District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

)

Incident ID	NRM2019548894
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: WPX Energy Permian, LLC.	OGRID: 246289
Contact Name: Lynda Laumbach	Contact Telephone: (575) 725-1647
Contact email: Lynda.Laumbach@wpxenergy.com	Incident # (assigned by OCD)
Contact mailing address: 5315 Buena Vista Drive, Carlsbad, NM 88	3220

Location of Release Source

Latitude 32.041235

Longitude -103.9018005 (NAD 83 in decimal degrees to 5 decimal places)

Site Name: RDX 17 Federal Com #006H	Site Type: Production Facility
Date Release Discovered: 07/05/2020	API# (if applicable): 30-015-39308

Unit Letter	Section	Township	Range	County
J	17	26S	30E	Eddy

Surface Owner: State X Federal Tribal Private (Name: _

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)					
Crude Oil	Volume Released (bbls):	Volume Recovered (bbls):			
X Produced Water	Volume Released (bbls): 35	Volume Recovered (bbls): 5			
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No			
Condensate	Volume Released (bbls)	Volume Recovered (bbls)			
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)			
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)			

Cause of Release:

At 0830 hours PW polyline connection failed causing an estimated 35bbl of PW to be released along recently reclaimed lease road for RDX 17-13. 5bbl of PW was recovered.

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

ceived by OCD: 3/23/202	ved by OCD: 3/23/2021 11:00:56 PM		Page 2 Dj		
IIII C-141		Incident ID	NRM2019548894		
ge 2	Oil Conservation Division	District RP			
		Facility ID			
		Application ID			
Was this a major release as defined by 19.15.29.7(A) NMAC? X Yes No	If YES, for what reason(s) does the responsible par Release was over 25bbl of fluid.	ty consider this a major release	2		
If YES, was immediate n Email notification was se	otice given to the OCD? By whom? To whom? When to Mike Bratcher, Robert Hamlet, Victoria Venega	nen and by what means (phone, o as, and Jim Griswold on 07/05/2	email, etc)? 020 at 1640 hours.		

Initial Response

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

 $\overline{\mathbf{X}}$ The source of the release has been stopped.

X The impacted area has been secured to protect human health and the environment.

X Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

X All free liquids and recoverable materials have been removed and managed appropriately.

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

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

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

Printed Name: Lynda Laumbach	Title:Environmental Specialist
Signature:	Date: 07/06/2020
email:Lynda.Laumbach@wpxenergy.com	Telephone: (575)725-1647
OCD Only	
Received by: Ramona Marcus	Date: <u>7/13/2020</u>

Oil Conservation Division

	Page 3 of 8
Incident ID	NRM2019548894
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

- X Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- X Field data
- \mathbf{X} Data table of soil contaminant concentration data
- \underline{X} Depth to water determination
- X Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release
- X Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- X 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.

Received by OCD: 3/23/2	021 11:00:56 PM			Page 4 of
101111 (-141			Incident ID	NRM201954889
Page 4 Oil Conservation Div		on	District RP	
			Facility ID	
			Application ID	
regulations all operators and public health or the enviro failed to adequately invest addition, OCD acceptance and/or regulations. Printed Name: Lyn Signature: for the second second email: Lynda.Laumbac	da Laumbach h@wpxenergy.com	Interference Interference Interference Interference	corrective actions for release ne operator of liability sh face water, human health pliance with any other fe nental Specialist	eases which may endanger ould their operations have or the environment. In deral, state, or local laws
OCD Only Received by: Cristin	na Eads	Date:0	4/19/2021	

Received by OCD: 3/23/2021 11:00:56 PM State of New Mexico **Oil Conservation Division**

<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

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Incident ID	NRM201954889	
District RP		
Facility ID		

Application ID

Remediation Plan

X Detailed description of proposed remediation technique X Scaled sitemap with GPS coordinates showing delineation points X Estimated volume of material to be remediated X Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC X Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction. Extents of contamination must be fully delineated. Contamination does not cause an imminent risk to human health, the environment, or groundwater. 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. Lynda Laumbach Printed Name: Title: Environmental Specialist Signature: Date: 03/23/2021 Telephone: (575)725-1647 email: Lynda.Laumbach@wpxenergy.com **OCD Only** Date: 04/19/2021 Cristina Eads Received by: Approved Approved with Attached Conditions of Approval Denied Deferral Approved 07/21/2021 Signature: Date:

Page 5



March 23, 2021 Mike Bratcher NMOCD District 2 811 South First Street Artesia, NM 88210

Re: RDX 17 Federal Com #006H Remediation Plan (NRM2019548894)

Mr. Bratcher,

This report summarizes the remediation activities and proposed plan for remediation and closure of the Incident at the RDX 17 Federal Com #006H well pad (Site). The topographic map of the Site is provided as Figure 01. On July 5, 2020, a produced water line cracked releasing 35 barrels (bbls) of produced water along recently reclaimed lease road for RDX 17-13. 5bbl of PW was recovered using a vacuum truck.

Well Location: RDX 17 Federal Com #006H API #: 30-015-39308 NMOCD Reference #: NRM2019548894 Site Location Description: Unit Letter J, Section 17, Township 26S, Range 30E Release Latitude/Longitude: N32.041235, W103.9018005 Land Jurisdiction: Federal Estimated Depth to Groundwater: >100 feet

NMOCD Site Characterization Standards

The Closure criteria of this site was determined based on the New Mexico Administrative Code (NMAC) Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12). The Site is not located within a sensitive area. Depth to groundwater at the site is estimated to be greater than 100 feet below ground surface (bgs) based on a depth to water drill at the RDX Federal 17 #044H, located ~0.56 miles north of the location, drilled on December 12, 2020. The well was completed to a depth of 105 feet, and groundwater was not encountered or observed prior to the plugging of the well on December 15, 2020. Well log is provided as Attachment 01. Based on the criteria outlined above, the closure criteria from the NMOCD Table 1 are as follows:

- 20,000 milligrams per kilogram (mg/kg) Chloride
- 50 mg/kg Benzene, Toluene, Ethylbenzene, and xylenes (BTEX)
- 10 mg/kg Benzene
- 2,500 mg/kg Total Petroleum Hydrocarbons (TPH)
- 1,000 mg/kg Diesel range organics (DRO) + Gasoline range organics (GRO)

Field Activities

On July 16, 2020, WPX personnel were onsite to confirm the release extent and collect delineation samples DS01-DS07. The area of interest is located on Figure 02. Further Surface samples SS01-SS12 were collected on March 16, 2021 to laterally delineate the release for chloride contamination.

5315 Buena Vista Dr. | Carlsbad, NM 88220 | 575.725.1647 Tel | 575.885.3509 Fax | www.wpxenergy.com

Sampling Activities

Discrete samples were taken to delineate the area outside of the release extent. All samples were taken with decontaminated equipment, jarred in precleaned glass soil jars, labelled with sample name, date, Site name, and depth, and immediately placed on ice to lower sample temperatures below 4° Celsius, adhering to chain of custodies of Hall and Xenco Laboratories. Samples were analyzed for Chlorides via Method EPA 300.0, TPH via Method 8015M, and BTEX via Method 8021B.

Laboratory Analytical Results

The laboratory analytical results for the delineation samples DS01-DS07 were above the Standard threshold for chlorides. In addition, samples SS04, SS05, SS08, and SS12 showed elevated chlorides. The sample locations are depicted in Figure 02. All sample results are summarized in Table 01 and complete lab results are provided in Attachment 02. Results for samples analyzed for BTEX and TPH confirmed no detectable levels. Chloride analysis ranged from 57.8 mg/kg to 37,000 mg/kg.

Proposed Workplan

WPX plans on excavating an estimated 1,700 cubic yards to 2,200 cubic yards to address the release. The proposed excavation area is outlined in Figure 03. This number is contingent on an average depth of four feet with contamination greater than 600 mg/kg chlorides. To fully delineate the release, bore locations will be advanced at BH01-BH03 to collect vertical delineations. Complete lateral delineations will be achieved via side wall samples once the excavation has been completed. WPX also proposes to lay down an impermeable layer at four feet bgs to mitigate any further contamination migration into the subsurface.

All samples will be analyzed for Chlorides via Method EPA 300.0, TPH via Method 8015M, and BTEX via Method 8021B. All contaminated soil will be hauled to disposal at R-360 Red Bluff Facility, 5053 US Hwy 285, Orla, TX 79770.

Proposed Schedule

WPX plans to start this project as soon as this remediation plan is approved or by June 21, 2021 whichever comes first. An extension request or Incident Closure report will be submitted after 90 days of this remediation approval. If any questions or further information is warranted, please do not hesitate to contact me by cell phone at (575) 725-1647 or by email at Lynda.Laumbach@wpxenergy.com.

Best regards,

Juda tomback

Lynda Laumbach Environmental Specialist

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

Attachments:

Figure 01 Topography Figure 02 Delineation Samples Figure 03 Remediation Plan Table 01 Soil Sample Results Attachment 01 Water Well Data Attachment 02 Analytical Results

Figures





Release Extent (8,785 sq. feet)

Released to Imaging: 7/21/2021 11 16:43 AM

30-015-39308 NRM2019548894 Permian Basin, Eddy County, NM

32.041235, -103.9018005



IMAGE COURTESY OF GOOGLE EARTH 2019

 Legend
 Figure 03

 X Point of Release
 30-015-39308

 NRM2019548894
 NRM2019548894

 Permian Basin, Eddy County, NM
 32.041235, -103.9018005

Tables



TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS

RDX 17 Federal #006H NMOCD REFERENCE NUMBER: NRM2019548894

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	2	7/16/2020	-	-	-	-	-	-	-	8340
DS01A	4	7/16/2020	-	-	-	-	-	-	-	723
DS02	2	7/16/2020	-	-	-	-	-	-	-	4700
DS02A	4	7/16/2020	-	-	-	-	-	-	-	1430
DS03	2	7/16/2020	-	-	-	-	-	-	-	26700
DS03A	4	7/16/2020	-	-	-	-	-	-	-	30900
DS03B	6	7/16/2020	-	-	-	-	-	-	-	32700
DS03C	8	7/16/2020	-	-	-	-	-	-	-	27200
DS03D	10	7/16/2020	-	-	-	-	-	-	-	28400
DS04	2	7/16/2020	-	-	-	-	-	-	-	26900
DS04A	4	7/16/2020	-	-	-	-	-	-	-	23500
DS04B	6	7/16/2020	-	-	-	-	-	-	-	13800
DS04C	10	7/16/2020	-	-	-	-	-	-	-	16000
DS05	2	7/16/2020	-	-	-	-	-	-	-	26000
DS05A	4	7/16/2020	-	-	-	-	-	-	-	24300
DS05B	6	7/16/2020	-	-	-	-	-	-	-	24800
DS05C	10	7/16/2020	-	-	-	-	-	-	-	24500
DS06	2	7/16/2020	-	-	-	-	-	-	-	18800
DS06A	4	7/16/2020	-	-	-	-	-	-	-	34600
DS06B	6	7/16/2020	-	-	-	-	-	-	-	37900
DS06C	10	7/16/2020	-	-	-	-	-	-	-	28400
DS07	2	7/16/2020	-	-	<49.8	<49.8	<49.8	-	-	26300
DS07A	4	7/16/2020	-	-	<49.9	<49.9	<49.9	-	-	22500
DS07B	6	7/16/2020	-	-	-	-	-	-	-	23100
DS07C	10	7/16/2020	-	-	-	-	-	-	-	23800
SS01	0.5	3/16/2021	-	-	-	-	-	-	-	379
SS02	0.5	3/16/2021	-	-	-	-	-	-	-	440
SS03	0.5	3/16/2021	-	-	-	-	-	-	-	57.8
SS04	0.5	3/16/2021	-	-	-	-	-	-	-	888
SS05	0.5	3/16/2021	-	-	-	-	-	-	-	1060
SS06	0.5	3/16/2021	-	-	-	-	-	-	-	273
SS07	0.5	3/16/2021	-	-	-	-	-	-	-	518
SS08	0.5	3/16/2021	-	-	-	-	-	-	-	707
SS09	0.5	3/16/2021	-	-	-	-	-	-	-	125
SS10	0.5	3/16/2021	-	-	-	-	-	-	-	347
SS11	0.5	3/16/2021	-	-	-	-	-	-	-	368
SS12	0.5	3/16/2021	-	-	-	-	-	-	-	1350
			-	-	-	-	-	-	-	
NMOCD Table 1 Clo	sure Criteria		10	50	NE	NE	NE	1000	2500	20000
Reference:	BTEX: benzene, tolue GRO: gasoline range DRO: diesel range or ft bgs: feet below gr	ene, ethylbenzene, a organics rganics ound surface	nd total xylenes			mg/kg: milligrams p NMOCD: New Mexic TPH: total petroleun	er kilogram to Oil Conservation D n hydrocarbons	ivision		

NMOCD Table 1 Closure Criteria: NMAC 19.15.29 August 2018 criteria for soils impacted based on characterization

Attachment 01: Water Well Data



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 abovementioned 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,

K. Williams

Kris Williams, CHMM, REM Operations Manager

Attached: Drilling Locations Maps Soil Boring Logs





Page .	19 d	of 8	6
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/		HR	1				BORI	NG LOG/	MONITORING W	ELL COMPLETION	N DIAC	GRAM	(
		0.0	MDI		C E		Boring/We	ll Number:	W 1	Location:	25		
		60	WPL		U E		Date:	М	W-1	KDX 16	-25		
	754	20	LU		N 2		Date.	12/10)/2020	WPX En	ergy		
Drilling Me	ethod:		Sampling 1	Method:			Logged By:		Drilled By:		0,		_
A	ir Rota	ry		No	one			J. Liı	ın, PG	Talon L	PE		
Gravel Pacl	k Type:	d	Gravel Pac	k Depth Inte	erval:		Seal Type:	Iono	Seal Depth Interval:	Latitude: 22.0300004			
I Casing Typ	$\frac{0}{20}$ sar	10 Diameter		3 D Denth Inter	ags val:		Reging Total Depth (fr. RGS):			32.0399004			
PVC		2-inch		0-105 fe	eet bgs		8	11	0	-103.8833	3368		
Screen Typ	e:	Slot:		Diameter:	Depth 1	Interval:	Well Total	Depth (ft. BGS)):	Depth to Water (ft. BTOC):	DTW Da	te:	_
PVC		0.010-ii	nch	2-inch	105-	110 ft		11	0	> 110	12/1	6/2020)
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	NSCS	Sample ID	Lithology	//Remarks	V Com	Vell pletion	1
0										-	_		
5													
10	NM	L	D	Ν	Ν	NM	SW	NS	Pale orange to pir	ith silt			
15									Sand W		t I		
2.0										•	†		
25													
30	NM	I T	Ь	N	N	NM	SP	NS	Pale pinky orange	poorly graded fine	+		
25				11	11	1 1111	51	115	sa	nd .	+		
35											-		
40	NM	L	D	N	Ν	NM	SW	NS	Orange to pale rec	l well graded sand			
45									with g	gravel			
50	NDA			N	N		CD	NG	Pale pinky orange	poorly graded fine			
55	INIM			IN	IN	INIVI	SP	NS	sa	nd	T I		
60											t		
65										•			
70										-			
75											+		
7.5											+		
80			_						Pale pinky orange	poorly graded fine	-		
85	NM			N	Ν	NM	SP	NS	sand with minor n	nedium and coarse			
90									sand - TD	: 110 bgs	L I		
95													
100											t I		
105										•	t l		
110											t l		
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Drilling M	ethod:		Sampling N	Method:			Logged By:			Drilled By:		
A	Air Rotai	у	G 10	No	one		0.17	J. Lit	nn, PG	Talon LPE		
Gravel Pac	к туре: 0/20 Sar	nd	Gravel Pac	R Depth Into	ervai:		Sear Type:	Ione	None	Latitude: 32 036765		
Casing Typ	e:	Diameter:		Depth Inter	val:		Boring Tota	al Depth (ft. BG	iS):	52.030703 Longitude:		
PVC		2-inch		0-102 fe	eet bgs		_	10)7	-103.895	993	
Screen Typ	e:	Slot:		Diameter:	Depth	Interval:	Well Total Depth (ft. BGS):		Depth to Water (ft. BTOC):	DTW Date	e:	
PVC		<u>0.010-i</u>	nch	2-inch	102-	107 ft		10)7	> 107	12/16	5/2020
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	NSCS	Sample ID	Litholog	v/Remarks	W Comp	ell eltion
0												
5	1									-		
10										-	-	
10	NM	L	D	Ν	Ν	NM	SP	NS	Pale orange poorl	y graded fine sand -	-	
15										-	-	
20										-	-	
25												
30		I T		N	NT		CD	NG	Same as above wit	h slight increase in		
35	INIM			IN	IN	INIM	SP	INS	coarse sand	and gravel		
40												
15	NM	Ιτ		N	N	NM	SD	NS	Pale orange poorl	y graded fine sand	-	
43				IN	1		51	IND	with very	slight silt -	-	
50											-	
55	NM	L	D	N	N	NM	SP	NS	Pale orange poorl	y graded fine sand		
60	NM	L	D	N	Ν	NM	SW	NS	Pale orange well	graded fine sand		
65												
70										-		
75	NM	М	SL M	N	N	NM	SM	NS	Pale red orange cla	ayey silty fine sand		
80	1.1.1					1 (1)1		110	with minor coars	e sand and gravel -	-	
00										-		
85											-	
90										-		
95	NM	Г	SI M	N	N		SD	NG	Pale orange poorly	y sorted fine sand -		
100	TATAT			1N	⊥N		J. J.	UND IND	TD 10	7' BGS		
105										-		

Page	21	01	86
		~	

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		HR	1				BORI	NG LOG/I	MONITORING WI	ELL COMPLETION	DIAGRAM
		CO	MDI		C C		Boring/Well	Number:	¥7 1	Location:	17 4411
		00	IN PL		U E		Date:	M	W-1	Client:	om 17-44H
	74	2 U	LU		12		Dute.	12/8/	/2020	WPX End	ergy
Drilling Me	ethod:		Sampling 1	Method:			Logged By:			Drilled By:	
A	ir Rota	ry		No	one		J. Linn, PG		in, PG	Talon LPE	
Gravel Pacl	k Type: 0/20 Sai	nd	Gravel Pac	k Depth Inte	erval:		Seal Type: N	Seal Type: Seal Depth Interval: Latitude:		Latitude: 32 0/196	56
Casing Typ	e:	Diameter:		Depth Inter	val:		Boring Total	Depth (ft. BGS):	Longitude:	50
PVC		2-inch		0-105 fi	bgs			1	10	-103.904	054
Screen Typ	e:	Slot:		Diameter:	Depth	Interval:	Well Total D	epth (ft. BGS):		Depth to Water (ft. BTOC):	DTW Date:
PVC		<u>0.010-i</u>	nch	2-inch	105 -	110 ft		1	10	> 110	12/16/2020
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Litholog	y/Remarks	Well Completion
$ \begin{array}{r} 0 \\ 5 \\ 10 \\ 15 \\ 20 \\ 25 \\ 30 \\ 35 \\ 40 \\ \end{array} $	NM	L	D	Ν	Ν	NM	CE	NS	Buff to pale pin	k colored caliche	
45 50 55 60	NM	L	D	N	N	NM	SW	NS	Pinky orange wel mino	l graded sand with or silt	
65 70 75	NM	L	D	N	N	NM	SP	NS	Pinky pale brown o fine sand wi	range poorly graded ith minor silt	
80 85 90	NM	L	D	N	N	NM	SW-SM SW-SC	NS	Pinky brown orang with silt	ge well-graded sand and clay	
95 100 105	NM	L	D	N	N	NM	SP	NS	Pinky pale brown o fine sand with mine	range poorly graded ⁻ or silt - TD: 110' bgs -	-

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/		HR	1				BORI	NG LOG/	MONITORING W	ELL COMPLETION	N DIAGRA	M
		C O	MDI	ΙΛΝ	C F		Boring/We	ll Number: M	W/_1	Location: RDX Federal C	om 21-43	
		50			NC		Date:	111		Client:	Juli 21-45	
	754	30	LU	110	0			12/9	9/2020	WPX End	ergy	
Drilling Me	thod: .ir Rotai	v	Sampling N	Method: No	ne		Logged By	: I Lir	n PG	Drilled By: Drilled By:		
Gravel Pack	к Туре:	<u> </u>	Gravel Pac	k Depth Inte	erval:		Seal Type: Seal Depth Interval:		Seal Depth Interval:	Latitude:		
10	0/20 Sar	nd		3 E	lags		None None		32.0225	32.022571		
Casing Typ	e:	Diameter: 2-inch		Depth Inter $0-100 \text{ f}$	rval: Pet hos		Boring Tot	al Depth (ft. BC	JS): 10	Longitude: -103 884	371	
Screen Typ	e:	Slot:		Diameter:	Depth 1	Interval:	Well Total	Depth (ft. BGS	b):	Depth to Water (ft. BTOC):	DTW Date:	
PVC		<u>0.010-i</u>	nch	2-inch	100 -	105 ft		10	05	> 105	12/16/20	20
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Litholog	v/Remarks	Well Completi	ion
0 5 10 15	NM	L	D	N	N	NM	SP	NS	Pale orange to tan sa	poorly graded fine nd		
20	NM	Н	D	N	N	NM	CL	NS	Pale orange/tan/pal silt, fine sand, a	e red clay, dry, with nd minor caliche		
25 30 35 40 45	NM	L	D	N	N	NM	SP	NS	Pale orange to pale fine	e red poorly graded sand	-	
50 55 60	NM	L	D	N	N	NM	SP	NS	Golden yellow poo with minor	rly graded fine sand - silt and clay -		
65 70 75	NM	L	D	N	N	NM	SP	NS	Pale orange to pale fine sand with	e red poorly graded - minor silt/clay -	-	
80 85 90	NM	М	D	N	N	NM	SC	NS	Buff to orange co medium sa	lor fine sand with - nd and clay -	-	
95	NM	Н	D	N	Ν	NM	CL	NS	Brown orange clay wi	th silt and fine sand		
100 105	NM	Н	D	N	N	NM	SC	NS	Golden yellow and b fine sand - TD Boring 105'	uff colored clay with : 110' BGS; Sand 110' BGS	-	

Page	<i>23</i>	of	⁶ 86
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		HR	1				BORI	NG LOG/	MONITORING W	ELL COMPLETION	N DIAGRAM	
	<	n n	L		0 5		Boring/We	ll Number:		Location:		
		60	MPL		U E		Deter	М	W-1	Ross Draw U	Jnit #38	
	74	S 0	LU		NS		Date:	12/8	3/2020	WPX En	ergy	
Drilling Me	ethod:		Sampling 1	Method:			Logged By		DC	Drilled By:	DE	
A Count Deal	Air Rota	ry	C 1.D	$\frac{Nc}{1 D - 4 Lc}$	one		C 1 T	J. Lii	nn, PG	I alon LPE		
Gravel Pac	к туре: 0/20 Sai	nd	Gravel Pac	3 B	aos		Sear Type:	Ione	None	22 0303	00	
Casing Typ	e:	Diameter:		Depth Inter	val:		Boring Total Depth (ft. BGS):		3S):	Longitude:		
PV	VC	2-inch		0-100 fe	eet bgs			1(05	-103.871	338	
Screen Typ	e:	Slot:		Diameter:	Depth	Interval:	Well Total	Depth (ft. BGS):	Depth to Water (ft. BTOC):	DTW Date:	
PV	VC	<u>0.010-i</u>	nch	2-inch	100-	105 ft		10	05	> 105	12/16/2020	
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	NSCS	Sample ID	Litholog	v/Remarks	Well Completion	
0 5 10 15	NM	L	D	N	N	NM	SW	NS	Pale orange/pale p fine sand with m coarse	ink to buff colored inor medium and e sand	-	
20 25 30	NM	L	D	N	N	NM	SP	NS	Pale orange/pale p fine	oink poorly graded sand		
35 40 45 50 55 60 65	NM	L	D	N	N	NM	SP	NS	Tan/pale brown/p graded f	vale orange poorly ine sand		
70 75 80 85 90 95	NM	L	D	N	N	NM	SP	NS	Brick red brown j sa	poorly graded fine nd		
100	NM	L	D	N	N	NM	SP	NS	Tan/pale brown/pale graded fine sand - T	e orange poorly D 105' BGS		

		HR	1				BORI	NG LOG/	MONITORING W	ELL COMPLETION	N DIAGRAM
		0.0	L		0 5		Boring/We	l Number:	*** 4	Location:	
		60	MPL		6 E		Data	М	W-1	Ross Draw U	Jnit #55
	74	S 0	LU		NS		Date:	12/9	0/2020	WPX En	ergy
Drilling Me	ethod:		Sampling N	Method:			Logged By:			Drilled By:	
A	ir Rota	у	G 10	No	one		J. Linn, PG			Talon LPE	
Gravel Paci	k Type: 0/20 Sar	nd	Gravel Pac	k Depth Into	erval:		Seal Type:	Ione	Seal Depth Interval:	Latitude:	
Casing Typ	e:	Diameter:		Depth Inter	val:		Boring Tota	al Depth (ft. BC	is):	Longitude:	05
PVC		2-inch		0-101'7	n -			106	5'7"	-103.863	346
Screen Typ	e:	Slot:		Diameter:	Depth	Interval:	Well Total	Depth (ft. BGS):	Depth to Water (ft. BTOC):	DTW Date:
PVC		0.010-i	nch	2-inch	101'7"	- 106'7"		106	5'7"	>106' 7"	12/16/2020
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	NSCS	Sample ID	Litholog	y/Remarks	Well Completion
0 5 10 15	NM	L	D	N	N	NM	SP	NS	Pale pink to buff co sand with	lored poorly graded minor silt	-
20 25 30	NM	L	D	N	N	NM	SW	NS	Pale tan orange we with minor mediu	ell graded fine sand m and coarse sand	
35 40 45 50 55 60	NM	L	D	N	N	NM	SP	NS	Pale orange brown sand with n	poorly graded fine ninor gravel	
65 70 75 80 85	NM	L	D	N	N	NM	SP	NS	Grey poorly grad minor	led fine sand with gravel	
90 95	NM	L	D	N	N	NM	SP	NS	Darker grey poorl with minor silt and	y graded fine sand minor medium sand	
100 106'7"	NM	М	D	N	N	NM	SC	NS	Dark grey fine sand and clay -	d with moderate silt TD 106'7"	

		HR	1				BORI	NG LOG/	MONITORING W	ELL COMPLETION	N DIAG	RAM
		0.0	MDI		C E		Boring/We	ll Number:	XX7 1	Location:	T	
		60					Date:	M	W-1	Koss Draw U	nit #57	
	74	20	LU	IU	1 2		Dute.	12/9	0/2020	WPX En	ergy	
Drilling M	ethod:		Sampling N	Method:			Logged By:			Drilled By:		
A	Air Rotai	ry	G 1 D	No	one		J. Linn, PG			Talon L	PE	
Gravel Pac	k Type: 0/20 Sar	nd	Gravel Pac	k Depth Into	erval:		Seal Type: Seal Depth Interval:			Latitude: 32 010	32	
Casing Typ	0/20 Sal	Diameter:		Depth Inter	val:		Boring Total Depth (ft. BGS):		S2.01032			
PVC		2-inch		0-105 f	eet bgs			11	10	-103.872	-103.87246	
Screen Typ	ie:	Slot:		Diameter:	Depth	Interval:	Well Total	Depth (ft. BGS):	Depth to Water (ft. BTOC):	DTW Date	:
PVC		0.010-ii	nch	2-inch	105-	110 ft		11	10	> 110	12/16	/2020
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	NSCS	Sample ID	Litholog	y/Remarks	W Comp	ell letion
$ \begin{array}{c} 0 \\ 5 \\ 10 \\ 15 \\ 20 \\ 25 \\ 30 \\ 35 \\ \end{array} $	NM	L/M	D	N	N	NM	SM	NS	Tan/pale orange/j graded f	pale brown poorly fine sand	- - - -	
40 45	NM	М	D	N	N	NM	SW	NS	Hard, dry pale pink sand wit	t orange well graded th gravel		
50 55	NM	М	D	N	Ν	NM	SM	NS	Pale orange red t	tan silty fine sand		
60 65	NM	L	D	N	Ν	NM	sw	NS	Dark brown greyis	sh well graded sand		
70 75 80 85 90 95	NM	L/M	D to SL M	N	N	NM	SW	NS	Grey well ۽	graded sand	- - - -	
100 105	NM	L/M	D	N	N	NM	SM	NS	Tan/pale orange/j graded fine san	pale brown poorly id - TD 110' bgs		

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		HR	1				BORI	NG LOG/	MONITORING W	ELL COMPLETION	N DIAGRAM	
	\leq	0.0	L		0 5		Boring/We	ll Number:		Location:		
		U U	MPL	IAN	ΓE		D.	М	W-1	North Brushy Fede	ral 35 # 010H	
	14	S O	LUI		N S		Date:	12/8	8/2020	WPX Energy		
Drilling Me	ethod:		Sampling N	Aethod:			Logged By:			Drilled By:		
A	ir Rotar	У		No	one			J. Liı	nn, PG	Talon L	PE	
Gravel Paci	k Type:		Gravel Pac	k Depth Inte	erval:		Seal Type:	т	Seal Depth Interval:	Latitude:		
Casina Tan	0/20 San	nd Diamatan		3 B	ags		N Derring Tet	l Derth (B. DC	None	32.0799	09	
PVC	ie:	2_inch		D_{-100} fe	vai: Pet hos		Boring 100	а Deptii (п. вС 1(15):)5	_103 951	386	
Screen Typ	e:	Slot:		Diameter:	Depth]	Interval:	Well Total	Depth (ft. BGS):	Depth to Water (ft. BTOC):	DTW Date:	
PVC		0.010-ii	nch	2-inch	100 -	105 ft		1()5	> 105	12/16/2020	
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Litholog	Well Completion		
0 5 10 15	NM	L	D	N	N	NM	CE	NS	Buff to pale	-		
20 25 30 35 40 45 50	NM	L	D	Ν	N	NM	SM	NS	Tan to pale i	red silty sand		
55 60	NM	М	М	N	N	NM	ML	NS	Tan to pale red sa mediu	ndy silt with minor m sand	-	
65	NM	Н	М	N	N	NM	CL	NS	Tan clay with	n minor gravel		
70 75 80	NM	L	D	N	N	NM	SP	NS	Pale red poorly graming	aded fine sand with or silt		
85	NM	Н	D/SLM	N	N	NM	CL	NS	Grey sandy lean medium sand and n	clay with minor ninor angular gravel		
90 95 100	NM	M/H	М	N	N	NM	CL	NS	Brown with orange sandy lean clay with minor medium sand and angular gravel - TD Boring: 105'		-	

Attachment 02: Laboratory Analytical Results

eurofins Environment Testing

Xenco

Project Id:07052020Contact:Lynda Laumbach

Project Location:

Certificate of Analysis Summary 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: RDX 17 Federal Com #006H

 Date Received in Lab:
 Thu 07.16.2020 16:20

 Report Date:
 07.22.2020 08:07

 Project Manager:
 Jessica Kramer

	Lab Id:	667473-001		667473-00)2	667473-003		667473-004		667473-005		667473-006	
Analysis Requested	Field Id:	DS01		DS01A		DS02		DS02A		DS03		DS03A	
Analysis Requested	Depth:	2- ft		4- ft		2- ft		4- ft		2- ft		4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	07.16.2020 09:20		07.16.2020 0	9:25	07.16.2020 09:30		07.16.2020 09:35		07.16.2020 09:45		07.16.2020 09:50	
Chloride by EPA 300	bride by EPA 300 <i>Extracted:</i> 07.17.2020 16:30		6:30	07.17.2020 1	6:30	07.17.2020 16:30		07.17.2020 16:30		07.17.2020 16:30		07.17.2020 16:30	
	Analyzed:	07.17.2020 20:49		07.17.2020 2	21:05	07.17.2020 21:11		07.17.2020 21:16		07.17.2020 21:22		07.17.2020 21:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		8340	200	723	100	4700	98.6	1430	99.8	26700	988	30900	1000

BRL - Below Reporting Limit

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

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eurofins Environment Testing

Xenco

Project Id:07052020Contact:Lynda Laumbach

Project Location:

Certificate of Analysis Summary 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: RDX 17 Federal Com #006H

 Date Received in Lab:
 Thu 07.16.2020 16:20

 Report Date:
 07.22.2020 08:07

Project Manager: Jessica Kramer

	Lab Id:	667473-00)7	667473-0	08	667473-0	09	667473-0	010	667473-01	11	667473-0)12
Analysis Roayostad	Field Id:	DS03B	DS03B		2	DS03D		DS04		DS04A		DS04B	
Anulysis Requested	Depth:	6- ft	6- ft			10- ft		2- ft		4- ft		6- ft	
	Matrix:	SOIL	SOIL			SOIL SOIL			SOIL		SOIL		
	Sampled:	07.16.2020 09:55		07.16.2020	10:00	07.16.2020 10:05		07.16.2020 10:10		07.16.2020 10:20		07.16.2020 10:25	
Chloride by EPA 300	Extracted:	07.17.2020 1	07.17.2020 16:30		07.17.2020 16:30 07.17.2020 16:30		07.17.2020 16:30		07.17.2020 16:30		07.17.2020 16:30		
	Analyzed:	07.17.2020 2	07.17.2020 21:44		21:50	07.17.2020 21:55		07.17.2020 22:01		07.17.2020 22:07		07.17.2020 22:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		32700	992	27200	998	28400	1000	26900	1010	23500 X	996	13800	1000

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Xenco

Project Id: 07052020 Lynda Laumbach **Contact:**

Project Location:

Certificate of Analysis Summary 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: RDX 17 Federal Com #006H

Date Received in Lab: Thu 07.16.2020 16:20 Report Date: 07.22.2020 08:07

Project Manager: Jessica Kramer

	Lab Id:	667473-0	13	667473-0	14	667473-0	15	667473-0	16	667473-0	17	667473-0	018
Analysis Requested	Field Id:	DS04C		DS05		DS05A		DS05B		DS05C		DS06	
Analysis Requested	Depth:	10- ft		2- ft		4- ft		6- ft		10- ft		2- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL	SOIL SOIL			SOIL	
	Sampled:	07.16.2020 10:30		07.16.2020	10:45	07.16.2020 10:50		07.16.2020 10:55		07.16.2020 11:00		07.16.2020 11:15	
Chloride by EPA 300	Extracted:	07.17.2020	16:30	07.17.2020 16:30 (07.17.2020	16:30	07.17.2020 16:30		07.17.2020 16:30		07.17.2020 16:30	
	Analyzed:	07.17.2020 22:29		07.17.2020 2	0 22:46 07.17.2020 22:51		22:51	07.17.2020 22:57		07.17.2020 23:02		07.17.2020 23:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		16000	1000	26000	988	24300	990	24800	994	24500	996	18800	998

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eurofins Environment Testing Xenco

Project Id: 07052020 Lynda Laumbach **Contact:**

Project Location:

Certificate of Analysis Summary 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: RDX 17 Federal Com #006H

Date Received in Lab: Thu 07.16.2020 16:20 Report Date: 07.22.2020 08:07

Project Manager: Jessica Kramer

	Lab Id:	667473-0	667473-019		20	667473-021		667473-022		667473-023		667473-0	24	
Analysis Reauested	Field Id:	DS06A	DS06A		DS06B		DS06C		DS07		DS07A		DS07B	
Thurysis Requesieu	Depth:	4- ft		6- ft		10- ft		2- ft		4- ft		6- ft		
	Matrix:	SOIL	SOIL			SOIL		SOIL		SOIL		SOIL		
	Sampled:	07.16.2020	07.16.2020 11:20		11:25	07.16.2020 11:30		07.16.2020 11:50		07.16.2020 11:55		07.16.2020 12:00		
Chloride by EPA 300	Extracted:	07.17.2020	07.17.2020 16:30		16:30	07.17.2020 13:25		07.17.2020 13:25		07.17.2020 13:25		07.17.2020 13:25		
	Analyzed:	07.17.2020	07.17.2020 23:14		23:19	07.17.2020 19:53		07.17.2020 19:58		07.17.2020 20:04		07.17.2020 20:10		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		34600	990	37900	998	28400	988	26300	992	22500	992	23100	998	
TPH By SW8015 Mod	Extracted:							07.17.2020	14:30	07.17.2020	14:30			
	Analyzed:							07.17.2020	21:02	07.17.2020	21:22			
	Units/RL:							mg/kg	RL	mg/kg	RL			
Gasoline Range Hydrocarbons (GRO)								<49.8	49.8	<49.9	49.9			
Diesel Range Organics (DRO)								<49.8	49.8	<49.9	49.9			
Motor Oil Range Hydrocarbons (MRO)								<49.8	49.8	<49.9	49.9			
Total TPH								<49.8	49.8	<49.9	49.9			

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Received by	OCD:	3/23/2021	11:00:56 PM
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Xenco

Project Id:07052020Contact:Lynda Laumbach

Project Location:

Certificate of Analysis Summary 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

Project Name: RDX 17 Federal Com #006H

Date Received in Lab:Thu 07.16.2020 16:20Report Date:07.22.2020 08:07Project Manager:Jessica Kramer

	Lab Id:	667473-025			
Analysis Paguastad	Field Id:	DS07C			
Anulysis Kequesieu	Depth:	10- ft			
	Matrix:	SOIL			
	Sampled:	07.16.2020 12:05			
Chloride by EPA 300	Extracted:	07.17.2020 13:25			
	Analyzed:	07.17.2020 20:15			
	Units/RL:	mg/kg RL			
Chloride		23800 1000			

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eurofins Environment Testing Xenco

Analytical Report 667473

for

WPX Energy Permian Basin, LLC

Project Manager: Lynda Laumbach

RDX 17 Federal Com #006H

07052020

07.22.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054) Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins Environment Testing Xenco

07.22.2020

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

Reference: Eurofins Xenco, LLC Report No(s): 667473 RDX 17 Federal Com #006H Project Address:

Lynda Laumbach:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 667473. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 667473 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

fession kenner

Jessica Kramer Project Manager

A Small Business and Minority Company

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

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eurofins Environment Testing Xenco

Sample Cross Reference 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
DS01	S	07.16.2020 09:20	2 ft	667473-001
DS01A	S	07.16.2020 09:25	4 ft	667473-002
DS02	S	07.16.2020 09:30	2 ft	667473-003
DS02A	S	07.16.2020 09:35	4 ft	667473-004
DS03	S	07.16.2020 09:45	2 ft	667473-005
DS03A	S	07.16.2020 09:50	4 ft	667473-006
DS03B	S	07.16.2020 09:55	6 ft	667473-007
DS03C	S	07.16.2020 10:00	8 ft	667473-008
DS03D	S	07.16.2020 10:05	10 ft	667473-009
DS04	S	07.16.2020 10:10	2 ft	667473-010
DS04A	S	07.16.2020 10:20	4 ft	667473-011
DS04B	S	07.16.2020 10:25	6 ft	667473-012
DS04C	S	07.16.2020 10:30	10 ft	667473-013
DS05	S	07.16.2020 10:45	2 ft	667473-014
DS05A	S	07.16.2020 10:50	4 ft	667473-015
DS05B	S	07.16.2020 10:55	6 ft	667473-016
DS05C	S	07.16.2020 11:00	10 ft	667473-017
DS06	S	07.16.2020 11:15	2 ft	667473-018
DS06A	S	07.16.2020 11:20	4 ft	667473-019
DS06B	S	07.16.2020 11:25	6 ft	667473-020
DS06C	S	07.16.2020 11:30	10 ft	667473-021
DS07	S	07.16.2020 11:50	2 ft	667473-022
DS07A	S	07.16.2020 11:55	4 ft	667473-023
DS07B	S	07.16.2020 12:00	6 ft	667473-024
DS07C	S	07.16.2020 12:05	10 ft	667473-025

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CASE NARRATIVE

Client Name: WPX Energy Permian Basin, LLC Project Name: RDX 17 Federal Com #006H

 Project ID:
 07052020

 Work Order Number(s):
 667473

 Report Date:
 07.22.2020

 Date Received:
 07.16.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3132059 Chloride by EPA 300

Lab Sample ID 667473-011 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 667473-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.
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WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id:	DS01		Matrix:	Soil		Date Received	l:07.16.2	2020 16:2	20
	1. 00/4/3-001		Date Cone	ected: 07.16.2020 09:20		Sample Deput	: 2 II		
Analytical Me	thod: Chloride by EPA	300				Prep Method:	E300P		
Tech:	MAB					% Moisture:			
Analyst:	MAB		Date Prep	: 07.17.2020 16:30		Basis:	Wet W	eight	
Seq Number:	3132059								
Parameter		Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride		16887-00-6	8340	200	mg/kg	07.17.2020 20):49		20

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS01A l: 667473-002		Matrix: Date Collect	Soil ed: 07.16.2020 09:25		Date Received Sample Depth	1:07.16.2 :: 4 ft	020 16:2	20
Analytical Me Tech: Analyst: Seq Number:	thod: Chloride by EPA MAB MAB 3132059	300	Date Prep:	07.17.2020 16:30		Prep Method: % Moisture: Basis:	E300P Wet We	eight	
Parameter		Cas Number	Result R	L	Units	Analysis D	ate I	Flag	Dil
Chloride		16887-00-6	723	100	mg/kg	07.17.2020 2	1:05		10

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WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS02		Matrix: Date Colle	Soil ected: 07-16-2020-09:30		Date Received	l:07.16.2020 1 · 2 ft	16:20
Analytical Me	thod: Chloride by EPA	300	Date Colle	cted. 07.10.2020 09.50		Prep Method:	E300P	
Tech:	MAB					% Moisture:		
Analyst:	MAB		Date Prep:	07.17.2020 16:30		Basis:	Wet Weight	
Seq Number:	3132059							
Parameter		Cas Number	Result	RL	Units	Analysis Da	ate Flag	Dil
Chloride		16887-00-6	4700	98.6	mg/kg	07.17.2020 2	1:11	10

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS02A 1: 667473-004		Matrix: Date Colle	Soil cted: 07.16.2020 09:35		Date Received Sample Depth	1:07.16.2 :: 4 ft	2020 16:2	20
Analytical Me Tech: Analyst: Seq Number:	thod: Chloride by EPA MAB MAB 3132059	300	Date Prep:	07.17.2020 16:30		Prep Method: % Moisture: Basis:	E300P Wet W	eight	
Parameter		Cas Number	Result	RL	Units	Analysis D	ate]	Flag	Dil
Chloride		16887-00-6	1430	99.8	mg/kg	07.17.2020 2	1:16		10

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WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS03 d: 667473-005		Matrix: Date Coll	Soil ected: 07.16.2020 09:45	i	Date Received Sample Depth	1:07.1 1:2 ft	6.2020 16:	20
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132059	300	Date Prep	e: 07.17.2020 16:30)	Prep Method: % Moisture: Basis:	E300 Wet	0P Weight	
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	26700	988	mg/kg	07.17.2020 2	1:22		100

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS03A d: 667473-006		Matrix: Date Coll	Soil ected: 07.16.2020 09:50		Date Received Sample Depth	1:07.1 1:4 ft	6.2020 16:	20
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132059	300	Date Prep	o: 07.17.2020 16:30		Prep Method: % Moisture: Basis:	E300 Wet	0P Weight	
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	30900	1000	mg/kg	07.17.2020 2	1:39		100

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS03B d: 667473-007		Matrix: Date Coll	Soil ected: 07.16.2020 09:55		Date Received Sample Depth	1:07.1 : 6 ft	6.2020 16:	20
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132059	300	Date Prep	: 07.17.2020 16:30	1	Prep Method: % Moisture: Basis:	E300 Wet)P Weight	
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	32700	992	mg/kg	07.17.2020 2	1:44		100

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS03C d: 667473-008		Matrix: Date Coll	Soil ected: 07.16.2020 10:00)	Date Received Sample Depth	1:07.1 1:8 ft	6.2020 16:	20
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132059	300	Date Prep	o: 07.17.2020 16:30	I	Prep Method: % Moisture: Basis:	E300 Wet	0P Weight	
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	27200	998	mg/kg	07.17.2020 2	1:50		100

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS03D d: 667473-009		Matrix: Date Coll	Soil ected: 07.16.2020 10:05		Date Received Sample Depth	1:07.1 1:10 ft	6.2020 16:2 :	20
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132059	300	Date Prep	o: 07.17.2020 16:30	I	Prep Method: % Moisture: Basis:	E300 Wet	DP Weight	
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	28400	1000	mg/kg	07.17.2020 2	1:55		100

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS04 d: 667473-010		Matrix: Date Coll	Soil ected: 07.16.2020 10:10		Date Received Sample Depth	l:07.16.2 :: 2 ft	2020 16:2	20
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132059	300	Date Prep	: 07.17.2020 16:30		Prep Method: % Moisture: Basis:	E300P Wet W	Veight	
Parameter		Cas Number	Result	RL	Units	Analysis Da	ate	Flag	Dil
Chloride		16887-00-6	26900	1010	mg/kg	07.17.2020 22	2:01		100

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WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS04A d: 667473-011		Matrix: Date Coll	Soil lected: 07.16.2020 10:20)	Date Received Sample Depth	:07.16 :4 ft	5.2020 16:	20
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132059	300	Date Prep	o: 07.17.2020 16:30)	Prep Method: % Moisture: Basis:	E300 Wet V	P Weight	
Parameter		Cas Number	Result	RL	Units	Analysis Da	ite	Flag	Dil
Chloride		16887-00-6	23500	996	mg/kg	07.17.2020 22	2:07	Х	100

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id:	DS04B		Matrix:	Soil		Date Received	1:07.16	.2020 16:2	20
Lab Sample Io	d: 667473-012		Date Coll	ected: 07.16.2020 10:25		Sample Depth	: 6 ft		
Analytical Me	ethod: Chloride by EPA	300				Prep Method:	E3001	Р	
Tech:	MAB					% Moisture:			
Analyst:	MAB		Date Prep	: 07.17.2020 16:30)	Basis:	Wet V	Weight	
Seq Number:	3132059								
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	13800	1000	mg/kg	07.17.2020 22	2:23		100

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id:	DS04C		Matrix:	Soil		Date Received	1:07.16.2	2020 16:2	20
Lab Sample Io	d: 667473-013		Date Coll	ected: 07.16.2020 10:30)	Sample Depth: 10 ft			
Analytical Me	ethod: Chloride by EPA	300				Prep Method:	E300P		
Tech:	MAB					% Moisture:			
Analyst:	MAB		Date Prep	: 07.17.2020 16:30)	Basis:	Wet W	eight	
Seq Number:	3132059								
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	16000	1000	mg/kg	07.17.2020 22	2:29		100

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WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample I	DS05 d: 667473-014		Matrix: Date Coll	Soil ected: 07.16.2020 10:45		Date Received Sample Depth	1:07.1 : 2 ft	6.2020 16:	20
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132059	300	Date Prep	o: 07.17.2020 16:30		Prep Method: % Moisture: Basis:	E300 Wet)P Weight	
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	26000	988	mg/kg	07.17.2020 22	2:46		100

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS05A d: 667473-015		Matrix: Date Coll	Soil ected: 07.16.2020 10:50		Date Received Sample Depth	20		
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132059	300	Date Prep	o: 07.17.2020 16:30		Prep Method: % Moisture: Basis:	E300 Wet	0P Weight	
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	24300	990	mg/kg	07.17.2020 22	2:51		100

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS05B d: 667473-016		Matrix: Date Coll	Soil ected: 07.16.2020 10:55		Date Received Sample Depth	20		
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132059	300	Date Prep	: 07.17.2020 16:30		Prep Method: % Moisture: Basis:	E300 Wet	0P Weight	
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	24800	994	mg/kg	07.17.2020 22	2:57		100

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WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id:	DS05C		Matrix:	Soil		Date Received	1:07.16.	2020 16:2	20
Lab Sample Io	d: 667473-017		Date Coll	ected: 07.16.2020 11:00)	Sample Depth			
Analytical Me	ethod: Chloride by EPA	300				Prep Method:	E300F	þ	
Tech:	MAB					% Moisture:			
Analyst:	MAB		Date Prep	: 07.17.2020 16:30)	Basis:	Wet W	Veight	
Seq Number:	3132059								
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	24500	996	mg/kg	07.17.2020 2	3:02		100

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WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample I	DS06 d: 667473-018		Matrix: Date Coll	Soil ected: 07.16.2020 11:15		Date Received Sample Depth	1:07.1 : 2 ft	6.2020 16:	20
Analytical Ma Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132059	300	Date Prep	o: 07.17.2020 16:30		Prep Method: % Moisture: Basis:	E300 Wet)P Weight	
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	18800	998	mg/kg	07.17.2020 22	3:08		100

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WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS06A d: 667473-019		Matrix: Date Coll	Soil ected: 07.16.2020 11:20)	Date Received Sample Depth	1:07.1 1:4 ft	6.2020 16:	20
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132059	300	Date Prep	o: 07.17.2020 16:30)	Prep Method: % Moisture: Basis:	E300 Wet	0P Weight	
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	34600	990	mg/kg	07.17.2020 22	3:14		100

Released to Imaging: 7/21/2021 11:16:43 AM

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS06B d: 667473-020		Matrix: Date Coll	Soil ected: 07.16.2020 11:25	i	Date Received Sample Depth	1:07.1 1:6 ft	6.2020 16:	20
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132059	300	Date Prep	o: 07.17.2020 16:30)	Prep Method: % Moisture: Basis:	E300 Wet	0P Weight	
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	37900	998	mg/kg	07.17.2020 22	3:19		100

Released to Imaging: 7/21/2021 11:16:43 AM

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: Lab Sample Id	DS06C d: 667473-021		Matrix: Date Coll	Soil ected: 07.16.2020 11:30		Date Received Sample Depth	1:07.10 : 10 ft	6.2020 16:	20
Analytical Me Tech: Analyst: Seq Number:	ethod: Chloride by EPA MAB MAB 3132057	300	Date Prep	p: 07.17.2020 13:25		Prep Method: % Moisture: Basis:	E300 Wet)P Weight	
Parameter		Cas Number	Result	RL	Units	Analysis D	ate	Flag	Dil
Chloride		16887-00-6	28400	988	mg/kg	07.17.2020 1	9:53		100

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: DS07 Lab Sample Id: 667473-022	Matrix: Soil Date Collected: 07.16.2020 11:50				Date Received:07.16.2020 16:20 Sample Depth: 2 ft			
Analytical Method: Chloride by E	PA 300					Prep Method: E300 % Moisture:)P	
Analyst: MAB		Date Pre	o: 07.17	.2020 13:25		Basis: Wet	Weight	
Seq Number: 3132057							U	
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26300	992		mg/kg	07.17.2020 19:58		100
Analytical Method:TPH By SW8Tech:DTHAnalyst:DTHSeq Number:3132061	015 Mod	Date Prej	p: 07.17	2.2020 14:30		Prep Method: SW8 % Moisture: Basis: Wet	015P Weight	
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8		mg/kg	07.17.2020 21:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8		mg/kg	07.17.2020 21:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8		mg/kg	07.17.2020 21:02	U	1
Total TPH	PHC635	<49.8	49.8		mg/kg	07.17.2020 21:02	U	1
Surrogate	(Cas Number %	6 Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	1	11-85-3	108	%	70-135	07.17.2020 21:02		

109

%

70-135

07.17.2020 21:02

84-15-1

o-Terphenyl

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1-Chlorooctane o-Terphenyl

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id: DS07A		Matrix:	Soil		Date Received:07.1	6.2020 16:	:20
Lab Sample Id: 667473-023		Date Coll	ected: 07.16.2020 11:55		Sample Depth: 4 ft		
Analytical Method: Chloride by EP	PA 300				Prep Method: E300)P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep	: 07.17.2020 13:25		Basis: Wet	Weight	
Seq Number: 3132057							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22500	992	mg/kg	07.17.2020 20:04		100
Analytical Method:TPH By SW80Tech:DTHAnalyst:DTHSeq Number:3132061	15 Mod	Date Prep	: 07.17.2020 14:30		Prep Method: SW8 % Moisture: Basis: Wet	8015P Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.17.2020 21:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.17.2020 21:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.17.2020 21:22	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.17.2020 21:22	U	1
Surrogate	Ca	as Number %	Recovery Units	Limit	s Analysis Date	Flag	

112

112

%

%

70-135

70-135

07.17.2020 21:22

07.17.2020 21:22

111-85-3

84-15-1

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id:	DS07B		Matrix:	Soil		Date Received	1:07.16.2020 1	5:20	
Lab Sample Io	d: 667473-024		Date Coll	ected: 07.16.20	020 12:00	Sample Depth: 6 ft			
Analytical Me	ethod: Chloride by EPA	300				Prep Method:	E300P		
Tech:	MAB					% Moisture:			
Analyst:	MAB		Date Prep	: 07.17.20	020 13:25	Basis:	Wet Weight		
Seq Number:	3132057								
Parameter		Cas Number	Result	RL	Units	Analysis Da	ate Flag	Dil	
Chloride		16887-00-6	23100	998	mg/kg	07.17.2020 20	0:10	100	

Certificate of Analytical Results 667473

WPX Energy Permian Basin, LLC, Carlsbad, NM

RDX 17 Federal Com #006H

Sample Id:	DS07C		Matrix:	Soil		Date Received	1:07.16.202	20 16:20
Lab Sample Io	1: 667473-025		Date Coll	ected: 07.16.2020 12:05	5	Sample Depth	10 ft	
Analytical Me	ethod: Chloride by EPA	300				Prep Method:	E300P	
Tech:	MAB					% Moisture:		
Analyst:	MAB		Date Prep	: 07.17.2020 13:2:	5	Basis:	Wet Weig	ght
Seq Number:	3132057							
Parameter		Cas Number	Result	RL	Units	Analysis D	ate Fla	ıg Dil
Chloride		16887-00-6	23800	1000	mg/kg	07.17.2020 20	0:15	100

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

** Surrogate recovered outside laboratory control limit.

BRL	Below Reporting Limit.	ND Not Detected.			
RL	Reporting Limit				
MDL	Method Detection Limit	SDL Sample Det	ection Limit	LOD Limit of Detection	
PQL	Practical Quantitation Limit	MQL Method Qua	antitation Limit	LOQ Limit of Quantitation	1
DL	Method Detection Limit				
NC	Non-Calculable				
SMP	Client Sample		BLK	Method Blank	
BKS/I	LCS Blank Spike/Laboratory	Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labor	atory Control Sample Duplicate
MD/S	D Method Duplicate/Samp	le Duplicate	MS	Matrix Spike	MSD: Matrix Spike Duplicate
+ NE	LAC certification not offered	for this compound.			

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

Received by OCD: 3/23/2021 11:00:56 PM

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Environment Testing

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QC Summary 667473

WPX Energy Permian Basin, LLC

RDX 17 Federal Com #006H

Analytical Method: Seq Number:	Chloride by 3132057)0		Matrix:	Solid			P	rep Meth Date Pr	od: E30 ep: 07.	00P 17.2020		
MB Sample Id:	7707603-1-1	BLK		LCS Sar	nple Id:	7707603-	1-BKS		LCS	D Sample	e Id: 770	7603-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		<10.0	250	254	102	265	106	90-110	4	20	mg/kg	07.17.2020 17:50	
Analytical Method:	Chloride by	y EPA 30)0						P	rep Meth	od: E30)0P	
Seq Number:	3132059				Matrix:	Solid			LOG	Date Pr	ep: 07.	17.2020	
MB Sample Id:	7707604-1-1	BLK		LCS Sar	npie ia:	//0/604-	I-BK2		LCS	D Sample	e Id: 770	1/604-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		<10.0	250	255	102	266	106	90-110	4	20	mg/kg	07.17.2020 20:37	
Analytical Method:	Chloride by	y EPA 30)0						P	rep Meth	od: E30)0P	
Seq Number:	3132057				Matrix:	Soil				Date Pr	ep: 07.	17.2020	
Parent Sample Id:	667509-014			MS Sai	nple Id:	667509-0	14 S		MS	D Sample	e Id: 667	509-014 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		285	200	492	104	492	104	90-110	0	20	mg/kg	07.17.2020 18:07	
Analytical Method: Seq Number:	Chloride by 3132057	y EPA 30)0		Matrix:	Soil			P	rep Meth Date Pr	od: E30 rep: 07.2	00P 17.2020	
Parent Sample Id:	667509-024			MS Sa	nple Id:	667509-02	24 S		MS	D Sample	e Id: 667	509-024 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		360	200	553	97	554	97	90-110	0	20	mg/kg	07.17.2020 19:25	
Analytical Method: Seq Number:	Chloride by 3132059	v EPA 30)0		Matrix:	Soil			P	rep Meth Date Pr	od: E30 rep: 07.2	00P 17.2020	
Parent Sample Id:	667473-001			MS Sai	nple Id:	667473-0	01 S		MS	D Sample	e Id: 667	473-001 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		8340	201	8530	95	8530	94	90-110	0	20	mg/kg	07.17.2020 20:54	
Analytical Method: Seq Number:	Chloride by 3132059	y EPA 30)0		Matrix:	Soil			P	rep Meth Date Pr	od: E30 rep: 07.2	00P 17.2020	
Parent Sample Id:	667473-011			MS Sa	nple Id:	667473-0	11 S		MS	D Sample	e Id: 667	473-011 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride		23500	1990	21700	0	21700	0	90-110	0	20	mg/kg	07.17.2020 22:12	Х

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference $\begin{array}{l} [D] = 100*(C-A) \ / \ B \\ RPD = 200* \ | \ (C-E) \ / \ (C+E) \ | \\ [D] = 100*(C) \ / \ [B] \\ Log \ Diff. = Log(Sample \ Duplicate) \ - \ Log(Original \ Sample) \end{array}$

LCS = Laboratory Control Sample A = Parent Result C = MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

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Received by OCD: 3/23/2021 11:00:56 PM

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Environment Testing

QC Summary 667473

WPX Energy Permian Basin, LLC

RDX 17 Federal Com #006H

Analytical Method: Seq Number: MB Sample Id:	TPH By SV 3132061 7707606-1-	W8015 M •BLK	od	l LCS San	Matrix: ple Id:	Solid 7707606-1	I-BKS		P1 LCS	ep Methe Date Pr D Sample	od: SW3 ep: 07.1 e Id: 770	8015P 7.2020 7606-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbo	ons (GRO)	<50.0	1000	1040	104	1040	104	70-135	0	35	mg/kg	07.17.2020 14:31	
Diesel Range Organics (DRO)	< 50.0	1000	1010	101	1180	118	70-135	16	35	mg/kg	07.17.2020 14:31	
Surrogate		MB %Rec	MB Flag	L(%]	CS Rec	LCS Flag	LCSE %Rec) LCSI c Flag	D Li g	mits	Units	Analysis Date	
1-Chlorooctane		117		12	26		127		70	-135	%	07.17.2020 14:31	
o-Terphenyl		119		12	26		124		70	-135	%	07.17.2020 14:31	

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW	8015P	
Seq Number:	3132061	Matrix:	Solid	Date Prep:	07.1	7.2020	
		MB Sample Id:	7707606-1-BLK				
Parameter		MB Result		τ	J nits	Analysis Date	Flag
Motor Oil Range Hydrocarb	oons (MRO)	<50.0		n	ng/kg	07.17.2020 14:10	

Analytical Method:	TPH By SW	od						Pı	ep Meth	od: SW	8015P		
Seq Number:	3132061]	Matrix:	Soil				Date Pr	ep: 07.1	7.2020	
Parent Sample Id:	667509-014			MS San	nple Id:	667509-01	14 S		MS	D Sample	e Id: 667	509-014 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbo	ons (GRO)	< 50.0	999	1010	101	948	95	70-135	6	35	mg/kg	07.17.2020 15:34	
Diesel Range Organics (DRO)	<50.0	999	1110	111	1040	104	70-135	7	35	mg/kg	07.17.2020 15:34	
Surrogate				N %1	IS Rec	MS Flag	MSD %Re) MSI c Flag) Li g	mits	Units	Analysis Date	
-Chlorooctane				123			121		70	-135	%	07.17.2020 15:34	
o-Terphenyl	o-Terphenyl			106			100		70	70-135		07.17.2020 15:34	

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference $\label{eq:c-A} \begin{array}{l} [D] = 100^{*}(C\text{-}A) \ / \ B \\ RPD = 200^{*} \ | \ (C\text{-}E) \ / \ (C\text{+}E) \ | \\ [D] = 100^{*} \ (C) \ / \ [B] \\ Log \ Diff. = Log(Sample \ Duplicate) \ - \ Log(Original \ Sample) \end{array}$

LCS = Laboratory Control Sample A = Parent Result C = MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

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gnature) Received by: (Signature)	2	0111 2	2/1/10		(
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sugus standard terms and conditions e to circumstances beyond the control ed unless previously negotiated.	/ the client if such losses are due /zed. These terms will be enforce	Xpenses incurred by Xenco, but not analy	r each sample submitted to	and shall not assume any responsion of the state of the s	F \$85.00 will be applied to eac	Xenco. A minimum charge o
Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Si 0 Ni Se Ag Ti U Hg: 16	Cd Ca Cr Co Cu Fe Cr Co Cu Pb Mn Mo	As Ba Be B As Ba Be Cd	M Texas 11 AI St 6010: 8RCRA Sb hase order from client com	8RCRA 13PP /zed TCLP / SPLP mples constitutes a valid purci	Ind Metal(s) to be analy rent and relinquishment of sa	Circle Method(s) and the service Signature of this documents of the service of th
			V V V	× 1010	7 000 8/ 6000	Total 200 7 / 6010
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				9:20	AS	050
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			u' 1	1 9:20	A s	1051
		×	2' 6 1	7/6/2020 9:20	50	050
		Chic BTEX	Depth Grab/ # of Comp Cont	Date Time Sampled Sampled	cation Matrix	Sample Identif
Zn		rides (Me (Met	3.7	Corrected Temperature:	2%	I Utai Containers:
Na		etho	6	femperature Reading:	Yes (No) N/A 1	Sample Custody Seals:
Na		PA 3 od 8 d 80	Par	Correction Factor:	Yes NO N/A	Cooler Custody Seals:
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H2		.00) L)	(Yes) No	Yes No Wet Ice:	Temp Blank:	SAMPLE RECEIP
HO			day received by ived by 4:30pm	the lab, if rece	ryina raaliba	PO #:
			07/24/2000	Due Date:	I vnda l alimha	Sampler's Name:
			LIRush Code	Routine	0/03 606	Project I ocation
IS REQUEST	ANALYSI		Around	Con #000 Turn	KVX 17 Febral	Project Name:
Deliverables: EDD ADaPT		vpxenergy.com	Lynda.Laumbach@	Email:	10101120-1041	
Reporting:Level II Level III ST/US1	3220	Carlsbad, NM 88	City, State ZIP:		575/795 1617	Phone:
State of Project:	ta Dr	5315 Buena Vist	Address:		arlehad NIM poppo	City. State ZIP:
Program: UST/PST DRP Drownfiel	ermian, LLC.	VVPA Energy Pe	A data and a second sec		315 Buena Vista Dr	Address:
Work Order Co		WDY Essentia	Company Name:	LLC.	VPX Enery Permian, I	Company Name:
www.xenco.com	÷.	Lvnda I alimbac	Bill to: (if different)		-ynda Laumbach	Project Manager:
(210) 509-3334 806) 734-1296 180) 355-0900 ⁻ L (561) 689-6701	Custody) 902-0300, San Antonio, TX (915) 585-3443, Lubbock, TX (8 975) 988-3199, Phoenix, AZ (4 50) 756-0747, Delray Beach, F 70) 449-8800	hain of 0, Dallas, TX (214) 440, EL Paso, TX (80) 50, Carlsbad, NM (50) Tallahassee, FL (81) Atlanta, GA (7)	C ouston, TX (281) 240-42 Midland, TX (432) 704-5 Hobbs, NM (575) 392-75 Mpa, FL (813) 620-2000,			

Paramet Paramet ent Chlorides (EPA 300.0 ont Chlorides (EPA 300.0 Marson BTEX (Method 8021) Marson BTEX (Method 8021) TPH (Method 8015) TPH (Method 8015) Marson BTEX (Method 8015) Marson Barber (Method 8015) Marson Barber (Method 8015) Marson Barber (Marson Marson Barber (Marson Marson Barber (Marson Marson Barber (Marson Sb As Ba Be Cd Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SlO2 Na Sr TI Sn U V Zn Sb As Ba Be Cd Cr Co Cu Pb Mn No Ni Se Ag TI U Hg: 1631 / 245.1 / 7470 / 7471 Hg: 1631 / 245.1 / 7470 / 7471 Hg: 1631 / 245.1 / 7470 / 7471 Hg: 1631 / 245.1 / 7470 / 7471 Hg: 1631 / 245.1 / 7470 / 7471 Hg: 1631 / 245.1 / 7470 / 7471 Hg: 1631 / 245.1 / 7470 / 7471 Hg: 1631 / 245.1 / 7470 / 7471	Ied Sampled Depth Comp Gamp 20:20 10:20 1/2 <	10.8 / 6020: etal(s) to be analyzed id relinquishment of samples or the cost of samples and sh ow will be applied to each proj will be applied to each proj Rece	Relinquished by: (Signat
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Al So As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Vi K Se Ad SiO, Na Sc Ti So I V Za	Ideal Sampled Depth Comp	0.8/6020:	tice: Signature of this document a
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A 300.0 8021) 3015) H ₃ PO ₄ : HP	rature Deading:	tes No NA Femne	Sample Custody Seals:
	onfeter.ID:	Yes No in Them	Cooler Custody Sealer
	No Wet Ice: Yes No	Temp Blank: Yes	SAMPLE RECEIPI
HCL: HC HNO3	the lab, if received by 4:30pm	-	PO #
Cool: Cool MeOH	TAT starts the day received by	Lynda Laumbach	Sampler's Name:
Code None: NO DI Wa			Project Location
Pres. ANALYSIS REQUEST Preservative Co	Routine Rush P	07057070	Project Number:
	Cook Turn Around	X 17 Edeal Con #	Project Name:
The woxenergy.com Deliverables: FDD AD-DT DOL	Email: Lynda.Laumbac	725-1647	Phone: (575)
Carlsbad, NM 88220	City, State ZIP:	oad, NM 88220	City, State ZIP: Carls
5315 Buena Vista Dr State of Project:	Address:	Buena Vista Dr	Address: 5315
WPX Energy Permian. LLC.	Company Name:	Enery Permian, LLC.	Company Name: WPX
Lynda Laumbach Www.xenco.com Page 2 of	Bill to: (if different)	Laumbach	Project Manager: Lynd
Chain of Custody 10-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 92-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900 2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701 Atlanta, GA (770) 449-8800	Houston, TX (281) 24(Midland, TX (432) 7 Hobbs, NM (575) 39 Tampa, FL (813) 620-2		

		O1 CE			Relinquished by: 15	of service. Xenco will be liab	Notice: Signature of this docu	Circle Method(s) a	+			P507C	0507	D5076	2 = 50	9050	Sample Identi	i omi comencia.	Total Containant	Sample Cristody Seals	Cooler Clistody Seals	Received Intact:		Sampler's Name:	Project Location	Project Number:	Project Name:	Phone:	City, State ZIP:	Address:	Company Name:	r i uject ivianager:				
				1 America	Signature	le only for the cost of sample of \$85.00 will be applied to e	Iment and relinquishment of	and Metal(s) to be ana					5	S	N	C S	fication Matrix		I TES IND INIA	THEY NOX WHAT	Voc 612 NO	T Temp Blank:		Lynda Laumba		070520	RDX 17 Federa	(575)725-1647	Carlsbad, NM 88220	5315 Buena Vista Dr	WPX Enery Permian,	Lynda Laumbach	-		ABORATO	
			đ	Neceived by. (oigita	Received by: /Cime	samples constitutes a valid p is and shall not assume any re tach project and a charge of t	samples constitutes a valid	8RCRA 13		1		V 12:05	12:00	11:55	1 11:50	67/16/200 11:30	Sampled Sampled	Corrected Temperature:	Temperature Reading:	Correction Factor:	Mennomater TD:	Yes No Wet Ice:	the lab, if n	ach TAT starts	Due Date	Lo Skoutine	I Centro dH Tu	Ema			LLC.					5
			31/10	ure)	s for each sample submitted	urchase order from client co esponsibility for any losses c	-F BUIU. BRURA SE	PM Texas 11 AI S				10' V V	6'	4'	21 1 1	10' 6 1	Depth Comp Cont			Pa	arai	Xes No	eceived by 4:30pm	the day received by	22/24/22	Rush Pres	rn Around	il: Lynda.Laumbach@	City, State ZIP:	Address:	Company Name:	Bill to: (if different)		Tampa, FL (813) 620-2000	Houston, TX (281) 240-42 Midland, TX (432) 704-	0
	6	4	100 11:00 2	Date/ I ime	to Xenco, but not analyzed	mpany to Xenco, its affiliate or expenses incurred by the	As Ba Be Cd Cr	Sb As Ba Be B Cc		0		<		×	 X	×	Chl BTE TPH	oride EX (M	es (eth	EPA nod	80. 80.	00.00 21) 5))					wpxenergy.com	Carlsbad, NM 88220	5315 Buena Vista D	WPX Energy Permia	Lynda Laumbach	Atlanta, GA (770)	, Tallahassee, FL (850) 7	200, Dallas, TX (214) 902 5440, EL Paso, TX (915)	Chain of Cu
				Relinquished by: (Signature	. These terms will be enforced unles	es and subcontractors. It assigns st client if such losses are due to circ	Co Cu Pb Mn Mo Ni S	Ca Cr Co Cu Fe Pb M																			ANAL VOIC DEC				an, LLC.		449-8800	988-3199, Phoenix, AZ (480) 355 56-0747, Delray Beach, FL (561)	-0300, San Antonio, TX (210) 50 585-3443, Lubbock, TX (806) 794	ıstody
				e) Received	s previously negotiated.	andard terms and conditio	è Ag TI U	Ag Mn Mo Ni K Se			V																	Deliverables: EDD	Reporting:Level II	State of Project:	Program: UST/PST			-0900 689-6701	9-3334 -1296 W	
				d by: (Signature)		ns trol	Hg: 1631	9 Ag SiO ₂ Na Sr T										NaOH		Na ₂ S	NaH	Hapo		HCI	Non			ADaPT			DRD Countiold	Work Order Com	www.xenco.com		ork Order No:	
Revised Date 05012020 Rev. 2020.1				Date/Time			/ 245.1 / 7470 / 7471	TI Sn U V Zn									Sample Comments	H+Ascorbic Acid: SAPC	notato+NoOU. 75	501: NaSO	SOA: NABIS).: HP		HC HND HND HN	e: NO DI Water: H ₂ O	Preservative Codes				s _kc a pertund _		monte	Page 3 of 3		arth the mail	

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Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Acceptable Temperature Range: 0 - 6 degC							
Air and Metal samples Acc	eptable Range: Ambient						
Temperature Measuring de	evice used : T-NM-007						
ot Checklist	Comments						
2.7							
Yes							
Yes							
Yes							
Yes							
Yes							
Yes							
No							
Yes							
Yes							
Yes							
Yes	Samples reveicevd in bulk containers.						
Yes							
Yes							
Yes							
Yes							
No							
N/A							
	Acceptable Temperature R Air and Metal samples Acc Temperature Measuring de ot Checklist 2.7 Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes						

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

Analyst:

PH Device/Lot#:

Checklist completed by: Date: 07.16.2020 Elizabeth McClellan

Checklist reviewed by: fession Whamen Jessica Kramer

Date: 07.20.2020

Received by OCD: 3/23/2021 11:00:56 PM

eurofins 🔅

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-380-1

Client Project/Site: RDX Federal 17-6

For:

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

Attn: Lynda Laumbach

RAMER

Authorized for release by: 3/22/2021 2:22:11 PM

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

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.

www.eurofinsus.com/Env Released to Imaging: 7/21/2021 11:16:43 AM

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2

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Client: WPX E Project/Site: R	nergy Production LLC RDX Federal 17-6	Job ID: 890-380-1	2
Qualifiers			2
			J
Qualifier	Qualifier Description		
U	Indicates the analyte was analyzed for but not detected.		
Glossary			5
Abbreviation	These commonly used abbreviations may or may not be present in this report.		
¤	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		ð
DER	Duplicate Error Ratio (normalized absolute difference)		
Dil Fac	Dilution Factor		9
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)		13
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)		

Too Numerous To Count

TNTC

Case Narrative

Client: WPX Energy Production LLC
Project/Site: RDX Federal 17-6

Job ID: 890-380-1

Job ID: 890-380-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-380-1

Receipt

The samples were received on 3/18/2021 8:05 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 0.2°C

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.
		Client	Sample R	esults	i				
Client: WPX Energy Production LLC Project/Site: RDX Federal 17-6								Job ID: 89	90-380-1
Client Sample ID: SS01							Lab S	ample ID: 890)-380-1
Date Collected: 03/16/21 13:40								Matri	ix: Solid
Date Received: 03/18/21 08:05									
Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	379		5.04		mg/Kg			03/19/21 15:38	1
Client Sample ID: SS02							Lab S	ample ID: 890)-380-2
Date Collected: 03/16/21 13:45								Matri	ix: Solid
Date Received: 03/18/21 08:05									
Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	440		4.96		mg/Kg			03/19/21 15:53	1
							l ah S	ample ID: 900	200.2
Client Sample ID: 5503							Lap 5	ample ID: 890	1-360-3
Date Collected: 03/16/21 13:50								Matri	IX: 50110
Date Received. 03/10/21 00:05									
Method: 300.0 - Anions, Ion Chrom	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.8		4.98		mg/Kg			03/19/21 15:58	1
Client Sample ID: SS04							Lab S	ample ID: 890)-380-4
Date Collected: 03/16/21 13:55								Matri	ix: Solid
Date Received: 03/18/21 08:05									
Method: 300.0 - Anions, Ion Chrom	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	888		5.02		mg/Kg			03/19/21 16:03	1
Client Sample ID: SS05							Lab S	ample ID: 890)-380-5
Date Collected: 03/16/21 14:00								Matri	ix: Solid
Date Received: 03/18/21 08:05									
Method: 300.0 - Anions, Ion Chrom	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1060		5.04		mg/Kg			03/19/21 16:08	1
Client Sample ID: SS06							l ah S	ample ID: 890	-380-6
Date Collected: 03/16/21 14:05								Matri	ix: Solid
Date Received: 03/18/21 08:05									in oonu
F									
Method: 300.0 - Anions, Ion Chrom	hatography -	Soluble	ы	MDI	11		Dranavad	Analyzad	
Analyte	Result	Qualifier		MDL		<u>D</u>	Prepared	Analyzed	
	213		5.05		ilig/itg			03/19/21 10:23	I
Client Sample ID: SS07							Lab S	ample ID: 890)-380-7
Date Collected: 03/16/21 14:10								Matri	ix: Solid
Date Received: 03/18/21 08:05									
Method: 300.0 - Anions, Ion Chrom	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Chloride	518		5.05		mg/Kg			03/19/21 16:28	1

Eurofins Xenco, Carlsbad

		Client	Sample R	esults	;				
Client: WPX Energy Production LLC Project/Site: RDX Federal 17-6			-					Job ID: 89	0-380-1
Client Sample ID: SS08 Date Collected: 03/16/21 14:15 Date Received: 03/18/21 08:05							Lab S	ample ID: 890 Matri)-380-8 ix: Solid
Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	707		4.98		mg/Kg			03/19/21 16:33	1
Client Sample ID: SS09							Lab S	ample ID: 890)-380-9
Date Collected: 03/16/21 14:20								Matri	ix: Solid
Date Received: 03/18/21 08:05									
Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	125		4.95		mg/Kg			03/19/21 16:38	1
Client Sample ID: SS10							Lab Sa	mple ID: 890-	380-10
Date Collected: 03/16/21 14:25								Matri	ix: Solid
Date Received: 03/18/21 08:05									
Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	347		5.04		mg/Kg			03/19/21 16:43	1
Client Sample ID: SS11							Lab Sa	mple ID: 890-	380-11
Date Collected: 03/16/21 14:30								Matri	ix: Solid
Date Received: 03/18/21 08:05									
Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	368		25.1		mg/Kg			03/19/21 18:33	5
Client Sample ID: SS12							Lab Sa	mple ID: 890-	380-12
Date Collected: 03/16/21 14:35								Matri	ix: Solid
Date Received: 03/18/21 08:05									
Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1350		25.0		mg/Kg			03/19/21 18:39	5

RL

5.00

Spike

Added

250

Spike

Added

250

MB MB

<5.00 U

Result Qualifier

Lab Sample ID: MB 880-593/1-A

Lab Sample ID: LCS 880-593/2-A

Lab Sample ID: LCSD 880-593/3-A

Lab Sample ID: 890-380-1 MS

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid Analysis Batch: 594

Analyte

Chloride

Analyte

Chloride

Analyte

Chloride

Analyte Chloride

Analysis Batch: 594

Analysis Batch: 594

Analysis Batch: 594

Job ID: 890-380-1

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

RPD

Client Sample ID: Method Blank

Analyzed

03/19/21 15:23

Client Sample ID: Lab Control Sample

%Rec.

Limits

90 - 110

%Rec.

Limits

90 - 110

Client Sample ID: Lab Control Sample Dup

6

Dil Fac

1

RPD

Limit

20

ent Sample ID: SS01	
Prep Type: Soluble	

								Client San Prep 1	nple ID: SS01 Type: Soluble
Sample	Sample	Spike	MS	MS				%Rec.	
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
 379		252	640.4		ma/Ka		104	90 110	

MDL Unit

LCS LCS

LCSD LCSD

Result Qualifier

263.4

265.4

Result Qualifier

mg/Kg

Unit

Unit

mg/Kg

mg/Kg

D

D

D

Prepared

%Rec

%Rec

106

105

Lab Sample ID: 890-380-1 MSD Matrix: Solid Apalysis Batch: 594									Client Sa Prep	mple ID: Type: So	SS01 oluble
Analysis Datch. 334	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	379		252	642.6		mg/Kg		104	90 - 110	0	20

ab Sample ID: MB 880-595/1-A Iatrix: Solid							Client Sample ID: Method					
Analysis Batch: 596								тер туре.	ooluble			
	MB	МВ										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac			
Chloride	<5.00	U	5.00		mg/Kg			03/19/21 15:54	1			
Lab Sample ID: LCS 880-595/2-A						CI	ient Sample	ID: Lab Control	Sample			
Matrix: Solid								Bron Type:	Soluble			

							Fieb	Type. Soluble	
Analysis Batch: 596									
	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	250	249.7		ma/Ka		100	90 - 110		

Lab Sample ID: LCSD 880-595/3-A		Client Sample ID: Lab Control Sample I								
Matrix: Solid						Prep	Type: Se	oluble		
Analysis Batch: 596										
	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	250.1		mg/Kg		100	90 - 110	0	20	

Eurofins Xenco, Carlsbad

Released to Imaging: 7/21/2021 11:16:43 AM

QC Association Summary

Client: WPX Energy Production LLC Project/Site: RDX Federal 17-6

Leach Batch: 593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-380-1	SS01	Soluble	Solid	DI Leach	
890-380-2	SS02	Soluble	Solid	DI Leach	
890-380-3	SS03	Soluble	Solid	DI Leach	
890-380-4	SS04	Soluble	Solid	DI Leach	
890-380-5	SS05	Soluble	Solid	DI Leach	
890-380-6	SS06	Soluble	Solid	DI Leach	
890-380-7	SS07	Soluble	Solid	DI Leach	
890-380-8	SS08	Soluble	Solid	DI Leach	
890-380-9	SS09	Soluble	Solid	DI Leach	
890-380-10	SS10	Soluble	Solid	DI Leach	
MB 880-593/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-593/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-593/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-380-1 MS	SS01	Soluble	Solid	DI Leach	
890-380-1 MSD	SS01	Soluble	Solid	DI Leach	

Analysis Batch: 594

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-380-1	SS01	Soluble	Solid	300.0	593
890-380-2	SS02	Soluble	Solid	300.0	593
890-380-3	SS03	Soluble	Solid	300.0	593
890-380-4	SS04	Soluble	Solid	300.0	593
890-380-5	SS05	Soluble	Solid	300.0	593
890-380-6	SS06	Soluble	Solid	300.0	593
890-380-7	SS07	Soluble	Solid	300.0	593
890-380-8	SS08	Soluble	Solid	300.0	593
890-380-9	SS09	Soluble	Solid	300.0	593
890-380-10	SS10	Soluble	Solid	300.0	593
MB 880-593/1-A	Method Blank	Soluble	Solid	300.0	593
LCS 880-593/2-A	Lab Control Sample	Soluble	Solid	300.0	593
LCSD 880-593/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	593
890-380-1 MS	SS01	Soluble	Solid	300.0	593
890-380-1 MSD	SS01	Soluble	Solid	300.0	593

Leach Batch: 595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-380-11	SS11	Soluble	Solid	DI Leach	
890-380-12	SS12	Soluble	Solid	DI Leach	
MB 880-595/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-595/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-595/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-380-11	SS11	Soluble	Solid	300.0	595
890-380-12	SS12	Soluble	Solid	300.0	595
MB 880-595/1-A	Method Blank	Soluble	Solid	300.0	595
LCS 880-595/2-A	Lab Control Sample	Soluble	Solid	300.0	595
LCSD 880-595/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	595

Job ID: 890-380-1

Lab Chronicle

Job ID: 890-380-1

Matrix: Solid

Lab Sample ID: 890-380-1

Lab Sample ID: 890-380-4

Lab Sample ID: 890-380-5

Lab Sample ID: 890-380-6

Matrix: Solid

Matrix: Solid

Matrix: Solid

XM	
Lab Sample ID: 890-380-2 Matrix: Solid	
	8
Lab	9
XM XM	
Lab Sample ID: 890-380-3 Matrix: Solid	

Client: WPX Energy Production LLC Project/Site: RDX Federal 17-6

Client Sample ID: SS01 Date Collected: 03/16/21 13:40 Date Received: 03/18/21 08:05

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			593	03/19/21 10:29	СН	XM
Soluble	Analysis	300.0		1	594	03/19/21 15:38	СН	XM

Client Sample ID: SS02 Date Collected: 03/16/21 13:45 Date Received: 03/18/21 08:05

Γ		Batch	Batch		Dilution	Batch	Prepared		
Pr	әр Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
So	luble	Leach	DI Leach			593	03/19/21 10:29	СН	XM
So	luble	Analysis	300.0		1	594	03/19/21 15:53	СН	XM

Client Sample ID: SS03

Date Collected: 03/16/21 13:50

Date Received: 03/18/21 08:05

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			593	03/19/21 10:29	СН	XM
Soluble	Analysis	300.0		1	594	03/19/21 15:58	СН	XM

Client Sample ID: SS04

Date Collected: 03/16/21 13:55

Date Received: 03/18/21 08:05

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			593	03/19/21 10:29	СН	XM
Soluble	Analysis	300.0		1	594	03/19/21 16:03	СН	XM

Client Sample ID: SS05 Date Collected: 03/16/21 14:00

Date Received: 03/18/21 08:05

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			593	03/19/21 10:29	СН	XM
Soluble	Analysis	300.0		1	594	03/19/21 16:08	СН	XM

Client Sample ID: SS06 Date Collected: 03/16/21 14:05 Date Received: 03/18/21 08:05

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			593	03/19/21 10:29	СН	XM
Soluble	Analysis	300.0		1	594	03/19/21 16:23	СН	XM

Batch

Туре

Leach

Batch

Туре

Leach

Analysis

Analysis

Batch

Method

DI Leach

300.0

Batch

Method

DI Leach

300.0

Client: WPX Energy Production LLC

Project/Site: RDX Federal 17-6 **Client Sample ID: SS07**

Date Collected: 03/16/21 14:10

Date Received: 03/18/21 08:05

Client Sample ID: SS08

Date Collected: 03/16/21 14:15

Date Received: 03/18/21 08:05

Prep Type

Soluble

Soluble

Prep Type

Soluble

Soluble

Lab Chronicle

Dilution

Dilution

Factor

1

Factor

1

Run

Run

Batch

593

594

Batch

593

594

Number

Number

Prepared

or Analyzed

03/19/21 10:29

03/19/21 16:28

Prepared

or Analyzed

03/19/21 10:29

03/19/21 16:33

Analyst

Analyst

СН

СН

СН

СН

Lab

XM

XM

Lab

XM

XM

Job ID: 890-380-1

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid

Lab Sample ID: 890-380-7

Lab Sample ID: 890-380-8

Lab Sample ID: 890-380-9

Lab Sample ID: 890-380-10

Lab Sample ID: 890-380-11

Lab Sample ID: 890-380-12

8
9

Client Sample ID: SS09

Date Collected: 03/16/21 14:20

Date Received: 03/18/21 08:05

_	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			593	03/19/21 10:29	СН	XM
Soluble	Analysis	300.0		1	594	03/19/21 16:38	СН	XM

Client Sample ID: SS10

Date Collected: 03/16/21 14:25

Date Received: 03/18/21 08:05

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			593	03/19/21 10:29	СН	XM
Soluble	Analysis	300.0		1	594	03/19/21 16:43	СН	XM

Client Sample ID: SS11 Date Collected: 03/16/21 14:30

Date Received: 03/18/21 08:05

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			595	03/19/21 10:43	СН	XM
Soluble	Analysis	300.0		5	596	03/19/21 18:33	CH	XM

Client Sample ID: SS12 Date Collected: 03/16/21 14:35 Date Received: 03/18/21 08:05

	Batch	Batch		Dilution	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			595	03/19/21 10:42	СН	XM
Soluble	Analysis	300.0		5	596	03/19/21 18:39	СН	XM

Laboratory References:

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

Accreditation/Certification Summary 1 Client: WPX Energy Production LLC
Project/Site: RDX Federal 17-6 Job ID: 890-380-1 2 Laboratory: Eurofins Xenco, Midland
Te accreditations/certifications listed below are applicable to this report. 3 3 Lathority Program Identification Number Expiration Date 4 Texas NELAP 104704400-20-21 06-30-21 5 6 7 8

Method Summary

Client: WPX Energy Production LLC Project/Site: RDX Federal 17-6

Job ID: 890-380-1

Method Method Description	Protocol	Laboratory
Anions, Ion Chromatography	MCAWW	XM
DI Leach Deionized Water Leaching Procedure	ASTM	XM

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

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: RDX Federal 17-6

Job ID: 890-380-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asse
890-380-1	SS01	Solid	03/16/21 13:40	03/18/21 08:05	
890-380-2	SS02	Solid	03/16/21 13:45	03/18/21 08:05	
890-380-3	SS03	Solid	03/16/21 13:50	03/18/21 08:05	
890-380-4	SS04	Solid	03/16/21 13:55	03/18/21 08:05	
890-380-5	SS05	Solid	03/16/21 14:00	03/18/21 08:05	
890-380-6	SS06	Solid	03/16/21 14:05	03/18/21 08:05	
890-380-7	SS07	Solid	03/16/21 14:10	03/18/21 08:05	
890-380-8	SS08	Solid	03/16/21 14:15	03/18/21 08:05	
890-380-9	SS09	Solid	03/16/21 14:20	03/18/21 08:05	
890-380-10	SS10	Solid	03/16/21 14:25	03/18/21 08:05	
890-380-11	SS11	Solid	03/16/21 14:30	03/18/21 08:05	
890-380-12	SS12	Solid	03/16/21 14:35	03/18/21 08:05	

of service. Xenco will be llable only for the c of Xenco. A minimum charge of \$85.00 will t Relinquished by: (Signature) 1 3 3	Total 200.7 / 6010 200.8 / Circle Method(s) and Metal(s) Notice: Signature of this document and relin	a155	8055 8055	[055	905J 5055	h 055	8035	2022	10.55	Sample Identification	Total Containers:	Sample Custody Seals: Yes N	Cooler Custody Seals: Yes	Received Intact:	SAMPLE RECEIPT Temp	PO #	Sampler's Name:	Project Location Eddy Co	Project Number:	Project Name: RDX Fed	Phone: (575)725-164:	City, State ZIP: Carlsbad, NM	Address: 5315 Buena V	Company Name: WPX Enery P	Project Manager: Lynda Laumba		LABOR
Received	6020: 8R) to be analyzed T (quishment of samples constitu	S V I		60	<i>6 6</i>	G	5		S 03/16/2021	Matrix Date Sampled S	Corrected Terr	lo N/A Temperature F	N/A Correction Fac	No Thermometer	Blank: Yes No	t	Aumback T	my MM DI		left 17-6	7	88220	/ista Dr	ermian, LLC.	ach		ATORIES
a charge of \$6 for each sample sub by: (Signature) S 18 21 805 0	CRA 13PPM Texas 11 <u>31P / SPLP 6010; 8PCPA</u> Ites a valid purchase order from cliv	4:25 V V V	14112	4:10	20.11	13:55	3.50 0.5	3:45 0.5	3(40 0.5' G	Time Depth Grab/ # Sampled Depth Comp C	perature:	reading: 0.4 6.2	tor: 10-2	DI NW BOA	Wet Ice: Tes No	he lab, if received by 4:30pm	AT starts the day received by	Je Date: 2 - Dwy]Routine WRush C	Turn Around	Email: Lynda.Laumbach	City, State ZIP:	Address:	Company Name:	Bill to: (if different)	lampa, FL (813) 620-200	Houston, 1X (281) 240- Midland, TX (432) 704 Hobbs, NM (575) 392-
sises or expenses incurred by th mitted to Xenco, but not analyze Date/Time 3/13/ひとし おこく 2 4	Al Sb As Ba Be B C Ch Cb As Ba Be Cd C ent company to Xenco, its affilia	V X	××	X	88	*	8	X	1 X	Chlc BTE TPH	orid X (N I (M	es (I ⁄Ieth	Pa EPA nod	30 802 801	nete 0.00 21) 5)	rs))			res.		n@wpxenergy.com	Carlsbad, NM 88220	5315 Buena Vista Dr	WPX Energy Permian	Lynda Laumbach	uu, Talianassee, FL (oou) / oo- Atlanta, GA (770) 449	4200, Dallas, TX (214) 902-03 4-5440, EL Paso, TX (915) 585 -7550, Carlsbad, NM (575) 988
Relinquished by: (Signa	d Ca Cr Co Cu Fe Pt Ar Co Cu Pb Mn Mo N tes and subcontractors. It assign									ТРН	(TX	- Ex 890-380 (ten	dec	100	05)				ANALYSIS RE				1, LLC.		9-8800	5-3443, Lubbock, TX (806) 794 8-3199, Phoenix, AZ (480) 355-
ture) Received in the control international received inter	Mg Mn Mo Ni K Se Se Ag TI U Standard terms and conditions											Chain of Custody								QUEST	Deliverables: EDD	Reporting:Level II	State of Project:	Program: UST/PST	W	WWW.	-1296 Work (0900
by: (Signature)	Ag SiO ₂ Na Sr TI Sn Hg: 1631 / 245				(les les	5		Samp	NaOHTASCO	Zn Acetate+	Na ₂ S ₂ O ₃ : Na	NaHSO, NA	H ₃ PO ₄ : HP	H ₂ S0 ₄ : H ₂	HCL: HC	Cool: Cool	None: NO	Preser				RP pownfields RC	ork Order Comments	<u>xenco.com</u> Page	Order No:
Date/Time	U V Zn 1.1/7470 /7471		C	2 BL	and the	,				le Comments		VaOH: Zn	SO3	BIS		NaOH: Na	HNO3: HN	MeOH: Me	DI Water: H ₂ O	vative Codes	her:			S perfund		1 of 2	_

3/22/2021

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Chain of Custody

Relinquished by (5)	Total 200.7 / 6010 Circle Method(s) at Notice: Signature of this docum of service. Xenco will be itable of Xenco. A minimum charge o		1/55 1/55	Project Location Sampler's Name: PO #: SAMPLE RECEIPT Received Intact: Cooler Custody Seals: Sample Custody Seals: Total Containers: Sample Identific:	Project Name:	Phone: (57:	City, State ZIP: Car	Company Name: WP	Project Manager: Lyn	
(doe)	200.8 / 6020: nd Metal(s) to be analyze ment and relinquishment of samp only for the cost of samples and of \$85.00 will be applied to each p		5 03/16 5 03/16	Temp Blank: Yes Yes No N/A Corre Yes No N/A Corre	20x Codor 17-6	5)725-1647	Isbad, NM 88220	X Enery Permian, LLC.	da Laumbach	BORATORIE
Acceived by: (Signature)	8RCRA 13PPM Te: ad TCLP/SPLP 6010: les constitutes a valid purchase ord shall not assume any responsibility project and a charge of \$5 for each s		Jon 14:30 0.5	Due Date: 1 - De TAT starts the day received by 4: the lab, if received by 4: No Wet Ice: Yes nometer ID: Yes sction Factor: Yes perature Reading: Yes scted Temperature: Time scted Temperature: Depth	Turn Around	Email: Lynda.La	City, State	Company	Bill to: (if d	Houston, TX (Midland, TX Hobbs, NM (Tampa, FL (81
05 03/18/2021 8	ANDRA 30 AS Ba Be ANDRA 30 AS Ba Be er from client company to Xenco, i for any losses or expenses incurri anple submitted to Xenco, but not anple submitted to Xenco, but not		6 1 X	O mage O mage <td>Pres.</td> <td>aumbach@wpxenergy.com</td> <td>ZIP: Carlsbad, NM 8</td> <td>Name: WPX Energy P</td> <td>ifferent) Lynda Laumbac</td> <td>(231) 240-4200, Ualas, ι Λ (c14) (432) 704-5440, EL Paso, TX (s (575) 392-7550, Carlsbad, NM (s 3) 620-2000, Tallahassee, FL (8) Atlanta, GA (7</td>	Pres.	aumbach@wpxenergy.com	ZIP: Carlsbad, NM 8	Name: WPX Energy P	ifferent) Lynda Laumbac	(231) 240-4200, Ualas, ι Λ (c14) (432) 704-5440, EL Paso, TX (s (575) 392-7550, Carlsbad, NM (s 3) 620-2000, Tallahassee, FL (8) Atlanta, GA (7
2 2 4 6	B Cd Ca Cr Co Cu Cd Cr Co Cu Pb Mn ts affiliates and subcontractors. te aby the client if such losses are analyzed. These terms will be en			TPH (Method 8015) TPH (TX- Extended 1005)	ANALYS		8220	ermian, LLC.	sh	915) 585-3443, Lubbock, TX (80 575) 988-3199, Phoenix, AZ (48 50) 756-0747, Delray Beach, FL 770) 449-8800
Signature) Receiv	Fe Pb Mg Mn Mo Ni K S Mo Ni Se Ag TI U It assigns standard terms and condition to circumstances beyond the co forced unless previously negotiated.				IS REQUEST	Deliverables: EDD	Reporting:Level II	Program: UST/PST State of Project:		. (561) 689-6701
ed by: (Signature)	Se Ag SiO ₂ Na Sr TI S Hg: 1631/2 ^{Inns}		0	Cool: Cool HCL: HC H ₂ S0 ₄ : H2 H ₃ PO ₄ : HP NaHSO ₄ : N Na ₂ S ₂ O ₃ : N Zn Acetate- NaOH+Asc Sam	None: NO	ADaPT L		PRP pownfields	Work Order Comments	rk Order No:
Vised Date 05012020 Rev. 2020.1	3n ∪ ∨ Zn 45.1 / 7470 / 7471	le le	Y al	MeOH: Me HNO3: HN NaOH: Na VABIS VaSO3 I+NaOH: Zn corbic Acid: SAPC	DI Water: H ₂ O	Other:		RC Sperfund		2 of 2

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3/22/2021

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XENCO

Chain of Custody

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Job Number: 890-380-1

List Source: Eurofins Carlsbad

Login Sample Receipt Checklist

Client: WPX Energy Production LLC

Login Number: 380 List Number: 1

Login Humbon ood			obuu
List Number: 1			5
Creator: Clifton, Cloe			
Question	Answer	Comment	6
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		8
Samples were received on ice.	True		
Cooler Temperature is acceptable.	True		9
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		13
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	N/A		

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Login Sample Receipt Checklist

Client: WPX Energy Production LLC

Login Number: 380
List Number: 2
Creator: Kramer, Jessica

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?	N/A	
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	N/A	

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

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Job Number: 890-380-1

List Source: Eurofins Midland

List Creation: 03/19/21 12:51 PM

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

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	21762
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
ceads	None	7/21/2021

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Action 21762