sample ID: 890-437-16

Date Collected: 03/25/21 12:45

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.382		0.00201		mg/Kg		03/31/21 14:38	04/01/21 14:01	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/31/21 14:38	04/01/21 14:01	1
Ethylbenzene	0.102		0.00201		mg/Kg		03/31/21 14:38	04/01/21 14:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/31/21 14:38	04/01/21 14:01	1
o-Xylene	0.0516		0.00201		mg/Kg		03/31/21 14:38	04/01/21 14:01	1
Xylenes, Total	0.0516		0.00402		mg/Kg		03/31/21 14:38	04/01/21 14:01	1
Total BTEX	0.536		0.00201		mg/Kg		03/31/21 14:38	04/01/21 14:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	871	S1+	70 - 130	03/31/21 14:38	04/01/21 14:01	1
1,4-Difluorobenzene (Surr)	323	S1+	70 - 130	03/31/21 14:38	04/01/21 14:01	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 17:51	1
Diesel Range Organics (Over C10-C28)	380		49.9		mg/Kg		03/30/21 10:16	03/31/21 17:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/30/21 10:16	03/31/21 17:51	1
Total TPH	380		49.9		mg/Kg		03/30/21 10:16	03/31/21 17:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	03/30/21 10:16	03/31/21 17:51	1
o-Terphenyl	88		70 - 130	03/30/21 10:16	03/31/21 17:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	149		4.96		mg/Kg			04/02/21 14:33	1

Client Sample ID: DS02 C

Lab Sample ID: 890-437-17

Date Collected: 03/25/21 12:50

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 6

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/31/21 14:38	04/01/21 14:22	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/31/21 14:38	04/01/21 14:22	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/31/21 14:38	04/01/21 14:22	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/31/21 14:38	04/01/21 14:22	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/31/21 14:38	04/01/21 14:22	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/31/21 14:38	04/01/21 14:22	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		03/31/21 14:38	04/01/21 14:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	03/31/21 14:38	04/01/21 14:22	1
1,4-Difluorobenzene (Surr)	94		70 - 130	03/31/21 14:38	04/01/21 14:22	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS02 C

Lab Sample ID: 890-437-17

Date Collected: 03/25/21 12:50

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 6

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 18:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 18:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 18:12	1
Total TPH	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 18:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	03/30/21 10:16	03/31/21 18:12	1
o-Terphenyl	88		70 - 130	03/30/21 10:16	03/31/21 18:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1490		24.8		mg/Kg			04/02/21 14:38	5

Client Sample ID: DS08

Lab Sample ID: 890-437-18

Date Collected: 03/25/21 12:55

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 14:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 14:42	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 14:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/31/21 14:38	04/01/21 14:42	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 14:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/31/21 14:38	04/01/21 14:42	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		03/31/21 14:38	04/01/21 14:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/31/21 14:38	04/01/21 14:42	1
1,4-Difluorobenzene (Surr)	103		70 - 130	03/31/21 14:38	04/01/21 14:42	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 18:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 18:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 18:33	1
Total TPH	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	03/30/21 10:16	03/31/21 18:33	1
o-Terphenyl	91		70 - 130	03/30/21 10:16	03/31/21 18:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.2	F1	4.96		mg/Kg			04/06/21 11:11	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS08 A

Lab Sample ID: 890-437-19

Date Collected: 03/25/21 13:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/02/21 09:30	04/02/21 18:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/02/21 09:30	04/02/21 18:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/02/21 09:30	04/02/21 18:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/02/21 09:30	04/02/21 18:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/02/21 09:30	04/02/21 18:10	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/02/21 09:30	04/02/21 18:10	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/02/21 09:30	04/02/21 18:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	04/02/21 09:30	04/02/21 18:10	1
1,4-Difluorobenzene (Surr)	102		70 - 130	04/02/21 09:30	04/02/21 18:10	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 18:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 18:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 18:54	1
Total TPH	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 18:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	03/30/21 10:16	03/31/21 18:54	1
o-Terphenyl	100		70 - 130	03/30/21 10:16	03/31/21 18:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98		mg/Kg			04/06/21 11:28	1

Client Sample ID: DS09

Lab Sample ID: 890-437-20

Date Collected: 03/25/21 13:05

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F2 F1	0.00200		mg/Kg		04/01/21 09:47	04/02/21 01:04	1
Toluene	<0.00200	U F2 F1	0.00200		mg/Kg		04/01/21 09:47	04/02/21 01:04	1
Ethylbenzene	<0.00200	U F2 F1	0.00200		mg/Kg		04/01/21 09:47	04/02/21 01:04	1
m-Xylene & p-Xylene	<0.00401	U F1	0.00401		mg/Kg		04/01/21 09:47	04/02/21 01:04	1
o-Xylene	<0.00200	U F2 F1	0.00200		mg/Kg		04/01/21 09:47	04/02/21 01:04	1
Xylenes, Total	<0.00401	U F1	0.00401		mg/Kg		04/01/21 09:47	04/02/21 01:04	1
Total BTEX	<0.00200	U F2 F1	0.00200		mg/Kg		04/01/21 09:47	04/02/21 01:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	04/01/21 09:47	04/02/21 01:04	1
1,4-Difluorobenzene (Surr)	101		70 - 130	04/01/21 09:47	04/02/21 01:04	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS09

Lab Sample ID: 890-437-20

Date Collected: 03/25/21 13:05

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/30/21 10:16	03/31/21 19:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/30/21 10:16	03/31/21 19:15	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/30/21 10:16	03/31/21 19:15	1
Total TPH	<49.8	U	49.8		mg/Kg		03/30/21 10:16	03/31/21 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	03/30/21 10:16	03/31/21 19:15	1
o-Terphenyl	87		70 - 130	03/30/21 10:16	03/31/21 19:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	126		5.00		mg/Kg			04/06/21 11:33	1

Client Sample ID: DS09 A

Lab Sample ID: 890-437-21

Date Collected: 03/25/21 13:10

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/01/21 09:47	04/02/21 01:25	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/01/21 09:47	04/02/21 01:25	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/01/21 09:47	04/02/21 01:25	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/01/21 09:47	04/02/21 01:25	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/01/21 09:47	04/02/21 01:25	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/01/21 09:47	04/02/21 01:25	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		04/01/21 09:47	04/02/21 01:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	04/01/21 09:47	04/02/21 01:25	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/01/21 09:47	04/02/21 01:25	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/30/21 21:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/30/21 21:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/30/21 21:50	1
Total TPH	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/30/21 21:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	03/30/21 10:33	03/30/21 21:50	1
o-Terphenyl	98		70 - 130	03/30/21 10:33	03/30/21 21:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.14		4.99		mg/Kg			04/06/21 11:39	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS09 B

Lab Sample ID: 890-437-22

Date Collected: 03/25/21 13:15

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/01/21 09:47	04/02/21 01:45	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/01/21 09:47	04/02/21 01:45	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/01/21 09:47	04/02/21 01:45	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		04/01/21 09:47	04/02/21 01:45	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/01/21 09:47	04/02/21 01:45	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		04/01/21 09:47	04/02/21 01:45	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		04/01/21 09:47	04/02/21 01:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	04/01/21 09:47	04/02/21 01:45	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/01/21 09:47	04/02/21 01:45	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/30/21 22:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/30/21 22:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/30/21 22:54	1
Total TPH	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/30/21 22:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	03/30/21 10:33	03/30/21 22:54	1
o-Terphenyl	87		70 - 130	03/30/21 10:33	03/30/21 22:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.06		4.95		mg/Kg			04/06/21 11:44	1

Client Sample ID: DS10

Lab Sample ID: 890-437-23

Date Collected: 03/25/21 13:20

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 02:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 02:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 02:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/01/21 09:47	04/02/21 02:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 02:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/01/21 09:47	04/02/21 02:05	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 02:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	04/01/21 09:47	04/02/21 02:05	1
1,4-Difluorobenzene (Surr)	103		70 - 130	04/01/21 09:47	04/02/21 02:05	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS10

Lab Sample ID: 890-437-23

Date Collected: 03/25/21 13:20

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/30/21 23:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/30/21 23:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/30/21 23:16	1
Total TPH	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/30/21 23:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	03/30/21 10:33	03/30/21 23:16	1
o-Terphenyl	87		70 - 130	03/30/21 10:33	03/30/21 23:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	807		4.95		mg/Kg			04/06/21 12:01	1

Client Sample ID: DS10 A

Lab Sample ID: 890-437-24

Date Collected: 03/25/21 13:25

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/01/21 09:47	04/02/21 02:26	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/01/21 09:47	04/02/21 02:26	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/01/21 09:47	04/02/21 02:26	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		04/01/21 09:47	04/02/21 02:26	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/01/21 09:47	04/02/21 02:26	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		04/01/21 09:47	04/02/21 02:26	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		04/01/21 09:47	04/02/21 02:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	04/01/21 09:47	04/02/21 02:26	1
1,4-Difluorobenzene (Surr)	92		70 - 130	04/01/21 09:47	04/02/21 02:26	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/30/21 10:33	03/30/21 23:37	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		03/30/21 10:33	03/30/21 23:37	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/30/21 10:33	03/30/21 23:37	1
Total TPH	<50.1	U	50.1		mg/Kg		03/30/21 10:33	03/30/21 23:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	03/30/21 10:33	03/30/21 23:37	1
o-Terphenyl	95		70 - 130	03/30/21 10:33	03/30/21 23:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.6		5.04		mg/Kg			04/06/21 12:07	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS11

Lab Sample ID: 890-437-25

Date Collected: 03/25/21 13:30

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 02:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 02:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 02:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/01/21 09:47	04/02/21 02:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 02:46	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/01/21 09:47	04/02/21 02:46	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 02:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	04/01/21 09:47	04/02/21 02:46	1
1,4-Difluorobenzene (Surr)	102		70 - 130	04/01/21 09:47	04/02/21 02:46	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/30/21 23:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/30/21 23:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/30/21 23:58	1
Total TPH	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/30/21 23:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	03/30/21 10:33	03/30/21 23:58	1
o-Terphenyl	95		70 - 130	03/30/21 10:33	03/30/21 23:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.5		5.02		mg/Kg			04/06/21 12:12	1

Client Sample ID: DS11 A

Lab Sample ID: 890-437-26

Date Collected: 03/25/21 13:35

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 03:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 03:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 03:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/01/21 09:47	04/02/21 03:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 03:07	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/01/21 09:47	04/02/21 03:07	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 03:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	04/01/21 09:47	04/02/21 03:07	1
1,4-Difluorobenzene (Surr)	95		70 - 130	04/01/21 09:47	04/02/21 03:07	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS11 A

Lab Sample ID: 890-437-26

Date Collected: 03/25/21 13:35

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/31/21 00:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/31/21 00:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/31/21 00:19	1
Total TPH	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/31/21 00:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	03/30/21 10:33	03/31/21 00:19	1
o-Terphenyl	96		70 - 130	03/30/21 10:33	03/31/21 00:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98		mg/Kg			04/06/21 12:18	1

Client Sample ID: DS11 B

Lab Sample ID: 890-437-27

Date Collected: 03/25/21 13:40

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 03:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 03:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 03:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/01/21 09:47	04/02/21 03:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 03:27	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/01/21 09:47	04/02/21 03:27	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 03:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	04/01/21 09:47	04/02/21 03:27	1
1,4-Difluorobenzene (Surr)	103		70 - 130	04/01/21 09:47	04/02/21 03:27	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/31/21 00:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/31/21 00:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/31/21 00:40	1
Total TPH	<49.9	U	49.9		mg/Kg		03/30/21 10:33	03/31/21 00:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	03/30/21 10:33	03/31/21 00:40	1
o-Terphenyl	88		70 - 130	03/30/21 10:33	03/31/21 00:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/06/21 12:23	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS12

Lab Sample ID: 890-437-28

Date Collected: 03/25/21 13:45

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/01/21 09:47	04/02/21 03:47	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/01/21 09:47	04/02/21 03:47	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/01/21 09:47	04/02/21 03:47	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/01/21 09:47	04/02/21 03:47	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/01/21 09:47	04/02/21 03:47	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/01/21 09:47	04/02/21 03:47	1
Total BTEX	<0.00201	U	0.00201		mg/Kg		04/01/21 09:47	04/02/21 03:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	04/01/21 09:47	04/02/21 03:47	1
1,4-Difluorobenzene (Surr)	93		70 - 130	04/01/21 09:47	04/02/21 03:47	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/31/21 01:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/31/21 01:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/31/21 01:02	1
Total TPH	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/31/21 01:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	03/30/21 10:33	03/31/21 01:02	1
o-Terphenyl	87		70 - 130	03/30/21 10:33	03/31/21 01:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	117	F1	5.00		mg/Kg			04/06/21 12:29	1

Client Sample ID: DS12 A

Lab Sample ID: 890-437-29

Date Collected: 03/25/21 13:50

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 05:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 05:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 05:30	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/01/21 09:47	04/02/21 05:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 05:30	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/01/21 09:47	04/02/21 05:30	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 05:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	04/01/21 09:47	04/02/21 05:30	1
1,4-Difluorobenzene (Surr)	107		70 - 130	04/01/21 09:47	04/02/21 05:30	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS12 A

Lab Sample ID: 890-437-29

Date Collected: 03/25/21 13:50

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<0.0132	U	0.0132		mg/Kg		03/30/21 10:33	03/31/21 01:23	1
Diesel Range Organics (Over C10-C28)	<0.0132	U	0.0132		mg/Kg		03/30/21 10:33	03/31/21 01:23	1
Oil Range Organics (Over C28-C36)	<0.0132	U	0.0132		mg/Kg		03/30/21 10:33	03/31/21 01:23	1
Total TPH	<0.0132	U	0.0132		mg/Kg		03/30/21 10:33	03/31/21 01:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	03/30/21 10:33	03/31/21 01:23	1
o-Terphenyl	94		70 - 130	03/30/21 10:33	03/31/21 01:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.0		4.95		mg/Kg			04/06/21 12:45	1

Client Sample ID: DS13

Lab Sample ID: 890-437-30

Date Collected: 03/25/21 13:55

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 05:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 05:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 05:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/01/21 09:47	04/02/21 05:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 05:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/01/21 09:47	04/02/21 05:50	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 05:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	04/01/21 09:47	04/02/21 05:50	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/01/21 09:47	04/02/21 05:50	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/30/21 10:33	03/31/21 01:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/30/21 10:33	03/31/21 01:44	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/30/21 10:33	03/31/21 01:44	1
Total TPH	<49.8	U	49.8		mg/Kg		03/30/21 10:33	03/31/21 01:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	03/30/21 10:33	03/31/21 01:44	1
o-Terphenyl	87		70 - 130	03/30/21 10:33	03/31/21 01:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			04/06/21 12:51	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS13 A

Lab Sample ID: 890-437-31

Date Collected: 03/25/21 14:00

Matrix: Solid

Date Received: 03/26/21 08:03

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 06:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 06:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 06:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/01/21 09:47	04/02/21 06:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 06:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/01/21 09:47	04/02/21 06:10	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		04/01/21 09:47	04/02/21 06:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	04/01/21 09:47	04/02/21 06:10	1
1,4-Difluorobenzene (Surr)	100		70 - 130	04/01/21 09:47	04/02/21 06:10	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/31/21 02:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/31/21 02:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/31/21 02:26	1
Total TPH	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/31/21 02:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	03/30/21 10:33	03/31/21 02:26	1
o-Terphenyl	88		70 - 130	03/30/21 10:33	03/31/21 02:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/06/21 13:08	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-437-1	DS01	110	100
890-437-2	DS01 A	108	100
890-437-3	DS02	120	97
890-437-4	DS02 A	175 S1+	68 S1-
890-437-5	DS02 B	103	105
890-437-6	DS03	174 S1+	100
890-437-7	DS03 A	216 S1+	93
890-437-8	DS04	100	101
890-437-9	DS04 A	194 S1+	92
890-437-10	DS05	99	107
890-437-11	DS05 A	120	98
890-437-12	DS06	114	91
890-437-13	DS06 A	72	124
890-437-14	DS06 B	104	106
890-437-15	DS07	96	97
890-437-16	DS07 A	871 S1+	323 S1+
890-437-17	DS02 C	110	94
890-437-18	DS08	98	103
890-437-19	DS08 A	117	102
890-437-20	DS09	111	101
890-437-20 MS	DS09	113	96
890-437-20 MSD	DS09	118	110
890-437-21	DS09 A	111	98
890-437-22	DS09 B	117	98
890-437-23	DS10	117	103
890-437-24	DS10 A	108	92
890-437-25	DS11	118	102
890-437-26	DS11 A	109	95
890-437-27	DS11 B	115	103
890-437-28	DS12	99	93
890-437-29	DS12 A	120	107
890-437-30	DS13	117	98
890-437-31	DS13 A	117	100
LCS 880-1116/1-A	Lab Control Sample	103	102
LCS 880-1147/1-A	Lab Control Sample	103	105
LCS 880-1227/1-A	Lab Control Sample	98	99
LCSD 880-1116/2-A	Lab Control Sample Dup	97	100
LCSD 880-1147/2-A	Lab Control Sample Dup	101	103
LCSD 880-1227/2-A	Lab Control Sample Dup	104	98
MB 880-1115/5-A	Method Blank	113	91
MB 880-1116/5-A	Method Blank	119	83
MB 880-1146/5-A	Method Blank	105	101
MB 880-1147/5-A	Method Blank	102	98
MB 880-1227/5-A	Method Blank	96	98

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WPX Energy Production LLC

Job ID: 890-437-1

Project/Site: RDU 45

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-437-1	DS01	89	75
890-437-1 MS	DS01	97	75
890-437-1 MSD	DS01	101	78
890-437-2	DS01 A	100	85
890-437-3	DS02	98	79
890-437-4	DS02 A	92	82
890-437-5	DS02 B	95	80
890-437-6	DS03	92	77
890-437-7	DS03 A	93	79
890-437-8	DS04	97	83
890-437-9	DS04 A	98	85
890-437-10	DS05	101	93
890-437-11	DS05 A	98	89
890-437-12	DS06	97	83
890-437-13	DS06 A	102	90
890-437-14	DS06 B	95	88
890-437-15	DS07	96	87
890-437-16	DS07 A	101	88
890-437-17	DS02 C	98	88
890-437-18	DS08	103	91
890-437-19	DS08 A	109	100
890-437-20	DS09	98	87
890-437-21	DS09 A	104	98
890-437-21 MS	DS09 A	111	90
890-437-21 MSD	DS09 A	109	86
890-437-22	DS09 B	96	87
890-437-23	DS10	95	87
890-437-24	DS10 A	102	95
890-437-25	DS11	102	95
890-437-26	DS11 A	103	96
890-437-27	DS11 B	96	88
890-437-28	DS12	97	87
890-437-29	DS12 A	103	94
890-437-30	DS13	94	87
890-437-31	DS13 A	101	88
LCS 880-1056/2-A	Lab Control Sample	96	80
LCS 880-1057/2-A	Lab Control Sample	99	83
LCSD 880-1056/3-A	Lab Control Sample Dup	95	80
LCSD 880-1057/3-A	Lab Control Sample Dup	96	82
MB 880-1056/1-A	Method Blank	91	87
MB 880-1057/1-A	Method Blank	104	100

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1115/5-A

Matrix: Solid

Analysis Batch: 1119

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1115

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:30	03/31/21 19:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:30	03/31/21 19:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:30	03/31/21 19:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/31/21 14:30	03/31/21 19:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:30	03/31/21 19:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/31/21 14:30	03/31/21 19:47	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/31/21 14:30	03/31/21 19:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	03/31/21 14:30	03/31/21 19:47	1
1,4-Difluorobenzene (Surr)	91		70 - 130	03/31/21 14:30	03/31/21 19:47	1

Lab Sample ID: MB 880-1116/5-A

Matrix: Solid

Analysis Batch: 1119

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1116

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 06:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 06:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 06:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/31/21 14:38	04/01/21 06:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 06:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/31/21 14:38	04/01/21 06:47	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/31/21 14:38	04/01/21 06:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	03/31/21 14:38	04/01/21 06:47	1
1,4-Difluorobenzene (Surr)	83		70 - 130	03/31/21 14:38	04/01/21 06:47	1

Lab Sample ID: LCS 880-1116/1-A

Matrix: Solid

Analysis Batch: 1119

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1116

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1015		mg/Kg		101	70 - 130
Toluene	0.100	0.1127		mg/Kg		113	70 - 130
Ethylbenzene	0.100	0.1124		mg/Kg		112	70 - 130
m-Xylene & p-Xylene	0.200	0.2195		mg/Kg		110	70 - 130
o-Xylene	0.100	0.1118		mg/Kg		112	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-1116/2-A

Matrix: Solid

Analysis Batch: 1119

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1116

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09431		mg/Kg		94	70 - 130	7	35
Toluene	0.100	0.1037		mg/Kg		104	70 - 130	8	35
Ethylbenzene	0.100	0.1014		mg/Kg		101	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.2019		mg/Kg		101	70 - 130	8	35
o-Xylene	0.100	0.1003		mg/Kg		100	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: MB 880-1146/5-A

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1146

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 13:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 13:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 13:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/01/21 09:34	04/01/21 13:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 13:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/01/21 09:34	04/01/21 13:09	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/01/21 09:34	04/01/21 13:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	04/01/21 09:34	04/01/21 13:09	1
1,4-Difluorobenzene (Surr)	101		70 - 130	04/01/21 09:34	04/01/21 13:09	1

Lab Sample ID: MB 880-1147/5-A

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 00:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 00:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 00:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/01/21 09:47	04/02/21 00:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 00:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/01/21 09:47	04/02/21 00:43	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/01/21 09:47	04/02/21 00:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	04/01/21 09:47	04/02/21 00:43	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/01/21 09:47	04/02/21 00:43	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 880-1147/1-A

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09813		mg/Kg		98	70 - 130
Toluene	0.100	0.09265		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.09857		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1918		mg/Kg		96	70 - 130
o-Xylene	0.100	0.09549		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-1147/2-A

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1147

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09558		mg/Kg		96	70 - 130	3	35
Toluene	0.100	0.09045		mg/Kg		90	70 - 130	2	35
Ethylbenzene	0.100	0.09608		mg/Kg		96	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1869		mg/Kg		93	70 - 130	3	35
o-Xylene	0.100	0.09295		mg/Kg		93	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 890-437-20 MS

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: DS09

Prep Type: Total/NA

Prep Batch: 1147

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F2 F1	0.0994	0.04826	F1	mg/Kg		49	70 - 130
Toluene	<0.00200	U F2 F1	0.0994	0.05571	F1	mg/Kg		56	70 - 130
Ethylbenzene	<0.00200	U F2 F1	0.0994	0.05307	F1	mg/Kg		53	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.199	0.1021	F1	mg/Kg		51	70 - 130
o-Xylene	<0.00200	U F2 F1	0.0994	0.05807	F1	mg/Kg		58	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-437-20 MSD

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: DS09

Prep Type: Total/NA

Prep Batch: 1147

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F2 F1	0.100	0.1023	F2	mg/Kg		102	70 - 130	72	35
Toluene	<0.00200	U F2 F1	0.100	0.09030	F2	mg/Kg		90	70 - 130	47	35
Ethylbenzene	<0.00200	U F2 F1	0.100	0.08433	F2	mg/Kg		84	70 - 130	45	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-437-20 MSD

Matrix: Solid

Analysis Batch: 1148

Client Sample ID: DS09

Prep Type: Total/NA

Prep Batch: 1147

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.1319	F1	mg/Kg		66	70 - 130	25	35
o-Xylene	<0.00200	U F2 F1	0.100	0.09562	F2	mg/Kg		95	70 - 130	49	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: MB 880-1227/5-A

Matrix: Solid

Analysis Batch: 1229

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1227

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/02/21 09:30	04/02/21 15:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/02/21 09:30	04/02/21 15:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/02/21 09:30	04/02/21 15:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/02/21 09:30	04/02/21 15:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/02/21 09:30	04/02/21 15:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/02/21 09:30	04/02/21 15:42	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/02/21 09:30	04/02/21 15:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	04/02/21 09:30	04/02/21 15:42	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/02/21 09:30	04/02/21 15:42	1

Lab Sample ID: LCS 880-1227/1-A

Matrix: Solid

Analysis Batch: 1229

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1227

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08351		mg/Kg		84	70 - 130
Toluene	0.100	0.08116		mg/Kg		81	70 - 130
Ethylbenzene	0.100	0.08479		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.200	0.1652		mg/Kg		83	70 - 130
o-Xylene	0.100	0.08474		mg/Kg		85	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-1227/2-A

Matrix: Solid

Analysis Batch: 1229

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1227

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08234		mg/Kg		82	70 - 130	1	35
Toluene	0.100	0.08152		mg/Kg		82	70 - 130	0	35
Ethylbenzene	0.100	0.08672		mg/Kg		87	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1721		mg/Kg		86	70 - 130	4	35

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-1227/2-A

Matrix: Solid

Analysis Batch: 1229

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1227

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
o-Xylene	0.100	0.08788		mg/Kg		88	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-1056/1-A

Matrix: Solid

Analysis Batch: 1086

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1056

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 10:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 10:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 10:27	1
Total TPH	<50.0	U	50.0		mg/Kg		03/30/21 10:16	03/31/21 10:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	03/30/21 10:16	03/31/21 10:27	1
o-Terphenyl	87		70 - 130	03/30/21 10:16	03/31/21 10:27	1

Lab Sample ID: LCS 880-1056/2-A

Matrix: Solid

Analysis Batch: 1086

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	956.1		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	1000	778.3		mg/Kg		78	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	80		70 - 130

Lab Sample ID: LCSD 880-1056/3-A

Matrix: Solid

Analysis Batch: 1086

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1056

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	950.2		mg/Kg		95	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	790.8		mg/Kg		79	70 - 130	2	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-1056/3-A

Matrix: Solid

Analysis Batch: 1086

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1056

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	80		70 - 130

Lab Sample ID: 890-437-1 MS

Matrix: Solid

Analysis Batch: 1086

Client Sample ID: DS01

Prep Type: Total/NA

Prep Batch: 1056

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1075		mg/Kg		103	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	918.7		mg/Kg		92	70 - 130	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	97		70 - 130							
o-Terphenyl	75		70 - 130							

Lab Sample ID: 890-437-1 MSD

Matrix: Solid

Analysis Batch: 1086

Client Sample ID: DS01

Prep Type: Total/NA

Prep Batch: 1056

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1133		mg/Kg		109	70 - 130	5	20	
Diesel Range Organics (Over C10-C28)	<49.9	U	998	962.1		mg/Kg		96	70 - 130	5	20	
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	101		70 - 130									
o-Terphenyl	78		70 - 130									

Lab Sample ID: MB 880-1057/1-A

Matrix: Solid

Analysis Batch: 1050

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1057

	MB	MB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/30/21 20:46	1		
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/30/21 20:46	1		
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/30/21 20:46	1		
Total TPH	<50.0	U	50.0		mg/Kg		03/30/21 10:33	03/30/21 20:46	1		
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac		
1-Chlorooctane	104		70 - 130				03/30/21 10:33	03/30/21 20:46	1		
o-Terphenyl	100		70 - 130				03/30/21 10:33	03/30/21 20:46	1		

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-1057/2-A

Matrix: Solid

Analysis Batch: 1050

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1057

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec.		
			Added	Result	Qualifier			Limits			
Gasoline Range Organics (GRO)-C6-C10			1000	1046		mg/Kg		105	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	830.1		mg/Kg		83	70 - 130		
Surrogate	LCS	LCS	Limits								
	%Recovery	Qualifier									
1-Chlorooctane	99		70 - 130								
o-Terphenyl	83		70 - 130								

Lab Sample ID: LCSD 880-1057/3-A

Matrix: Solid

Analysis Batch: 1050

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1057

			Spike	LCSD	LCSD				%Rec.	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	974.1		mg/Kg		97	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	820.2		mg/Kg		82	70 - 130	1	20

Lab Sample ID: 890-437-21 MS

Matrix: Solid

Analysis Batch: 1050

Client Sample ID: DS09 A

Prep Type: Total/NA

Prep Batch: 1057

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1182		mg/Kg		116	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1033		mg/Kg		103	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	111		70 - 130								
o-Terphenyl	90		70 - 130								

Lab Sample ID: 890-437-21 MSD

Matrix: Solid

Analysis Batch: 1050

Client Sample ID: DS09 A

Prep Type: Total/NA

Prep Batch: 1057

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1150		mg/Kg		113	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1009		mg/Kg		101	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	109		70 - 130								

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-437-21 MSD

Matrix: Solid

Analysis Batch: 1050

Client Sample ID: DS09 A

Prep Type: Total/NA

Prep Batch: 1057

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	86		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1060/1-A

Matrix: Solid

Analysis Batch: 1240

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<5.00	U	5.00		mg/Kg			04/02/21 12:53	1	

Lab Sample ID: LCS 880-1060/2-A

Matrix: Solid

Analysis Batch: 1240

Client Sample ID: Lab Control Sample

Prep Type: Soluble

			Spike	LCS	LCS				%Rec.	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			250	237.0		mg/Kg		95	90 - 110	

Lab Sample ID: LCSD 880-1060/3-A

Matrix: Solid

Analysis Batch: 1240

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	236.5		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 890-437-5 MS

Matrix: Solid

Analysis Batch: 1240

Client Sample ID: DS02 B

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	2090		253	3384	4	mg/Kg		511	90 - 110	

Lab Sample ID: 890-437-5 MSD

Matrix: Solid

Analysis Batch: 1240

Client Sample ID: DS02 B

Prep Type: Soluble

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	2090		253	3384	4	mg/Kg		511	90 - 110	0	20

Lab Sample ID: 890-437-15 MS

Matrix: Solid

Analysis Batch: 1240

Client Sample ID: DS07

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	129		249	380.0		mg/Kg		101	90 - 110	

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-437-15 MSD

Matrix: Solid

Analysis Batch: 1240

Client Sample ID: DS07

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	129		249	380.0		mg/Kg		101	90 - 110	0	20

Lab Sample ID: MB 880-1243/1-A

Matrix: Solid

Analysis Batch: 1278

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/03/21 20:34	1

Lab Sample ID: LCS 880-1243/2-A

Matrix: Solid

Analysis Batch: 1278

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	270.7		mg/Kg		108	90 - 110

Lab Sample ID: LCSD 880-1243/3-A

Matrix: Solid

Analysis Batch: 1278

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	271.4		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 890-437-1 MS

Matrix: Solid

Analysis Batch: 1278

Client Sample ID: DS01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	62.3	F1	252	342.0	F1	mg/Kg		111	90 - 110

Lab Sample ID: 890-437-1 MSD

Matrix: Solid

Analysis Batch: 1278

Client Sample ID: DS01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	62.3	F1	252	342.2	F1	mg/Kg		111	90 - 110	0	20

Lab Sample ID: MB 880-1167/1-A

Matrix: Solid

Analysis Batch: 1357

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/06/21 10:55	1

Lab Sample ID: LCS 880-1167/2-A

Matrix: Solid

Analysis Batch: 1357

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	246.8		mg/Kg		99	90 - 110

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QC Sample Results

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-1167/3-A

Matrix: Solid

Analysis Batch: 1357

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	250.9		mg/Kg		100	90 - 110	2	20

Lab Sample ID: 890-437-18 MS

Matrix: Solid

Analysis Batch: 1357

Client Sample ID: DS08

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	28.2	F1	248	331.7	F1	mg/Kg		122	90 - 110		

Lab Sample ID: 890-437-18 MSD

Matrix: Solid

Analysis Batch: 1357

Client Sample ID: DS08

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	28.2	F1	248	316.0	F1	mg/Kg		116	90 - 110	5	20

Lab Sample ID: 890-437-28 MS

Matrix: Solid

Analysis Batch: 1357

Client Sample ID: DS12

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	117	F1	250	418.8	F1	mg/Kg		121	90 - 110		

Lab Sample ID: 890-437-28 MSD

Matrix: Solid

Analysis Batch: 1357

Client Sample ID: DS12

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	117	F1	250	404.3	F1	mg/Kg		115	90 - 110	4	20

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QC Association Summary

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

GC VOA

Prep Batch: 1115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1115/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 1116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-1	DS01	Total/NA	Solid	5035	
890-437-2	DS01 A	Total/NA	Solid	5035	
890-437-3	DS02	Total/NA	Solid	5035	
890-437-4	DS02 A	Total/NA	Solid	5035	
890-437-5	DS02 B	Total/NA	Solid	5035	
890-437-6	DS03	Total/NA	Solid	5035	
890-437-7	DS03 A	Total/NA	Solid	5035	
890-437-8	DS04	Total/NA	Solid	5035	
890-437-9	DS04 A	Total/NA	Solid	5035	
890-437-10	DS05	Total/NA	Solid	5035	
890-437-11	DS05 A	Total/NA	Solid	5035	
890-437-12	DS06	Total/NA	Solid	5035	
890-437-13	DS06 A	Total/NA	Solid	5035	
890-437-14	DS06 B	Total/NA	Solid	5035	
890-437-15	DS07	Total/NA	Solid	5035	
890-437-16	DS07 A	Total/NA	Solid	5035	
890-437-17	DS02 C	Total/NA	Solid	5035	
890-437-18	DS08	Total/NA	Solid	5035	
MB 880-1116/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1116/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1116/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 1119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-1	DS01	Total/NA	Solid	8021B	1116
890-437-2	DS01 A	Total/NA	Solid	8021B	1116
890-437-3	DS02	Total/NA	Solid	8021B	1116
890-437-4	DS02 A	Total/NA	Solid	8021B	1116
890-437-5	DS02 B	Total/NA	Solid	8021B	1116
890-437-6	DS03	Total/NA	Solid	8021B	1116
890-437-7	DS03 A	Total/NA	Solid	8021B	1116
890-437-8	DS04	Total/NA	Solid	8021B	1116
890-437-9	DS04 A	Total/NA	Solid	8021B	1116
890-437-10	DS05	Total/NA	Solid	8021B	1116
890-437-11	DS05 A	Total/NA	Solid	8021B	1116
890-437-12	DS06	Total/NA	Solid	8021B	1116
890-437-13	DS06 A	Total/NA	Solid	8021B	1116
890-437-14	DS06 B	Total/NA	Solid	8021B	1116
890-437-15	DS07	Total/NA	Solid	8021B	1116
890-437-16	DS07 A	Total/NA	Solid	8021B	1116
890-437-17	DS02 C	Total/NA	Solid	8021B	1116
890-437-18	DS08	Total/NA	Solid	8021B	1116
MB 880-1115/5-A	Method Blank	Total/NA	Solid	8021B	1115
MB 880-1116/5-A	Method Blank	Total/NA	Solid	8021B	1116
LCS 880-1116/1-A	Lab Control Sample	Total/NA	Solid	8021B	1116
LCSD 880-1116/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1116

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QC Association Summary

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

GC VOA

Prep Batch: 1146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1146/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 1147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-20	DS09	Total/NA	Solid	5035	
890-437-21	DS09 A	Total/NA	Solid	5035	
890-437-22	DS09 B	Total/NA	Solid	5035	
890-437-23	DS10	Total/NA	Solid	5035	
890-437-24	DS10 A	Total/NA	Solid	5035	
890-437-25	DS11	Total/NA	Solid	5035	
890-437-26	DS11 A	Total/NA	Solid	5035	
890-437-27	DS11 B	Total/NA	Solid	5035	
890-437-28	DS12	Total/NA	Solid	5035	
890-437-29	DS12 A	Total/NA	Solid	5035	
890-437-30	DS13	Total/NA	Solid	5035	
890-437-31	DS13 A	Total/NA	Solid	5035	
MB 880-1147/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1147/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1147/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-437-20 MS	DS09	Total/NA	Solid	5035	
890-437-20 MSD	DS09	Total/NA	Solid	5035	

Analysis Batch: 1148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-20	DS09	Total/NA	Solid	8021B	1147
890-437-21	DS09 A	Total/NA	Solid	8021B	1147
890-437-22	DS09 B	Total/NA	Solid	8021B	1147
890-437-23	DS10	Total/NA	Solid	8021B	1147
890-437-24	DS10 A	Total/NA	Solid	8021B	1147
890-437-25	DS11	Total/NA	Solid	8021B	1147
890-437-26	DS11 A	Total/NA	Solid	8021B	1147
890-437-27	DS11 B	Total/NA	Solid	8021B	1147
890-437-28	DS12	Total/NA	Solid	8021B	1147
890-437-29	DS12 A	Total/NA	Solid	8021B	1147
890-437-30	DS13	Total/NA	Solid	8021B	1147
890-437-31	DS13 A	Total/NA	Solid	8021B	1147
MB 880-1146/5-A	Method Blank	Total/NA	Solid	8021B	1146
MB 880-1147/5-A	Method Blank	Total/NA	Solid	8021B	1147
LCS 880-1147/1-A	Lab Control Sample	Total/NA	Solid	8021B	1147
LCSD 880-1147/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1147
890-437-20 MS	DS09	Total/NA	Solid	8021B	1147
890-437-20 MSD	DS09	Total/NA	Solid	8021B	1147

Prep Batch: 1227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-19	DS08 A	Total/NA	Solid	5035	
MB 880-1227/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1227/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1227/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

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QC Association Summary

Client: WPX Energy Production LLC

Job ID: 890-437-1

Project/Site: RDU 45

GC VOA

Analysis Batch: 1229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-19	DS08 A	Total/NA	Solid	8021B	1227
MB 880-1227/5-A	Method Blank	Total/NA	Solid	8021B	1227
LCS 880-1227/1-A	Lab Control Sample	Total/NA	Solid	8021B	1227
LCSD 880-1227/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1227

GC Semi VOA

Analysis Batch: 1050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-21	DS09 A	Total/NA	Solid	8015B NM	1057
890-437-22	DS09 B	Total/NA	Solid	8015B NM	1057
890-437-23	DS10	Total/NA	Solid	8015B NM	1057
890-437-24	DS10 A	Total/NA	Solid	8015B NM	1057
890-437-25	DS11	Total/NA	Solid	8015B NM	1057
890-437-26	DS11 A	Total/NA	Solid	8015B NM	1057
890-437-27	DS11 B	Total/NA	Solid	8015B NM	1057
890-437-28	DS12	Total/NA	Solid	8015B NM	1057
890-437-29	DS12 A	Total/NA	Solid	8015B NM	1057
890-437-30	DS13	Total/NA	Solid	8015B NM	1057
890-437-31	DS13 A	Total/NA	Solid	8015B NM	1057
MB 880-1057/1-A	Method Blank	Total/NA	Solid	8015B NM	1057
LCS 880-1057/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1057
LCSD 880-1057/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1057
890-437-21 MS	DS09 A	Total/NA	Solid	8015B NM	1057
890-437-21 MSD	DS09 A	Total/NA	Solid	8015B NM	1057

Prep Batch: 1056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-1	DS01	Total/NA	Solid	8015NM Prep	
890-437-2	DS01 A	Total/NA	Solid	8015NM Prep	
890-437-3	DS02	Total/NA	Solid	8015NM Prep	
890-437-4	DS02 A	Total/NA	Solid	8015NM Prep	
890-437-5	DS02 B	Total/NA	Solid	8015NM Prep	
890-437-6	DS03	Total/NA	Solid	8015NM Prep	
890-437-7	DS03 A	Total/NA	Solid	8015NM Prep	
890-437-8	DS04	Total/NA	Solid	8015NM Prep	
890-437-9	DS04 A	Total/NA	Solid	8015NM Prep	
890-437-10	DS05	Total/NA	Solid	8015NM Prep	
890-437-11	DS05 A	Total/NA	Solid	8015NM Prep	
890-437-12	DS06	Total/NA	Solid	8015NM Prep	
890-437-13	DS06 A	Total/NA	Solid	8015NM Prep	
890-437-14	DS06 B	Total/NA	Solid	8015NM Prep	
890-437-15	DS07	Total/NA	Solid	8015NM Prep	
890-437-16	DS07 A	Total/NA	Solid	8015NM Prep	
890-437-17	DS02 C	Total/NA	Solid	8015NM Prep	
890-437-18	DS08	Total/NA	Solid	8015NM Prep	
890-437-19	DS08 A	Total/NA	Solid	8015NM Prep	
890-437-20	DS09	Total/NA	Solid	8015NM Prep	
MB 880-1056/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1056/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1056/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

GC Semi VOA (Continued)

Prep Batch: 1056 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-1 MS	DS01	Total/NA	Solid	8015NM Prep	
890-437-1 MSD	DS01	Total/NA	Solid	8015NM Prep	

Prep Batch: 1057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-21	DS09 A	Total/NA	Solid	8015NM Prep	
890-437-22	DS09 B	Total/NA	Solid	8015NM Prep	
890-437-23	DS10	Total/NA	Solid	8015NM Prep	
890-437-24	DS10 A	Total/NA	Solid	8015NM Prep	
890-437-25	DS11	Total/NA	Solid	8015NM Prep	
890-437-26	DS11 A	Total/NA	Solid	8015NM Prep	
890-437-27	DS11 B	Total/NA	Solid	8015NM Prep	
890-437-28	DS12	Total/NA	Solid	8015NM Prep	
890-437-29	DS12 A	Total/NA	Solid	8015NM Prep	
890-437-30	DS13	Total/NA	Solid	8015NM Prep	
890-437-31	DS13 A	Total/NA	Solid	8015NM Prep	
MB 880-1057/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1057/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1057/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-437-21 MS	DS09 A	Total/NA	Solid	8015NM Prep	
890-437-21 MSD	DS09 A	Total/NA	Solid	8015NM Prep	

Analysis Batch: 1086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-1	DS01	Total/NA	Solid	8015B NM	1056
890-437-2	DS01 A	Total/NA	Solid	8015B NM	1056
890-437-3	DS02	Total/NA	Solid	8015B NM	1056
890-437-4	DS02 A	Total/NA	Solid	8015B NM	1056
890-437-5	DS02 B	Total/NA	Solid	8015B NM	1056
890-437-6	DS03	Total/NA	Solid	8015B NM	1056
890-437-7	DS03 A	Total/NA	Solid	8015B NM	1056
890-437-8	DS04	Total/NA	Solid	8015B NM	1056
890-437-9	DS04 A	Total/NA	Solid	8015B NM	1056
890-437-10	DS05	Total/NA	Solid	8015B NM	1056
890-437-11	DS05 A	Total/NA	Solid	8015B NM	1056
890-437-12	DS06	Total/NA	Solid	8015B NM	1056
890-437-13	DS06 A	Total/NA	Solid	8015B NM	1056
890-437-14	DS06 B	Total/NA	Solid	8015B NM	1056
890-437-15	DS07	Total/NA	Solid	8015B NM	1056
890-437-16	DS07 A	Total/NA	Solid	8015B NM	1056
890-437-17	DS02 C	Total/NA	Solid	8015B NM	1056
890-437-18	DS08	Total/NA	Solid	8015B NM	1056
890-437-19	DS08 A	Total/NA	Solid	8015B NM	1056
890-437-20	DS09	Total/NA	Solid	8015B NM	1056
MB 880-1056/1-A	Method Blank	Total/NA	Solid	8015B NM	1056
LCS 880-1056/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1056
LCSD 880-1056/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1056
890-437-1 MS	DS01	Total/NA	Solid	8015B NM	1056
890-437-1 MSD	DS01	Total/NA	Solid	8015B NM	1056

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QC Association Summary

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

HPLC/IC

Leach Batch: 1060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-5	DS02 B	Soluble	Solid	DI Leach	
890-437-6	DS03	Soluble	Solid	DI Leach	
890-437-7	DS03 A	Soluble	Solid	DI Leach	
890-437-8	DS04	Soluble	Solid	DI Leach	
890-437-9	DS04 A	Soluble	Solid	DI Leach	
890-437-10	DS05	Soluble	Solid	DI Leach	
890-437-11	DS05 A	Soluble	Solid	DI Leach	
890-437-12	DS06	Soluble	Solid	DI Leach	
890-437-13	DS06 A	Soluble	Solid	DI Leach	
890-437-14	DS06 B	Soluble	Solid	DI Leach	
890-437-15	DS07	Soluble	Solid	DI Leach	
890-437-16	DS07 A	Soluble	Solid	DI Leach	
890-437-17	DS02 C	Soluble	Solid	DI Leach	
MB 880-1060/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1060/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1060/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-437-5 MS	DS02 B	Soluble	Solid	DI Leach	
890-437-5 MSD	DS02 B	Soluble	Solid	DI Leach	
890-437-15 MS	DS07	Soluble	Solid	DI Leach	
890-437-15 MSD	DS07	Soluble	Solid	DI Leach	

Leach Batch: 1167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-18	DS08	Soluble	Solid	DI Leach	
890-437-19	DS08 A	Soluble	Solid	DI Leach	
890-437-20	DS09	Soluble	Solid	DI Leach	
890-437-21	DS09 A	Soluble	Solid	DI Leach	
890-437-22	DS09 B	Soluble	Solid	DI Leach	
890-437-23	DS10	Soluble	Solid	DI Leach	
890-437-24	DS10 A	Soluble	Solid	DI Leach	
890-437-25	DS11	Soluble	Solid	DI Leach	
890-437-26	DS11 A	Soluble	Solid	DI Leach	
890-437-27	DS11 B	Soluble	Solid	DI Leach	
890-437-28	DS12	Soluble	Solid	DI Leach	
890-437-29	DS12 A	Soluble	Solid	DI Leach	
890-437-30	DS13	Soluble	Solid	DI Leach	
890-437-31	DS13 A	Soluble	Solid	DI Leach	
MB 880-1167/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1167/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1167/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-437-18 MS	DS08	Soluble	Solid	DI Leach	
890-437-18 MSD	DS08	Soluble	Solid	DI Leach	
890-437-28 MS	DS12	Soluble	Solid	DI Leach	
890-437-28 MSD	DS12	Soluble	Solid	DI Leach	

Analysis Batch: 1240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-5	DS02 B	Soluble	Solid	300.0	1060
890-437-6	DS03	Soluble	Solid	300.0	1060
890-437-7	DS03 A	Soluble	Solid	300.0	1060
890-437-8	DS04	Soluble	Solid	300.0	1060

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QC Association Summary

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

HPLC/IC (Continued)

Analysis Batch: 1240 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-9	DS04 A	Soluble	Solid	300.0	1060
890-437-10	DS05	Soluble	Solid	300.0	1060
890-437-11	DS05 A	Soluble	Solid	300.0	1060
890-437-12	DS06	Soluble	Solid	300.0	1060
890-437-13	DS06 A	Soluble	Solid	300.0	1060
890-437-14	DS06 B	Soluble	Solid	300.0	1060
890-437-15	DS07	Soluble	Solid	300.0	1060
890-437-16	DS07 A	Soluble	Solid	300.0	1060
890-437-17	DS02 C	Soluble	Solid	300.0	1060
MB 880-1060/1-A	Method Blank	Soluble	Solid	300.0	1060
LCS 880-1060/2-A	Lab Control Sample	Soluble	Solid	300.0	1060
LCSD 880-1060/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1060
890-437-5 MS	DS02 B	Soluble	Solid	300.0	1060
890-437-5 MSD	DS02 B	Soluble	Solid	300.0	1060
890-437-15 MS	DS07	Soluble	Solid	300.0	1060
890-437-15 MSD	DS07	Soluble	Solid	300.0	1060

Leach Batch: 1243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-1	DS01	Soluble	Solid	DI Leach	
890-437-2	DS01 A	Soluble	Solid	DI Leach	
890-437-3	DS02	Soluble	Solid	DI Leach	
890-437-4	DS02 A	Soluble	Solid	DI Leach	
MB 880-1243/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1243/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1243/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-437-1 MS	DS01	Soluble	Solid	DI Leach	
890-437-1 MSD	DS01	Soluble	Solid	DI Leach	

Analysis Batch: 1278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-1	DS01	Soluble	Solid	300.0	1243
890-437-2	DS01 A	Soluble	Solid	300.0	1243
890-437-3	DS02	Soluble	Solid	300.0	1243
890-437-4	DS02 A	Soluble	Solid	300.0	1243
MB 880-1243/1-A	Method Blank	Soluble	Solid	300.0	1243
LCS 880-1243/2-A	Lab Control Sample	Soluble	Solid	300.0	1243
LCSD 880-1243/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1243
890-437-1 MS	DS01	Soluble	Solid	300.0	1243
890-437-1 MSD	DS01	Soluble	Solid	300.0	1243

Analysis Batch: 1357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-18	DS08	Soluble	Solid	300.0	1167
890-437-19	DS08 A	Soluble	Solid	300.0	1167
890-437-20	DS09	Soluble	Solid	300.0	1167
890-437-21	DS09 A	Soluble	Solid	300.0	1167
890-437-22	DS09 B	Soluble	Solid	300.0	1167
890-437-23	DS10	Soluble	Solid	300.0	1167
890-437-24	DS10 A	Soluble	Solid	300.0	1167
890-437-25	DS11	Soluble	Solid	300.0	1167

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

HPLC/IC (Continued)

Analysis Batch: 1357 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-437-26	DS11 A	Soluble	Solid	300.0	1167
890-437-27	DS11 B	Soluble	Solid	300.0	1167
890-437-28	DS12	Soluble	Solid	300.0	1167
890-437-29	DS12 A	Soluble	Solid	300.0	1167
890-437-30	DS13	Soluble	Solid	300.0	1167
890-437-31	DS13 A	Soluble	Solid	300.0	1167
MB 880-1167/1-A	Method Blank	Soluble	Solid	300.0	1167
LCS 880-1167/2-A	Lab Control Sample	Soluble	Solid	300.0	1167
LCSD 880-1167/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1167
890-437-18 MS	DS08	Soluble	Solid	300.0	1167
890-437-18 MSD	DS08	Soluble	Solid	300.0	1167
890-437-28 MS	DS12	Soluble	Solid	300.0	1167
890-437-28 MSD	DS12	Soluble	Solid	300.0	1167

Lab Chronicle

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS01

Lab Sample ID: 890-437-1

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 07:50	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 11:31	T1S	XM
Soluble	Leach	DI Leach			1243	04/02/21 11:50	SC	XM
Soluble	Analysis	300.0		1	1278	04/03/21 21:36	CH	XM

Client Sample ID: DS01 A

Lab Sample ID: 890-437-2

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 08:10	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 12:34	T1S	XM
Soluble	Leach	DI Leach			1243	04/02/21 11:50	SC	XM
Soluble	Analysis	300.0		1	1278	04/03/21 21:53	CH	XM

Client Sample ID: DS02

Lab Sample ID: 890-437-3

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 08:31	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 12:55	T1S	XM
Soluble	Leach	DI Leach			1243	04/02/21 11:50	SC	XM
Soluble	Analysis	300.0		1	1278	04/03/21 21:58	CH	XM

Client Sample ID: DS02 A

Lab Sample ID: 890-437-4

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 08:51	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 13:16	T1S	XM
Soluble	Leach	DI Leach			1243	04/02/21 11:50	SC	XM
Soluble	Analysis	300.0		1	1278	04/03/21 22:04	CH	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS02 B

Lab Sample ID: 890-437-5

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 09:12	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 13:37	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		5	1240	04/02/21 13:08	CH	XM

Client Sample ID: DS03

Lab Sample ID: 890-437-6

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 09:33	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 13:58	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		1	1240	04/02/21 13:23	CH	XM

Client Sample ID: DS03 A

Lab Sample ID: 890-437-7

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 09:53	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 14:19	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		1	1240	04/02/21 13:28	CH	XM

Client Sample ID: DS04

Lab Sample ID: 890-437-8

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 10:14	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 14:41	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		1	1240	04/02/21 13:33	CH	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS04 A

Lab Sample ID: 890-437-9

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 11:36	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 15:02	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		1	1240	04/02/21 13:38	CH	XM

Client Sample ID: DS05

Lab Sample ID: 890-437-10

Date Collected: 03/25/21 00:00

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 11:57	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 15:23	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		1	1240	04/02/21 13:53	CH	XM

Client Sample ID: DS05 A

Lab Sample ID: 890-437-11

Date Collected: 03/25/21 12:20

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 12:18	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 16:05	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		1	1240	04/02/21 13:58	CH	XM

Client Sample ID: DS06

Lab Sample ID: 890-437-12

Date Collected: 03/25/21 12:25

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 12:38	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 16:26	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		1	1240	04/02/21 14:03	CH	XM

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Lab Chronicle

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS06 A

Lab Sample ID: 890-437-13

Date Collected: 03/25/21 12:30

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 12:59	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 16:48	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		1	1240	04/02/21 14:08	CH	XM

Client Sample ID: DS06 B

Lab Sample ID: 890-437-14

Date Collected: 03/25/21 12:35

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 13:20	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 17:09	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		1	1240	04/02/21 14:13	CH	XM

Client Sample ID: DS07

Lab Sample ID: 890-437-15

Date Collected: 03/25/21 12:40

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 13:40	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 17:30	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		1	1240	04/02/21 14:18	CH	XM

Client Sample ID: DS07 A

Lab Sample ID: 890-437-16

Date Collected: 03/25/21 12:45

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 14:01	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 17:51	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		1	1240	04/02/21 14:33	CH	XM

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Lab Chronicle

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS02 C

Lab Sample ID: 890-437-17

Date Collected: 03/25/21 12:50

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 14:22	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 18:12	T1S	XM
Soluble	Leach	DI Leach			1060	03/30/21 10:55	SC	XM
Soluble	Analysis	300.0		5	1240	04/02/21 14:38	CH	XM

Client Sample ID: DS08

Lab Sample ID: 890-437-18

Date Collected: 03/25/21 12:55

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1116	03/31/21 14:38	KL	XM
Total/NA	Analysis	8021B		1	1119	04/01/21 14:42	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 18:33	T1S	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 11:11	CH	XM

Client Sample ID: DS08 A

Lab Sample ID: 890-437-19

Date Collected: 03/25/21 13:00

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1227	04/02/21 09:30	KL	XM
Total/NA	Analysis	8021B		1	1229	04/02/21 18:10	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 18:54	T1S	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 11:28	CH	XM

Client Sample ID: DS09

Lab Sample ID: 890-437-20

Date Collected: 03/25/21 13:05

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1147	04/01/21 09:47	KL	XM
Total/NA	Analysis	8021B		1	1148	04/02/21 01:04	KL	XM
Total/NA	Prep	8015NM Prep			1056	03/30/21 10:16	DM	XM
Total/NA	Analysis	8015B NM		1	1086	03/31/21 19:15	T1S	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 11:33	CH	XM

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Lab Chronicle

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS09 A

Lab Sample ID: 890-437-21

Date Collected: 03/25/21 13:10

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1147	04/01/21 09:47	KL	XM
Total/NA	Analysis	8021B		1	1148	04/02/21 01:25	KL	XM
Total/NA	Prep	8015NM Prep			1057	03/30/21 10:33	DM	XM
Total/NA	Analysis	8015B NM		1	1050	03/30/21 21:50	AJ	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 11:39	CH	XM

Client Sample ID: DS09 B

Lab Sample ID: 890-437-22

Date Collected: 03/25/21 13:15

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1147	04/01/21 09:47	KL	XM
Total/NA	Analysis	8021B		1	1148	04/02/21 01:45	KL	XM
Total/NA	Prep	8015NM Prep			1057	03/30/21 10:33	DM	XM
Total/NA	Analysis	8015B NM		1	1050	03/30/21 22:54	AJ	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 11:44	CH	XM

Client Sample ID: DS10

Lab Sample ID: 890-437-23

Date Collected: 03/25/21 13:20

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1147	04/01/21 09:47	KL	XM
Total/NA	Analysis	8021B		1	1148	04/02/21 02:05	KL	XM
Total/NA	Prep	8015NM Prep			1057	03/30/21 10:33	DM	XM
Total/NA	Analysis	8015B NM		1	1050	03/30/21 23:16	AJ	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 12:01	CH	XM

Client Sample ID: DS10 A

Lab Sample ID: 890-437-24

Date Collected: 03/25/21 13:25

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1147	04/01/21 09:47	KL	XM
Total/NA	Analysis	8021B		1	1148	04/02/21 02:26	KL	XM
Total/NA	Prep	8015NM Prep			1057	03/30/21 10:33	DM	XM
Total/NA	Analysis	8015B NM		1	1050	03/30/21 23:37	AJ	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 12:07	CH	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS11

Lab Sample ID: 890-437-25

Date Collected: 03/25/21 13:30

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1147	04/01/21 09:47	KL	XM
Total/NA	Analysis	8021B		1	1148	04/02/21 02:46	KL	XM
Total/NA	Prep	8015NM Prep			1057	03/30/21 10:33	DM	XM
Total/NA	Analysis	8015B NM		1	1050	03/30/21 23:58	AJ	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 12:12	CH	XM

Client Sample ID: DS11 A

Lab Sample ID: 890-437-26

Date Collected: 03/25/21 13:35

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1147	04/01/21 09:47	KL	XM
Total/NA	Analysis	8021B		1	1148	04/02/21 03:07	KL	XM
Total/NA	Prep	8015NM Prep			1057	03/30/21 10:33	DM	XM
Total/NA	Analysis	8015B NM		1	1050	03/31/21 00:19	AJ	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 12:18	CH	XM

Client Sample ID: DS11 B

Lab Sample ID: 890-437-27

Date Collected: 03/25/21 13:40

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1147	04/01/21 09:47	KL	XM
Total/NA	Analysis	8021B		1	1148	04/02/21 03:27	KL	XM
Total/NA	Prep	8015NM Prep			1057	03/30/21 10:33	DM	XM
Total/NA	Analysis	8015B NM		1	1050	03/31/21 00:40	AJ	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 12:23	CH	XM

Client Sample ID: DS12

Lab Sample ID: 890-437-28

Date Collected: 03/25/21 13:45

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1147	04/01/21 09:47	KL	XM
Total/NA	Analysis	8021B		1	1148	04/02/21 03:47	KL	XM
Total/NA	Prep	8015NM Prep			1057	03/30/21 10:33	DM	XM
Total/NA	Analysis	8015B NM		1	1050	03/31/21 01:02	AJ	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 12:29	CH	XM

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Client Sample ID: DS12 A

Lab Sample ID: 890-437-29

Date Collected: 03/25/21 13:50

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1147	04/01/21 09:47	KL	XM
Total/NA	Analysis	8021B		1	1148	04/02/21 05:30	KL	XM
Total/NA	Prep	8015NM Prep			1057	03/30/21 10:33	DM	XM
Total/NA	Analysis	8015B NM		1	1050	03/31/21 01:23	AJ	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 12:45	CH	XM

Client Sample ID: DS13

Lab Sample ID: 890-437-30

Date Collected: 03/25/21 13:55

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1147	04/01/21 09:47	KL	XM
Total/NA	Analysis	8021B		1	1148	04/02/21 05:50	KL	XM
Total/NA	Prep	8015NM Prep			1057	03/30/21 10:33	DM	XM
Total/NA	Analysis	8015B NM		1	1050	03/31/21 01:44	AJ	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 12:51	CH	XM

Client Sample ID: DS13 A

Lab Sample ID: 890-437-31

Date Collected: 03/25/21 14:00

Matrix: Solid

Date Received: 03/26/21 08:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1147	04/01/21 09:47	KL	XM
Total/NA	Analysis	8021B		1	1148	04/02/21 06:10	KL	XM
Total/NA	Prep	8015NM Prep			1057	03/30/21 10:33	DM	XM
Total/NA	Analysis	8015B NM		1	1050	03/31/21 02:26	AJ	XM
Soluble	Leach	DI Leach			1167	04/01/21 11:52	CH	XM
Soluble	Analysis	300.0		1	1357	04/06/21 13:08	CH	XM

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Method Summary

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XM
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XM
300.0	Anions, Ion Chromatography	MCAWW	XM
5035	Closed System Purge and Trap	SW846	XM
8015NM Prep	Microextraction	SW846	XM
DI Leach	Deionized Water Leaching Procedure	ASTM	XM

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: WPX Energy Production LLC
Project/Site: RDU 45

Job ID: 890-437-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-437-1	DS01	Solid	03/25/21 00:00	03/26/21 08:03	- 1
890-437-2	DS01 A	Solid	03/25/21 00:00	03/26/21 08:03	- 2
890-437-3	DS02	Solid	03/25/21 00:00	03/26/21 08:03	- 1
890-437-4	DS02 A	Solid	03/25/21 00:00	03/26/21 08:03	- 2
890-437-5	DS02 B	Solid	03/25/21 00:00	03/26/21 08:03	- 4
890-437-6	DS03	Solid	03/25/21 00:00	03/26/21 08:03	- 1
890-437-7	DS03 A	Solid	03/25/21 00:00	03/26/21 08:03	- 2
890-437-8	DS04	Solid	03/25/21 00:00	03/26/21 08:03	- 1
890-437-9	DS04 A	Solid	03/25/21 00:00	03/26/21 08:03	- 2
890-437-10	DS05	Solid	03/25/21 00:00	03/26/21 08:03	- 1
890-437-11	DS05 A	Solid	03/25/21 12:20	03/26/21 08:03	- 2
890-437-12	DS06	Solid	03/25/21 12:25	03/26/21 08:03	- 1
890-437-13	DS06 A	Solid	03/25/21 12:30	03/26/21 08:03	- 2
890-437-14	DS06 B	Solid	03/25/21 12:35	03/26/21 08:03	- 4
890-437-15	DS07	Solid	03/25/21 12:40	03/26/21 08:03	- 1
890-437-16	DS07 A	Solid	03/25/21 12:45	03/26/21 08:03	- 2
890-437-17	DS02 C	Solid	03/25/21 12:50	03/26/21 08:03	- 6
890-437-18	DS08	Solid	03/25/21 12:55	03/26/21 08:03	- 1
890-437-19	DS08 A	Solid	03/25/21 13:00	03/26/21 08:03	- 2
890-437-20	DS09	Solid	03/25/21 13:05	03/26/21 08:03	- 1
890-437-21	DS09 A	Solid	03/25/21 13:10	03/26/21 08:03	- 2
890-437-22	DS09 B	Solid	03/25/21 13:15	03/26/21 08:03	- 4
890-437-23	DS10	Solid	03/25/21 13:20	03/26/21 08:03	- 1
890-437-24	DS10 A	Solid	03/25/21 13:25	03/26/21 08:03	- 2
890-437-25	DS11	Solid	03/25/21 13:30	03/26/21 08:03	- 1
890-437-26	DS11 A	Solid	03/25/21 13:35	03/26/21 08:03	- 2
890-437-27	DS11 B	Solid	03/25/21 13:40	03/26/21 08:03	- 4
890-437-28	DS12	Solid	03/25/21 13:45	03/26/21 08:03	- 1
890-437-29	DS12 A	Solid	03/25/21 13:50	03/26/21 08:03	- 2
890-437-30	DS13	Solid	03/25/21 13:55	03/26/21 08:03	- 1
890-437-31	DS13 A	Solid	03/25/21 14:00	03/26/21 08:03	- 2

Eurofins Xenco, Carlsbad



Environment Testing
Xenoco

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El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No:

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Page 1 of 4

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Project Manager:	Lynda Lambach	Bill to: (if different)	
Company Name:	WPX Energy Permian, LLC.	Company Name:	
Address:	5315 Buena Vista Dr.	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	575-775-1647	Email:	Lynda.Lambach@WPXenergy.com

Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level I <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Project Name:	RPU 45	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Proa. Code	
Project Number:		Due Date:			
Sampler's Name:	Tyler Dominguez	TAT starts the day received by the lab, if received by 4:30pm			
PO #:					
SAMPLE RECEIPT	TAMP Blank: <input checked="" type="radio"/> Yes <input checked="" type="radio"/> No	Wet Ice: <input checked="" type="radio"/> Yes <input checked="" type="radio"/> No	Parameters		
Samples Received Intact:	<input checked="" type="radio"/> Yes <input type="radio"/> No	Thermometer ID:	7 N/A - 0.2		
Cooler Custody Seals:	<input checked="" type="radio"/> Yes <input type="radio"/> No	Correction Factor:	-0.2		
Sample Custody Seals:	<input checked="" type="radio"/> Yes <input type="radio"/> No	Temperature Reading:	4.2		
Total Containers:		Corrected Temperature:	4.6		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	ANALYSIS REQUEST	Preservative Codes	Sample Comments
DS01	S	3-25-21		1'	G	1	Chlorides (EPA 300.09)	None, NO	DI Water: H ₂ O
DS01A	S			2'	G	1	BTEX (Method 8021)	Cool: Cool	MeOH: Me
DS02	S			1'	G	1	TPH (Method 8015)	HCL: HC	HNO ₃ : HN
DS02A	S			2'	G	1		H ₂ SO ₄ : H ₂	NaOH: Na
DS02B	S			4'	G	1		H ₃ PO ₄ : HP	
DS03	S			1'	G	1		NaHSO ₄ : NABIS	
DS03A	S			2'	G	1		Na ₂ S ₂ O ₅ : NaSO ₃	
DS04	S			1'	G	1		Zn Acetate+NaOH: Zn	
DS04A	S			2'	G	1		NaOH+Ascorbic Acid: SAPC	
DS05	S			1'	G	1			

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	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed: TCAP, GRP, 6010, 6020, 6030, 6040, 6050, 6060, 6070, 6080, 6090, 6100, 6110, 6120, 6130, 6140, 6150, 6160, 6170, 6180, 6190, 6200, 6210, 6220, 6230, 6240, 6250, 6260, 6270, 6280, 6290, 6300, 6310, 6320, 6330, 6340, 6350, 6360, 6370, 6380, 6390, 6400, 6410, 6420, 6430, 6440, 6450, 6460, 6470, 6480, 6490, 6500, 6510, 6520, 6530, 6540, 6550, 6560, 6570, 6580, 6590, 6600, 6610, 6620, 6630, 6640, 6650, 6660, 6670, 6680, 6690, 6700, 6710, 6720, 6730, 6740, 6750, 6760, 6770, 6780, 6790, 6800, 6810, 6820, 6830, 6840, 6850, 6860, 6870, 6880, 6890, 6900, 6910, 6920, 6930, 6940, 6950, 6960, 6970, 6980, 6990, 7000, 7010, 7020, 7030, 7040, 7050, 7060, 7070, 7080, 7090, 7100, 7110, 7120, 7130, 7140, 7150, 7160, 7170, 7180, 7190, 7200, 7210, 7220, 7230, 7240, 7250, 7260, 7270, 7280, 7290, 7300, 7310, 7320, 7330, 7340, 7350, 7360, 7370, 7380, 7390, 7400, 7410, 7420, 7430, 7440, 7450, 7460, 7470, 7480, 7490, 7500, 7510, 7520, 7530, 7540, 7550, 7560, 7570, 7580, 7590, 7600, 7610, 7620, 7630, 7640, 7650, 7660, 7670, 7680, 7690, 7700, 7710, 7720, 7730, 7740, 7750, 7760, 7770, 7780, 7790, 7800, 7810, 7820, 7830, 7840, 7850, 7860, 7870, 7880, 7890, 7900, 7910, 7920, 7930, 7940, 7950, 7960, 7970, 7980, 7990, 8000, 8010, 8020, 8030, 8040, 8050, 8060, 8070, 8080, 8090, 8100, 8110, 8120, 8130, 8140, 8150, 8160, 8170, 8180, 8190, 8200, 8210, 8220, 8230, 8240, 8250, 8260, 8270, 8280, 8290, 8300, 8310, 8320, 8330, 8340, 8350, 8360, 8370, 8380, 8390, 8400, 8410, 8420, 8430, 8440, 8450, 8460, 8470, 8480, 8490, 8500, 8510, 8520, 8530, 8540, 8550, 8560, 8570, 8580, 8590, 8600, 8610, 8620, 8630, 8640, 8650, 8660, 8670, 8680, 8690, 8700, 8710, 8720, 8730, 8740, 8750, 8760, 8770, 8780, 8790, 8800, 8810, 8820, 8830, 8840, 8850, 8860, 8870, 8880, 8890, 8900, 8910, 8920, 8930, 8940, 8950, 8960, 8970, 8980, 8990, 9000, 9010, 9020, 9030, 9040, 9050, 9060, 9070, 9080, 9090, 9100, 9110, 9120, 9130, 9140, 9150, 9160, 9170, 9180, 9190, 9200, 9210, 9220, 9230, 9240, 9250, 9260, 9270, 9280, 9290, 9300, 9310, 9320, 9330, 9340, 9350, 9360, 9370, 9380, 9390, 9400, 9410, 9420, 9430, 9440, 9450, 9460, 9470, 9480, 9490, 9500, 9510, 9520, 9530, 9540, 9550, 9560, 9570, 9580, 9590, 9600, 9610, 9620, 9630, 9640, 9650, 9660, 9670, 9680, 9690, 9700, 9710, 9720, 9730, 9740, 9750, 9760, 9770, 9780, 9790, 9800, 9810, 9820, 9830, 9840, 9850, 9860, 9870, 9880, 9890, 9900, 9910, 9920, 9930, 9940, 9950, 9960, 9970, 9980, 9990, 10000																															

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3/26/21 8:03			



Environment Testing
Xenco

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300
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Hobbs, NM (575) 392-7550 Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: _____

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Page 2 of 44

Project Manager:	Lynda Laumbach	Bill to: (if different)	
Company Name:	WFX Energy Permian, LLC	Company Name:	
Address:	5315 Buena Vista Dr.	Address:	
City/State/Zip:	Carlsbad, NM 88270	City/State/Zip:	
Phone:	575-725-1647	Email:	Lynda.Laumbach@WFXenergy.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level I <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	RDU 45	Turn Around	Pres. Code	
Project Number:		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		
Project Location:		Due Date:		
Sampler's Name:	Tyler Dominguez	TAT starts the day received by the lab, if received by 4:30pm		
PO #:				
SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Samples Received Inact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID: LTM-507		
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:		
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Temperature Reading:	4.2	
Total Containers:		Corrected Temperature:	4.0	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Preservative Codes	Sample Comments
DS05A	S	3-25-21	12:20	7'	G	1	Chlorides (EPA 300.00)	None: NO	DI Water: H ₂ O
DS06	S	12:25	1'	G	1	1	BTEX (Method 8021)	Cool: Cool	MeOH: Me
DS06A	S	12:30	2'	G	1	1	TPH (Method 8015)	HCL: HC	HNO ₃ : HN
DS06B	S	12:35	4'	G	1	1		H ₂ SO ₄ : H ₂	NaOH: Na
DS07	S	12:40	1'	G	1	1		H ₃ PO ₄ : HP	
DS07A	S	12:45	1'	G	1	1		NaHSO ₄ : NABIS	
DS02C	S	12:50	6'	G	1	1		Na ₂ S ₂ O ₃ : NaSO ₃	
DS08	S	12:55	1'	G	1	1		Zn Acetate+NaOH: Zn	
DS08A	S	13:00	2'	G	1	1		NaOH+Ascorbic Acid: S.A.P.C.	
DS09	S	13:05	1'	G	1	1			

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 Matrix to be analyzed: TCFT/SPCP/STU: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1. <i>[Signature]</i>	<i>[Signature]</i>	3-26-21 8:13	2. <i>[Signature]</i>		
3. <i>[Signature]</i>			4. <i>[Signature]</i>		
5. <i>[Signature]</i>			6. <i>[Signature]</i>		

Revised Date 08/23, Rev 10/202



Chain of Custody

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 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No: _____

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Project Manager:	Lynda Laumbach	Bill to: (if different)	Lynda Laumbach
Company Name:	WPX Energy Permian, LLC.	Company Name:	WPX Energy Permian, LLC.
Address:	5315 Buena Vista Dr	Address:	5315 Buena Vista Dr
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	(575) 725-1647	Email:	Lynda.Laumbach@wpxenergy.com

Work Order Comments	
Program: UST/PST	<input type="checkbox"/> PRP <input type="checkbox"/> Downfields <input type="checkbox"/> RC <input type="checkbox"/> Depth <input type="checkbox"/> Level IV
State of Project:	
Reporting Level II	<input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV
Deliverables: EDD	<input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Project Name:	RDU 45	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code	
Project Number:		Due Date:			
Project Location:		TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Tyler Dominguez				
PO #:					
SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Parameters		
Received Intact:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Thermometer ID:	7101601		
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Correction Factor:	-0.2		
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Temperature Reading:	4.2		
Total Containers:		Corrected Temperature:	4.0		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Chlorides (EPA 300.00)	BTEX (Method 8021)	TPH (Method 8015)	TPH (TX- Extended 1005)	Preservative Codes	Sample Comments
DS09A	S	3-25-21	13:10	2'	G	1	X	X	X		None: NO	DI Water: H ₂ O
DS07B	S		13:15	4'	G	1	X	X	X		Cool: Cool	MeOH: Me
DS10	S		13:20	1'	G	1	X	X	X		HCL: HC	HNO ₃ : HN
DS10A	S		13:25	2'	G	1	X	X	X		H ₂ SO ₄ : H ₂	NaOH: Na
DS11	S		13:30	1'	G	1	X	X	X		H ₃ PO ₄ : HP	
DS11A	S		13:35	2'	G	1	X	X	X		NaHSO ₄ : NABIS	
DS11B	S		13:40	4'	G	1	X	X	X		Na ₂ S ₂ O ₃ : NASO ₃	
DS12	S		13:45	1'	G	1	X	X	X		Zn Acetate+NaOH: Zn	
DS12A	S		13:50	2'	G	1	X	X	X		NaOH+Ascorbic Acid: SAPC	
DS13	S		13:55	1'	G	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: TELP/SELP/6010- 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Lynda Laumbach</i>	1 <i>Lynda Laumbach</i>	3-26-21 8:03	2		
3			4		
5			6		



Environment Testing

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El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: _____

www.xenco.com Page 4 of 4

Project Manager:	Lynda Laumbach	Bill to: (if different)	
Company Name:	WPX Energy Permian LLC.	Company Name:	
Address:	5315 Buena Vista Dr	Address:	
City, State ZIP:	Carlsbad, NM	City, State ZIP:	
Phone:	575-725-1647	Email:	Lynda.Laumbach@WPXenergy.com

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PPP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____

[illegible][illegible]

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 SiO ₂ Na Sr Ti Sn U V Zr TCPL / SPLP 6010 : 8RCRA 5b As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Statutory disclosure requirements require us to state purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 issues are due to circumstances beyond the control of Eurofins Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, but not analyzed. These terms will be enforced unless previously negated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>		3-26-21 8:05	2		
3			4		
5			6		

Login Sample Receipt Checklist

Client: WPX Energy Production LLC

Job Number: 890-437-1

Login Number: 437

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: WPX Energy Production LLC

Job Number: 890-437-1

Login Number: 437

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Midland

List Creation: 03/29/21 12:02 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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 52880

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 52880
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	9/14/2022