<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District I1 811 S. First St., Artesia, NM 88210 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

NM OIL CONSERVATION

State of New Mexico **Energy Minerals and Natural Resources**

ARTESIA DISTRICT

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. MAY 0.5 2017 Submit I Copy to appropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

	CIS DL., Salik	a re, inivi 6/30.		Sa	ınta Fe	e, NM 875	05	/ CFT 4 i				
			Rele	ease Notific	cation	and Co	rrective A	ction		''		
MABI	7129	52339	7			OPERA?	ГOR	Þ] Initia	al Report	П	Final Report
				Contact	Karolina Blan			<u> </u>				
Address		iena Vista D		- 01 1 - 01 D	_		No. 970 589 074					
Facility Nar	ne: RDX 1	17-25					e: Well Pad					
Surface Ow	ner: Feder	ral		Mineral C)wner:]	Federal			API No	0. 30- 015-4	1664	
	LOCATION OF RELEASE											
			South Line	Feet from the	East/We	st Line	County					
D	17	26S	30E	150		FNL	682	FW	L	Eddy		
	<u> </u>	l		<u> </u>	2607 N		e: -103.9093957	•				
			1/6			OF REL		/ / ••				
Type of Rele	ase. Produc	ed Water					Release: 11 Bbls	s	Volum	e Recovered	: 6 B	bls
Source of Re	lease	.=				1	Iour of Occurrence	e		nd Hour of I		
Flowline		~! 0				5/2/2017			5/2/201	17 – 11:00 h	rs MT	
Was Immedia	ate Notice (] Yes [No Not R	equired	If YES, To) Whom? Crystal Weaver &	Michael E	Bratcher,	BLM Shell	y Tuck	ær
By Whom? k	Carolina Bla	aney				Date and Hour: 5/3/17– 12:42 hrs MT						
Was a Water		ched?		7		If YES, Volume Impacting the Watercourse.						
		L_				N/A						
If a Watercou	urse was Im	pacted, Descr	ibe Fully.	* N/A								
Describe Cau	ise of Probl	em and Reme	dial Actio	n Taken.*		**						
							water to spill int was spilled onto					
Describe Are	a Affected	and Cleanup	Action Tal	ken *								
							e sampled for BTI will be based on th			orides in acco	ərdanc	e with NM
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.												
OIL CONSERVATION DIVISION												
Kamlina Blaney Signature:								\	1 ()	. 1	اما	
				Approved by	Environmental S	pecialis:	WE	stel/	N	lu		
Title: Environmental Specialist A				Approval Da	te: 5/8 17	Ex	piration	Date: N/	<u>A_</u>			
E-mail Address: Karolina.blaney@wpxenergy.com				Conditions o	11	01 -	1	Attached	X			
Date: 5/4/20				: 970-589-0743		Sec	attai	une	<u> </u>			
Attach Addi	tional Cha	ate If Magage	20.257							α	- 4	αO

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	nAB1712952339
District RP	2RP-4198
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible	Party: WPX	Energy Permian,	LLC	OGRID: 2	OGRID: 246289			
Contact Name: Jim Raley				Contact T	Contact Telephone: 575-689-7597			
Contact emai	il: Jim.Raley	y@dvn.com		Incident #	(assigned by OCD): nAB1712952339			
Contact mail	ing address:	5315 Buena Vista	a Drive, Carlsbad N	NM				
			Location	of Release S	ource			
Latitude		32.04926	(NAD 83 in dec		Longitude			
Site Name: R	DX 17-25			Site Type:	Oil Production Facility			
Date Release	Discovered:	: 05/02/2017		API# (if ap	plicable): 30-015-41664			
Unit Letter	Section	Township	Range	Cou	nty			
D	17	26S	30E	Edo	İy			
			ll that apply and attach	Volume of	justification for the volumes provided below)			
Crude Oil	1	Volume Release	ed (bbls):		Volume Recovered (bbls):			
□ Produced	Water	Volume Release	ed (bbls): 11		Volume Recovered (bbls): 6			
		Is the concentrate produced water	tion of dissolved cl >10,000 mg/l?	hloride in the	X Yes □ No			
Condensa	ite	Volume Release	ed (bbls)		Volume Recovered (bbls)			
Natural G	ias	Volume Release	ed (Mcf)		Volume Recovered (Mcf)			
Other (describe) Volume/Weight Released (provide unit				units)	Volume/Weight Recovered (provide units)			
Cause of Rel	ease:				4			
next to a ham	nmer union a	allowed approxima	tely 5 bbls to esca	pe the containmen	of produced water into a lined containment. A breach at, flowing into the pasture, onto an adjacent access road wered approximately 6 bbls of produced water.			
$bbl\ estimate = \frac{saturated\ soil\ volume\ (ft^3)}{4.21\ (\frac{ft^3}{bbl\ equivalent})}*\ estimated\ porosity\ (\%) + recovered\ fluids\ (bbl)$								

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Incident ID	nAB1712952339
District RP	2RP-4198
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the response	nsible party consider this a major release?
		nom? When and by what means (phone, email, etc)? ystal Weaver and Michael Bratcher) and BLM (Shelly Tucker).
	Initial R	esponse
The responsible p	party must undertake the following actions immediated	y unless they could create a safety hazard that would result in injury
☑ The source of the rele☑ The impacted area ha	ease has been stopped. s been secured to protect human health and	the environment.
	•	likes, absorbent pads, or other containment devices.
	ecoverable materials have been removed an	-
D 10 15 20 0 D (1) NM		
has begun, please attach	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred blease attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig	required to report and/or file certain release notinent. The acceptance of a C-141 report by the Cate and remediate contamination that pose a three	best of my knowledge and understand that pursuant to OCD rules and fications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws
Printed Name: Jim Rale	ey	Title: Environmental Professional
Signature:		Date:8/18/2023
	com	Telephone:
OCD Only		
Received by:		Date:

ew Mexico Page 4 of 370

Incident ID	nAB1712952339
District RP	2RP-4198
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?	<u>>100</u> (ft bgs)			
Did this release impact groundwater or surface water?	☐ Yes ☒ No			
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No			
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No			
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes 🏻 No			
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes 🏻 No			
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No			
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No			
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No			
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No			
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No			
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No			
Did the release impact areas not on an exploration, development, production, or storage site?				
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil				

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.

	1
Chara	acterization Report Checklist: Each of the following items must be included in the report.
Fi D D D D D D D D D D D D D D D D D D D	caled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. ield data table of soil contaminant concentration data tepth to water determination etermination of water sources and significant watercourses within ½-mile of the lateral extents of the release oring or excavation logs hotographs including date and GIS information opographic/Aerial maps aboratory 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: 8/18/2023 7:25:14 AM State of New Mexico
Page 4 Oil Conservation Division

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Incident ID	nAB1712952339
District RP	2RP-4198
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a thr addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	oCD does not relieve the operator of liability should their operations have eat to groundwater, surface water, human health or the environment. In
Printed Name: Jim Raley	Title: Environmental Professional
Signature: fin Rife	Date:8/18/2023
email:Jim.Raley@dvn.com	Telephone: 575-689-7597
OCD Only	
Received by: Shelly Wells	Date: _8/18/2023

Page 6 of 370

Incident ID	nAB1712952339
District RP	2RP-4198
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: Each of the following its	ems must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC
Photographs of the remediated site prior to backfill or photos of must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate ODC	District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of a	nediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially neditions that existed prior to the release or their final land use in
OCD Only	
Received by: Shelly Wells	Date: <u>8/18/2023</u>
	of liability should their operations have failed to adequately investigate and vater, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by: Ashley Maxwell	Date: 8/22/2023
Closure Approved by: Ashley Maxwell Printed Name: Ashley Maxwell	Title:Environmental Specialist



CLOSURE REQUEST REPORT

RDX 17-25 / RDX 17 Federal #36H
Eddy County, New Mexico
Incident Numbers
nAB1712952339
NRM 2017643736

Prepared For:
WPX Energy Permian, LLC
5315 Buena Vista Dr.
Carlsbad, NM 88220

Carlsbad • Midland • San Antonio • Lubbock • Hobbs • Lafayette

SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy Permian, LLC (WPX), presents the following Closure Request Report (CRR) documenting excavation activities and subsequent soil sampling activities in accordance with an approved Remediation Work Plan (RWP), for two overlapping inadvertent releases of produced water at the RDX 17-25 / RDX 17 Federal #36H (Site) (Figure 1 in Appendix A). Based on completed remedial actions and laboratory analytical results from recent confirmation soil sampling activities, WPX is requesting No Further Action (NFA) at the Site.

SITE LOCATION AND RELEASE BACKGROUND

The Site is located in Unit D, Section 17, Township 26 South, Range 30 East, in Eddy County, New Mexico (32.049734°, -103.9102662°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

As documented in the RWP, a third-party environmental consultant conducted site assessment and delineation activities on August 27, 2020, and October 29, 2020, to characterize the following inadvertent subject releases:

nAB1712952339

On May 2, 2017, failure of a corroded flowline resulted in the release of approximately 11 barrels (bbls) of produced water into a lined containment. A breach in the lined containment allowed approximately 5 bbls to escape the containment, flow into the pasture, and intersect an adjacent access road and pipeline Right-of-Way (ROW). A vacuum truck was dispatched to the Site and recovered approximately 6 bbls of free-standing fluids. WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141) on May 4, 2017, and was subsequently assigned Incident Number nAB1712952339. **Figure 2** in **Appendix A** depicts the observed release footprint, hereafter referred to as the Area of Concern #1 (AOC #1).

NRM2017643736

On June 16, 2020, a pinhole developed on a produced water line causing the release of approximately 22 bbls of produced water into a lined containment. A vacuum truck was dispatched to the Site and recovered all 22 bbls of produced water. WPX reported the release to the NMOCD on a Form C-141 on June 25, 2020, and was subsequently assigned Incident Number NRM2017643736. A crude oil released volume was reported on the Initial Form C-141, however, the checkbox denotation was not completed under the section "Nature and Volume of Release. The correction is provided on the Final Form C-141. **Figure 2** in **Appendix A** depicts the observed release footprint, hereafter referred to as the Area of Concern #2 (AOC #2).

Following site assessment and delineation soil sampling activities at the Site, an RWP was prepared, proposing corrective actions to address identified residual soil impacts exceeding the applicable Site Closure Criteria and completing lateral delineation around the lined containment to the north, east, and south. The RWP was received by the NMOCD on June 2, 2021, and approved separately for Incident Numbers NRM2017643736 and Incident Number nAB1712952339 with the following conditions:

"The Workplan/Remediation Plan is approved with the following conditions: Please make sure the edges/sidewalls and floor closure samples are delineated/excavated to meet closure criteria standards for proven depth to water determination. Please make sure all groundwater data is included in closure report summary. If on-site lined treatment cell is conducted, a closure report must be loaded to the payment portal 90 days after the remediation plan has been approved. A five-point composite sample will need to be collected for every 50 cubic yards of treated soil. If

Closure Request Report Incident Numbers nAB1712952339 & NRM2017643736 RDX 17-25 / RDX 17 Federal #36H contaminated soil can't be remediated to closure criteria levels in OCD time guidelines, the contaminated soil will need to be excavated and disposed of at an OCD approved facility." [Conditions for NRM2017643736 on September 9, 2021]

- "Work plan approved. Variance approved for sampling sidewalls and excavation base every 500 square feet. Submit a closure report by 6/30/2023." [Condition for nAB1712952339 on March 27, 2023]

Note: A extension request for a new deadline of September 28, 2023, was sent to NMOCD and approved on June 14, 2023, to allow additional time to implement additional safety measures to excavate around subsurface utilities within the proposed work area.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

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

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

Constituents of Concern (COCs)	Laboratory Analytical Method	Closure Criteria [†]
Chloride	Environmental Protection Agency (EPA) 300.0	20,000 milligram per kilogram (mg/kg)
TPH (Total Petroleum Hydrocarbon)	EPA 8015 M/D	2,500 mg/kg
Gasoline Range Organics (GRO) + Diesel Range Organics (DRO)	EPA 8015 M/D	1,000 mg/kg
Benzene	EPA 8021B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8021B	50 mg/kg

[†]The reclamation concentration requirements of 600 mg/kg chloride and 100 mg/kg TPH apply to the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13.

The results of the approved Site characterization are reported on the Final Form C-141. Referenced well records are provided as **Appendix B**. Receptor details and sources used for the site characterization are included in **Figure 1** in **Appendix A**.

EXCAVATION AND DELINEATION SOIL SAMPLING ACTIVITIES

nAB1712952339

From mid-June through July 13, 2023, Etech oversaw excavation activities via mechanical equipment to address residual impacts within AOC #1. Excavation activities were driven by field screening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips.

Following the removal of impacted soil, Etech collected 5-point composite soil samples at the approved sampling frequency of 500 square feet from the excavation sidewalls and floors. The 5-point composite soil samples were comprised of five equivalent aliquots homogenized in a 1-gallon, resealable plastic bag. The samples were then placed into lab provided pre-cleaned glass jars, packaged with minimal void space, labeled, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Envirotech, Inc. in Farmington, New Mexico, for analysis of COCs. The locations of confirmation excavation soil samples are shown in **Figure 3** in **Appendix A**.

NRM2017643736

On July 5 and July 13, 2023, Etech conducted delineation activities concurrently with excavation activities to assess the absence or presence of residual impacts above the Site Closure Criteria surrounding the lined containment, which includes both AOC #1 and AOC #2. Delineation activities were driven by field screening for VOCs and chloride as described above. Five delineation boreholes (BH01 through BH05) were advanced with a hand auger to the north, east, and south of the lined containment as proposed in the approved RWP. A total of two samples were collected from each delineation soil sample location, representing the highest observed field screening concentrations and the greatest depth. Field screening results and soil descriptions are included on lithologic soil sampling logs shown in **Appendix C**. The locations of the delineation soil samples are shown in **Figure 4** in **Appendix A**. The soil samples were handled and analyzed as previously described.

Upon completion of remediation activities, impacted soil was removed from the Site and transported to a licensed and approved New Mexico landfill under WPX approved manifests. Upon receipt of the final confirmation excavation soil samples results, the excavation was backfilled with clean, locally sourced soil and the Site was restored to "as close to its original state" as possible. Photographic documentation of all Site activities is included in **Appendix D**.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all final confirmation excavation soil samples indicated all analyzed COCs were below the applicable Site Closure Criteria. Laboratory analytical results for all delineation soil samples indicated all analyzed COCs were below the applicable Site Closure Criteria. Specifically, analytical results for soil samples collected from BH01, BH02, BH04, and BH05 locations provide sufficient supplemental horizontal delineation for AOC #1 and AOC #2 surrounding the lined containment. Horizontal delineation to the west of the lined containment was supported via confirmation sampling by SW01, SW03, SW04, SW05, FS01 and FS02. Laboratory analytical results are summarized in **Table 1** included in **Appendix E**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix F**.

CLOSURE REQUEST

Based on the results from laboratory analytical results, WPX believes residual impacts associated with the two overlapping, inadvertent releases have been delineated, excavated, and removed from the Site. Concentrations of COCs for all analyzed soil samples were below the applicable Site Closure Criteria. Furthermore, the horizontal periphery of impacts has been defined for AOC#1 and AOC#2 via delineation

Closure Request Report Incident Numbers nAB1712952339 & NRM2017643736 RDX 17-25 / RDX 17 Federal #36H and/or confirmation sampling. WPX believes the completed remedial actions have mitigated impacts at the Site and fulfilled requirements set forth in NMAC 19.15.29.13 guidelines in order to be protective of human health, the environment and ground water. As such, WPX respectfully requests NFA of Incident Numbers nAB1712952339 and NRM2017643736.

If you have any questions or comments, please do not hesitate to contact Joseph Hernandez at (281) 702-2329 or joseph@etechenv.com or Gilbert Moreno at (832) 541-7719 or gilbert@etechenv.com. Appendix G provides correspondence email notification receipts associated with the subject release. Previous remediation activities and soil sample analytical results for the subject release can be referenced in the approved RWP in Appendix H.

Sincerely,

Etech Environmental and Safety Solutions, Inc.

Gilbert Moreno Project Geologist Joseph S. Hernandez Senior Managing Geologist

cc: Jim Raley, WPX

New Mexico Oil Conservation Division

Bureau of Land Management

Appendices:

Appendix A: Figure 1: Site Map

Figure 2: Areas of Concern

Figure 3: Excavation Soil Sample Locations
Figure 4: Delineation Soil Sample Locations

Appendix B: Referenced Well Records

Appendix C: Lithologic Soil Sampling Logs

Appendix D: Photographic Log

Appendix E: Tables

Appendix F: Laboratory Analytical Reports & Chain-of-Custody Documentation

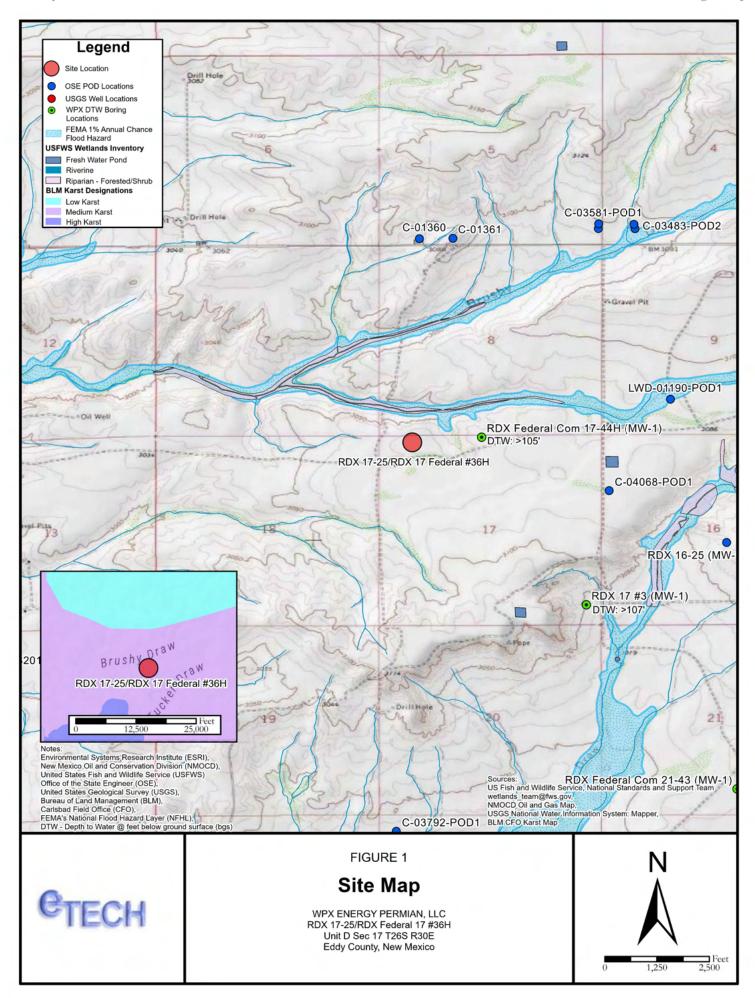
Appendix G: NMOCD Notifications

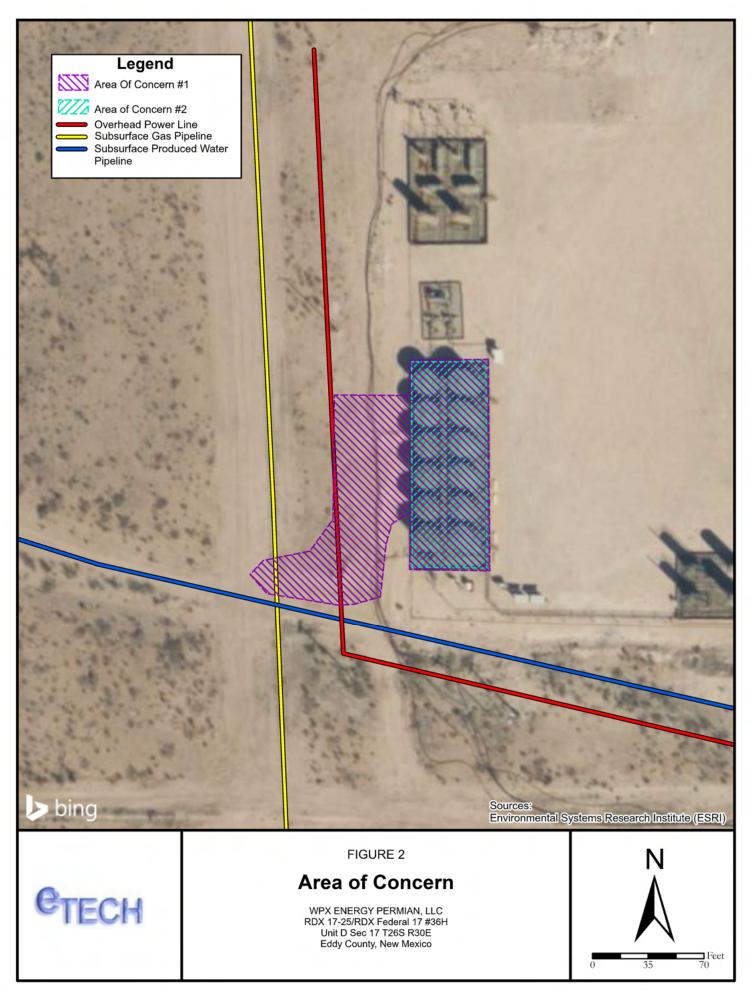
Appendix H: Approved Remediation Work Plan

APPENDIX A

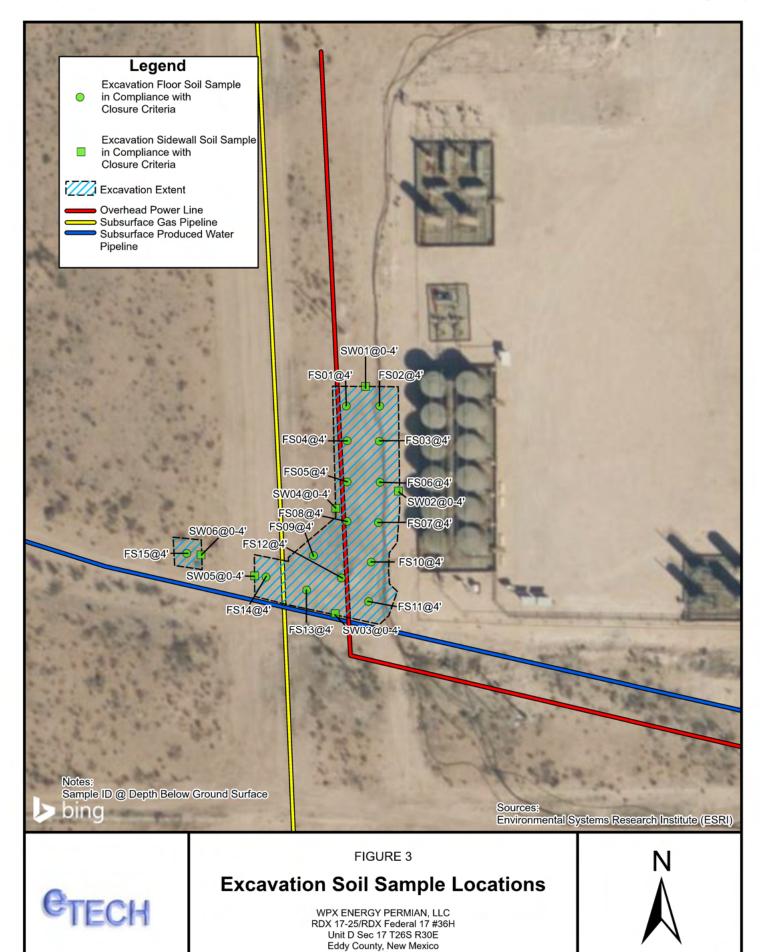
Figures

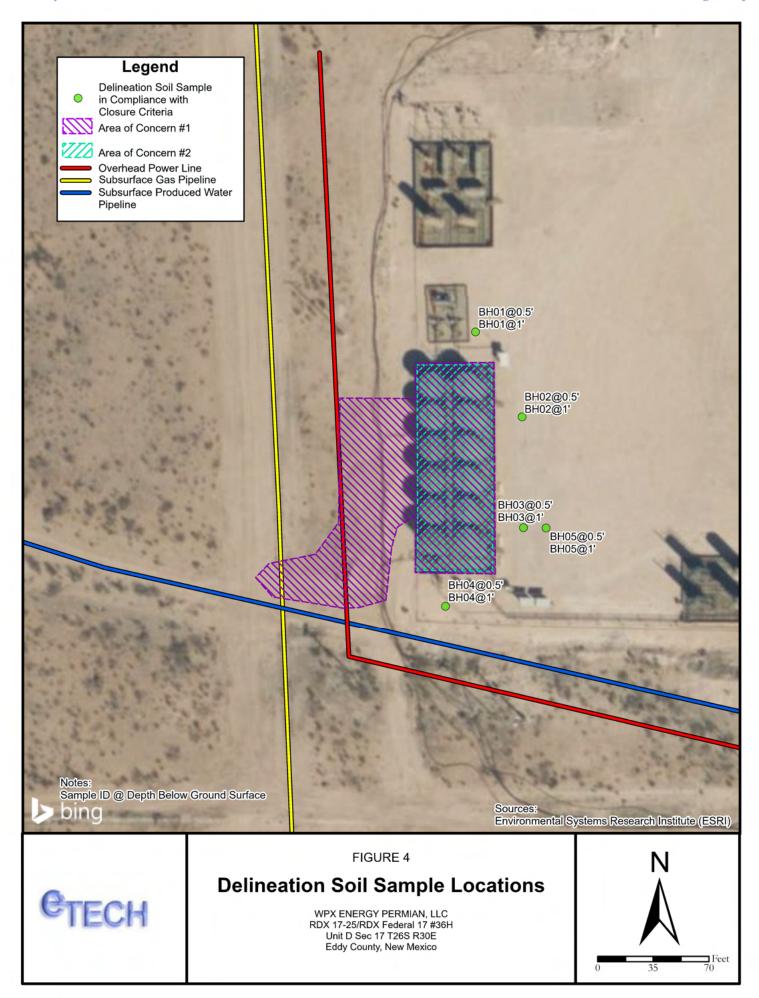






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APPENDIX B

Referenced Well Record

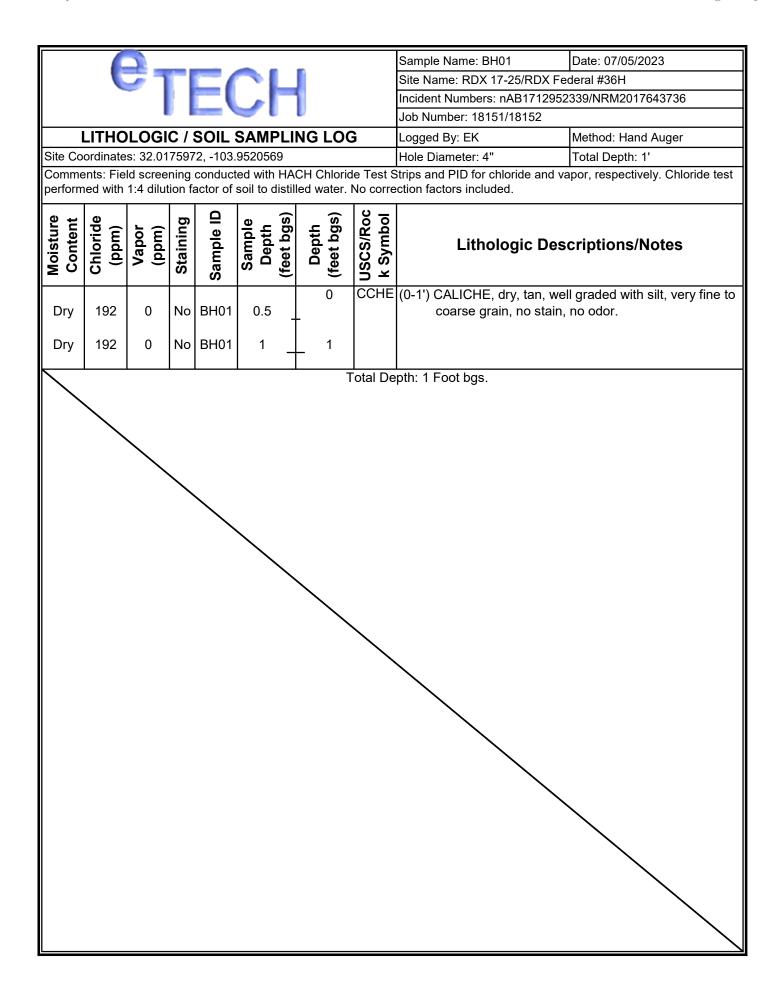


/		HR							MONITORING W	ELL COMPLETION	DIAGRAM
\nearrow		CO	MPL	IAN	CE		Boring/Well		W-1	Location: RDX Federal Co	om 17-44H
	774	SO	LUT	101	NS		Date:	12/9	/2020	Client:	
Drilling Me	Orilling Method: Sampling Method:						Logged By:	12/0/	72020	WPX End	argy
	Air Rotary None						J. Lin	nn, PG	Talon L	PE	
Gravel Pacl	k Type: 0/20 Sar	nd	Gravel Pac		erval: Bags		Seal Type:	one	Seal Depth Interval: None	Latitude: 32.0496	56
Casing Typ		Diameter:		Depth Inter	val:		Boring Total	Depth (ft. BGS	*	Longitude:	
PVC Screen Typ	e:	2-inch Slot:		0-105 ft Diameter:		Interval:	Well Total D	epth (ft. BGS):	10	-103.904 Depth to Water (ft. BTOC):	
PVC		0.010-ii	nch	2-inch		110 ft			10	> 110	12/16/2020
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	OSCS	Lithology/Remarks		Well Completion	
0 5 10 15 20 25 30 35 40	NM	L	D	N	N	NM	CE	NS	Buff to pale pin	Buff to pale pink colored caliche	
45 50 55 60	NM	L	D	N	N	NM	SW	NS		ll graded sand with or silt	
65 70 75	NM	L	D	N	N	NM	SP	NS		orange poorly graded ith minor silt	
80 85 90	NM	L	D	N	N	NM	SW-SM SW-SC	NS		ge well-graded sand tand clay	
95 100 105	NM	L	D	N	N	NM	SP	NS		orange poorly graded or silt - TD: 110' bgs -	-

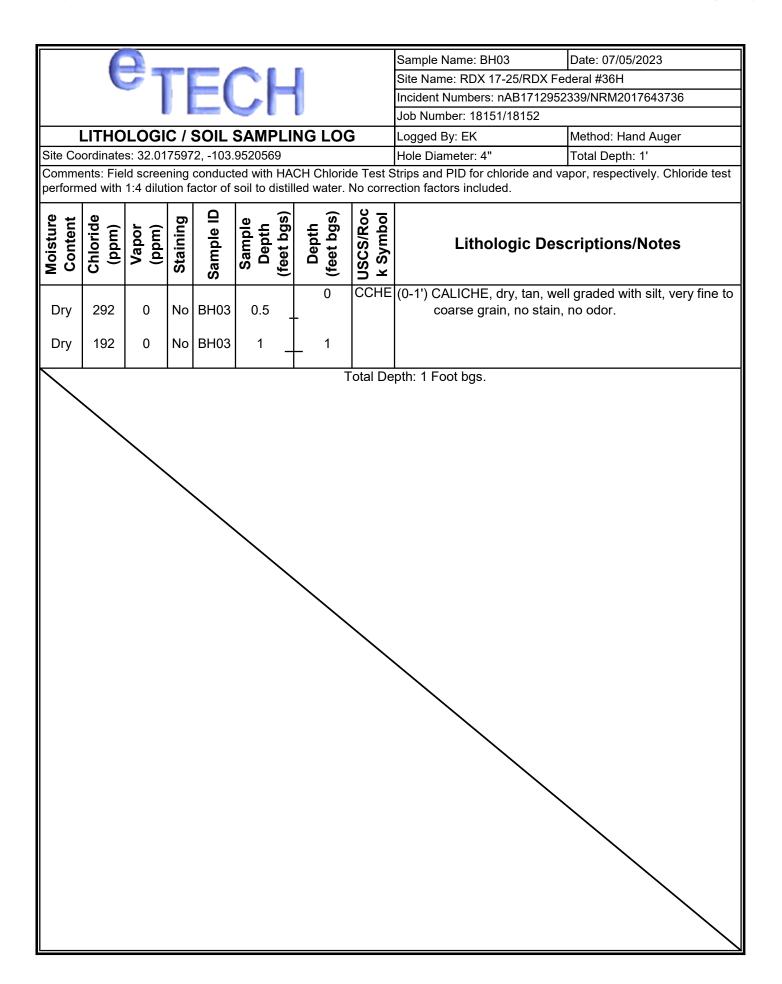
APPENDIX C

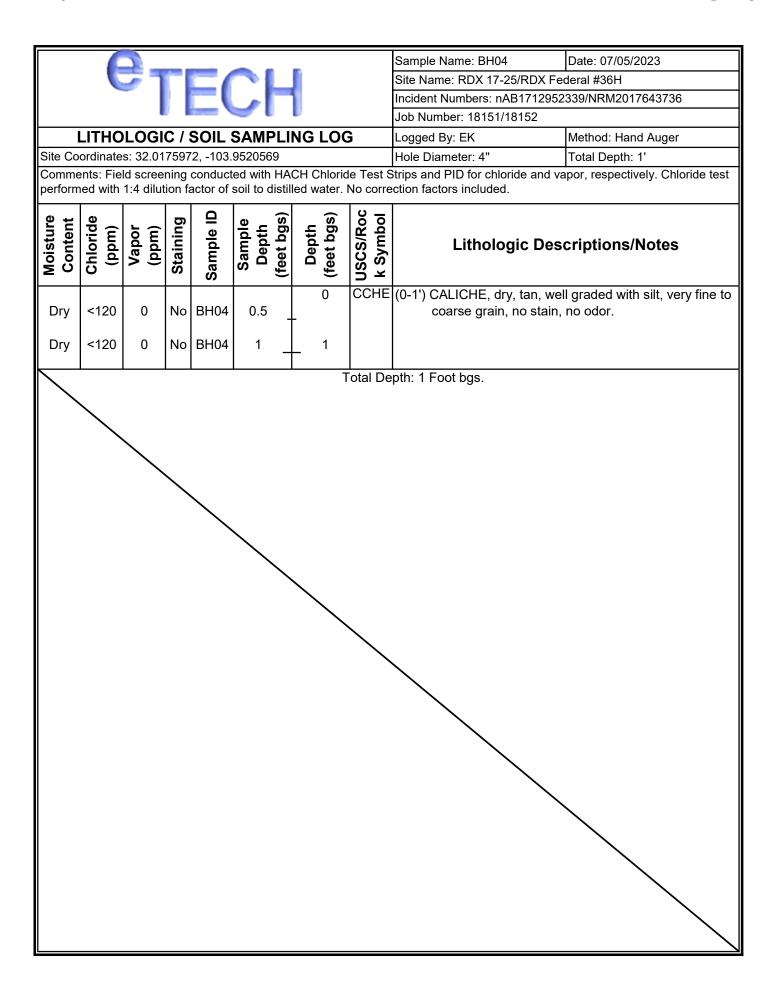
Lithologic Soil Sampling Logs

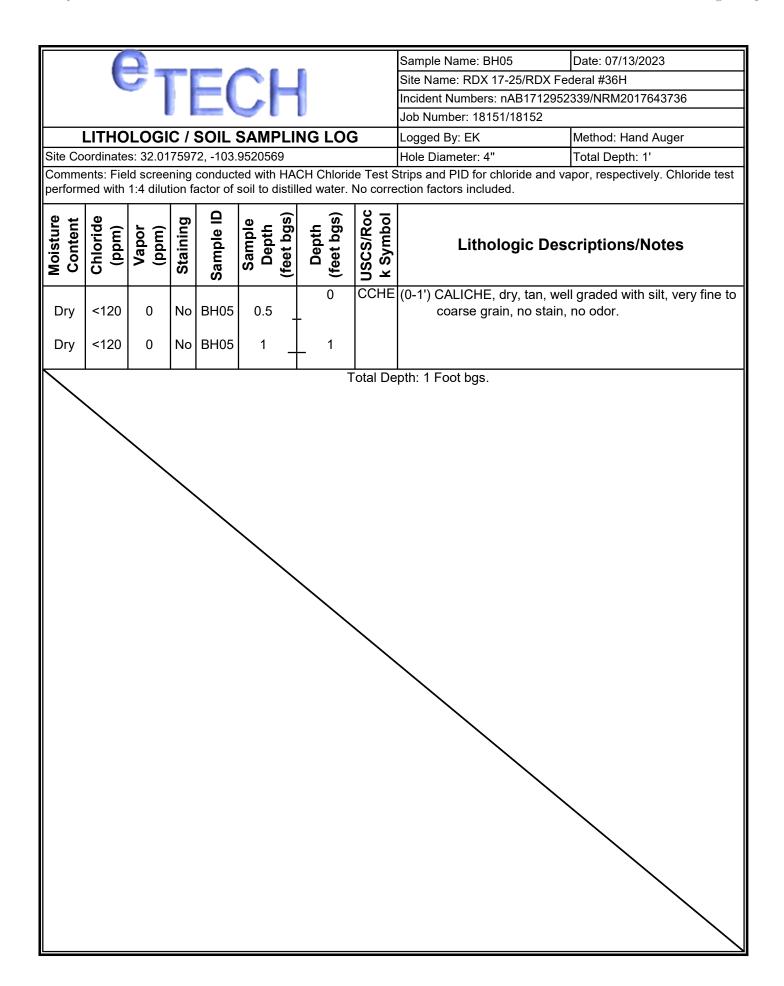




Date: 07/05/2023 Sample Name: BH02 Site Name: RDX 17-25/RDX Federal #36H Incident Numbers: nAB1712952339/NRM2017643736 Job Number: 18151/18152 LITHOLOGIC / SOIL SAMPLING LOG Logged By: EK Method: Hand Auger Site Coordinates: 32.0175972, -103.9520569 Hole Diameter: 4" Total Depth: 1' Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. USCS/Roc k Symbol Depth (feet bgs) Sample Depth (feet bgs) Sample ID Moisture Content Chloride **Lithologic Descriptions/Notes** CCHE (0-1') CALICHE, dry, tan, well graded with silt, very fine to No BH02 Dry 180 0.5 coarse grain, no stain, no odor. Dry 132 0.1 No BH02 1 Total Depth: 1 Foot bgs.







APPENDIX D

Photographic Log



eTECH

PHOTOGRAPHIC LOG

WPX Energy Permian, LLC RDX 17-25/RDX Federal 17 #36H nAB1712952339/NRM2017643736



Date & Time: Thu Jul 13, 2023 a) 69; 81 ft M&T Position: 4032 046532* /*-1039 ft Men Position (105 6) 40 ft Memory
Photograph 1 Date:07/13/2023
Description: Southeastern view of excavation extent.

Photograph 2 Date:07/13/2023
Description: Northwestern view of excavation extent.





Photograph 3 Date:07/13/2023

Description: Soutwestern view of excavation extent.

Photograph 4 Date:07/13/2023
Description: Southeastern view of excavation extent.

eTECH

PHOTOGRAPHIC LOG

WPX Energy Permian, LLC RDX 17-25/RDX Federal 17 #36H nAB1712952339/NRM2017643736



Photograph 5 Date:07/13/2023

Description: Southern view of delineation activities surrounding the secondary lined containment.

Photograph 6 Date:07/13/2023

Description: Southern view of delineation activities surrounding the secondary lined containment.





Photograph 7 Date: 07/26/2023 Description: Northwestern view of backfilled excavation.

Photograph 8 Date:07/26/2023

Description: Southwestern view of backfilled excavation.

APPENDIX E

Tables



Received by OCD: 8/18/2023 7:25:14 AM



Table 1 SOIL SAMPLE ANALYTICAL RESULTS WPX Energy Permian, LLC RDX 17-25/RDX Federal 17 #36H **Eddy County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	DRO+GRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closu Release (NMAC 19.15.		ils Impacted by a	10	50	NE	NE	NE	1,000	2,500	20,000
					Excavation Floor Soil	l Samples				
FS01	07/05/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	163
FS02	07/05/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	258
FS03	07/05/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,800
FS04	07/05/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	732
FS05	07/05/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,560
FS06	07/05/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	8,080
FS07	07/05/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,570
FS08	07/05/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,020
FS09	07/05/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,680
FS10	07/05/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	692
FS11	07/13/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,220
FS12	07/13/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	3,920
FS13	07/13/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,740
FS14	07/13/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	785
FS15	07/13/2023	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	251
				ĺ	Excavation Sidewall So	oil Samples				
SW01	07/052023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	133
SW02	07/05/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<200
SW03	07/13/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	206
SW04	07/13/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	36.9
SW05	07/13/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	214
SW06	07/13/2023	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<100

rvoies.
bgs: below ground surface
mg/kg: milligrams per kilogram
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics DRO: Diesel Range Organics

ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Concentrations in bold exceed the NMOCD Table I Closure Criteria and/or Reclamation Standards for Soils Impacted by a Release

Received by OCD: 8/18/2023 7:25:14 AM



Table 2 SOIL SAMPLE ANALYTICAL RESULTS WPX Energy Permian, LLC RDX 17-25/RDX Federal 17 #36H **Eddy County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	DRO+GRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closu Release (NMAC 19.15		ils Impacted by a	10	50	NE	NE	NE	1,000	2,500	20,000
					Delineation Soil Sa	amples				
BH01	07/05/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	301
BH01	07/05/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	329
BH02	07/05/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<200
BH02	07/05/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<200
BH03	07/05/2023	0.5	<0.0250	<0.0500	<20.0	940	577	940	1,517	269
BH03	07/05/2023	1	<0.0250	<0.0500	<20.0	749	517	749	1,266	296
BH04	07/05/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	37.2
BH04	07/05/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	27.2
BH05	07/13/2023	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<200
BH05	07/13/2023	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	106

bgs: below ground surface mg/kg: milligrams per kilogram

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes GRO: Gasoline Range Organics DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

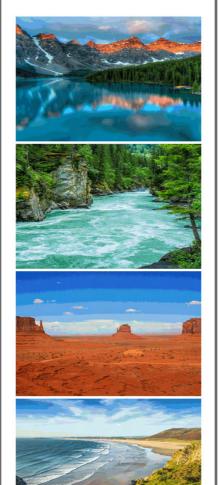
Concentrations in **bold** exceed the NMOCD Table I Closure Criteria and/or Reclamation Standard for Soils Impacted by a Release

APPENDIX F

Laboratory Analytical Reports & Chain-of-Custody Documentation



Report to:
Gilbert Moreno



5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 17-25

Work Order: E307015

Job Number: 01058-0007

Received: 7/10/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 7/12/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 7/12/23

Gilbert Moreno 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX 17-25 Workorder: E307015

Date Received: 7/10/2023 8:10:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/10/2023 8:10:00AM, under the Project Name: RDX 17-25.

The analytical test results summarized in this report with the Project Name: RDX 17-25 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman

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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Donoutoda
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/12/23 10:47

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS01 4'	E307015-01A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
FS02 4'	E307015-02A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
FS03 4'	E307015-03A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
FS04 4'	E307015-04A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
FS05 4'	E307015-05A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
FS06 4'	E307015-06A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
FS07 4'	E307015-07A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
FS08 4'	E307015-08A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
FS09 4'	E307015-09A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
FS10 4'	E307015-10A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.



Sample Data

WPX E	nergy - Carlsbad	Project Name:	RDX 17-25	
5315 B	uena Vista Dr	Project Number:	01058-0007	Reported:
Carlsba	d NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 10:47:17AM

FS01 4' E307015-01

		E30/013-01				
Analyte	Result	Reporting Limit	Dilutior	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: IY		Batch: 2328001
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		96.7 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	Analyst: IY		Batch: 2328001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		89.4 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/11/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/11/23	
Surrogate: n-Nonane		98.6 %	50-200	07/10/23	07/11/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2328006
Chloride	163	100	5	07/10/23	07/10/23	



WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 10:47:17AM

FS02 4'

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	st: IY		Batch: 2328001
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		95.4 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2328001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.5 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	Analyst: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/11/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/11/23	
Surrogate: n-Nonane		100 %	50-200	07/10/23	07/11/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	st: BA		Batch: 2328006
Chloride	258	200	10	07/10/23	07/10/23	



WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 10:47:17AM

FS03 4'

		D 4				
Analyte	Result	Reporting Limit	Dilutio	n Prepared	Analyzed	Notes
Anaryte	Kesuit	Lillit	Dilutio	ii i repared	Analyzeu	TOLES
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: IY		Batch: 2328001
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		94.8 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	Analyst: IY		Batch: 2328001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.2 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	Analyst: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/11/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/11/23	
Surrogate: n-Nonane		96.1 %	50-200	07/10/23	07/11/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2328006
Chloride	1800	40.0	2	07/10/23	07/10/23	



WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 10:47:17AM

FS04 4'

		D am a+!				
Analyte	Result	Reporting Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: IY		Batch: 2328001
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		95.7 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	Analyst: IY		Batch: 2328001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.4 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/11/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/11/23	
Surrogate: n-Nonane		98.9 %	50-200	07/10/23	07/11/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2328006
Chloride	732	40.0	2	07/10/23	07/10/23	·



WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 10:47:17AM

FS05 4'

		D 4				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		yst: IY		Batch: 2328001
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		95.3 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2328001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.5 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	Analyst: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/11/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/11/23	
Surrogate: n-Nonane		100 %	50-200	07/10/23	07/11/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2328006
Chloride	1560	200	10	07/10/23	07/10/23	



WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 10:47:17AM

FS06 4'

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	st: IY		Batch: 2328001
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		95.6 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2328001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.6 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/11/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/11/23	
Surrogate: n-Nonane		96.8 %	50-200	07/10/23	07/11/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	st: BA		Batch: 2328006
Chloride	8080	200	10	07/10/23	07/10/23	



WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 10:47:17AM

FS07 4'

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: IY		Batch: 2328001
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		95.2 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2328001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.3 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/11/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/11/23	
Surrogate: n-Nonane		82.5 %	50-200	07/10/23	07/11/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: BA		Batch: 2328006
Chloride	2570	400	20	07/10/23	07/10/23	



WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 10:47:17AM

FS08 4'

	Reporting				
Result	Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analy	yst: IY		Batch: 2328001
ND	0.0250	1	07/10/23	07/10/23	
ND	0.0250	1	07/10/23	07/10/23	
ND	0.0250	1	07/10/23	07/10/23	
ND	0.0250	1	07/10/23	07/10/23	
ND	0.0500	1	07/10/23	07/10/23	
ND	0.0250	1	07/10/23	07/10/23	
	96.5 %	70-130	07/10/23	07/10/23	
mg/kg	mg/kg	Analy	yst: IY		Batch: 2328001
ND	20.0	1	07/10/23	07/10/23	
	88.8 %	70-130	07/10/23	07/10/23	
mg/kg	mg/kg	Analy	yst: KM		Batch: 2328005
ND	25.0	1	07/10/23	07/11/23	
ND	50.0	1	07/10/23	07/11/23	
	98.2 %	50-200	07/10/23	07/11/23	
mg/kg	mg/kg	Analy	yst: BA		Batch: 2328006
	mg/kg ND	Result Limit mg/kg mg/kg ND 0.0250 ND 0.0250 ND 0.0250 ND 0.0250 ND 0.0500 ND 0.0250 mD 0.0250 mD 20.0250 88.8 % mg/kg mg/kg mg/kg ND 25.0 ND 50.0	Result Limit Dilution mg/kg mg/kg Analy ND 0.0250 1 ND 0.0250 1 ND 0.0250 1 ND 0.0250 1 ND 0.0500 1 ND 0.0250 1 MD 0.0250 1 MD 20.0250 1 MB/kg mg/kg Analy ND 20.0 1 88.8 % 70-130 mg/kg mg/kg Analy ND 25.0 1 ND 50.0 1	Result Limit Dilution Prepared mg/kg mg/kg Analyst: IY ND 0.0250 1 07/10/23 ND 0.0250 1 07/10/23 ND 0.0250 1 07/10/23 ND 0.0250 1 07/10/23 ND 0.0500 1 07/10/23 ND 0.0250 1 07/10/23 mg/kg mg/kg Analyst: IY ND 20.0 1 07/10/23 mg/kg mg/kg Analyst: KM ND 25.0 1 07/10/23 ND 25.0 1 07/10/23 ND 50.0 1 07/10/23	Result Limit Dilution Prepared Analyzed mg/kg mg/kg Analyst: IY ND 0.0250 1 07/10/23 07/10/23 ND 0.0250 1 07/10/23 07/10/23 ND 0.0250 1 07/10/23 07/10/23 ND 0.0500 1 07/10/23 07/10/23 ND 0.0250 1 07/10/23 07/10/23 ND 0.0250 1 07/10/23 07/10/23 mg/kg mg/kg Analyst: IY ND 20.0 1 07/10/23 07/10/23 mg/kg mg/kg Analyst: KM ND 25.0 1 07/10/23 07/11/23 ND 50.0 1 07/10/23 07/11/23



WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 10:47:17AM

FS09 4'

		ъ				
Analyte	Result	Reporting Limit	Dilution	n Prepared	Analyzed	Notes
Analyte	Result	Limit	Dilution	i riepared	Analyzed	notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	ılyst: IY		Batch: 2328001
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		95.2 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	ılyst: IY		Batch: 2328001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.9 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	ılyst: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/11/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/11/23	
Surrogate: n-Nonane		97.2 %	50-200	07/10/23	07/11/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	nlyst: BA		Batch: 2328006
Chloride	2680	40.0	2	07/10/23	07/10/23	



Sample Data

WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 10:47:17AM

FS10 4'

		E307015-10				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	ılyst: IY		Batch: 2328001
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		94.8 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	ılyst: IY		Batch: 2328001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.7 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	ılyst: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/11/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/11/23	
Surrogate: n-Nonane		97.4 %	50-200	07/10/23	07/11/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	ılyst: BA		Batch: 2328006
Chloride	692	20.0	1	07/10/23	07/10/23	



		QC Si	umma	ii y Data	1				
WPX Energy - Carlsbad		Project Name:		DX 17-25					Reported:
5315 Buena Vista Dr		Project Number:		058-0007					
Carlsbad NM, 88220		Project Manager:	Gi	ilbert Moreno				7/	12/2023 10:47:17AM
		Volatile O	rganics b	y EPA 802	1B				Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328001-BLK1)							Prepared: 0	7/10/23 Ana	alyzed: 07/10/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
p-Xylene	ND	0.0250							
o,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.64		8.00		95.5	70-130			
LCS (2328001-BS1)							Prepared: 0	7/10/23 Ana	alyzed: 07/10/23
Benzene	5.06	0.0250	5.00		101	70-130			
thylbenzene	5.01	0.0250	5.00		100	70-130			
oluene	5.08	0.0250	5.00		102	70-130			
-Xylene	5.01	0.0250	5.00		100	70-130			
,m-Xylene	10.2	0.0500	10.0		102	70-130			
Total Xylenes	15.2	0.0250	15.0		101	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.74		8.00		96.8	70-130			
Matrix Spike (2328001-MS1)				Source:	E307015-	01	Prepared: 0	7/10/23 Ana	alyzed: 07/10/23
Benzene	5.15	0.0250	5.00	ND	103	54-133			
thylbenzene	5.09	0.0250	5.00	ND	102	61-133			
oluene	5.18	0.0250	5.00	ND	104	61-130			
-Xylene	5.10	0.0250	5.00	ND	102	63-131			
,m-Xylene	10.4	0.0500	10.0	ND	104	63-131			
Total Xylenes	15.5	0.0250	15.0	ND	103	63-131			
urrogate: 4-Bromochlorobenzene-PID	7.74		8.00		96.7	70-130			
Matrix Spike Dup (2328001-MSD1)				Source:	E307015-	01	Prepared: 0	7/10/23 Ana	alyzed: 07/10/23
Benzene	4.95	0.0250	5.00	ND	99.0	54-133	3.95	20	
Ethylbenzene	4.89	0.0250	5.00	ND	97.9	61-133	3.92	20	
Toluene	4.97	0.0250	5.00	ND	99.3	61-130	4.15	20	
o-Xylene	4.91	0.0250	5.00	ND	98.2	63-131	3.82	20	
o,m-Xylene	9.98	0.0500	10.0	ND	99.8	63-131	3.71	20	
Total Virlamas	140	0.0250	15.0	ND	00.2	62 121	2 7/	20	



Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

14.9

7.78

0.0250

15.0

8.00

ND

99.3

97.2

63-131

70-130

3.74

20

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 10:47:17AM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno				7/	12/2023 10:47:17AM		
	Nonhalogenated Organics by EPA 8015D - GRO								Analyst: IY		
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes		
Blank (2328001-BLK1)							Prepared: 0	7/10/23 Ana	alyzed: 07/10/23		
Gasoline Range Organics (C6-C10)	ND	20.0									
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.10		8.00		88.8	70-130					
LCS (2328001-BS2)							Prepared: 0	7/10/23 Ana	lyzed: 07/10/23		
Gasoline Range Organics (C6-C10)	40.9	20.0	50.0		81.8	70-130					
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.15		8.00		89.4	70-130					
Matrix Spike (2328001-MS2)				Source:	E307015-	01	Prepared: 0	7/10/23 Ana	lyzed: 07/10/23		
Gasoline Range Organics (C6-C10)	42.5	20.0	50.0	ND	85.0	70-130					
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.97		8.00		87.1	70-130					
Matrix Spike Dup (2328001-MSD2)				Source:	E307015-	01	Prepared: 0	7/10/23 Ana	lyzed: 07/10/23		
Gasoline Range Organics (C6-C10)	41.4	20.0	50.0	ND	82.9	70-130	2.52	20			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.05		8.00		88.1	70-130					

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	•
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 10:47:17AM

Carisbad NM, 88220		Project Manager	r: Gi	ibert Moreno					//12/2023 10:47:17A
	Nonha	logenated Or	ganics by	EPA 8015I) - DRO	ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328005-BLK1)							Prepared: 0	7/10/23 A	analyzed: 07/10/23
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	51.1		50.0		102	50-200			
LCS (2328005-BS1)							Prepared: 0	7/10/23 A	analyzed: 07/10/23
Diesel Range Organics (C10-C28)	256	25.0	250		102	38-132			
urrogate: n-Nonane	48.3		50.0		96.6	50-200			
Matrix Spike (2328005-MS1)				Source:	E307015-0	01	Prepared: 0	7/10/23 A	analyzed: 07/10/23
Diesel Range Organics (C10-C28)	254	25.0	250	ND	102	38-132			
urrogate: n-Nonane	46.7		50.0		93.3	50-200			
Matrix Spike Dup (2328005-MSD1)				Source:	E307015-0	01	Prepared: 0	7/10/23 A	analyzed: 07/10/23
Diesel Range Organics (C10-C28)	259	25.0	250	ND	103	38-132	1.79	20	
urrogate: n-Nonane	49.3		50.0		98.6	50-200			



WPX Energy - Carlsbad		Project Name:	RI	DX 17-25					Reported:
5315 Buena Vista Dr		Project Number:	01	.058-0007					Reporteu.
Carlsbad NM, 88220		Project Manager:	Gi	ilbert Moreno					7/12/2023 10:47:17AN
		Anions	by EPA 3	300.0/9056 <i>A</i>	4				Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328006-BLK1)							Prepared: 0	07/10/23 A	nalyzed: 07/10/23
Chloride	ND	20.0							
LCS (2328006-BS1)							Prepared: 0	7/10/23 A	nalyzed: 07/10/23
Chloride	249	20.0	250		99.4	90-110			
Matrix Spike (2328006-MS1)				Source:	E307015-0	01	Prepared: 0	7/10/23 A	nalyzed: 07/10/23
Chloride	402	100	250	163	96.0	80-120			
Matrix Spike Dup (2328006-MSD1)				Source:	E307015-0	01	Prepared: 0	7/10/23 A	nalyzed: 07/10/23
Chloride	399	100	250	163	94.7	80-120	0.763	20	

QC Summary Report Comment:

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



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/12/23 10:47

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Project In	nformation					C	hain of Custody													Program SDWA RCRA
Client: W	/PX Energy Pe	rmian LLC	C.			Bill To				La	b Us	e On	ily			-	TAT	Г	EPA	Program
	RDX 17-25				Att	tention: Jim Raley		Lab	WO#			Job	Number	STA	1D 20	T	3D	Standard	CWA	SDWA
	Aanager: Gilbe	ert Morer	10			dress: 5315 Buena Vista Dr.		E.3	307	015	5 6	DIC	58-0	∞ 7	m			5 day TAT		
Address: 13000 W County Rd 100 City, State, Zip: Carlsbad, NM, 8822			88220	_					sis and f		1					RCRA				
City, Stat	e, Zip_Odessa	a,TX, 7976	55		Ph	one: 575-885-7502			þ							Т				
	332) 541-7719				Em	nail: jim.raley@dvn.com)RO							- 1	- 1		State	
Email: De	evon-team@e	techenv.	com			O: 21181900			0/0	-			0.		ΣN	- 1		NM C	UT A	Z TX
Collected	by: Edyte Ko	nan	110111			cident ID: nAB1712952339		77	J/DF	802	3260	010	300.0				×			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID			Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride		верос		GDOC		Remark	s
9:00	7/5/2023	S	1			FS01	1	4'							х					
9:10	7/5/2023	S	1			FS02	2	4'							х					
9:20	7/5/2023	S	1			FS03	3	4'							х					
9:30	7/5/2023	S	1			FS04		4'							x					
9:40	7/5/2023	S	1		FS05		5	4'							х					
9:50	7/5/2023	S	1			FS06	6	4'							х					
10:00	7/5/2023	S	1			FS07	7	4'							х					
10:10	7/5/2023	S	1			FS08	8	4'							х					
10:20	7/5/2023	S	1			FS09	9	4'							х					
10:30	7/5/2023	S	1			FS10	10	4'							Х					
Addition	al Instruction	is:																		
and the state of the	oler), attest to the					tampering with or intentionally misla Sampled by: EK	belling the sample loo	ation,				104-5						eived on ice the ess than 6 °C on s		
Relinquish	d by: (Signature		Date		Time 08:00	Received by: (Signature)	Date 7-6	23	Time	800)	Rece	eived or	ice:	Lab		e Only	У		
Wic		weller	Date		Time 1 6 30	Received by: (Signature)	7.7.	. Levi	Time 16	30)	T1			T2					
Relinquish	ed by: (Signature	500	Date		12245	Received by: (Signature)	2 7/10/	23	Time	:10)	AVG	Temp '	c L						
	rix: S - Soil, Sd - So		e. A - Aqueo	ous, O - Other			Containe	r Typ				_			per glass	. v	- VOA			





Printed: 7/10/2023 9:44:15AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

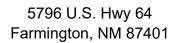
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	07/10/23 0	8:10	Work Order	ID:	E307015
Phone:	(539) 573-4018	Date Logged In:	07/07/23 1	6:28	Logged In F	By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	07/13/23 1	7:00 (3 day TAT)			
Chain of	Custody (COC)						
	ne sample ID match the COC?		Yes				
	ne number of samples per sampling site location ma	tch the COC	Yes				
	amples dropped off by client or carrier?		Yes	Carrier: Cor	<u>urier</u>		
4. Was the	e COC complete, i.e., signatures, dates/times, reque	sted analyses?	Yes				
5. Were a	Il samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi		Yes		<u>Com</u>	ment	ts/Resolution
Sample T	<u> Curn Around Time (TAT)</u>			Г			
6. Did the	e COC indicate standard TAT, or Expedited TAT?		Yes				
Sample C							
	sample cooler received?		Yes				
8. If yes,	was cooler received in good condition?		Yes				
9. Was the	e sample(s) received intact, i.e., not broken?		Yes				
10. Were	custody/security seals present?		No				
11. If yes	, were custody/security seals intact?		NA				
	e sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling visible ice, record the temperature. Actual sample	e received w/i 15	Yes C				
Sample C		· • • · · · · · <u> </u>	_				
	queous VOC samples present?		No				
	OC samples collected in VOA Vials?		NA				
	head space less than 6-8 mm (pea sized or less)?		NA				
	trip blank (TB) included for VOC analyses?		NA				
	on-VOC samples collected in the correct containers	?	Yes				
	appropriate volume/weight or number of sample contain		Yes				
Field Lal	•						
	field sample labels filled out with the minimum info	ormation:					
	ample ID?		Yes				
D	ate/Time Collected?		Yes	L			
C	ollectors name?		Yes				
	<u>Preservation</u>						
	the COC or field labels indicate the samples were p	reserved?	No				
	ample(s) correctly preserved?		NA				
24. Is lab	filteration required and/or requested for dissolved n	netals?	No				
	se Sample Matrix						
26. Does	the sample have more than one phase, i.e., multipha	se?	No				
27. If yes	, does the COC specify which phase(s) is to be analy	yzed?	NA				
Subcontr	act Laboratory						
28. Are sa	amples required to get sent to a subcontract laborato	ry?	No				
29. Was a	subcontract laboratory specified by the client and i	f so who?	NA	Subcontract Lab: 1	NA		
Client Ir	nstruction_						

Date

Report to:
Gilbert Moreno





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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 17-25

Work Order: E307014

Job Number: 01058-0007

Received: 7/10/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 7/12/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 7/12/23

Gilbert Moreno 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX 17-25 Workorder: E307014

Date Received: 7/10/2023 8:10:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/10/2023 8:10:00AM, under the Project Name: RDX 17-25.

The analytical test results summarized in this report with the Project Name: RDX 17-25 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman

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Sample Summary

Γ	WPX Energy - Carlsbad	Project Name:	RDX 17-25	Donosta da
١	5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
l	Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/12/23 09:51

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
SW01 0 - 4'	E307014-01A Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
SW02 0 - 4'	E307014-02A Soil	07/05/23	07/10/23	Glass Jar, 2 oz.



WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 9:51:53AM

SW01 0 - 4' E307014-01

	E30/014-01				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
			•	111111111111111111111111111111111111111	
mg/kg	mg/kg	Analys	t: IY		Batch: 2328001
ND	0.0250	1	07/10/23	07/10/23	
ND	0.0250	1	07/10/23	07/10/23	
ND	0.0250	1	07/10/23	07/10/23	
ND	0.0250	1	07/10/23	07/10/23	
ND	0.0500	1	07/10/23	07/10/23	
ND	0.0250	1	07/10/23	07/10/23	
	94.6 %	70-130	07/10/23	07/10/23	
mg/kg	mg/kg	Analys	t: IY		Batch: 2328001
ND	20.0	1	07/10/23	07/10/23	
	87.5 %	70-130	07/10/23	07/10/23	
mg/kg	mg/kg	Analys	t: KM		Batch: 2328010
ND	25.0	1	07/10/23	07/10/23	
ND	50.0	1	07/10/23	07/10/23	
	93.3 %	50-200	07/10/23	07/10/23	
mg/kg	mg/kg	Analys	t: BA		Batch: 2328004
133					
	ND ND ND ND ND ND ND ND ND Mg/kg ND mg/kg	Result Limit mg/kg mg/kg ND 0.0250 ND 0.0250 ND 0.0250 ND 0.0500 ND 0.0250 MD 0.0250 MD 0.0250 MD 20.0 87.5 % mg/kg mg/kg mg/kg ND 25.0 ND 50.0 93.3 % mg/kg mg/kg mg/kg	Reporting Result Limit Dilution mg/kg mg/kg Analys ND 0.0250 1 ND 0.0250 1 ND 0.0250 1 ND 0.0500 1 ND 0.0250 1 ND 0.0250 1 MD 0.0250 1 MD 0.0250 1 Mg/kg mg/kg Analys ND 20.0 1 87.5 % 70-130 mg/kg mg/kg Analys ND 25.0 1 ND 50.0 1 93.3 % 50-200 mg/kg Mg/kg Analys	Reporting Result Limit Dilution Prepared mg/kg mg/kg Analyst: IY ND 0.0250 1 07/10/23 ND 0.0250 1 07/10/23 ND 0.0250 1 07/10/23 ND 0.0500 1 07/10/23 ND 0.0250 1 07/10/23 mg/kg mg/kg Analyst: IY ND 20.0 1 07/10/23 mg/kg mg/kg Analyst: KM ND 25.0 1 07/10/23 ND 25.0 1 07/10/23 ND 50.0 1 07/10/23 ND 50.0 1 07/10/23 ND 50.0 1 07/10/23 Mg/kg Mg/kg Analyst: BA	Reporting Result Limit Dilution Prepared Analyzed mg/kg mg/kg Analyst: IY ND 0.0250 1 07/10/23 07/10/23 ND 0.0500 1 07/10/23 07/10/23 ND 0.0250 1 07/10/23 07/10/23 mg/kg mg/kg Analyst: IY ND 20.0 1 07/10/23 07/10/23 mg/kg mg/kg Analyst: KM ND 25.0 1 07/10/23 07/10/23 ND 25.0 1 07/10/23 07/10/23 07/10/23 ND 50.0 1 07/10/23 07/10/23 ND 50.0 1 07/10/23 07/10/23 ND 50.0 1 07/10/23



Sample Data

WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 9:51:53AM

SW02 0 - 4'

		E307014-02				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: IY		Batch: 2328001
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		96.4 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	yst: IY		Batch: 2328001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.3 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: KM		Batch: 2328010
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/10/23	
Surrogate: n-Nonane		94.4 %	50-200	07/10/23	07/10/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2328004
Chloride	ND	200	10	07/10/23	07/10/23	



		QC 50	41111116	ii y Data	•				
WPX Energy - Carlsbad		Project Name:	R	DX 17-25					Reported:
5315 Buena Vista Dr		Project Number:	01	1058-0007					•
Carlsbad NM, 88220		Project Manager:	G	ilbert Moreno				7/1	2/2023 9:51:53AM
		Volatile O	ganics l	oy EPA 8021	В				Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328001-BLK1)							Prepared: 0	7/10/23 Ana	lyzed: 07/10/23
Benzene	ND	0.0250							-
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.64		8.00		95.5	70-130			
LCS (2328001-BS1)							Prepared: 0	7/10/23 Ana	lyzed: 07/10/23
Benzene	5.06	0.0250	5.00		101	70-130			
Ethylbenzene	5.01	0.0250	5.00		100	70-130			
Toluene	5.08	0.0250	5.00		102	70-130			
p-Xylene	5.01	0.0250	5.00		100	70-130			
p,m-Xylene	10.2	0.0500	10.0		102	70-130			
Total Xylenes	15.2	0.0250	15.0		101	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.74		8.00		96.8	70-130			
Matrix Spike (2328001-MS1)				Source: F	E307015-	01	Prepared: 0	7/10/23 Ana	lyzed: 07/10/23
Benzene	5.15	0.0250	5.00	ND	103	54-133			
Ethylbenzene	5.09	0.0250	5.00	ND	102	61-133			
Toluene	5.18	0.0250	5.00	ND	104	61-130			
o-Xylene	5.10	0.0250	5.00	ND	102	63-131			
p,m-Xylene	10.4	0.0500	10.0	ND	104	63-131			
Total Xylenes	15.5	0.0250	15.0	ND	103	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.74		8.00		96.7	70-130			
Matrix Spike Dup (2328001-MSD1)				Source: F	E307015-	01	Prepared: 0	7/10/23 Ana	yzed: 07/10/23
Benzene	4.95	0.0250	5.00	ND	99.0	54-133	3.95	20	
Ethylbenzene	4.89	0.0250	5.00	ND	97.9	61-133	3.92	20	
Toluene	4.97	0.0250	5.00	ND	99.3	61-130	4.15	20	
o-Xylene	4.91	0.0250	5.00	ND	98.2	63-131	3.82	20	
	0.00		100	ATES					
p,m-Xylene Total Xylenes	9.98 14.9	0.0500 0.0250	10.0 15.0	ND ND	99.8 99.3	63-131 63-131	3.71 3.74	20 20	



70-130

Surrogate: 4-Bromochlorobenzene-PID

7.78

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	•
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 9:51:53AM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno				7/1	2/2023 9:51:53AM
	Non	halogenated	Organics l	by EPA 80	15D - Gl	RO			Analyst: IY
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2328001-BLK1)							Prepared: 0	7/10/23 Anal	yzed: 07/10/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.10		8.00		88.8	70-130			
LCS (2328001-BS2)							Prepared: 0	7/10/23 Anal	yzed: 07/10/23
Gasoline Range Organics (C6-C10)	40.9	20.0	50.0		81.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.15		8.00		89.4	70-130			
Matrix Spike (2328001-MS2)				Source:	E307015-	01	Prepared: 0	7/10/23 Anal	yzed: 07/10/23
Gasoline Range Organics (C6-C10)	42.5	20.0	50.0	ND	85.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.97		8.00		87.1	70-130			
Matrix Spike Dup (2328001-MSD2)				Source:	E307015-	01	Prepared: 0	7/10/23 Anal	yzed: 07/10/23
Gasoline Range Organics (C6-C10)	41.4	20.0	50.0	ND	82.9	70-130	2.52	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.05		8.00		88.1	70-130			

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	·
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/12/2023 9:51:53AM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno				7/1	2/2023 9:51:53AN
	Nonha	logenated Or	ganics by	EPA 8015I) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328010-BLK1)							Prepared: 0	7/10/23 Anal	yzed: 07/10/23
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.3		50.0		90.5	50-200			
LCS (2328010-BS1)							Prepared: 0	7/10/23 Anal	yzed: 07/10/23
Diesel Range Organics (C10-C28)	256	25.0	250		102	38-132			
Surrogate: n-Nonane	45.8		50.0		91.6	50-200			
Matrix Spike (2328010-MS1)				Source:	E307010-	01	Prepared: 0	7/10/23 Anal	yzed: 07/11/23
Diesel Range Organics (C10-C28)	20100	1250	250	21400	NR	38-132			M4
Surrogate: n-Nonane	64.7		50.0		129	50-200			
Matrix Spike Dup (2328010-MSD1)				Source:	E307010-	01	Prepared: 0	7/10/23 Anal	yzed: 07/11/23
Diesel Range Organics (C10-C28)	21000	1250	250	21400	NR	38-132	4.67	20	M4
Surrogate: n-Nonane	66.9		50.0		134	50-200			

Matrix Spike (2328004-MS1)

Matrix Spike Dup (2328004-MSD1)

Chloride

Chloride

24600

30300

Prepared: 07/10/23 Analyzed: 07/10/23

Prepared: 07/10/23 Analyzed: 07/10/23

20

M5, R3

QC Summary Data

WPX Energy - Carlsbad		Project Name:	R	DX 17-25					Reported:
5315 Buena Vista Dr Carlsbad NM, 88220		Project Number: Project Manager		1058-0007 ilbert Moreno					7/12/2023 9:51:53AM
		Anions	by EPA 3	300.0/90 5 6 <i>A</i>	4				Analyst: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits	RPD %	RPD Limit %	Notes
Blank (2328004-BLK1)							Prepared: 0	7/10/23 A	nalyzed: 07/10/23
Chloride	ND	20.0							
LCS (2328004-BS1)							Prepared: 0	7/10/23 A	nalyzed: 07/10/23
Chloride	251	20.0	250		101	90-110			

250

250

1000

1000

Source: E307009-01

Source: E307009-01

24.4

NR

80-120

80-120

20.9

24500

24500

QC Summary Report Comment:

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



Definitions and Notes

ſ	WPX Energy - Carlsbad	Project Name:	RDX 17-25	
l	5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
l	Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/12/23 09:51

M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.

M5 The analysis of the MS sample required a dilution such that the spike recovery calculation does not provide useful information. The

accociated LCS spike recovery was acceptable.

R3 The RPD exceeded the acceptance limit. LCS spike recovery met acceptance criteria.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



lient \	PX Energy Pe	rmian II C				Bill To				10	hH	e On	dv		Т	AT		FPA D	Page
	RDX 17-25	i i i i i i i i i i i i i i i i i i i			A++			Lab	WO#	_			Number	1D 20			andard	CWA	SDWA
	Manager: Gilbe	ert Moren	10		Add	ention: Jim Raley dress: 5315 Buena Vista Dr.		E S	WO#	101			28-000	10 21	30		day TAT	CVVA	JUWA
	13000 W Cou					y, State, Zip: Carlsbad, NM, 8	88220	LJ	.0	101			sis and Metho			9	day IAI		RCRA
	e, Zip_Odessa					one: 575-885-7502	30220		>			ruidiy	SIS UNG IVICEING	T		T			Heliot
	332) 541-7719					ail: jim.raley@dvn.com			RO b									State	
	von-team@e		om			D: 21181900			0/0	0.5			0	5			NM CO		TX
	by: Edyte Ko					ident ID: nAB1712952339		-	J/DR	8021	3260	010	300.	Z	×				
Time			No. of	Cample ID			Lab	Depth(ft.)	TPH GRO/DRO/ORO by 8015	втех by 8021	VOC by 8260	Metals 6010	Chloride 300.0	верос	20			Domarko	k - Line
Sampled	Date Sampled	Matrix	Containers	Sample ID			Number	Dep	TPH (вте	NOC	Met	Chic	BGI	GDOC			Remarks	
10:40	7/5/2023	S	1			SW01	1	0-4'						x					
10:50	7/5/2023	S	1			SW02	2	0-4'						х					
		Qu	gine.																
(
Addition	al Instruction	s:																	
	oler), attest to the					tampering with or intentionally mislab Sampled by: EK	elling the sample loc	ation,				Section 4.	es requiring therma ed packed in ice at a						
Relingqishe	by: (Signature)	Date	6.23	08:00	Received by: (Signature)	On 7-62	3	Time	800	5	Rece	eived on ice:	Lab M/	Use O N	nly			
Mid	ed by: (Signature	wells	Date		1630	Received by: (Signature)	Date		Time 16	3	0	<u>T1</u>		<u>T2</u>			<u>T3</u>		
10	ed by: (Signature	1800	Date		12245	Regeived by: (Gignature)	Date /	23	Time	:/0)	AVG	Temp°C	4					
	rix: S - Soil, Sd - So		e. A - Aqueo	us. O - Other		7.00			a. b - t	alace	n-r		olastic, ag - am	her alace	V - VC	٦Δ			



Printed: 7/10/2023 9:41:08AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

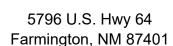
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	07/10/23	08:10	Work Order ID:	E307014
Phone:	(539) 573-4018	Date Logged In:	07/07/23	16:24	Logged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	07/13/23	17:00 (3 day TAT)		
~ .						
	Custody (COC)					
	he sample ID match the COC?	tab the COC	Yes			
	he number of samples per sampling site location mat	ich the COC	Yes			
	samples dropped off by client or carrier?	-4- 4 19	Yes Yes	Carrier: Courier		
	ne COC complete, i.e., signatures, dates/times, reques	sted analyses?				
5. were	all samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssion.		Yes		Comment	ts/Resolution
	<u> Turn Around Time (TAT)</u>					
6. Did th	e COC indicate standard TAT, or Expedited TAT?		Yes			
Sample						
	sample cooler received?		Yes			
8. If yes,	was cooler received in good condition?		Yes			
9. Was th	ne sample(s) received intact, i.e., not broken?		Yes			
10. Were	custody/security seals present?		No			
11. If yes	s, were custody/security seals intact?		NA			
	ne sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples are minutes of sampling visible ice, record the temperature. Actual sample	e received w/i 15	Yes <u>C</u>			
Sample	Container_					
	iqueous VOC samples present?		No			
15. Are	VOC samples collected in VOA Vials?		NA			
16. Is the	head space less than 6-8 mm (pea sized or less)?		NA			
17. Was	a trip blank (TB) included for VOC analyses?		NA			
	non-VOC samples collected in the correct containers'	?	Yes			
	appropriate volume/weight or number of sample contain		Yes			
Field La	•					
•	field sample labels filled out with the minimum info	ormation:				
	Sample ID?		Yes			
	Date/Time Collected?		Yes			
	Collectors name?		Yes			
	<u>Preservation</u>					
	the COC or field labels indicate the samples were pr	reserved?	No			
	sample(s) correctly preserved?		NA			
24. Is lat	o filteration required and/or requested for dissolved m	netals?	No			
	ase Sample Matrix					
	the sample have more than one phase, i.e., multipha		No			
27. If ye	s, does the COC specify which phase(s) is to be analy	zed?	NA			
Subcont	ract Laboratory					
28. Are s	amples required to get sent to a subcontract laborator	ry?	No			
	a subcontract laboratory specified by the client and it	•	NA	Subcontract Lab: NA		
Client I	nstruction					
<u>Chent i</u>	nstruction .					

Date

Report to:
Gilbert Moreno





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





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Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 17 FEDERAL # 36H

Work Order: E307016

Job Number: 01058-0007

Received: 7/10/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 7/13/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 7/13/23

Gilbert Moreno 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX 17 FEDERAL # 36H

Workorder: E307016

Date Received: 7/10/2023 8:10:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/10/2023 8:10:00AM, under the Project Name: RDX 17 FEDERAL # 36H.

The analytical test results summarized in this report with the Project Name: RDX 17 FEDERAL # 36H apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman

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Sample Summary

WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	Donoutoda
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/13/23 08:33

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01 0.5'	E307016-01A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
BH01 1'	E307016-02A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
BH02 0.5'	E307016-03A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
BH02 1'	E307016-04A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
BH03 0.5'	E307016-05A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
BH03 1'	E307016-06A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
BH04 0.5'	E307016-07A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.
BH04 1'	E307016-08A	Soil	07/05/23	07/10/23	Glass Jar, 2 oz.



WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/13/2023 8:33:18AM

BH01 0.5' E307016-01

		E307010-01				
Analyte	Result	Reporting Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: IY		Batch: 2328002
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
oluene	ND	0.0250	1	07/10/23	07/10/23	
-Xylene	ND	0.0250	1	07/10/23	07/10/23	
,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		97.2 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	Analyst: IY		Batch: 2328002
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
urrogate: 1-Chloro-4-fluorobenzene-FID		85.9 %	70-130	07/10/23	07/10/23	
Onhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/10/23	
'urrogate: n-Nonane		98.9 %	50-200	07/10/23	07/10/23	
anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2328006
Chloride	301	100	5	07/10/23	07/10/23	



WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/13/2023 8:33:18AM

BH01 1'

E307016-02

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: IY		Batch: 2328002
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		97.1 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	Analyst: IY		Batch: 2328002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.0 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	Analyst: KM			Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/10/23	
Surrogate: n-Nonane		92.7 %	50-200	07/10/23	07/10/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2328006
Chloride	329	200	10	07/10/23	07/10/23	



WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/13/2023 8:33:18AM

BH02 0.5'

		E307016-03				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	yst: IY		Batch: 2328002
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
o,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		97.8 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	yst: IY		Batch: 2328002
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		85.7 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/10/23	
Surrogate: n-Nonane		99.7 %	50-200	07/10/23	07/10/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2328006
Chloride	ND	200	10	07/10/23	07/10/23	



WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/13/2023 8:33:18AM

BH02 1'

E307016-04

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: IY		Batch: 2328002
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		97.7 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: IY		Batch: 2328002
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.0 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/10/23	_
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/10/23	
Surrogate: n-Nonane		102 %	50-200	07/10/23	07/10/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: BA		Batch: 2328006
Chloride	ND	200	10	07/10/23	07/10/23	•



WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/13/2023 8:33:18AM

BH03 0.5'

		E307016-05				
		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: IY		Batch: 2328002
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		97.2 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: IY		Batch: 2328002
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.3 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	940	25.0	1	07/10/23	07/10/23	
Oil Range Organics (C28-C36)	577	50.0	1	07/10/23	07/10/23	
Surrogate: n-Nonane		102 %	50-200	07/10/23	07/10/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2328006
Chloride	269	100	5	07/10/23	07/10/23	·



WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/13/2023 8:33:18AM

BH03 1'

E307016-06

		D				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		vst: IY		Batch: 2328002
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		97.1 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	vst: IY		Batch: 2328002
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.8 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	749	25.0	1	07/10/23	07/10/23	
Oil Range Organics (C28-C36)	517	50.0	1	07/10/23	07/10/23	
Surrogate: n-Nonane		103 %	50-200	07/10/23	07/10/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	vst: BA		Batch: 2328006
Chloride	296	40.0	2	07/10/23	07/10/23	



WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/13/2023 8:33:18AM

BH04 0.5'

		E307016-07				
		Reporting				
Analyte	Result	Limit	Dilutio	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Aı	nalyst: IY		Batch: 2328002
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
p,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		98.1 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Aı	nalyst: IY		Batch: 2328002
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.9 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Aı	nalyst: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/10/23	
Surrogate: n-Nonane		98.8 %	50-200	07/10/23	07/10/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Aı	nalyst: BA		Batch: 2328006
Chloride	37.2	20.0	1	07/10/23	07/10/23	



WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/13/2023 8:33:18AM

BH04 1'

E307016-08

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	ılyst: IY		Batch: 2328002
Benzene	ND	0.0250	1	07/10/23	07/10/23	
Ethylbenzene	ND	0.0250	1	07/10/23	07/10/23	
Toluene	ND	0.0250	1	07/10/23	07/10/23	
o-Xylene	ND	0.0250	1	07/10/23	07/10/23	
o,m-Xylene	ND	0.0500	1	07/10/23	07/10/23	
Total Xylenes	ND	0.0250	1	07/10/23	07/10/23	
Surrogate: 4-Bromochlorobenzene-PID		97.8 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	ılyst: IY		Batch: 2328002
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/23	07/10/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		86.7 %	70-130	07/10/23	07/10/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	ılyst: KM		Batch: 2328005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/23	07/10/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/23	07/10/23	
Surrogate: n-Nonane		101 %	50-200	07/10/23	07/10/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	ılyst: BA		Batch: 2328006



		QC Si	umm	ary Dat	а				
WPX Energy - Carlsbad		Project Name:	R	RDX 17 FEDE	RAL # 36H	1			Reported:
5315 Buena Vista Dr		Project Number:	0	1058-0007					
Carlsbad NM, 88220		Project Manager:	C	Gilbert Moreno				7/1	3/2023 8:33:18AM
		Volatile O	rganics	by EPA 802	21B				Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328002-BLK1)							Prepared: 0	7/10/23 Anal	yzed: 07/10/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.67		8.00		95.9	70-130			
LCS (2328002-BS1)							Prepared: 0	7/10/23 Anal	yzed: 07/10/23
Benzene	4.12	0.0250	5.00		82.4	70-130			
Ethylbenzene	4.01	0.0250	5.00		80.2	70-130			
Toluene	4.14	0.0250	5.00		82.8	70-130			
o-Xylene	4.13	0.0250	5.00		82.7	70-130			
p,m-Xylene	8.33	0.0500	10.0		83.3	70-130			
Total Xylenes	12.5	0.0250	15.0		83.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.85		8.00		98.2	70-130			
Matrix Spike (2328002-MS1)				Source:	E307016-	03	Prepared: 0	7/10/23 Anal	yzed: 07/10/23
Benzene	4.87	0.0250	5.00	ND	97.3	54-133			
Ethylbenzene	4.77	0.0250	5.00	ND	95.5	61-133			
Toluene	4.91	0.0250	5.00	ND	98.3	61-130			
o-Xylene	4.92	0.0250	5.00	ND	98.5	63-131			
p,m-Xylene	9.90	0.0500	10.0	ND	99.0	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.8	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.77		8.00		97.2	70-130			
Matrix Spike Dup (2328002-MSD1)				Source:	E307016-	03	Prepared: 0	7/10/23 Anal	yzed: 07/10/23
Benzene	5.05	0.0250	5.00	ND	101	54-133	3.70	20	
Ethylbenzene	4.93	0.0250	5.00	ND	98.7	61-133	3.33	20	
Toluene	5.08	0.0250	5.00	ND	102	61-130	3.35	20	
o-Xylene	5.08	0.0250	5.00	ND	102	63-131	3.19	20	
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131	3.28	20	
Total Xylenes	15.3	0.0250	15.0	ND	102	63-131	3.25	20	



70-130

98.4

Surrogate: 4-Bromochlorobenzene-PID

WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/13/2023 8:33:18AM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno				7/1	3/2023 8:33:18AN
	Non	halogenated	Organics l	y EPA 80	15D - Gl	RO			Analyst: IY
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2328002-BLK1)							Prepared: 0	7/10/23 Ana	lyzed: 07/10/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.91		8.00		86.4	70-130			
LCS (2328002-BS2)							Prepared: 0	7/10/23 Ana	lyzed: 07/10/23
Gasoline Range Organics (C6-C10)	46.8	20.0	50.0		93.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.04		8.00		88.0	70-130			
Matrix Spike (2328002-MS2)				Source:	E307016-0	03	Prepared: 0	7/10/23 Ana	lyzed: 07/10/23
Gasoline Range Organics (C6-C10)	44.7	20.0	50.0	ND	89.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.98		8.00		87.2	70-130			
Matrix Spike Dup (2328002-MSD2)				Source:	E307016-0	03	Prepared: 0	7/10/23 Ana	lyzed: 07/10/23
Gasoline Range Organics (C6-C10)	47.1	20.0	50.0	ND	94.2	70-130	5.38	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.01		8.00		87.6	70-130			



WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/13/2023 8:33:18AM

Carisbad NM, 88220		Project Manage	r: G1	ibert Moreno					//13/2023 8:33:18AF
	Nonha	logenated Or	ganics by l	EPA 8015I) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328005-BLK1)							Prepared: 0	7/10/23 A	nalyzed: 07/10/23
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	51.1		50.0		102	50-200			
LCS (2328005-BS1)							Prepared: 0	7/10/23 A	nalyzed: 07/10/23
Diesel Range Organics (C10-C28)	256	25.0	250		102	38-132			
urrogate: n-Nonane	48.3		50.0		96.6	50-200			
Matrix Spike (2328005-MS1)				Source:	E307015-0	01	Prepared: 0	7/10/23 A	nalyzed: 07/10/23
Diesel Range Organics (C10-C28)	254	25.0	250	ND	102	38-132			
urrogate: n-Nonane	46.7		50.0		93.3	50-200			
Matrix Spike Dup (2328005-MSD1)				Source:	E307015-0	01	Prepared: 0	7/10/23 A	nalyzed: 07/10/23
Diesel Range Organics (C10-C28)	259	25.0	250	ND	103	38-132	1.79	20	
urrogate: n-Nonane	49.3		50.0		98.6	50-200			



WPX Energy - Carlsbad		Project Name:		DX 17 FEDE	RAL # 36H	I			Reported:
5315 Buena Vista Dr		Project Number:		1058-0007					
Carlsbad NM, 88220		Project Manager:	G	ilbert Moreno	1				7/13/2023 8:33:18AM
		Anions	by EPA	300.0/90 5 6 <i>£</i>	4				Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328006-BLK1)							Prepared: 0	7/10/23 A	Analyzed: 07/10/23
Chloride	ND	20.0							
LCS (2328006-BS1)							Prepared: 0	7/10/23 A	Analyzed: 07/10/23
Chloride	249	20.0	250		99.4	90-110			
Matrix Spike (2328006-MS1)				Source:	E307015-0)1	Prepared: 0	7/10/23 A	Analyzed: 07/10/23
Chloride	402	100	250	163	96.0	80-120			
Matrix Spike Dup (2328006-MSD1)				Source:	E307015-0)1	Prepared: 0	7/10/23 A	Analyzed: 07/10/23
Chloride	399	100	250	163	94.7	80-120	0.763	20	-

QC Summary Report Comment:

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



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/13/23 08:33

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Project II	nformation						Chair	of Custody	•													Page rogram SDWA RCRA
Client: W	VPX Energy Pe	rmian II (Bill To				La	ab Us	e On	ılv			-	TA	Т	-	FPA P	rogram
	RDX 17 FEDER				Atte	ntion: Jim R			Lab	WO				Numb	er	1D	2D	3D	Stand	dard	CWA	SDWA
	Manager: Gilb		10				uena Vista Dr.				26				0007				5 day	TAT		
	13000 W Cou				City,	State, Zip: 0	Carlsbad, NM, 882	20	-		-				Metho	od						RCRA
City, Sta	te, Zip_Odessa	a,TX, 797	65		Phor	ne: 575-885	-7502			λq												
Phone: (832) 541-771	9			Ema	il: jim.raley@	@dvn.com			ORO											State	
Email: D	evon-team@e	techenv.	com			21181922				30/0	н		_	0.0		Σ			NN	VI CO	UT AZ	TX
Collecte	d by: Edyte Ko	nan			Incid	ent ID: NRN	A2017643736		T	JQ/C	802	8260	5010	300				¥				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID				Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		В			Remarks	
11:00	7/5/2023	S	1			BH01		1	0.5							X						
11:10	7/5/2023	S	1			BH01		2	1'							x						
11:20	7/5/2023	S	1			BH02		3	0.5							х						
11:30	7/5/2023	S	1			BH02		4	1'							х	1					
11:40	7/5/2023	S	1			BH03		5	0.5							х						
11:50	7/5/2023	S	1			BH03		6	1'							х						
12:00	7/5/2023	S	1			BH04		7	0.5							X						
12:10	7/5/2023	S	1			BH04		8	1'							х						
		<i>x</i> –																				
_	alon	-6																				
Addition	nal Instruction	is:																				
	State of the state	A STATE OF THE PARTY OF		of this sample. I am be grounds for legal			intentionally mislabellin	g the sample lo	ation,				0.00		-						they are sam sequent days.	
Con	ed by: (Signature		Date		8:00	Received by: (!	e Cencele	7-6-8	23	Time	800		Rece	eived o	on ice:	10000	ab Us) / N	se Onl	У			
Much	ed by: (Signature	alex	Date 7	F 5 5	030	Received by: (Signature) W	7.7.	23	Time 16	63)	T1			<u>T2</u>			<u>T3</u>			
Relinquish	ed by: (Signature	1850	Date 7		245	Received by:	Signature Man	Pliok	23	Time	:/(AVG	Temp	°C	4						
	trix: S - Soil, Sd - So		ge, A - Aquec	ous, O - Other				Containe		e: g -	glass,	p - p	oly/p	olastic,	ag - am	ber gl	ass, v	- VOA				



Printed: 7/10/2023 9:45:55AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

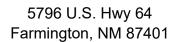
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	07/10/23 0	08:10	Wo	ork Order ID:	E307016
Phone:	(539) 573-4018	Date Logged In:	07/07/23 1	6:43	Lo	gged In By:	Caitlin Mars
Email:	devon-team@ensolum.com	Due Date:	07/13/23 1	7:00 (3 day TAT)			
Chain of	Custody (COC)						
	ne sample ID match the COC?		Yes				
	ne number of samples per sampling site location ma	tch the COC	Yes				
	amples dropped off by client or carrier?		Yes	Carrier: <u>Co</u>	<u>ourier</u>		
	e COC complete, i.e., signatures, dates/times, reque	sted analyses?	Yes				
5. Were a	Il samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi	•	Yes			Comments	s/Resolution
Sample T	<u> Curn Around Time (TAT)</u>						
6. Did the	e COC indicate standard TAT, or Expedited TAT?		Yes				
Sample C							
	sample cooler received?		Yes				
8. If yes,	was cooler received in good condition?		Yes				
9. Was the	e sample(s) received intact, i.e., not broken?		Yes				
10. Were	custody/security seals present?		No				
11. If yes	, were custody/security seals intact?		NA				
	e sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling visible ice, record the temperature. Actual sample	e received w/i 15	Yes C				
	Container _	· · · · · · ·	_				
	queous VOC samples present?		No				
	OC samples collected in VOA Vials?		NA				
	head space less than 6-8 mm (pea sized or less)?		NA				
	trip blank (TB) included for VOC analyses?		NA				
	on-VOC samples collected in the correct containers	?	Yes				
	appropriate volume/weight or number of sample contai		Yes				
Field Lal	•						
	field sample labels filled out with the minimum info	ormation:					
	ample ID?		Yes				
	ate/Time Collected?		Yes	L			
C	ollectors name?		Yes				
	<u>Preservation</u>						
	the COC or field labels indicate the samples were p	reserved?	No				
	ample(s) correctly preserved?		NA				
24. Is lab	filteration required and/or requested for dissolved n	netals?	No				
	se Sample Matrix						
26. Does	the sample have more than one phase, i.e., multipha	se?	No				
27. If yes	, does the COC specify which phase(s) is to be analy	yzed?	NA				
Subcontr	act Laboratory						
28. Are sa	amples required to get sent to a subcontract laborato	ry?	No				
29. Was a	subcontract laboratory specified by the client and i	f so who?	NA	Subcontract Lab:	NA		
Client Ir	nstruction_						

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

Report to:
Gilbert Moreno





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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 17-25

Work Order: E307053

Job Number: 01058-0007

Received: 7/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 7/19/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 7/19/23

Gilbert Moreno 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX 17-25 Workorder: E307053

Date Received: 7/14/2023 8:35:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/14/2023 8:35:00AM, under the Project Name: RDX 17-25.

The analytical test results summarized in this report with the Project Name: RDX 17-25 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman

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Rayny Hagan

West Texas Midland/Odessa Area

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Sample Summary

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Donoutod
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 15:57

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
FS11 4'	E307053-01A Soil	07/13/23	07/14/23	Glass Jar, 2 oz.
FS12 4'	E307053-02A Soil	07/13/23	07/14/23	Glass Jar, 2 oz.
FS13 4'	E307053-03A Soil	07/13/23	07/14/23	Glass Jar, 2 oz.



WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 3:57:29PM

FS11 4' E307053-01

	1507035 01				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analy	st: IY		Batch: 2328065
ND	0.0250	1	07/14/23	07/17/23	
ND	0.0250	1	07/14/23	07/17/23	
ND	0.0250	1	07/14/23	07/17/23	
ND	0.0250	1	07/14/23	07/17/23	
ND	0.0500	1	07/14/23	07/17/23	
ND	0.0250	1	07/14/23	07/17/23	
	98.6 %	70-130	07/14/23	07/17/23	
mg/kg	mg/kg	Analy	st: IY		Batch: 2328065
ND	20.0	1	07/14/23	07/17/23	
	82.5 %	70-130	07/14/23	07/17/23	
mg/kg	mg/kg	Analy	st: KM		Batch: 2329005
ND	25.0	1	07/17/23	07/17/23	
ND	50.0	1	07/17/23	07/17/23	
	102 %	50-200	07/17/23	07/17/23	
mg/kg	mg/kg	Analy	vst: BA		Batch: 2328061
	mg/kg ND	Result Limit mg/kg mg/kg ND 0.0250 ND 0.0250 ND 0.0250 ND 0.0500 ND 0.0250 MD 0.0250 MD 0.0250 MD 20.0250 82.5 % mg/kg MD 25.0 ND 50.0 102 %	Reporting Result Limit Dilution mg/kg mg/kg Analy ND 0.0250 1 ND 0.0250 1 ND 0.0250 1 ND 0.0500 1 ND 0.0250 1 ND 0.0250 1 mg/kg mg/kg Analy ND 20.0 1 82.5 % 70-130 70-130 mg/kg mg/kg Analy ND 25.0 1 ND 50.0 1 102 % 50-200	Reporting Result Limit Dilution Prepared mg/kg mg/kg Analyst: IY ND 0.0250 1 07/14/23 ND 0.0250 1 07/14/23 ND 0.0250 1 07/14/23 ND 0.0500 1 07/14/23 ND 0.0250 1 07/14/23 ND 0.0250 1 07/14/23 mg/kg mg/kg Analyst: IY ND 20.0 1 07/14/23 mg/kg mg/kg Analyst: KM ND 25.0 1 07/17/23 ND 50.0 1 07/17/23 ND 50.0 1 07/17/23	Reporting Result Limit Dilution Prepared Analyzed mg/kg mg/kg Analyst: IY ND 0.0250 1 07/14/23 07/17/23 ND 0.0250 1 07/14/23 07/17/23 ND 0.0250 1 07/14/23 07/17/23 ND 0.0500 1 07/14/23 07/17/23 ND 0.0250 1 07/14/23 07/17/23 ND 0.0250 1 07/14/23 07/17/23 mg/kg mg/kg Analyst: IY ND 20.0 1 07/14/23 07/17/23 mg/kg mg/kg Analyst: KM ND 25.0 1 07/17/23 07/17/23 ND 25.0 1 07/17/23 07/17/23 ND 50.0 1 07/17/23 07/17/23 ND 50.0 1 07/17/23 07/17/23



WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 3:57:29PM

FS12 4'

		E307053-02				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2328065
Benzene	ND	0.0250	1	07/14/23	07/17/23	
Ethylbenzene	ND	0.0250	1	07/14/23	07/17/23	
Toluene	ND	0.0250	1	07/14/23	07/17/23	
o-Xylene	ND	0.0250	1	07/14/23	07/17/23	
o,m-Xylene	ND	0.0500	1	07/14/23	07/17/23	
Total Xylenes	ND	0.0250	1	07/14/23	07/17/23	
Surrogate: 4-Bromochlorobenzene-PID		101 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	llyst: IY		Batch: 2328065
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/14/23	07/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		81.4 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: KM		Batch: 2329005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/17/23	07/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/23	07/17/23	
Surrogate: n-Nonane		106 %	50-200	07/17/23	07/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	llyst: BA		Batch: 2328061
Chloride	3920	40.0	2	07/14/23	07/17/23	



WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 3:57:29PM

FS13 4'

E307053-03

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	llyst: IY		Batch: 2328065
Benzene	ND	0.0250	1	07/14/23	07/17/23	
Ethylbenzene	ND	0.0250	1	07/14/23	07/17/23	
Toluene	ND	0.0250	1	07/14/23	07/17/23	
o-Xylene	ND	0.0250	1	07/14/23	07/17/23	
p,m-Xylene	ND	0.0500	1	07/14/23	07/17/23	
Total Xylenes	ND	0.0250	1	07/14/23	07/17/23	
Surrogate: 4-Bromochlorobenzene-PID		101 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	Analyst: IY		Batch: 2328065
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/14/23	07/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		81.8 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: KM		Batch: 2329005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/17/23	07/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/23	07/17/23	
Surrogate: n-Nonane		101 %	50-200	07/17/23	07/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: BA		Batch: 2328061
Chloride	2740	40.0	2	07/14/23	07/17/23	



		QC 5	umm	iry Data							
WPX Energy - Carlsbad		Project Name:	R	DX 17-25					Reported:		
5315 Buena Vista Dr		Project Number:	01	1058-0007							
Carlsbad NM, 88220		Project Manager:	G	ilbert Moreno					7/19/2023 3:57:29PM		
		Volatile O	rganics l	by EPA 8021	В		Analyst:				
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit			
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes		
Blank (2328065-BLK1)							Prepared: 0	7/14/23 A	nalyzed: 07/17/23		
Benzene	ND	0.0250							-		
Ethylbenzene	ND	0.0250									
Toluene	ND	0.0250									
o-Xylene	ND	0.0250									
p,m-Xylene	ND	0.0500									
Total Xylenes	ND	0.0250									
Surrogate: 4-Bromochlorobenzene-PID	7.68		8.00		96.0	70-130					
LCS (2328065-BS1)							Prepared: 0	7/14/23 A	nalyzed: 07/17/23		
Benzene	4.82	0.0250	5.00		96.5	70-130					
Ethylbenzene	4.71	0.0250	5.00		94.2	70-130					
Toluene	4.86	0.0250	5.00		97.1	70-130					
p-Xylene	4.85	0.0250	5.00		97.1	70-130					
p,m-Xylene	9.77	0.0500	10.0		97.7	70-130					
Total Xylenes	14.6	0.0250	15.0		97.5	70-130					
Surrogate: 4-Bromochlorobenzene-PID	7.84		8.00		98.0	70-130					
Matrix Spike (2328065-MS1)				Source: F	E307053-	01	Prepared: 0	7/14/23 A	nalyzed: 07/17/23		
Benzene	5.06	0.0250	5.00	ND	101	54-133					
Ethylbenzene	4.93	0.0250	5.00	ND	98.6	61-133					
Toluene	5.09	0.0250	5.00	ND	102	61-130					
o-Xylene	5.09	0.0250	5.00	ND	102	63-131					
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131					
Total Xylenes	15.3	0.0250	15.0	ND	102	63-131					
Surrogate: 4-Bromochlorobenzene-PID	7.91		8.00		98.9	70-130					
Matrix Spike Dup (2328065-MSD1)				Source: F	2307053-	01	Prepared: 0	7/14/23 A	nalyzed: 07/17/23		
Benzene	5.00	0.0250	5.00	ND	100	54-133	1.20	20			
Ethylbenzene	4.89	0.0250	5.00	ND	97.7	61-133	0.905	20			
Toluene	5.03	0.0250	5.00	ND	101	61-130	1.15	20			
o-Xylene	5.04	0.0250	5.00	ND	101	63-131	1.03	20			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.10	20			
Total Vydanas	15.2	0.0250	15.0	ND	101	62 121	1.07	20			



15.2

7.97

0.0250

15.0

8.00

ND

101

63-131

70-130

1.07

20

Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 3:57:29PM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno				7/	19/2023 3:57:29PN
	Non	Analyst: IY							
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2328065-BLK1)							Prepared: 0	7/14/23 Ana	lyzed: 07/17/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.59		8.00		82.4	70-130			
LCS (2328065-BS2)							Prepared: 0	7/14/23 Ana	lyzed: 07/17/23
Gasoline Range Organics (C6-C10)	47.2	20.0	50.0		94.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.77		8.00		84.6	70-130			
Matrix Spike (2328065-MS2)				Source:	E307053-0	01	Prepared: 0	7/14/23 Ana	lyzed: 07/17/23
Gasoline Range Organics (C6-C10)	45.2	20.0	50.0	ND	90.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.65		8.00		83.2	70-130			
Matrix Spike Dup (2328065-MSD2)				Source:	E307053-0	01	Prepared: 0	7/14/23 Ana	lyzed: 07/17/23
Gasoline Range Organics (C6-C10)	44.9	20.0	50.0	ND	89.8	70-130	0.677	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.72		8.00		83.9	70-130			



WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	•
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 3:57:29PM

Carlsbad NM, 88220		Project Manage	r: Gı	lbert Moreno					7/19/2023 3:57:29PN		
Nonhalogenated Organics by EPA 8015D - DRO/ORO Analyst: I											
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit			
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes		
Blank (2329005-BLK1)							Prepared: 0	7/17/23 Ar	nalyzed: 07/17/23		
Diesel Range Organics (C10-C28)	ND	25.0									
Dil Range Organics (C28-C36)	ND	50.0									
Surrogate: n-Nonane	56.0		50.0		112	50-200					
LCS (2329005-BS1)							Prepared: 0	7/17/23 Ar	nalyzed: 07/17/23		
Diesel Range Organics (C10-C28)	253	25.0	250		101	38-132					
Surrogate: n-Nonane	49.9		50.0		99.7	50-200					
Matrix Spike (2329005-MS1)				Source:	E307053-	03	Prepared: 0	7/17/23 Ar	nalyzed: 07/17/23		
Diesel Range Organics (C10-C28)	250	25.0	250	ND	99.9	38-132					
Surrogate: n-Nonane	47.3		50.0		94.7	50-200					
Matrix Spike Dup (2329005-MSD1)				Source:	E307053-	03	Prepared: 0	7/17/23 Ar	nalyzed: 07/17/23		
Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132	0.940	20			
Surrogate: n-Nonane	45.0		50.0		90.1	50-200					



WPX Energy - Carlsbad		Project Name:	RI	DX 17-25					Reported:
5315 Buena Vista Dr		Project Number:	01	058-0007					
Carlsbad NM, 88220		Project Manager:	: Gi	ilbert Moreno					7/19/2023 3:57:29PM
		Anions	by EPA 3	00.0/9056 <i>A</i>	4				Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328061-BLK1)							Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	ND	20.0							
LCS (2328061-BS1)							Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2328061-MS1)				Source:	E307052-	01	Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	1580	40.0	250	1280	117	80-120			
Matrix Spike Dup (2328061-MSD1)				Source:	E307052-	01	Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	1590	40.0	250	1280	121	80-120	0.675	20	M2

QC Summary Report Comment:

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



Definitions and Notes

ſ	WPX Energy - Carlsbad	Project Name:	RDX 17-25	
١	5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
١	Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 15:57

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Client: W	/PX Energy Pe	rmian LLO	С.			Bill To			-	La	ab Us	e Or	nlv	70.53			TAT		EPA P	rogram
	RDX 17-25				At	tention: Jim Raley					Job	Numb	er	1D	2D		Standard	CWA	SDW	
	Aanager: Gilbe	ert Morei	no			dress: 5315 Buena Vista Dr		Lab WO# E 307053				110	5X-6	2007				5 day TAT		
Address:	13000 W Cou	nty Rd 10	00		Cit	y, State, Zip: Carlsbad, NM,	88220					Analy	sis an	d Metho	d					RCRA
City, Stat	te, Zip_Odessa	,TX, 797	55		Ph	one: 575-885-7502			by											
	832) 541-7719				En	nail: jim.raley@dvn.com			ORO										State	
Email: De	evon-team@e	techenv.	com			O: 21181900			RO/	п	0		300.0		Z		~	NM CO	UT AZ	TX
Collected	d by: Edyte Ko	nan		4	Inc	Incident ID: nAB1712952339		3	0/0	802	826	6010	300		1 7		¥			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample II)		Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride		BGDOC		GDOC		Remarks	
9:30	7/13/2023	S	1			FS11	J	4'							X					
9:40	7/13/2023	S	1			FS12	2	4'							Х					
9:50	7/13/2023	S	1			FS13	3	4'							х					
Addition	al Instruction	s:						-												
			on the constitution			at tampering with or intentionally mis	abelling the sample l	ocation	n,									eived on ice the da		pled or
	e of collection is cor ed by: (Signature		Date		Time 14:20	Received by: (Signature)	Date 7-13-		Time	420					La	ab Us	e Only			
A	ed by: (Signature	/1	Date	1227	Time 1700	Received by: (Signature)	Date	73	Time	200			eivea	on ice:	CY	N		тэ		
Relinquish	ed by: (Signature	χJ	Date 7		Time 723	Received by: Signature	Date 7/14/-	12	Time	13	-	T1	To-	00	4			<u>T3</u>		
MU	trix: S - Soil, Sd - Sol	1850	- 1	100	1000	ueu / w	Containe	-0	-	_			Tem							3



envirotech

Printed: 7/14/2023 9:37:58AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	WPX Energy - Carlsbad	Date Received:	07/14/23	08:35	Work Order ID:	E307053
Phone:	(539) 573-4018	Date Logged In:	07/13/23	15:50	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	07/20/23	17:00 (4 day TAT)		
Chain of	Custody (COC)					
1. Does t	he sample ID match the COC?		Yes			
2. Does t	he number of samples per sampling site location ma	tch the COC	Yes			
3. Were s	amples dropped off by client or carrier?		Yes	Carrier: Courier		
4. Was th	e COC complete, i.e., signatures, dates/times, reques	sted analyses?	Yes			
5. Were a	Il samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi	•	Yes		<u>Commen</u>	ts/Resolution
Sample T	Turn Around Time (TAT)					
	e COC indicate standard TAT, or Expedited TAT?		Yes			
Sample (
	sample cooler received?		Yes			
	was cooler received in good condition?		Yes			
•	e sample(s) received intact, i.e., not broken?		Yes			
	custody/security seals present?					
			No			
-	, were custody/security seals intact?		NA			
	ne sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling	e received w/i 15	Yes			
	visible ice, record the temperature. Actual sample	temperature. 4	<u>c</u>			
	Container 1					
	queous VOC samples present?		No			
	OC samples collected in VOA Vials?		NA			
	head space less than 6-8 mm (pea sized or less)?		NA			
	a trip blank (TB) included for VOC analyses?	-	NA			
	on-VOC samples collected in the correct containers		Yes			
	appropriate volume/weight or number of sample contain	ners collected?	Yes			
Field La						
	field sample labels filled out with the minimum info	ormation:	37			
	ample ID? eate/Time Collected?		Yes			
	follectors name?		Yes Yes			
	Preservation .		103			
	the COC or field labels indicate the samples were pr	reserved?	No			
	ample(s) correctly preserved?	Coorvou.	NA			
	filteration required and/or requested for dissolved n	netals?	No			
		ieuis.	110			
	ase Sample Matrix	0				
	the sample have more than one phase, i.e., multipha		No			
27. If yes	, does the COC specify which phase(s) is to be analy	yzed?	NA			
Subconti	act Laboratory					
28. Are s	amples required to get sent to a subcontract laborato	ry?	No			
29. Was a	subcontract laboratory specified by the client and is	f so who?	NA	Subcontract Lab: NA		
Client I	nstruction					
L						

Report to:
Gilbert Moreno



5796 U.S. Hwy 64 Farmington, NM 87401

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





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Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 17 FEDERAL # 36H

Work Order: E307054

Job Number: 01058-0007

Received: 7/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 7/19/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 7/19/23

Gilbert Moreno 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX 17 FEDERAL # 36H

Workorder: E307054

Date Received: 7/14/2023 8:35:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/14/2023 8:35:00AM, under the Project Name: RDX 17 FEDERAL # 36H.

The analytical test results summarized in this report with the Project Name: RDX 17 FEDERAL # 36H apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman

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Sample Summary

WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 15:59

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
BH05 0.5'	E307054-01A Soil	07/13/23	07/14/23	Glass Jar, 2 oz.
BH05 1'	E307054-02A Soil	07/13/23	07/14/23	Glass Jar, 2 oz.



WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 3:59:00PM

BH05 0.5' E307054-01

	1207034-01				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analys	st: IY		Batch: 2328065
ND	0.0250	1	07/14/23	07/17/23	
ND	0.0250	1	07/14/23	07/17/23	
ND	0.0250	1	07/14/23	07/17/23	
ND	0.0250	1	07/14/23	07/17/23	
ND	0.0500	1	07/14/23	07/17/23	
ND	0.0250	1	07/14/23	07/17/23	
	101 %	70-130	07/14/23	07/17/23	
mg/kg	mg/kg	Analys	st: IY		Batch: 2328065
ND	20.0	1	07/14/23	07/17/23	
	81.8 %	70-130	07/14/23	07/17/23	
mg/kg	mg/kg	Analys	st: KM		Batch: 2329005
ND	25.0	1	07/17/23	07/17/23	
ND	50.0	1	07/17/23	07/17/23	
	97.5 %	50-200	07/17/23	07/17/23	
mg/kg	mg/kg	Analys	st: BA		Batch: 2328061
ND				07/18/23	
	mg/kg ND	Result Limit mg/kg mg/kg ND 0.0250 ND 0.0250 ND 0.0250 ND 0.0500 ND 0.0250 MD 0.0250 MD 0.0250 MD 20.0250 81.8 % mg/kg MD 25.0 ND 50.0 97.5 %	Reporting Result Limit Dilution mg/kg mg/kg Analys ND 0.0250 1 ND 0.0250 1 ND 0.0250 1 ND 0.0500 1 ND 0.0250 1 ND 0.0250 1 ND 70-130 1 mg/kg mg/kg Analys ND 20.0 1 mg/kg mg/kg Analys ND 25.0 1 ND 50.0 1 97.5 % 50-200	Reporting Result Limit Dilution Prepared mg/kg mg/kg Analyst: IY ND 0.0250 1 07/14/23 ND 0.0250 1 07/14/23 ND 0.0250 1 07/14/23 ND 0.0500 1 07/14/23 ND 0.0250 1 07/14/23 ND 0.0250 1 07/14/23 mg/kg mg/kg Analyst: IY ND 20.0 1 07/14/23 mg/kg mg/kg Analyst: KM ND 25.0 1 07/17/23 ND 50.0 1 07/17/23 97.5 % 50-200 07/17/23	Reporting Result Limit Dilution Prepared Analyzed mg/kg mg/kg Analyst: IY ND 0.0250 1 07/14/23 07/17/23 ND 0.0250 1 07/14/23 07/17/23 ND 0.0250 1 07/14/23 07/17/23 ND 0.0500 1 07/14/23 07/17/23 ND 0.0250 1 07/14/23 07/17/23 ND 0.0250 1 07/14/23 07/17/23 ND 0.0250 1 07/14/23 07/17/23 mg/kg mg/kg Analyst: IY ND 20.0 1 07/14/23 07/17/23 Mg/kg mg/kg Analyst: KM ND 25.0 1 07/17/23 07/17/23 ND 25.0 1 07/17/23 07/17/23 07/17/23 ND 50.0 1 07/17/23 07/17/23 97.5 % 50-200 07/17/23 07/17/23



WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 3:59:00PM

BH05 1'

E307054-02

		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: IY		Batch: 2328065
Benzene	ND	0.0250	1	07/14/23	07/17/23	
Ethylbenzene	ND	0.0250	1	07/14/23	07/17/23	
Toluene	ND	0.0250	1	07/14/23	07/17/23	
o-Xylene	ND	0.0250	1	07/14/23	07/17/23	
p,m-Xylene	ND	0.0500	1	07/14/23	07/17/23	
Total Xylenes	ND	0.0250	1	07/14/23	07/17/23	
Surrogate: 4-Bromochlorobenzene-PID		101 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	Analyst: IY		Batch: 2328065
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/14/23	07/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		82.2 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	Analyst: KM		Batch: 2329005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/17/23	07/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/23	07/17/23	
Surrogate: n-Nonane		91.3 %	50-200	07/17/23	07/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2328061
Chloride	106	100	5	07/14/23	07/18/23	



RDX 17 FEDERAL # 36H WPX Energy - Carlsbad Project Name: Reported: 5315 Buena Vista Dr Project Number: 01058-0007 Carlsbad NM, 88220 Project Manager: Gilbert Moreno 7/19/2023 3:59:00PM **Volatile Organics by EPA 8021B** Analyst: IY Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % Notes Blank (2328065-BLK1) Prepared: 07/14/23 Analyzed: 07/17/23 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 Total Xylenes ND 0.0250 Surrogate: 4-Bromochlorobenzene-PID 7.68 8.00 96.0 70-130 LCS (2328065-BS1) Prepared: 07/14/23 Analyzed: 07/17/23 4.82 5.00 96.5 70-130 Benzene 0.0250 Ethylbenzene 4.71 0.0250 5.00 94.2 70-130 4.86 0.0250 5.00 97.1 70-130 Toluene 97.1 o-Xylene 4.85 0.0250 5.00 70-130 9.77 10.0 97.7 70-130 0.0500 p.m-Xvlene 97.5 70-130 14.6 15.0 Total Xylenes 0.0250 8.00 98.0 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.84 Matrix Spike (2328065-MS1) Source: E307053-01 Prepared: 07/14/23 Analyzed: 07/17/23 5.06 0.0250 5.00 ND 54-133 Benzene ND 61-133 Ethylbenzene 4.93 0.0250 5.00 98.6 Toluene 5.09 0.0250 5.00 ND 102 61-130 5.09 ND 102 63-131 5.00 0.0250 o-Xylene p,m-Xylene 10.2 0.0500 10.0 ND 102 63-131 15.3 0.0250 15.0 ND 63-131 Total Xylenes 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.91 8.00 Matrix Spike Dup (2328065-MSD1) Source: E307053-01 Prepared: 07/14/23 Analyzed: 07/17/23 5.00 0.0250 5.00 ND 54-133 1.20 20 ND 61-133 0.905 4.89 0.0250 5.00 97.7 20 Ethylbenzene 61-130 Toluene 5.03 0.0250 5.00 ND 101 1.15 20 5.04 5.00 ND 101 63-131 1.03 20 o-Xylene 0.0250 10.1 10.0 ND 101 63-131 1.10 20 p,m-Xylene 0.0500



15.2

7.97

0.0250

15.0

8.00

ND

101

99.6

63-131

70-130

1.07

20

Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	^
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 3:59:00PM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno				7/	19/2023 3:59:00PM	
	Nonhalogenated Organics by EPA 8015D - GRO							Analyst: IY		
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes	
Blank (2328065-BLK1)							Prepared: 0'	7/14/23 Ana	lyzed: 07/17/23	
Gasoline Range Organics (C6-C10)	ND	20.0								
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.59		8.00		82.4	70-130				
LCS (2328065-BS2)							Prepared: 0'	7/14/23 Ana	lyzed: 07/17/23	
Gasoline Range Organics (C6-C10)	47.2	20.0	50.0		94.5	70-130				
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.77		8.00		84.6	70-130				
Matrix Spike (2328065-MS2)				Source:	E307053-0	01	Prepared: 0'	7/14/23 Ana	lyzed: 07/17/23	
Gasoline Range Organics (C6-C10)	45.2	20.0	50.0	ND	90.4	70-130				
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.65		8.00		83.2	70-130				
Matrix Spike Dup (2328065-MSD2)				Source:	E307053-0	01	Prepared: 0'	7/14/23 Ana	lyzed: 07/17/23	
Gasoline Range Organics (C6-C10)	44.9	20.0	50.0	ND	89.8	70-130	0.677	20		
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.72		8.00		83.9	70-130				

WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	•
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 3:59:00PM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno					7/19/2023 3:59:00PN
	Nonhalogenated Organics by EPA 8015D - DRO/ORO							Analyst: KM	
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2329005-BLK1)							Prepared: 0'	7/17/23 An	alyzed: 07/17/23
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.0		50.0		112	50-200			
LCS (2329005-BS1)							Prepared: 0'	7/17/23 An	alyzed: 07/17/23
Diesel Range Organics (C10-C28)	253	25.0	250		101	38-132			
Surrogate: n-Nonane	49.9		50.0		99.7	50-200			
Matrix Spike (2329005-MS1)	29005-MS1) Source: E307053-03			03	Prepared: 0'	7/17/23 An	alyzed: 07/17/23		
Diesel Range Organics (C10-C28)	250	25.0	250	ND	99.9	38-132			
Surrogate: n-Nonane	47.3		50.0		94.7	50-200			
Matrix Spike Dup (2329005-MSD1)				Source:	E307053-	03	Prepared: 0'	7/17/23 An	alyzed: 07/17/23
Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132	0.940	20	
Surrogate: n-Nonane	45.0		50.0		90.1	50-200			

Chloride

QC Summary Data

WPX Energy - Carlsbad 5315 Buena Vista Dr		Project Name: Project Number:		RDX 17 FEDEF 01058-0007	RAL# 36H]			Reported:	
Carlsbad NM, 88220		Project Manager		Gilbert Moreno					7/19/2023 3:59:00PM	
Anions by EPA 300.0/9056A									Analyst: BA	
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit		
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes	
Blank (2328061-BLK1)								Prepared: 07/14/23 Analyzed: 07/17/23		
Chloride	ND	20.0								
LCS (2328061-BS1)							Prepared: 0	7/14/23 A	nalyzed: 07/17/23	
Chloride	250	20.0	250		100	90-110				
Matrix Spike (2328061-MS1)				Source:	Source: E307052-01			Prepared: 07/14/23 Analyzed: 07/17/23		
Chloride	1580	40.0	250	1280	117	80-120				
Matrix Spike Dup (2328061-MSD1)				Source:	Source: E307052-01			7/14/23 A	nalyzed: 07/17/23	

250

40.0

1280

121

80-120

0.675

20

M2

1590

QC Summary Report Comment:

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



Definitions and Notes

ſ	WPX Energy - Carlsbad	Project Name:	RDX 17 FEDERAL # 36H	
١	5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
١	Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 15:59

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Project In	formation					Chai	n of Custody													Page rogram SDWA RCRA
Client: W	PX Energy Pe	rmian LL	C.			Bill To				1 =	ab Us	e Or	nly	1		TA	т	-	FDA D	rogram
	RDX 17 FEDER				Att	Attention: Jim Raley			WO#	_			Number	10	2D	3D	Standard		CWA	SDWA
	lanager: Gilbe					Address: 5315 Buena Vista Dr.			307	05	4	MI	58-000	7	20	1	5 day T		CVVA	JUVA
	13000 W Cou				_	, State, Zip: Carlsbad, NM, 88	220		01			Analy	sis and Meth	od			July			RCRA
	e, Zip_Odessa				-	one: 575-885-7502			2		Πİ	ti, idi y	I I			П		-		HOIN
	332) 541-7719				_	ail: jim.raley@dvn.com			RO							1 1	-	- 1	State	
	von-team@e		com): 21181922			0/0	5			0	5			NM		JT AZ	TX
	by: Edyte Ko					dent ID: NRM2017643736		_	/DR	3021	260	010	300.0	ΣZ		¥	14.07	-	JI AL	IX.
Time	Date Sampled	Matrix	No. of	Sample ID	1 Title	dent 10. 14(14)2017043730	Lab	Depth(ft.)	ТРН GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride	BGDOC		20				
Sampled	Date sumpled	Watrix	Containers	Sample 10			Number	Dep	TPH G 8015	BTE	VOC	Met	Chi	BGE		GDOC	.1.0	В	Remarks	
11:00	7/13/2023	S	1			BH05	1	0.5						X						
11:10	7/13/2023	S	1			BH05	2	1'						Х						
						i de la companya de la companya de la companya de la companya de la companya de la companya de la companya de														
	al Instruction																			
ate or time	of collection is con	sidered frau		of this sample. I an be grounds for legal		tampering with or intentionally mislabe Sampled by:	ling the sample lo	ocation	,				es requiring thermaded packed in ice at							pled or
-fox			Date 07/1	Time 3/2023 14:2		Received by: (Signature) McClll Gunyal	Date 7-13-	23	Time	120		Rece	eived on ice:	/	ab Us	se Onl	У			
relinquishe WWW	d by: (Signatyre)	ingle	Date 7-	13-23 Time	700	Received by: (Signature)	17.13.	75	Time	700		T1		T2			<u></u>			
Allu	d by: (Signature	800	Date 7	Time	330	Received by: (Stenature)	Date / 7//4/2	23	Time 8:	3	-		Temp °C	4						
	ix: S - Soil, Sd - Sol	id, Sg - Slude	ge, A - Aqueo	ous, O - Other			Containe	Type	: g - s	glass			lastic, ag - ar	nher ø	lass. v	- VOA				
					ess other a	rrangements are made. Hazardous	samples will be	retur	ned to	clien	tord	snor	ed of at the cli	ent ove	ense	There	nort for th	analus	is of the	ahova



e client expense. The report for the analysis of the above

Printed: 7/14/2023 9:42:45AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	WPX Energy - Carlsbad	Date Received:	07/14/23	08:35	Work Order ID	D: E307054
Phone:	(539) 573-4018	Date Logged In:	07/13/23	15:52	Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	07/20/23	17:00 (4 day TAT)		
Chain of	Custody (COC)					
	ne sample ID match the COC?		Yes			
	ne number of samples per sampling site location ma	tch the COC	Yes			
	amples dropped off by client or carrier?		Yes	Carrier: Cour	<u>rier</u>	
	e COC complete, i.e., signatures, dates/times, reque	sted analyses?	Yes			
5. Were a	Il samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi	•	Yes		<u>Comm</u>	ents/Resolution
Sample T	<u>urn Around Time (TAT)</u>					
6. Did the	COC indicate standard TAT, or Expedited TAT?		Yes			
Sample C	Cooler					
7. Was a s	sample cooler received?		Yes			
8. If yes,	was cooler received in good condition?		Yes			
9. Was the	e sample(s) received intact, i.e., not broken?		Yes			
	custody/security seals present?		No			
	, were custody/security seals intact?		NA NA			
-	e sample received on ice? If yes, the recorded temp is 4°C. Note: Thermal preservation is not required, if samples ar minutes of sampling		Yes			
13. If no v	visible ice, record the temperature. Actual sample	temperature: 4°	<u>C</u>			
Sample C	Container	_				
	queous VOC samples present?		No			
	OC samples collected in VOA Vials?		NA			
	head space less than 6-8 mm (pea sized or less)?		NA			
	trip blank (TB) included for VOC analyses?		NA			
	on-VOC samples collected in the correct containers	?	Yes			
	appropriate volume/weight or number of sample contain		Yes			
Field Lab	· ·					
	field sample labels filled out with the minimum info	ormation:				
	ample ID?		Yes			
D	ate/Time Collected?		Yes	<u> </u>		
C	ollectors name?		Yes			
Sample P	<u>reservation</u>					
21. Does	the COC or field labels indicate the samples were p	reserved?	No			
22. Are sa	ample(s) correctly preserved?		NA			
24. Is lab	filteration required and/or requested for dissolved n	netals?	No			
Multipha	se Sample Matrix					
26. Does	the sample have more than one phase, i.e., multipha	se?	No			
27. If yes,	, does the COC specify which phase(s) is to be analy	yzed?	NA			
Subcontr	ract Laboratory					
	amples required to get sent to a subcontract laborato	ary)	No			
	subcontract laboratory specified by the client and i	•	NA	Subcontract Lab: N	īΑ	
	• • •	1 30 WIIO:	1421	Subcontract Lab. 19		
Client Ir	<u>nstruction</u>					
						1
						1
						1

Report to:
Gilbert Moreno







5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 17-25

Work Order: E307055

Job Number: 01058-0007

Received: 7/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 7/19/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 7/19/23

Gilbert Moreno 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX 17-25 Workorder: E307055

Date Received: 7/14/2023 8:35:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/14/2023 8:35:00AM, under the Project Name: RDX 17-25.

The analytical test results summarized in this report with the Project Name: RDX 17-25 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881

Cell: 775-287-1762

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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

_				
Γ	WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
l	5315 Buena Vista Dr	Project Number:	01058-0007	Reporteu:
l	Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 16:00

Client Sample ID	Lab Sample ID M	Iatrix	Sampled	Received	Container
SW06 0-4'	E307055-01A	Soil	07/13/23	07/14/23	Glass Jar. 2 oz.



Sample Data

WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:00:43PM

SW06 0-4' E307055-01

	200.000 01				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Anal	yst: IY		Batch: 2328065
ND	0.0250	1	07/14/23	07/17/23	
ND	0.0250	1	07/14/23	07/17/23	
ND	0.0250	1	07/14/23	07/17/23	
ND	0.0250	1	07/14/23	07/17/23	
ND	0.0500	1	07/14/23	07/17/23	
ND	0.0250	1	07/14/23	07/17/23	
	101 %	70-130	07/14/23	07/17/23	
mg/kg	mg/kg	Anal	yst: IY		Batch: 2328065
ND	20.0	1	07/14/23	07/17/23	
	81.7 %	70-130	07/14/23	07/17/23	
mg/kg	mg/kg	Anal	yst: KM		Batch: 2329005
ND	25.0	1	07/17/23	07/17/23	
ND	50.0	1	07/17/23	07/17/23	
	94.9 %	50-200	07/17/23	07/17/23	
mg/kg	mg/kg	Anal	yst: BA		Batch: 2328061
ND	100	5	07/14/23	07/18/23	
	mg/kg ND ND ND ND ND ND ND ND ND Mg/kg ND mg/kg	mg/kg mg/kg ND 0.0250 ND 0.0250 ND 0.0250 ND 0.0500 ND 0.0250 ND 0.0250 ND 20.0250 ND 20.0 81.7 % mg/kg MB/kg mg/kg ND 25.0 ND 50.0 94.9 % mg/kg mg/kg mg/kg	Reporting Result Limit Dilution mg/kg mg/kg Anal ND 0.0250 1 ND 0.0250 1 ND 0.0250 1 ND 0.0500 1 ND 0.0250 1 ND 0.0250 1 MD 70-130 1 mg/kg mg/kg Anal ND 20.0 1 81.7 % 70-130 1 mg/kg mg/kg Anal ND 25.0 1 ND 50.0 1 94.9 % 50-200 mg/kg mg/kg Anal	Reporting Result Limit Dilution Prepared mg/kg Malyst: IY ND 0.0250 1 07/14/23 ND 0.0250 1 07/14/23 ND 0.0250 1 07/14/23 ND 0.0250 1 07/14/23 ND 0.0500 1 07/14/23 ND 0.0250 1 07/14/23 mg/kg mg/kg Analyst: IY ND 20.0 1 07/14/23 mg/kg mg/kg Analyst: KM ND 25.0 1 07/17/23 ND 50.0 1 07/17/23 ND 50.0 1 07/17/23 ND 50.0 1 07/17/23 mg/kg mg/kg Analyst: BA	Reporting Result Limit Dilution Prepared Analyzed mg/kg mg/kg Analyst: IY ND 0.0250 1 07/14/23 07/17/23 ND 0.0250 1 07/14/23 07/17/23 ND 0.0250 1 07/14/23 07/17/23 ND 0.0500 1 07/14/23 07/17/23 ND 0.0250 1 07/14/23 07/17/23 ND 0.0250 1 07/14/23 07/17/23 mg/kg mg/kg Analyst: IY ND 07/17/23 mg/kg mg/kg Analyst: IY ND 20.0 1 07/14/23 07/17/23 mg/kg mg/kg Analyst: KM ND 25.0 1 07/17/23 07/17/23 ND 25.0 1 07/17/23 07/17/23 07/17/23 ND 50.0 1 07/17/23 07/17/23 94.9 % 50-200 07/17/23 07/17

		QC 50	A11111110	iry Data	•				
WPX Energy - Carlsbad 5315 Buena Vista Dr		Project Name: Project Number:		DX 17-25 058-0007					Reported:
Carlsbad NM, 88220		Project Manager:	Gi	ilbert Moreno					7/19/2023 4:00:43PM
		Volatile O	ganics b	y EPA 8021	1B				Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328065-BLK1)							Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.68		8.00		96.0	70-130			
LCS (2328065-BS1)							Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Benzene	4.82	0.0250	5.00		96.5	70-130			
Ethylbenzene	4.71	0.0250	5.00		94.2	70-130			
Toluene	4.86	0.0250	5.00		97.1	70-130			
o-Xylene	4.85	0.0250	5.00		97.1	70-130			
p,m-Xylene	9.77	0.0500	10.0		97.7	70-130			
Total Xylenes	14.6	0.0250	15.0		97.5	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.84		8.00		98.0	70-130			
Matrix Spike (2328065-MS1)				Source: I	E 307053 -	01	Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Benzene	5.06	0.0250	5.00	ND	101	54-133			
Ethylbenzene	4.93	0.0250	5.00	ND	98.6	61-133			
Toluene	5.09	0.0250	5.00	ND	102	61-130			
o-Xylene	5.09	0.0250	5.00	ND	102	63-131			
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131			
Total Xylenes	15.3	0.0250	15.0	ND	102	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.91		8.00		98.9	70-130			
Matrix Spike Dup (2328065-MSD1)				Source: I	E307053-	01	Prepared: 0		nalyzed: 07/17/23
Benzene	5.00	0.0250	5.00	ND	100	54-133	1.20	20	
Ethylbenzene	4.89	0.0250	5.00	ND	97.7	61-133	0.905	20	
Toluene	5.03	0.0250	5.00	ND	101	61-130	1.15	20	
o-Xylene	5.04	0.0250	5.00	ND	101	63-131	1.03	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.10	20	
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131	1.07	20	

7.97

8.00

70-130



Surrogate: 4-Bromochlorobenzene-PID

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	•
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:00:43PM

Carlsbad NM, 88220		Project Manage		lbert Moreno				7/	9/2023 4:00:43PM
	Non	halogenated	Organics l	y EPA 80	15D - Gl	RO			Analyst: IY
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits	RPD %	RPD Limit %	Notes
Blank (2328065-BLK1)							Prepared: 0'	7/14/23 Anal	yzed: 07/17/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.59		8.00		82.4	70-130			
LCS (2328065-BS2)							Prepared: 0'	7/14/23 Ana	yzed: 07/17/23
Gasoline Range Organics (C6-C10)	47.2	20.0	50.0		94.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.77		8.00		84.6	70-130			
Matrix Spike (2328065-MS2)				Source:	E307053-	01	Prepared: 0'	7/14/23 Ana	yzed: 07/17/23
Gasoline Range Organics (C6-C10)	45.2	20.0	50.0	ND	90.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.65		8.00		83.2	70-130			
Matrix Spike Dup (2328065-MSD2)				Source:	E307053-	01	Prepared: 0'	7/14/23 Anal	yzed: 07/17/23
Gasoline Range Organics (C6-C10)	44.9	20.0	50.0	ND	89.8	70-130	0.677	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.72		8.00		83.9	70-130			

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	·
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:00:43PM

Carlsbad NM, 88220		Project Manager	r: G1	lbert Moreno					7/19/2023 4:00:43PN
	Nonha	logenated Or	ganics by l	EPA 8015I	D - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2329005-BLK1)							Prepared: 0	7/17/23 A	nalyzed: 07/17/23
Diesel Range Organics (C10-C28)	ND	25.0							
il Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	56.0		50.0		112	50-200			
LCS (2329005-BS1)							Prepared: 0	7/17/23 A	nalyzed: 07/17/23
Diesel Range Organics (C10-C28)	253	25.0	250		101	38-132			
urrogate: n-Nonane	49.9		50.0		99.7	50-200			
Matrix Spike (2329005-MS1)				Source:	E307053-	03	Prepared: 0	7/17/23 A	nalyzed: 07/17/23
Diesel Range Organics (C10-C28)	250	25.0	250	ND	99.9	38-132			
urrogate: n-Nonane	47.3		50.0		94.7	50-200			
Matrix Spike Dup (2329005-MSD1)				Source:	E307053-	03	Prepared: 0	7/17/23 A	nalyzed: 07/17/23
Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132	0.940	20	
urrogate: n-Nonane	45.0		50.0		90.1	50-200			



WPX Energy - Carlsbad		Project Name:	R	DX 17-25					Reported:
5315 Buena Vista Dr Carlsbad NM, 88220		Project Number: Project Manager:		058-0007 ilbert Moreno					7/19/2023 4:00:43PM
Calisbau IVIVI, 66220									7/17/2023 4.00.431 N1
		Anions	by EPA 3	300.0/9056 <i>A</i>	A				Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328061-BLK1)							Prepared: 0	7/14/23 A	analyzed: 07/17/23
Chloride	ND	20.0							
LCS (2328061-BS1)							Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2328061-MS1)				Source:	E307052-	01	Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	1580	40.0	250	1280	117	80-120			
Matrix Spike Dup (2328061-MSD1)				Source:	E307052-)1	Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	1590	40.0	250	1280	121	80-120	0.675	20	M2

QC Summary Report Comment:

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



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 16:00

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

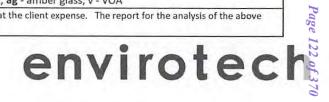
Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



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lient: W	PX Energy Per	mian LLC	ì.			Bill To				La	b Us	e Onl	ly			TA	AT	EPA Program	
roject: F	RDX 17-25				Att	ention: Jim Raley		Lab	WO#			Job N	Number	1D	2D	3D	Standard	CWA	SDW
roject N	lanager: Gilbe	rt Morer	10			ress: 5315 Buena Vista Dr		TF 3	30	105	55	0/03	Number 58 · 2007				5 day TAT		
ddress:	13000 W Cou	nty Rd 10	00		City	, State, Zip: Carlsbad, NM	88220				1	Analys	sis and Meth	od					RCR
City, Stat	e, Zip_Odessa	TX, 7976	55		Pho	ne: 575-885-7502			by	-							Marie I		
hone: (8	332) 541-7719				Em	Email: jim.raley@dvn.com			SRO.						1			State	
mail: De	von-team@e	techenv.	com			2: 21181900		1	0/0	-			0	ΣN			NMI CO	UT AZ	TX
	by: Edyte Ko					dent ID: nAB1712952339		1 ~	/DR	802	260	010	300		1	¥	11111	01, 112	1
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID			Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC		GDOC		Remarks	
10:50	7/13/2023	S	1			SW06	1	0-4						X					
Addition	al Instruction	s:																	
						tampering with or intentionally mis	labelling the sample	locatio	n,		- 1						eceived on ice the da		pled or
	of collection is cored by: (Signature		Date			Sampled by: Received by: (Signature) MUULL LULL	Date 7-13	23	Time	20			ived on ice	I		se On	less than 6 °C on sub	sequent days.	
Relinquish	ed by: (Signature	nalle			Time 1700	Received by: (Signature)	5 Date 7.10	5.23	Time	200		T1	rea on ice.	(L	<i>y</i> ' '	• 1	T3		
Relinquish	ed by: (Signature	1950	Date	13.73	1330	Received by/(Signature)	Date/	122	Time	13	5		Temp °C	4					





samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

Printed: 7/14/2023 9:49:17AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

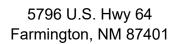
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	07/14/23	08:35		Work Order ID:	E307055
Phone:	(539) 573-4018	Date Logged In:	07/13/23	15:54		Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:		17:00 (4 day TAT)		88	
Chain of	Custody (COC)						
1. Does th	e sample ID match the COC?		Yes				
2. Does th	e number of samples per sampling site location mat	ch the COC	Yes				
3. Were sa	amples dropped off by client or carrier?		Yes	Carrier: Cor	urier		
4. Was the	e COC complete, i.e., signatures, dates/times, reques	ted analyses?	Yes				
5. Were al	I samples received within holding time?		Yes				
	Note: Analysis, such as pH which should be conducted in					Comments	s/Resolution
Samula T	i.e, 15 minute hold time, are not included in this disucssic	on.		Г		Comment	
	urn Around Time (TAT) COC indicate standard TAT, or Expedited TAT?		Yes				
	•		108				
Sample C			Vac				
	ample cooler received? was cooler received in good condition?		Yes				
•	•		Yes				
	e sample(s) received intact, i.e., not broken?		Yes				
	custody/security seals present?		No				
11. If yes,	were custody/security seals intact?		NA				
12. Was the	e sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples are minutes of sampling		Yes				
13. If no v	risible ice, record the temperature. Actual sample	temperature: 4°0	<u>C</u>				
Sample C	<u>Container</u>						
14. Are ac	queous VOC samples present?		No				
15. Are V	OC samples collected in VOA Vials?		NA				
16. Is the	head space less than 6-8 mm (pea sized or less)?		NA				
17. Was a	trip blank (TB) included for VOC analyses?		NA				
18. Are no	on-VOC samples collected in the correct containers?	,	Yes				
19. Is the a	appropriate volume/weight or number of sample contain	ers collected?	Yes				
Field Lab	<u>oel</u>						
20. Were t	field sample labels filled out with the minimum info	rmation:					
	ample ID?		Yes				
	ate/Time Collected?		Yes	_			
	ollectors name?		Yes				
	reservation the COC or field lebels indicate the second or years are	agamyad0	NI.				
	the COC or field labels indicate the samples were pr	eserveu?	No				
	umple(s) correctly preserved? filteration required and/or requested for dissolved m	etale?	NA No				
		ictais:	INO				
	se Sample Matrix	0					
	the sample have more than one phase, i.e., multiphase		No				
27. If yes,	does the COC specify which phase(s) is to be analy	zed?	NA				
Subcontr	act Laboratory						
28. Are sa	imples required to get sent to a subcontract laborator	ry?	No				
29. Was a	subcontract laboratory specified by the client and if	so who?	NA	Subcontract Lab: 1	NA		
Client In	struction						

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

Report to:
Gilbert Moreno





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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 17-25

Work Order: E307056

Job Number: 01058-0007

Received: 7/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 7/19/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 7/19/23

Gilbert Moreno 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX 17-25 Workorder: E307056

Date Received: 7/14/2023 8:35:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/14/2023 8:35:00AM, under the Project Name: RDX 17-25.

The analytical test results summarized in this report with the Project Name: RDX 17-25 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881

Cell: 775-287-1762

whinchman@envirotech-inc.com

Raina Schwanz

Laboratory Administrator Office: 505-632-1881

rainaschwanz@envirotech-inc.com

Alexa Michaels

Sample Custody Officer Office: 505-632-1881

labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area Lynn Jarboe

Technical Representative/Client Services

Office: 505-421-LABS(5227)

Cell: 505-320-4759

ljarboe@envirotech-inc.com

West Texas Midland/Odessa Area Rayny Hagan Technical Representative

Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

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ſ	WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
l	5315 Buena Vista Dr	Project Number:	01058-0007	Reported.
l	Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 16:04

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
FS15 4'	E307056-01A Soil	07/13/23	07/14/23	Glass Jar, 2 oz.



Chloride

Sample Data

WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:04:36PM

FS15 4'

		E307056-01				
		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	nalyst: IY		Batch: 2328065
Benzene	ND	0.0250	1	07/14/23	07/17/23	
Ethylbenzene	ND	0.0250	1	07/14/23	07/17/23	
Toluene	ND	0.0250	1	07/14/23	07/17/23	
o-Xylene	ND	0.0250	1	07/14/23	07/17/23	
o,m-Xylene	ND	0.0500	1	07/14/23	07/17/23	
Total Xylenes	ND	0.0250	1	07/14/23	07/17/23	
Surrogate: 4-Bromochlorobenzene-PID		101 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	nalyst: IY		Batch: 2328065
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/14/23	07/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		82.0 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	nalyst: KM		Batch: 2329005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/17/23	07/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/23	07/17/23	
Surrogate: n-Nonane		95.1 %	50-200	07/17/23	07/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	nalyst: BA		Batch: 2328061

20.0

251

07/14/23

07/18/23



RDX 17-25 WPX Energy - Carlsbad Project Name: Reported: 5315 Buena Vista Dr Project Number: 01058-0007 Carlsbad NM, 88220 Project Manager: Gilbert Moreno 7/19/2023 4:04:36PM **Volatile Organics by EPA 8021B** Analyst: IY Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % % Notes Blank (2328065-BLK1) Prepared: 07/14/23 Analyzed: 07/17/23 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 Total Xylenes ND 0.0250 Surrogate: 4-Bromochlorobenzene-PID 7.68 8.00 96.0 70-130 LCS (2328065-BS1) Prepared: 07/14/23 Analyzed: 07/17/23 4.82 96.5 70-130 5.00 Benzene 0.0250 Ethylbenzene 4.71 0.0250 5.00 94.2 70-130 4.86 0.0250 5.00 97.1 70-130 Toluene 97.1 o-Xylene 4.85 0.0250 5.00 70-130 9.77 10.0 97.7 70-130 0.0500 p.m-Xvlene 97.5 70-130 14.6 15.0 Total Xylenes 0.0250 8.00 98.0 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.84 Matrix Spike (2328065-MS1) Source: E307053-01 Prepared: 07/14/23 Analyzed: 07/17/23 5.06 0.0250 5.00 ND 54-133 Benzene ND 61-133 Ethylbenzene 4.93 0.0250 5.00 98.6 Toluene 5.09 0.0250 5.00 ND 102 61-130 5.09 ND 102 63-131 5.00 0.0250 o-Xylene p,m-Xylene 10.2 0.0500 10.0 ND 102 63-131 15.3 0.0250 15.0 ND 63-131 Total Xylenes 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.91 8.00 Matrix Spike Dup (2328065-MSD1) Source: E307053-01 Prepared: 07/14/23 Analyzed: 07/17/23 5.00 0.0250 5.00 ND 54-133 1.20 20 ND 61-133 0.905 4.89 0.0250 5.00 97.7 20 Ethylbenzene Toluene 5.03 0.0250 5.00 ND 101 61-130 1.15 20 5.04 5.00 ND 101 63-131 1.03 20 o-Xylene 0.0250 10.1 10.0 ND 101 63-131 1.10 20 p,m-Xylene 0.0500



15.2

7.97

0.0250

15.0

8.00

ND

101

99.6

63-131

70-130

1.07

20

Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	•
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:04:36PM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno				7	/19/2023 4:04:36PN
	Non	halogenated	Organics l	y EPA 80	15D - GI	RO			Analyst: IY
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2328065-BLK1)							Prepared: 0'	7/14/23 Ana	alyzed: 07/17/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.59		8.00		82.4	70-130			
LCS (2328065-BS2)							Prepared: 0'	7/14/23 Ana	alyzed: 07/17/23
Gasoline Range Organics (C6-C10)	47.2	20.0	50.0		94.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.77		8.00		84.6	70-130			
Matrix Spike (2328065-MS2)				Source:	E307053-0	01	Prepared: 0'	7/14/23 Ana	alyzed: 07/17/23
Gasoline Range Organics (C6-C10)	45.2	20.0	50.0	ND	90.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.65		8.00		83.2	70-130			
Matrix Spike Dup (2328065-MSD2)				Source:	E307053-0	01	Prepared: 0'	7/14/23 Ana	alyzed: 07/17/23
Gasoline Range Organics (C6-C10)	44.9	20.0	50.0	ND	89.8	70-130	0.677	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.72		8.00		83.9	70-130			



WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:04:36PM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno	1				7/19/2023 4:04:36PN
	Nonha	logenated Or	ganics by	EPA 80151	D - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2329005-BLK1)							Prepared: 0	7/17/23 A	analyzed: 07/17/23
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.0		50.0		112	50-200			
LCS (2329005-BS1)							Prepared: 0	7/17/23 A	analyzed: 07/17/23
Diesel Range Organics (C10-C28)	253	25.0	250		101	38-132			
Surrogate: n-Nonane	49.9		50.0		99.7	50-200			
Matrix Spike (2329005-MS1)				Source:	E307053-	03	Prepared: 0	7/17/23 A	analyzed: 07/17/23
Diesel Range Organics (C10-C28)	250	25.0	250	ND	99.9	38-132			
Surrogate: n-Nonane	47.3		50.0		94.7	50-200			
Matrix Spike Dup (2329005-MSD1)				Source:	E307053-	03	Prepared: 0	7/17/23 A	analyzed: 07/17/23
Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132	0.940	20	
Surrogate: n-Nonane	45.0		50.0		90.1	50-200			



WPX Energy - Carlsbad		Project Name:		DX 17-25					Reported:
5315 Buena Vista Dr Carlsbad NM, 88220		Project Number: Project Manager:		1058-0007 ilbert Moreno					7/19/2023 4:04:36PM
		Anions	by EPA 3	300.0/9056 <i>A</i>	\				Analyst: BA
Analyte	Result	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec	Rec Limits	RPD %	RPD Limit	
Blank (2328061-BLK1)							Prepared: (07/14/23	Analyzed: 07/17/23
Chloride LCS (2328061-BS1)	ND	20.0					Prepared: (07/14/23	Analyzed: 07/17/23
Chloride Matrix Spike (2328061-MS1)	250	20.0	250	Source:	100 E307052- 0	90-110	Prepared: (07/14/23	Analyzed: 07/17/23
Chloride Matrix Spike Dup (2328061-MSD1)	1580	40.0	250	1280 Source:	117 E307052- 0	80-120 01	Prepared: (07/14/23	Analyzed: 07/17/23
Chloride	1590	40.0	250	1280	121	80-120	0.675	20	M2

QC Summary Report Comment:

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



Definitions and Notes

ſ	WPX Energy - Carlsbad	Project Name:	RDX 17-25	
١	5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
١	Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 16:04

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



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20 Lab Number					Job N	Number 58-0007	1D	Tan	TA			rogram
20 Lab			051	8	NIn			120	3D	Standard	CWA	SDW
20 Lab					ULU:	58-000/				5 day TAT		
100 mm to 100 mm	()	tO by			Analy	sis and Metho	od					RCRA
100 mm to 100 mm		2										
100 mm to 100 mm	-	9									State	1-1
100 mm to 100 mm	7	RO/	21	00	0	0.0	ΣZ		×	NM CO	UT AZ	TX
100 mm to 100 mm	#	30/0	y 80	,82€	601	e 30						
	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC		GDOC		Remarks	1-
1	4'						X					
ng the sample lo	cation,	,										
					receive	a packed in ice at a					sequent days.	
7-13 6			20		Rece	eived on ice:		1		ly		
7.13	73	Time	P		T1		T2			T3		
Date 7/14/2	12	Time		5		Temp °C	4			= × ****		
ng	Date 7-13 & Date 2.13	Date 7-13:23 Date 2:13:73 Date 7/14/23	7-1323 14 Date 7:13:73 178 Date Time 7/14/23 8	Date 7-13-23 Time 7-13-23 Time 7-13-73 Time	Date 7-13 J 3 Time 7-13 J 3 Time 7-13 J 3 Time 7-13 Time	Date 7-13 J 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Date 7-13-13 Time Date 7-13-73 Time Time 7-13-73 Time Time Time Time Time Time Time Time	Date 7-13 J3 Time Received on ice: Date 7-13 J3 Time Time T1 T2 Date 7-13 Time T1 T2	Date 7-13 J3 Time Received on ice: Y/ I Date 7-13 Time 7-14 Time 7-15 Time 7-15 Time 7-16 Time 7-17 Time 7-18 Time	Date 7-13 J3 Time Received on ice: Y/N Date 7-13 J3 Time Time Time T1 T2 Date T1 T2	received packed in ice at an avg temp above 0 but less than 6 °C on substitution of the second of th	received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days. Date Time Lab Use Only



the client expense. The report for the analysis of the above

Printed: 7/14/2023 9:53:18AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	WPX Energy - Carlsbad	Date Received:	07/14/23 08	:35		Work Order ID:	E307056
Phone:	(539) 573-4018	Date Logged In:	07/13/23 16	:02		Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	07/20/23 17	7:00 (4 day TAT)			
1. Does th 2. Does th 3. Were sa 4. Was the	Custody (COC) The sample ID match the COC? The number of samples per sampling site location man amples dropped off by client or carrier? The COC complete, i.e., signatures, dates/times, requently samples received within holding time?		Yes Yes Yes Yes	Carrier: <u>C</u>	<u>'ourier</u>		
	Note: Analysis, such as pH which should be conducted it.e, 15 minute hold time, are not included in this disucssi			Г		Comment	s/Resolution
	COC indicate stendard TAT on Franchised TAT?		Yes				
	COC indicate standard TAT, or Expedited TAT?		ies				
Sample C	ample cooler received?		Yes				
	was cooler received in good condition?		Yes				
• /	e sample(s) received intact, i.e., not broken?		Yes				
	custody/security seals present?		No				
	were custody/security seals intact?		NA				
12. Was the	e sample received on ice? If yes, the recorded temp is 4°C Note: Thermal preservation is not required, if samples ar minutes of sampling	re received w/i 15	Yes				
13. If no v	visible ice, record the temperature. Actual sample	temperature: $\frac{4^{\circ}}{}$	<u>C</u>				
Sample C							
	queous VOC samples present?		No				
	OC samples collected in VOA Vials?		NA NA				
	head space less than 6-8 mm (pea sized or less)?						
	trip blank (TB) included for VOC analyses?	ก	NA V				
	on-VOC samples collected in the correct containers appropriate volume/weight or number of sample contains.		Yes Yes				
Field Lab	· · ·	ners conected:	105				
20. Were	rield sample labels filled out with the minimum info ample ID?	ormation:	Yes				
	ate/Time Collected?		Yes	L			
C	ollectors name?		Yes				
	reservation						
	the COC or field labels indicate the samples were p	reserved?	No				
	ample(s) correctly preserved?	. 1.0	NA				
	filteration required and/or requested for dissolved r	netals?	No				
	se Sample Matrix						
	the sample have more than one phase, i.e., multipha		No				
27. If yes,	does the COC specify which phase(s) is to be analy	yzed?	NA				
Subcontr	act Laboratory						
	amples required to get sent to a subcontract laborate subcontract laboratory specified by the client and i	•	No NA S	Subcontract Lab	: NA		
Client In	<u>istruction</u>						
							

Report to:
Gilbert Moreno



5796 U.S. Hwy 64 Farmington, NM 87401

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





envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 17-25

Work Order: E307057

Job Number: 01058-0007

Received: 7/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 7/19/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 7/19/23

Gilbert Moreno 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX 17-25 Workorder: E307057

Date Received: 7/14/2023 8:35:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/14/2023 8:35:00AM, under the Project Name: RDX 17-25.

The analytical test results summarized in this report with the Project Name: RDX 17-25 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881

Cell: 775-287-1762

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Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

_				
Γ	WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
ı	5315 Buena Vista Dr	Project Number:	01058-0007	Reported.
l	Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 16:14

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
FS14 4'	E307057-01A Soil	07/13/23	07/14/23	Glass Jar, 2 oz.



Sample Data

WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:14:56PM

FS14 4'

E3	07	70	57	7_(N 1

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	mg/kg Analyst: IY			Batch: 2328065
Benzene	ND	0.0250	1	07/14/23	07/17/23	
Ethylbenzene	ND	0.0250	1	07/14/23	07/17/23	
Toluene	ND	0.0250	1	07/14/23	07/17/23	
o-Xylene	ND	0.0250	1	07/14/23	07/17/23	
p,m-Xylene	ND	0.0500	1	07/14/23	07/17/23	
Total Xylenes	ND	0.0250	1	07/14/23	07/17/23	
Surrogate: 4-Bromochlorobenzene-PID		100 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	Analyst: IY		Batch: 2328065
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/14/23	07/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		82.7 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: KM		Batch: 2329005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/17/23	07/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/23	07/17/23	
Surrogate: n-Nonane		100 %	50-200	07/17/23	07/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: BA		Batch: 2328061
Chloride	785	20.0	1	07/14/23	07/18/23	

		QC Si	umma	ii y Data	1				
WPX Energy - Carlsbad		Project Name:		DX 17-25					Reported:
5315 Buena Vista Dr Carlsbad NM, 88220		Project Number: Project Manager:		058-0007 ilbert Moreno					7/19/2023 4:14:56PM
Carisoad 1411, 00220		Troject Manager.		nocit ivioreno					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		Volatile O	rganics b	oy EPA 802	1B				Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328065-BLK1)							Prepared: 0	7/14/23 A	analyzed: 07/17/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
-Xylene	ND	0.0250							
o,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.68		8.00		96.0	70-130			
LCS (2328065-BS1)							Prepared: 0	7/14/23 A	analyzed: 07/17/23
Benzene	4.82	0.0250	5.00		96.5	70-130			
thylbenzene	4.71	0.0250	5.00		94.2	70-130			
oluene	4.86	0.0250	5.00		97.1	70-130			
-Xylene	4.85	0.0250	5.00		97.1	70-130			
,m-Xylene	9.77	0.0500	10.0		97.7	70-130			
Total Xylenes	14.6	0.0250	15.0		97.5	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.84		8.00		98.0	70-130			
Matrix Spike (2328065-MS1)				Source:	E307053-	01	Prepared: 0	7/14/23 A	analyzed: 07/17/23
Benzene	5.06	0.0250	5.00	ND	101	54-133			
thylbenzene	4.93	0.0250	5.00	ND	98.6	61-133			
oluene	5.09	0.0250	5.00	ND	102	61-130			
-Xylene	5.09	0.0250	5.00	ND	102	63-131			
,m-Xylene	10.2	0.0500	10.0	ND	102	63-131			
Total Xylenes	15.3	0.0250	15.0	ND	102	63-131			
urrogate: 4-Bromochlorobenzene-PID	7.91		8.00		98.9	70-130			
Matrix Spike Dup (2328065-MSD1)				Source:	E307053-	01	Prepared: 0	7/14/23 A	analyzed: 07/17/23
Benzene	5.00	0.0250	5.00	ND	100	54-133	1.20	20	
Ethylbenzene	4.89	0.0250	5.00	ND	97.7	61-133	0.905	20	
Toluene	5.03	0.0250	5.00	ND	101	61-130	1.15	20	
o-Xylene	5.04	0.0250	5.00	ND	101	63-131	1.03	20	
o,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	1.10	20	
Total Villanas	15.2	0.0250	15.0	ND	101	62 121	1.07	20	



15.2

7.97

0.0250

15.0

8.00

ND

101

63-131

70-130

1.07

20

Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	·
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:14:56PM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno				7/19	0/2023 4:14:56PM
	Non	halogenated	Organics l	oy EPA 80	15D - Gl	RO			Analyst: IY
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits	RPD %	RPD Limit %	Notes
Blank (2328065-BLK1)							Prepared: 0°	7/14/23 Analy	zed: 07/17/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.59		8.00		82.4	70-130			
LCS (2328065-BS2)							Prepared: 0	7/14/23 Analy	zed: 07/17/23
Gasoline Range Organics (C6-C10)	47.2	20.0	50.0		94.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.77		8.00		84.6	70-130			
Matrix Spike (2328065-MS2)				Source:	E307053-	01	Prepared: 0	7/14/23 Analy	zed: 07/17/23
Gasoline Range Organics (C6-C10)	45.2	20.0	50.0	ND	90.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.65		8.00		83.2	70-130			
Matrix Spike Dup (2328065-MSD2)				Source:	E307053-	01	Prepared: 0	7/14/23 Analy	zed: 07/17/23
Gasoline Range Organics (C6-C10)	44.9	20.0	50.0	ND	89.8	70-130	0.677	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.72		8.00		83.9	70-130			

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	·
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:14:56PM

Carlsbad NM, 88220		Project Manager	r: G1	lbert Moreno	1				7/19/2023 4:14:56PN
	Nonha	logenated Or	ganics by l	EPA 8015I	D - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2329005-BLK1)							Prepared: 0	7/17/23 A	nalyzed: 07/17/23
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.0		50.0		112	50-200			
LCS (2329005-BS1)							Prepared: 0	7/17/23 A	nalyzed: 07/17/23
Diesel Range Organics (C10-C28)	253	25.0	250		101	38-132			
Surrogate: n-Nonane	49.9		50.0		99.7	50-200			
Matrix Spike (2329005-MS1)				Source:	E307053-	03	Prepared: 0	7/17/23 A	nalyzed: 07/17/23
Diesel Range Organics (C10-C28)	250	25.0	250	ND	99.9	38-132			
Surrogate: n-Nonane	47.3		50.0		94.7	50-200			
Matrix Spike Dup (2329005-MSD1)				Source:	E307053-	03	Prepared: 0	7/17/23 A	nalyzed: 07/17/23
Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132	0.940	20	
Surrogate: n-Nonane	45.0		50.0		90.1	50-200			



WPX Energy - Carlsbad		Project Name:	R	DX 17-25					Reported:
5315 Buena Vista Dr		Project Number:	01	058-0007					
Carlsbad NM, 88220		Project Manager	: G	ilbert Moreno					7/19/2023 4:14:56PM
		Anions	by EPA 3	300.0/9056 <i>A</i>	\				Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328061-BLK1)							Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	ND	20.0							
LCS (2328061-BS1)							Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2328061-MS1)				Source:	E307052-)1	Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	1580	40.0	250	1280	117	80-120			
Matrix Spike Dup (2328061-MSD1)				Source:	E307052-	01	Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	1590	40.0	250	1280	121	80-120	0.675	20	M2

QC Summary Report Comment:

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



Definitions and Notes

	WPX Energy - Carlsbad	Project Name:	RDX 17-25	
-	5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
	Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 16:14

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Client: W	/PX Energy Pe	rmian LLO	C.			Bill To				L	ab U	se Or	nly				T	AT	EPA	Program
Project:	RDX 17-25				At	tention: Jim Raley		Lab	o WO	_			Num	ber	1	D 20	3D	Standar		
Project N	Manager: Gilb	ert More	no		Ad	ddress: 5315 Buena Vista Dr.		F	307	05	7	010	58	-0007				5 day TA	T	
Address:	13000 W Cou	unty Rd 10	00		Ci	ty, State, Zip: Carlsbad, NM, 8	8220							nd Meth						RCRA
City, Stat	te, Zip_Odessa	a,TX, 797	65		Pł	none: 575-885-7502			þ						T				1	
Phone: (832) 541-7719	9			Er	nail: jim.raley@dvn.com			80										State	
	evon-team@e		com			O: 21181900			0/0	1 2			0.			Z Z		NM (
•	d by: Edyte Ko					cident ID: nAB1712952339		7	/DR	802	260	010	300		- 1		×			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID			Lab Numb	Depth(ft.)	TPH GRO/DRO/ORO by	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC	GDOC		Remark	(S
10:20	7/13/2023	S	1			FS14	1	4'							-	х				
									\vdash						1					
	l nal Instruction pler), attest to the		Iauthenticity	of this sample	e. I am aware th	at tampering with or intentionally misla	pelling the samp	e locatio	on,			Sampl	es requ	iring therm	nal pre	ervation	must be	eceived on ice th	e day they are s	ampled or
	of collection is co					Sampled by:						receiv	ed pack	red in ice at	an av	temp al	ove 0 bu	t less than 6 °C or	subsequent day	5.
Tuy	A		Date 07/1	3/2023	Time 14:20	Received by: (Signature) Willle Cury well	_ Date 7-13	-23	Time	120	5	Rec	eived	d on ice	: (Lab I	Jse Or N	nly		
Much	ed by: (Signature Ull UM	rall		13-23	Time 1700	Received by: (Signature)	7.1		Time			T1			I			<u>T3</u>		
Relinquish	ed by: (Signature	V550	Date	13.23	1233c	Received by (Spenatury)	- 7/14	23	Time 8	:3	5	AVG	Ten	np °C	4					
Sample Mat	rix: S - Soil, Sd - So	lid, Sg - Slude	ge, A - Aque	ous, O - Other				ner Typ	pe:g-	glass	s, p -			c, ag - a		glass	v - VO	A		
Note: Sam	ples are discarde	d 30 days a	fter result	are reporte	ed unless other	arrangements are made. Hazardo	us samples will	be retu	urned t	o clie	nt or	dispos	ed of	at the cli	ent e	xpense	. The r	eport for the	analysis of th	ne above
samples is	applicable only t	o those sar	nples recei	ved by the la	aboratory with	this COC. The liability of the labora	tory is limited t	o the a	mount	paid	for or	ther	eport							



envirotech

Printed: 7/14/2023 9:56:43AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

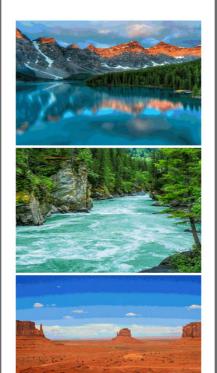
Instructions: Please take note of any NO checkmarks.

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

Client:	WPX Energy - Carlsbad	Date Received:	07/14/23 0	8:35		Work Order ID:	E307057
Phone:	(539) 573-4018	Date Logged In:	07/13/23 1	6:03		Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	07/20/23 1	7:00 (4 day TAT)			
1. Does th 2. Does th 3. Were sa 4. Was the	Custody (COC) the sample ID match the COC? the number of samples per sampling site location may the amples dropped off by client or carrier? the COC complete, i.e., signatures, dates/times, reque Il samples received within holding time? Note: Analysis, such as pH which should be conducted i i.e., 15 minute hold time, are not included in this disucssi	sted analyses?	Yes Yes Yes Yes Yes	Carrier: <u>C</u>	Courier	<u>Comment</u>	s/Resolution
	<u>urn Around Time (TAT)</u>						
6. Did the	COC indicate standard TAT, or Expedited TAT?		Yes				
Sample C			Ves				
	sample cooler received? was cooler received in good condition?		Yes				
• /	G		Yes				
	e sample(s) received intact, i.e., not broken?		Yes				
	custody/security seals present?		No				
11. If yes,	were custody/security seals intact?		NA				
	e sample received on ice? If yes, the recorded temp is 4°C Note: Thermal preservation is not required, if samples ar minutes of sampling	re received w/i 15	Yes				
13. If no v	visible ice, record the temperature. Actual sample	temperature: 4°	<u>C</u>				
Sample C							
	queous VOC samples present?		No				
	OC samples collected in VOA Vials?		NA				
	head space less than 6-8 mm (pea sized or less)?		NA				
	trip blank (TB) included for VOC analyses?		NA				
	on-VOC samples collected in the correct containers		Yes				
19. Is the a	appropriate volume/weight or number of sample contain	ners collected?	Yes				
Sa D	nel field sample labels filled out with the minimum information ample ID? ate/Time Collected? ollectors name?	ormation:	Yes Yes				
	reservation		Yes				
	the COC or field labels indicate the samples were p	reserved?	No				
	imple(s) correctly preserved?	10501 704.	NA				
	filteration required and/or requested for dissolved r	netals?	No				
	se Sample Matrix		110				
	se Sample Watrix the sample have more than one phase, i.e., multipha		3.7				
	does the COC specify which phase(s) is to be analy		No				
		yzcu:	NA				
	act Laboratory						
	amples required to get sent to a subcontract laborato	•	No				
29. Was a	subcontract laboratory specified by the client and i	f so who?	NA	Subcontract Lab	: NA		
Client In	<u>istruction</u>						

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

Report to:
Gilbert Moreno





5796 U.S. Hwy 64 Farmington, NM 87401

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





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Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 17-25

Work Order: E307058

Job Number: 01058-0007

Received: 7/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 7/19/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 7/19/23

Gilbert Moreno 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX 17-25 Workorder: E307058

Date Received: 7/14/2023 8:35:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/14/2023 8:35:00AM, under the Project Name: RDX 17-25.

The analytical test results summarized in this report with the Project Name: RDX 17-25 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881 Cell: 775-287-1762

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West Texas Midland/Odessa Area Rayny Hagan Technical Representative

Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

_			•	
ſ	WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
l	5315 Buena Vista Dr	Project Number:	01058-0007	Reported.
l	Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 16:16

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW05 0-4'	E307058-01A	Soil	07/13/23	07/14/23	Glass Jar, 2 oz.



Sample Data

W	PX Energy - Carlsbad	Project Name:	RDX 17-25	
53	315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Ca	arlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:16:34PM

SW05 0-4' E307058-01

		E30/058-01				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	Anal	yst: IY		Batch: 2328065
Benzene	ND	0.0250	1	07/14/23	07/17/23	
Ethylbenzene	ND	0.0250	1	07/14/23	07/17/23	
Toluene	ND	0.0250	1	07/14/23	07/17/23	
o-Xylene	ND	0.0250	1	07/14/23	07/17/23	
o,m-Xylene	ND	0.0500	1	07/14/23	07/17/23	
Total Xylenes	ND	0.0250	1	07/14/23	07/17/23	
Surrogate: 4-Bromochlorobenzene-PID		99.6 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: IY		Batch: 2328065
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/14/23	07/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		82.2 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: KM		Batch: 2329005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/17/23	07/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/23	07/17/23	
Surrogate: n-Nonane		96.4 %	50-200	07/17/23	07/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2328061
Chloride	214	20.0	1	07/14/23	07/18/23	



RDX 17-25 WPX Energy - Carlsbad Project Name: Reported: 5315 Buena Vista Dr Project Number: 01058-0007 Carlsbad NM, 88220 Project Manager: Gilbert Moreno 7/19/2023 4:16:34PM **Volatile Organics by EPA 8021B** Analyst: IY Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % % Notes Blank (2328065-BLK1) Prepared: 07/14/23 Analyzed: 07/17/23 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 Total Xylenes ND 0.0250 Surrogate: 4-Bromochlorobenzene-PID 7.68 8.00 96.0 70-130 LCS (2328065-BS1) Prepared: 07/14/23 Analyzed: 07/17/23 4.82 96.5 70-130 5.00 Benzene 0.0250 Ethylbenzene 4.71 0.0250 5.00 94.2 70-130 4.86 0.0250 5.00 97.1 70-130 Toluene 97.1 o-Xylene 4.85 0.0250 5.00 70-130 9.77 10.0 97.7 70-130 0.0500 p.m-Xvlene 97.5 70-130 14.6 15.0 Total Xylenes 0.0250 8.00 98.0 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.84 Matrix Spike (2328065-MS1) Source: E307053-01 Prepared: 07/14/23 Analyzed: 07/17/23 5.06 0.0250 5.00 ND 54-133 Benzene ND 61-133 Ethylbenzene 4.93 0.0250 5.00 98.6 Toluene 5.09 0.0250 5.00 ND 102 61-130 5.09 ND 102 63-131 5.00 0.0250 o-Xylene p,m-Xylene 10.2 0.0500 10.0 ND 102 63-131 15.3 0.0250 15.0 ND 63-131 Total Xylenes 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.91 8.00 Matrix Spike Dup (2328065-MSD1) Source: E307053-01 Prepared: 07/14/23 Analyzed: 07/17/23 5.00 0.0250 5.00 ND 54-133 1.20 20 ND 61-133 0.905 4.89 0.0250 5.00 97.7 20 Ethylbenzene Toluene 5.03 0.0250 5.00 ND 101 61-130 1.15 20 5.04 5.00 ND 101 63-131 1.03 20 o-Xylene 0.0250 10.1 10.0 ND 101 63-131 1.10 20

0.0500

0.0250

15.0

8.00

ND

101

99.6

63-131

70-130

1.07

20

15.2

7.97



p,m-Xylene

Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	•
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:16:34PM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno				7/	19/2023 4:16:34PN
	Non	halogenated	Organics l	oy EPA 80	15D - GI	RO			Analyst: IY
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2328065-BLK1)							Prepared: 0°	7/14/23 Ana	lyzed: 07/17/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.59		8.00		82.4	70-130			
LCS (2328065-BS2)							Prepared: 0'	7/14/23 Ana	lyzed: 07/17/23
Gasoline Range Organics (C6-C10)	47.2	20.0	50.0		94.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.77		8.00		84.6	70-130			
Matrix Spike (2328065-MS2)				Source:	E307053-0	01	Prepared: 0'	7/14/23 Ana	lyzed: 07/17/23
Gasoline Range Organics (C6-C10)	45.2	20.0	50.0	ND	90.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.65		8.00		83.2	70-130			
Matrix Spike Dup (2328065-MSD2)				Source:	E307053-0	01	Prepared: 0'	7/14/23 Ana	lyzed: 07/17/23
Gasoline Range Organics (C6-C10)	44.9	20.0	50.0	ND	89.8	70-130	0.677	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.72		8.00		83.9	70-130			



WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	•
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:16:34PM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno					7/19/2023 4:16:34PI
	Nonha	logenated Or	ganics by	EPA 8015I) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2329005-BLK1)							Prepared: 0'	7/17/23 An	alyzed: 07/17/23
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.0		50.0		112	50-200			
LCS (2329005-BS1)							Prepared: 0'	7/17/23 An	alyzed: 07/17/23
Diesel Range Organics (C10-C28)	253	25.0	250		101	38-132			
Surrogate: n-Nonane	49.9		50.0		99.7	50-200			
Matrix Spike (2329005-MS1)				Source:	E307053-	03	Prepared: 0'	7/17/23 An	alyzed: 07/17/23
Diesel Range Organics (C10-C28)	250	25.0	250	ND	99.9	38-132			
Surrogate: n-Nonane	47.3		50.0		94.7	50-200			
Matrix Spike Dup (2329005-MSD1)				Source:	E307053-	03	Prepared: 0'	7/17/23 An	alyzed: 07/17/23
Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132	0.940	20	
Surrogate: n-Nonane	45.0		50.0		90.1	50-200			

WPX Energy - Carlsbad		Project Name:	R	DX 17-25					Reported:
5315 Buena Vista Dr Carlsbad NM, 88220		Project Number: Project Manager:		1058-0007 ilbert Moreno					7/19/2023 4:16:34PM
		Anions	by EPA 3	300.0/9056 <i>A</i>	<u> </u>				Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328061-BLK1)							Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	ND	20.0							
LCS (2328061-BS1)							Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2328061-MS1)				Source:	E307052-0)1	Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	1580	40.0	250	1280	117	80-120			
Matrix Spike Dup (2328061-MSD1)				Source:	E307052-0)1	Prepared: 0	7/14/23 A	nalyzed: 07/17/23
Chloride	1590	40.0	250	1280	121	80-120	0.675	20	M2

QC Summary Report Comment:

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



Definitions and Notes

	WPX Energy - Carlsbad	Project Name:	RDX 17-25	
-	5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
	Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 16:16

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



roject In	formation					Chai	n of Custody	,												Page
lient: W	PX Energy Per	rmian LLC	2.			Bill To				La	b U	se Or	nlv	110			TAT		EPA P	rogram
	RDX 17-25				Att	ention: Jim Raley		Lab	WO#				Number		1D 2	D :		Standard	CWA	SDWA
roject N	/lanager: Gilbe	ert More	no			dress: 5315 Buena Vista Dr.		E	307	05	8		58-00	07				5 day TAT		
	13000 W Cou				Cit	y, State, Zip: Carlsbad, NM, 88	220						sis and N		d					RCRA
	e, Zip_Odessa		55		Ph	one: 575-885-7502			by											
-	832) 541-7719				Em	ail: jim.raley@dvn.com			ORO								- 1		State	
	evon-team@e		com			D: 21181900)RO/	21	09	0	0.0		ΣN		×	NM CO	UT AZ	TX
	by: Edyte Ko	nan			Inc	ident ID: nAB1712952339		£.	RO/I	y 80	y 826	601	Je 30			- 1				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID			Lab Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		верос		GDOC		Remarks	
10:30	7/13/2023	S	1			SW05	1	0-4'							х					
Addition	al Instruction	s:																		
	pler), attest to the					t tampering with or intentionally mislabel Sampled by:	ling the sample l	ocation	1,									eived on ice the day ss than 6 °C on sub	Action to the second second	pled or
fill	ed by: (Signature	1	Date 07/1	3/2023	Time 14:20	Received by: (Signature)	100	23	Time	120)	Rece	eived on	ice:	Lab		Only			
Mid	ed by: (Signature	Jules		-13-23	700 1700	Received by: (Signature)	7.13°	23	Time 17	200		T1			<u>T2</u>			<u>T3</u>		
Relinquish	ed by: (Signature	150	Date 7.	13.23	2330	Registed by: (Signature)	7/14/2	23	Time	3		AVG	Temp °C		1					
ample Mat	trix: S - Soil, Sd - Sol	lid, Sg - Slud	ge, A - Aqueo	ous, O - Other			Containe	r Type	e: g - g	glass,	p-p	ooly/p	lastic, ag	- amb	er glas	s, v -	VOA			

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samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

Printed: 7/14/2023 9:58:42AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	WPX Energy - Carlsbad	Date Received:	07/14/23 0	08:35	,	Work Order ID:	E307058
Phone:	(539) 573-4018	Date Logged In:	07/13/23 1	6:05		Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:	07/20/23 1	7:00 (4 day TAT)			
Chain of	Custody (COC)						
	ne sample ID match the COC?		Yes				
	ne number of samples per sampling site location ma	tch the COC	Yes				
	amples dropped off by client or carrier?		Yes	Carrier: Co	<u>urier</u>		
4. Was the	e COC complete, i.e., signatures, dates/times, reque	sted analyses?	Yes				
5. Were a	Il samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi	•	Yes			Comments	s/Resolution
Sample T	<u> Curn Around Time (TAT)</u>						
6. Did the	e COC indicate standard TAT, or Expedited TAT?		Yes				
Sample C	Cooler						
7. Was a s	sample cooler received?		Yes				
8. If yes,	was cooler received in good condition?		Yes				
9. Was the	e sample(s) received intact, i.e., not broken?		Yes				
10. Were	custody/security seals present?		No				
11. If yes	, were custody/security seals intact?		NA				
	e sample received on ice? If yes, the recorded temp is 4°C. Note: Thermal preservation is not required, if samples ar minutes of sampling visible ice, record the temperature. Actual sample	re received w/i 15	Yes C				
	Container _	- F					
	queous VOC samples present?		No				
	OC samples collected in VOA Vials?		NA				
	head space less than 6-8 mm (pea sized or less)?		NA				
	trip blank (TB) included for VOC analyses?		NA				
	on-VOC samples collected in the correct containers	?	Yes				
	appropriate volume/weight or number of sample contai		Yes				
Field Lal	•						
	field sample labels filled out with the minimum info	ormation:					
	ample ID?		Yes				
	ate/Time Collected?		Yes				
C	ollectors name?		Yes				
	<u>Preservation</u>						
	the COC or field labels indicate the samples were p	reserved?	No				
	ample(s) correctly preserved?	. 1.0	NA				
24. Is lab	filteration required and/or requested for dissolved n	netals?	No				
	se Sample Matrix						
	the sample have more than one phase, i.e., multipha		No				
27. If yes	, does the COC specify which phase(s) is to be analy	yzed?	NA				
Subcontr	act Laboratory						
28. Are sa	amples required to get sent to a subcontract laborato	ory?	No				
29. Was a	subcontract laboratory specified by the client and i	f so who?	NA	Subcontract Lab:	NA		
Client Ir	nstruction_						
<u> </u>							

Report to:
Gilbert Moreno





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





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Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: RDX 17-25

Work Order: E307060

Job Number: 01058-0007

Received: 7/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 7/19/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 7/19/23

Gilbert Moreno 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX 17-25 Workorder: E307060

Date Received: 7/14/2023 8:35:00AM

Gilbert Moreno,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/14/2023 8:35:00AM, under the Project Name: RDX 17-25.

The analytical test results summarized in this report with the Project Name: RDX 17-25 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881 Cell: 775-287-1762

whinchman@envirotech-inc.com

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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Γ	WPX Energy - Carlsbad	Project Name: RDX 17-25		Donoutoda
ı	5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
l	Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 16:18

Client Sample ID	Lab Sample ID Matrix	Sampled	Received	Container
SW03 0-4'	E307060-01A Soil	07/13/23	07/14/23	Glass Jar, 2 oz.
SW04 0-4'	E307060-02A Soil	07/13/23	07/14/23	Glass Jar, 2 oz.



Sample Data

WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:18:35PM

SW03 0-4' E307060-01

		E30/000-01				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	lyst: IY	·	Batch: 2328068
Benzene	ND	0.0250	1	07/14/23	07/17/23	
Ethylbenzene	ND	0.0250	1	07/14/23	07/17/23	
Toluene	ND	0.0250	1	07/14/23	07/17/23	
o-Xylene	ND	0.0250	1	07/14/23	07/17/23	
o,m-Xylene	ND	0.0500	1	07/14/23	07/17/23	
Total Xylenes	ND	0.0250	1	07/14/23	07/17/23	
Surrogate: 4-Bromochlorobenzene-PID		96.4 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2328068
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/14/23	07/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		82.8 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: KM		Batch: 2329005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/17/23	07/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/23	07/17/23	
Surrogate: n-Nonane		97.9 %	50-200	07/17/23	07/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: BA		Batch: 2328062
Chloride	206	20.0	1	07/14/23	07/17/23	



Sample Data

WPX Energy - Carlsbad	Project Name:	RDX 17-25	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:18:35PM

SW04 0-4'

		E307060-02				
		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: IY		Batch: 2328068
Benzene	ND	0.0250	1	07/14/23	07/17/23	
Ethylbenzene	ND	0.0250	1	07/14/23	07/17/23	
Toluene	ND	0.0250	1	07/14/23	07/17/23	
o-Xylene	ND	0.0250	1	07/14/23	07/17/23	
p,m-Xylene	ND	0.0500	1	07/14/23	07/17/23	
Total Xylenes	ND	0.0250	1	07/14/23	07/17/23	
Surrogate: 4-Bromochlorobenzene-PID		96.7 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: IY		Batch: 2328068
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/14/23	07/17/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		85.3 %	70-130	07/14/23	07/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: KM		Batch: 2329005
Diesel Range Organics (C10-C28)	ND	25.0	1	07/17/23	07/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	07/17/23	07/17/23	
Surrogate: n-Nonane		93.9 %	50-200	07/17/23	07/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2328062
Chloride	36.9	20.0	1	07/14/23	07/17/23	



RDX 17-25 WPX Energy - Carlsbad Project Name: Reported: 5315 Buena Vista Dr Project Number: 01058-0007 Carlsbad NM, 88220 Project Manager: Gilbert Moreno 7/19/2023 4:18:35PM **Volatile Organics by EPA 8021B** Analyst: IY Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % % Notes Blank (2328068-BLK1) Prepared: 07/14/23 Analyzed: 07/17/23 ND 0.0250 ND Ethylbenzene 0.0250 Toluene ND 0.0250 ND o-Xylene 0.0250 ND p,m-Xylene 0.0500 Total Xylenes ND 0.0250 Surrogate: 4-Bromochlorobenzene-PID 7.54 8.00 94.2 70-130 LCS (2328068-BS1) Prepared: 07/14/23 Analyzed: 07/17/23 4.77 95.4 70-130 5.00 Benzene 0.0250 Ethylbenzene 4.72 0.0250 5.00 94.3 70-130 4.79 0.0250 5.00 95.8 70-130 Toluene 94.2 o-Xylene 4.71 0.0250 5.00 70-130 10.0 96.0 70-130 9.60 0.0500 p.m-Xvlene 95.4 70-130 14.3 15.0 Total Xylenes 0.0250 8.00 95.8 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.66 Matrix Spike (2328068-MS1) Source: E307060-02 Prepared: 07/14/23 Analyzed: 07/17/23 5.04 0.0250 5.00 ND 54-133 Benzene ND 61-133 Ethylbenzene 5.00 0.0250 5.00 99.9 Toluene 5.07 0.0250 5.00 ND 101 61-130 4.99 ND 99.8 63-131 5.00 0.0250 o-Xylene p,m-Xylene 10.2 0.0500 10.0 ND 102 63-131 0.0250 15.0 ND 63-131 Total Xylenes 70-130 Surrogate: 4-Bromochlorobenzene-PID 7.83 8.00 Matrix Spike Dup (2328068-MSD1) Source: E307060-02 Prepared: 07/14/23 Analyzed: 07/17/23 4.99 0.0250 5.00 ND 99.7 54-133 1.12 20 61-133 1.34 4.93 0.0250 5.00 ND 98.6 20 Ethylbenzene 61-130 Toluene 5.02 0.0250 5.00 ND 100 1.09 20 4.94 5.00 ND 98.8 63-131 1.02 20 o-Xylene 0.0250 10.0 10.0 ND 100 63-131 1.21 20 p,m-Xylene 0.0500



15.0

7.79

0.0250

15.0

8.00

ND

99.9

97.4

63-131

70-130

1.14

20

Total Xylenes

Surrogate: 4-Bromochlorobenzene-PID

WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	•
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:18:35PM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno				7/1	9/2023 4:18:35PM
	Non	halogenated	Organics l	by EPA 80	15D - Gl	RO			Analyst: IY
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec	Rec Limits	RPD %	RPD Limit %	Notes
							,,,		
Blank (2328068-BLK1)							Prepared: 0	7/14/23 Anal	yzed: 07/17/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.99		8.00		87.3	70-130			
LCS (2328068-BS2)							Prepared: 0	7/14/23 Anal	yzed: 07/17/23
Gasoline Range Organics (C6-C10)	42.9	20.0	50.0		85.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.84		8.00		85.5	70-130			
Matrix Spike (2328068-MS2)				Source:	E307060-	02	Prepared: 0	7/14/23 Anal	yzed: 07/17/23
Gasoline Range Organics (C6-C10)	45.7	20.0	50.0	ND	91.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.87		8.00		85.9	70-130			
Matrix Spike Dup (2328068-MSD2)				Source:	E307060-	02	Prepared: 0	7/14/23 Anal	yzed: 07/17/23
Gasoline Range Organics (C6-C10)	47.0	20.0	50.0	ND	93.9	70-130	2.83	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.96		8.00		86.9	70-130			



WPX Energy - Carlsbad	Project Name:	RDX 17-25	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	·
Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	7/19/2023 4:18:35PM

Carlsbad NM, 88220		Project Manage	r: Gi	lbert Moreno					7/19/2023 4:18:35PN
	Nonha	logenated Or	ganics by	EPA 8015I) - DRO	/ORO			Analyst: KM
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2329005-BLK1)							Prepared: 0	7/17/23 Aı	nalyzed: 07/17/23
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.0		50.0		112	50-200			
LCS (2329005-BS1)							Prepared: 0	7/17/23 Aı	nalyzed: 07/17/23
Diesel Range Organics (C10-C28)	253	25.0	250		101	38-132			
Surrogate: n-Nonane	49.9		50.0		99.7	50-200			
Matrix Spike (2329005-MS1)				Source:	E307053-	03	Prepared: 0	7/17/23 Aı	nalyzed: 07/17/23
Diesel Range Organics (C10-C28)	250	25.0	250	ND	99.9	38-132			
Surrogate: n-Nonane	47.3		50.0		94.7	50-200			
Matrix Spike Dup (2329005-MSD1)				Source:	E307053-	03	Prepared: 0	7/17/23 Aı	nalyzed: 07/17/23
Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132	0.940	20	
Surrogate: n-Nonane	45.0		50.0		90.1	50-200			

QC Summary Data

WPX Energy - Carlsbad		Project Name:	R	DX 17-25	•		•		Reported:
5315 Buena Vista Dr		Project Number:	01	058-0007					•
Carlsbad NM, 88220		Project Manager:	G	ilbert Moreno					7/19/2023 4:18:35PM
		Anions 1	by EPA 3	00.0/9056 <i>A</i>	1				Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2328062-BLK1)							Prepared: 0	7/14/23 A	analyzed: 07/17/23
Chloride	ND	20.0							
LCS (2328062-BS1)							Prepared: 0	7/14/23 A	analyzed: 07/17/23
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2328062-MS1)				Source:	E307045-0)1	Prepared: 0	7/14/23 A	analyzed: 07/17/23
Chloride	6750	400	250	6540	83.2	80-120			
Matrix Spike Dup (2328062-MSD1)				Source:	E307045-0)1	Prepared: 0	7/14/23 A	analyzed: 07/17/23
Chloride	6600	400	250	6540	23.5	80-120	2.24	20	M4

QC Summary Report Comment:

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



Definitions and Notes

ſ	WPX Energy - Carlsbad	Project Name:	RDX 17-25	
١	5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
١	Carlsbad NM, 88220	Project Manager:	Gilbert Moreno	07/19/23 16:18

M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The

associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Client: WPX Energy Permian LLC.					Bill To				Lab Us				ly				TA	T	EPA	Program		
	RDX 17-25				A	ttention: Jim Raley			Lab \	NO#				Number		1D	2D	3D		d CW/	SDWA	
Project N	/lanager: Gilbe	ert More	no			ddress: 5315 Buena Vista	Dr.		E3	070	06	0	OI Nº	18-00	07				5 day TAT	\T		
\ddress:	13000 W Cou	inty Rd 10	00		Ci	ity, State, Zip: Carlsbad, N	M, 88220					1	Analy	sis and N	1etho	d					RCRA	
	e, Zip_Odessa		65		PI	hone: 575-885-7502				by												
	332) 541-7719				Er	mail: jim.raley@dvn.com			Depth(ft.) TPH GRO/DRO/ORO by 8015 BIEX by 8021										12.7	State		
	evon-team@e		com		W	/O: 21181900				RO/	21	0	Metals 6010	6010	0.0		N		X	NM	CO UT	AZ TX
ollected	by: Edyte Ko	nan			In	cident ID: nAB17129523	39		3	0/0	y 80	826			6010	e 30						
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID				Lab	Depth(ft.)	TPH GF 8015	BTEX by 8021	VOC by 8260	etals	Chloride 300.0		верос		GDOC		Rema	rks	
Sampleu			Containers		-			Number	ă	8 7	18	>	Σ	5	-	B		ū	_			
10:00	7/13/2023	S	1			SW03		1	0-4'							X						
10:10	7/13/2023	/13/2023 S 1 SW04			SW04		2	0-4'							X							
		7																	-			
															-							
															-							
															-				-			
Addition	al Instruction	s:																				
			authenticity	of this sample. I	am aware th	hat tampering with or intentionally	y mislabelling th	ie sample l	ocation	,		-	Sample	es requiring	thermal	preserva	ation mu	ust be re	ceived on ice	he day they are	sampled or	
	of collection is cor					Sampled by:		77.2.13					receive	ed packed in	ice at a	n avg ten	np abov	e 0 but l	ess than 6 °C	n subsequent d	ays.	
elingvishe	d by: (Signature)	Date 07/1	17.75	ne 1:20	Received by: (Signature)	usale "	0ate 7-17-0	13	Time	40		Rece	eived or	ice:		ab Us N	e On	У			
elinquishe	linquished by: (Signature) Date Time		700	Received by: (Signature) // Date		73 1700			T1			T2			Т3	T3						
E VVIV	ed by: (Signature	-	Date		233	Received by: (Signature)	1/11	7/14/2	12	Time	121	5		Temp ^c		4						
1100	ix: S - Soil, Sd - Sol			-		under 1	···	Containe	Turn	600	يرس		1			hord	200 14	VO				



Page 172 of 370

Printed: 7/14/2023 10:05:00AM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	WPX Energy - Carlsbad	Date Received:	07/14/23	08:35		Work Order ID:	E307060
Phone:	(539) 573-4018	Date Logged In:	07/13/23	16:40		Logged In By:	Alexa Michaels
Email:	devon-team@ensolum.com	Due Date:		17:00 (4 day TAT)		88	
Chain of	Custody (COC)						
1. Does th	ne sample ID match the COC?		Yes				
2. Does th	ne number of samples per sampling site location ma	tch the COC	Yes				
3. Were sa	amples dropped off by client or carrier?		Yes	Carrier: C	Courier		
4. Was the	e COC complete, i.e., signatures, dates/times, reques	sted analyses?	Yes	_			
5. Were al	Il samples received within holding time?		Yes				
	Note: Analysis, such as pH which should be conducted in					Comments	s/Resolution
C1- T	i.e, 15 minute hold time, are not included in this disucssi	on.				<u>Comment</u>	WILCOOTHING
	Urn Around Time (TAT)		Yes				
	COC indicate standard TAT, or Expedited TAT?		168				
Sample C	ample cooler received?		Yes				
	was cooler received:						
• •	G		Yes				
	e sample(s) received intact, i.e., not broken?		Yes				
	custody/security seals present?		No				
11. If yes,	were custody/security seals intact?		NA				
12. Was the	e sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling		Yes				
13. If no v	visible ice, record the temperature. Actual sample	temperature: 4°	<u>C</u>				
Sample C	Container	_					
	queous VOC samples present?		No				
	OC samples collected in VOA Vials?		NA				
	head space less than 6-8 mm (pea sized or less)?		NA				
	trip blank (TB) included for VOC analyses?		NA				
	on-VOC samples collected in the correct containers	?	Yes				
	appropriate volume/weight or number of sample contain		Yes				
Field Lab	el						
	— field sample labels filled out with the minimum info	ormation:					
Sa	ample ID?		Yes				
	ate/Time Collected?		Yes				
	ollectors name?		Yes				
-	reservation		N				
	the COC or field labels indicate the samples were pr	reserved?	No				
	ample(s) correctly preserved? filteration required and/or requested for dissolved n	antolo?	NA				
	i i	netals?	No				
	se Sample Matrix	-					
	the sample have more than one phase, i.e., multipha		No				
27. If yes,	does the COC specify which phase(s) is to be analy	yzed?	NA				
Subcontr	act Laboratory						
28. Are sa	imples required to get sent to a subcontract laborato	ry?	No				
29. Was a	subcontract laboratory specified by the client and it	f so who?	NA	Subcontract Lab	o: NA		
Client In	<u>struction</u>						
							_

APPENDIX G

NMOCD Notifications

P.O. Box 62228 Midland • TX • 79711 • Tel: 432-563-2200 • Fax: 432-563-2213



Erick Herrera

From: Hamlet, Robert, EMNRD < Robert. Hamlet@emnrd.nm.gov>

Wednesday, June 14, 2023 4:33 PM Sent:

To: Raley, Jim

Devon-Team; Bratcher, Michael, EMNRD; Harimon, Jocelyn, EMNRD; Maxwell, Ashley, Cc:

EMNRD

Subject: (Extension Approval) - RDX 17-25 Extension Request - nAB1712952339

Some people who received this message don't often get email from robert.hamlet@emnrd.nm.gov. Learn why this is important

Please send all future Extension Requests to OCD.Enviro@emnrd.nm.gov

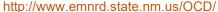
RE: Incident #NAB1712952339

Jim,

Your request for an extension to September 28th, 2023 is approved. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet • Environmental Specialist - Advanced

Environmental Bureau EMNRD - Oil Conservation Division 506 W. Texas Ave. | Artesia, NM 88210 575.909.0302 | robert.hamlet@state.nm.us





From: Raley, Jim < Jim.Raley@dvn.com> **Sent:** Wednesday, June 14, 2023 1:56 PM

To: Hamlet, Robert, EMNRD < Robert. Hamlet@emnrd.nm.gov>

Cc: Devon-Team < Devon-Team@etechenv.com >

Subject: [EXTERNAL] RDX 17-25 Extension Request - nAB1712952339

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Robert,

WPX Energy Permian, LLC (WPX) is requesting an extension to the current deadline for a report required in 19.15.29.12.B.(1) NMAC at the RDX 17-25 (Site).

A produced water release was discovered on May 2, 2017, and subsequently assigned Incident Number nAB1712952339. WPX submitted a remediation work plan proposing further investigation of residual soil impacts to develop a corrective action plan, which was approved by NMOCD on March 27, 2023, and granted a deadline for June 30, 2023. A sundry was submitted and has since been approved to initiate remediation activities. Due to the current site conditions and release location, additional time is being requested to implement additional safety guidelines to excavate around subsurface utilities located within proposed work area.

To provide enough time for additional planning, remediation activities and subsequent corrective action report, WPX requests an extension of the deadline to September 28, 2023.

Jim Raley | Environmental Professional - Permian Basin 5315 Buena Vista Dr., Carlsbad, NM 88220 C: (575)689-7597 | jim.raley@dvn.com



Confidentiality Warning: This message and any attachments are intended only for the use of the intended recipient(s), are confidential, and may be privileged. If you are not the intended recipient, you are hereby notified that any review, retransmission, conversion to hard copy, copying, circulation or other use of all or any portion of this message and any attachments is strictly prohibited. If you are not the intended recipient, please notify the sender immediately by return e-mail, and delete this message and any attachments from your system.

Erick Herrera

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>

Sent: Thursday, June 29, 2023 3:42 PM

To: Erick Herrera

Cc: Bratcher, Michael, EMNRD; Maxwell, Ashley, EMNRD

Subject: RE: [EXTERNAL] WPX Site Sampling Activity Update (7/5-7/7)

Erick,

The OCD has received your notification. When reporting sampling at multiple locations it is required to provide and date and time for each location. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon • Environmental Specialist

Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov



From: Erick Herrera <erick@etechenv.com> Sent: Wednesday, June 28, 2023 3:07 PM

To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; blm_nm_cfo_spill@blm.gov **Cc:** Raley, Jim <jim.raley@dvn.com>; Devon-Team <Devon-Team@etechenv.com>

Subject: [EXTERNAL] WPX Site Sampling Activity Update (7/5-7/7)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following sites between July 5 – July 7, 2023:

Site Name: RDX 17-25

Incident Number: NAB1712952339

API: 30-015-41664

Site Name: RDX 17-36

Incident Number: NRM2017643736

API: 30-015-43636

Site Name: Toro 22-3

API: 30-025-35253

Incident Number: nOY1727952679

Thank you,

Erick Herrera Staff Geologist



Work: (432) 305-6416 Cell: (281) 777-4152

Erick Herrera

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>

Sent: Monday, July 10, 2023 5:29 PM

To: Erick Herrera

Cc: Bratcher, Michael, EMNRD; Maxwell, Ashley, EMNRD

Subject: RE: [EXTERNAL] WPX Site Sampling Activity Update (7/13-7/14)

Erick,

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JΗ

Jocelyn Harimon • Environmental Specialist

Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | <u>Jocelyn.Harimon@emnrd.nm.gov</u>





From: Erick Herrera <erick@etechenv.com> Sent: Monday, July 10, 2023 2:06 PM

To: Enviro, OCD, EMNRD < OCD.Enviro@emnrd.nm.gov>; blm_nm_cfo_spill@blm.gov **Cc:** Raley, Jim < jim.raley@dvn.com>; Devon-Team < Devon-Team@etechenv.com>

Subject: [EXTERNAL] WPX Site Sampling Activity Update (7/13-7/14)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following site between July 13 through July 14, 2023.

Proposed Date: July 13, 2023

Proposed Timeframe: 0800 – 1700 hrs.

Site Name: RDX 17-25

Incident Number: NAB1712952339

API: 30-015-41664

Thank you,

Erick Herrera

Staff Geologist



Work: (432) 305-6416 Cell: (281) 777-4152

APPENDIX H

Approved Remediation Work Plan



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	NRM2017643736
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: WPX Energy Permian, LLC.			, LLC.		OGRID: 246289
Contact Name: Lynda Laumbach			Contact Telephone: (575) 725-1647		
Contact ema	il: Lynda.La	umbach@wpxen	ergy.com		Incident # (assigned by OCD) NRM2017643736
Contact mail	ing address:	5315 Buena Vist	a Drive, Carlsba	d, NM 882	0
			Locatio	n of Re	lease Source
atitude 3	2.049734		(NAD 83 in		ongitude -103.9102662 ees to 5 decimal places)
Site Name: R	DX 17 Fede	eral #36H		5	Site Type: Production Facility
Date Release	Discovered	: 06/16/2020		1	API# (if applicable): 30-015-43636
Unit Letter	Section	Township	Range		County
D	17	26S	30E	Eddy	
			Nature ar	nd Volu	me of Release
				ch calculation	ns or specific justification for the volumes provided below)
Crude Oi		Volume Releas			Volume Recovered (bbls):
X Produced	Water	Volume Releas	ed (bbls): 22		Volume Recovered (bbls): 22
Is the concentration of dissolved chloride produced water >10,000 mg/l?		l chloride ii	n the Yes No		
Condensa				Volume Recovered (bbls)	
Natural C	tural Gas Volume Released (Mcf)			Volume Recovered (Mcf)	
Other (describe) Volume/Weight Released (provide units)		ide units)	Volume/Weight Recovered (provide units)		
Cause of Rel Pinhole leak were recover	developed o		ing 22bbl of prod	luced water	r to be released into the lined secondary containment. All fluids

Th. 75			~ ~~~
Page	end ch	a contract	• 2911
1 420	Z U	4 01	300

Incident ID	NRM2017643736
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the respon	sible party consider this a major release?
release as defined by	ir 125, for what reason(s) does the respec	istore party constact time a major release.
19.15.29.7(A) NMAC?		
Yes X No		
If YES, was immediate no	otice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?
	Initial Ro	esponse
The responsible		vunless they could create a safety hazard that would result in injury
The responsible p	party must undertake the following actions immediates	amess mey could create a sayety nazara mai would result in injury
X The source of the rele	ease has been stopped.	
X The impacted area ha	s been secured to protect human health and	the environment.
X Released materials ha	ave been contained via the use of berms or d	ikes, absorbent pads, or other containment devices.
X All free liquids and re	ecoverable materials have been removed and	l managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain v	vhy:
		emediation 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 info	rmation given above is true and complete to the	pest of my knowledge and understand that pursuant to OCD rules and
		ications 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 and/or regulations.	f a C-141 report does not relieve the operator of	responsibility for compliance with any other federal, state, or local laws
Duinted Niener I vm	da Laumbach	Title: Environmental Specialist
Printed Name: Lyn		Title: Environmental Specialist
Signature:	Tombach	Date: <u>06/25/2020</u>
email: Lynda.Laumbac	h@wpxenergy.com	Telephone: (575)725-1647
OCD Only		
Received by: Ramona	Marcus	Date: <u>6/26/2020</u>
·		

Received by OCD: 8/18/2023 7:25:14 AM State of New Mexico
Page 3 Oil Conservation Division

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Incident ID	
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?	(ft bgs)	
Did this release impact groundwater or surface water?	☐ Yes ☐ No	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ No	
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☐ No	
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ No	
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☐ No	
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No	
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No	
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No	
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No	
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No	
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No	
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☐ No	
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.		
Characterization Report Checklist: Each of the following items must be included in the report.		
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs Photographs including date and GIS information Topographic/Aerial maps Laboratory data including chain of custody		

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

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Incident ID		
District RP		
Facility ID		
Application ID		

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

Received by OCD: 8/18/2023 7:25:14 AMI Form C-14-1 State of New Mexico Page 5 Oil Conservation Division

New Mexico Incident ID

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: Each of the following items must be	e included in the plan.	
 □ Detailed description of proposed remediation technique □ Scaled sitemap with GPS coordinates showing delineation points □ Estimated volume of material to be remediated □ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC □ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) 		
<u>Deferral Requests Only</u> : Each of the following items must be con	firmed as part of any request for deferral of remediation.	
Contamination must be in areas immediately under or around predeconstruction.	roduction equipment where remediation could cause a major facility	
Extents of contamination must be fully delineated.		
Contamination does not cause an imminent risk to human health	n, 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.		
Printed Name:	Title:	
Signature: forde tomback	Date: 06/01/2021	
email:	Telephone:	
OCD Only		
Received by:	Date:	
☐ Approved	Approval	
Signature:	Date:	

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

State of New Mexico ARTESIA DISTRICT
Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. MAY 0.5 2017 Submit I Copy to appropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

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			Rele	ease Notific	cation	and Co	orrective A	ction				
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Name of Co		WPX Energ		1 24/028	QT	Contact Karolina Blaney						
Address		iena Vista D	τ.				No. 970 589 074	13				
Facility Name: RDX 17-25 Facility Type: Well Pad												
Surface Ow	ner: Fede	ral		Mineral (Owner: 1	Federal			API No	. 30- 015-	41664	
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Flowline	icase					5/2/2017	toni or occurrent	.		7 – 11:00 f		
Was Immedi	ate Notice (If YES, To			• •			
			Yes [No ⊠ Not R	equired	<u> </u>	Crystal Weaver &		ratcher,	BLM Shell	y Tuci	ker
By Whom? I							lour: 5/3/17- 12:					
Was a Water	rcourse Rea		Yes 🗵	1 No		If YES, Volume Impacting the Watercourse. N/A						
If a Watersa		pacted, Descr	•			<u> </u>						
II a watered	uise was in	ipacted, ibesci	ibe runy.	· N/A								
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Describe Ca	use of Probl	lem and Reme	dial Actio	n Taken.*								
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vegetation.												
Describe Ar	oa Affected	and Cleanup	Action To	ken *				···········				
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OCD Guidel	lines for Re	mediation of I	.eaks, Spi	lls, and Releases.	Further	remediation v	will be based on ti	hese results	3.			
I hereby cert	ify that the	information g	iven above	e is true and comp	olete to t	he best of my	knowledge and	inderstand	that purs	suant to NM	IOCD	rules and
regulations a	all operators	are required:	to report a	nd/or file certain	release n	otifications a	ind perform corre	ctive action	is for rel	eases which	may e	endanger
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or the enviro	operations :	addition, NM	OCD accer	ptance of a C-141	report d	oes not relie	ve the operator of	responsibi	lity for c	ompliance	with a	ny other
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Signature:	Signature:										ام	
Approved by Environmental Specialise:								40\/	M	V , _		
Printed Nam	e: Karolina	a Blaney						\		/ ////	• •	
Title: Envir	onmental S	pecialist				Approval Da	ite: 5/8 17	Ex	piration	Date: N	A	
							·		-			
E-mail Addr	ess: Karoli	na.blancy@w	pxenergy.	com		Conditions o	of Approval:	ء اہ	ŧ	Attached) 💢	
Date: 5/4/2	017		Phone	: 970-589-0743	}	Sec	atta	che	01			
* Attach Add	itional She	ets If Neces	sary							2RP-	41	98

State of New Mexico

Incident ID	NAB1712952339
District RP	2RP-4198
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☑ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas not on an exploration, development, production, or storage site?	✓ Yes ☐ No
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil
Characterization Report Checklist: Each of the following items must be included in the report.	
 ✓ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wellow Field data ✓ Data table of soil contaminant concentration data ✓ Depth to water determination ✓ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release ✓ Boring or excavation logs 	ls.
Photographs including date and GIS information Topographic/Aerial maps	

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.

✓ Laboratory data including chain of custody

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Incident ID	NAB1712952339
District RP	2RP-4198
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.								
Printed Name: Lynda Laumbach	Title: Environmental Specialist							
Printed Name: Lynda Laumbach Signature:	Date:06/01/2021							
email: _lynda.laumbach@wpxenergy.com	Telephone: <u>575-725-1647</u>							
OCD Only								
Received by:	Date:							

140MM Page 189 of 370

Incident ID	NAB1712952339
District RP	2RP-4198
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: Each of the following items must be	included in the plan.
 ✓ Detailed description of proposed remediation technique ✓ Scaled sitemap with GPS coordinates showing delineation points ✓ Estimated volume of material to be remediated ✓ Closure criteria is to Table 1 specifications subject to 19.15.29.1 ✓ Proposed schedule for remediation (note if remediation plan times) 	2(C)(4) NMAC
Deferral Requests Only: Each of the following items must be con	firms of an mart of any many act for deformal of non-diation
Deterral Requests Omy: Each of the following tiems must be con-	firmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around predeconstruction.	oduction equipment where remediation could cause a major facility
Extents of contamination must be fully delineated.	
Contamination does not cause an imminent risk to human health	, the environment, or groundwater.
which may endanger public health or the environment. The acceptar liability should their operations have failed to adequately investigate surface water, human health or the environment. In addition, OCD a responsibility for compliance with any other federal, state, or local later.	ertain release notifications and perform corrective actions for releases nce of a C-141 report by the OCD does not relieve the operator of and remediate contamination that pose a threat to groundwater, acceptance of a C-141 report does not relieve the operator of
Printed Name:	Title:
Printed Name: Lynda Laumbach Signature:	Date:06/01/2021
email: Iynda.laumbach@wpxenergy.com	Telephone: 575-725-1647
OCD O. I	
OCD Only	
Received by:	Date:
Approved	Approval
Signature: Ashley Maxwell	Date: 3/27/2023

Variance approved for sampling every 500 sq feet.



WSP USA

3300 North "A" Street Building 1, Unit 222 Midland, Texas 79705 432.704.5178

June 1, 2021

District II New Mexico Oil Conservation Division 811 South First Street Artesia, New Mexico 88210

Re: Remediation Work Plan

RDX 17 Federal #36H/RDX 17-25

Incident Number NRM2017643736 and NAB1712952339

Eddy County, New Mexico

To Whom it May Concern:

WSP USA Inc. (WSP) (formerly LT Environmental, Inc.), on behalf of WPX Energy Permian, LLC. (WPX), presents the following Remediation Work Plan detailing site assessment and sampling activities completed to date and proposing actions to address impacted soil resulting from two releases of produced water at the RDX 17 (Site). The Site is located in Unit D, Section 17, Township 26 South, Range 30 East, in Eddy County, New Mexico (Figure 1). Based on field observations, field screening activities, and laboratory analytical results from soil sampling activities, WPX is submitting this Remediation Work Plan, describing sampling activities that have occurred and proposing additional remediation activities.

RELEASE BACKGROUND

Incident Number NRM2017643736

On June 16, 2020, a pinhole developed on a water line causing approximately 22 barrels (bbls) of produced water into a lined secondary containment. The fluids were recovered, and a subsequent visual inspection of liner integrity determined the liner was not in working condition. WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Form C-141) on June 25, 2020 and was subsequently assigned Incident Number NRM2017643736.

Incident Number NAB1712952339

On May 2, 2017, a corroded flowline resulted in the release of approximately 11 barrels (bbls) of produced water into a lined containment. A breach next to a hammer union allowed approximately 5 bbls to escape the containment, flowing into the pasture, onto an adjacent access road, and pipeline right-of-way. A hydro-vacuum truck was dispatched to the Site to recover free liquids. Approximately 6 bbls of produced water were recovered. WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and



Corrective Action Form C-141 (Form C-141) on May 5, 2017 and was subsequently assigned Incident Number NAB1712952339.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on Form C-141, Site Assessment/Characterization Form. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based a boring that was drilled by WPX on December 8, 2020, located approximately 0.4 miles east of the Site. Using a truck mounted drill rig equipped with hollow stem auger, the soil boring was advanced to a total depth of 110 feet bgs. No water was observed within the soil boring after at least 72 hours and the boring was plugged and abandoned. The boring log is included as Attachment 1.

CLOSURE CRITERIA

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

Additionally, the top four feet of reclaimed surface in the affected pasture must be comprised of non-waste containing, uncontaminated earthen material exhibiting chloride concentrations below 600 mg/kg, which was applied per NMAC 19.15.29.13.D (1), or natural background chloride concentrations if they exceed 600 mg/kg. A reclamation standard of 100 mg/kg of TPH was also applied to the affected pasture.

DELINEATION SOIL SAMPLING ACTIVITIES

Incident Number NAB1712952339

On August 27, 2020, WSP conducted Site assessment and delineation soil sampling activities. Six potholes (PH01 through PH06) were advanced via heavy equipment within the release extent as described on the Form C-141 to confirm the presence or absence of impact to soil at depth.



Delineation soil samples were collected at depths ranging from approximately 1 foot to 6 feet bgs. At least three discrete soil samples, which included the highest field screening result and the terminus, were collected from the potholes based on field screening results for volatile aromatic hydrocarbons and chloride. Soil samples were screened for volatile aromatic hydrocarbons and chloride using a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The lithologic/soil sampling logs for the boreholes are included in Attachment 2. Soil sample locations are depicted on Figure 2. Photographic documentation during assessment and delineation activities is provided in Attachment 3.

Incident Number NRM2017643736 and NAB1712952339

On October 29, 2020, WSP utilized a Shaw Tool, Ltd Portable Core Drill to install two corehole delineation points (CH01 and CH02) to determine the vertical extent of impact within the documented breached liner area to confirm vertical delineation of any impacts to soil under the containment. The coreholes were advanced to depths ranging from 6 feet to 8.5 feet bgs. Corehole soil samples were field screened, at minimum, every 2-foot interval for volatile aromatic hydrocarbons and chloride utilizing a calibrated PID and Hach® chloride QuanTab® test strips. Soil samples from CH01 and CH02 were collected from the soil interval with the highest field screening result and the terminus of the corehole. Field screening results and observations for each delineation soil sample were recorded on lithologic/soil sampling logs which are included in Attachment 2. The corehole soil sample locations are presented on Figure 2. The breached area within the lined containment was bonded and repaired by WPX in an effort to restore the integrity of the liner.

SOIL COLLECTION METHOD AND ANALYTICAL RESULTS

Each soil sample was placed directly into pre-cleaned glass jars, labeled with location, date, time, sampler, and method of analysis, and immediately placed on ice. The samples were transported to Xenco Laboratories (Xenco) in Carlsbad, New Mexico, at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures for analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH-GRO, TPH-DRO, and TPH-ORO by EPA Method 8015M/D, and chloride by EPA Method 300.0.

Laboratory analytical results for the potholes indicated that benzene, BTEX, TPH-GRO/TPH-DRO and TPH concentrations were compliant with the Closure Criteria and reclamation criteria in all delineation soil samples. Laboratory analytical results potholes indicated that chloride concentrations exceeded the reclamation criteria in delineation soil samples PH01, PH01A, PH02, PH02A, PH03, PH03A and PH06A. Laboratory analytical results for the corehole soil samples CH01 and CH02 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH and chloride concentrations were compliant with the Closure Criteria. Furthermore, off-pad impacts are delineated vertically and laterally to the east by corehole soil samples CH01 and CH02. The laboratory analytical results are summarized on Table 1 and laboratory analytical reports are included in Attachment 4.



PROPOSED WORK PLAN

Because PH06 contained chloride concentrations exceeding 600 mg/kg and was positioned outside of the release footprint, WPX proposes to investigate naturally occurring background concentrations for chloride. The background sampling area will continue to be no closer than 50 feet but no farther than 100 feet from the lateral and horizontal extent of the release. Laboratory analytical results of the chloride background concentrations may be used drive remediation and continued delineation efforts if concentrations are consistent within the background buffer or greater than the reclamation chloride concentration limit of 600 mg/kg. Figure 3 represents the background sampling area buffer that WPX will investigate.

If chloride background levels are consistently less than the 600 mg/kg for chloride, WPX will use the reclamation criteria off pad. If the reclamation standard is applied, WPX estimates up to 1,332 cubic yards of impacted soil exists at the Site within the top 4 feet of the subsurface. Due to the nature of the release (produced water containing chloride) and chloride impacts to approximately 4 feet bgs, WSP proposes excavation of the top 4 feet of the subsurface to the maximum extent allowed based on presence of active pipeline infrastructure. WSP will oversee excavation activities to remediate impacted soil as indicated by visual observations, field screening results, and depths consistent with delineation laboratory analytical results. ISoil will be excavated pursuant to NMAC 19.15.29 to ensure extent of the contaminated soils above Table I thresholds has been identified and removed. Excavated soil will then be transferred to (a) a New Mexico approved landfill facility for disposal or (b) an on-site, lined treatment cell. Non-waste containing soil, as defined by "Procedures for Implementation of the Spill Rule" (September 6, 2019), will then be used to backfill the excavation. If the on-site treatment is selected, non-waste containing soils will be treated soils with each confirmation sample testing below the most protective concentrations in Table I of 19.15.29.12 NMAC and representing no more than 100 cubic yards. Samples pulled from the treatment cell will be from the bottom 12" of the soil and evenly spaced in a grid like pattern.

Remediation associated with Incident Number NAB1712952339 will be completed through excavation of all remaining impacted soil within the release footprint and near PH06 containing chloride concentrations above the observed background concentrations or reclamation standard for the top four feet.

Additional lateral delineation is required for the release associated with Incident Number NRM2017643736 to confirm the release did not impact areas north, east, and south outside of the containment. Delineation activities will be performed simultaneously with excavation activities. If laboratory analytical results from additional delineation soil samples are compliant with the Closure Criteria or background concentrations, WPX will proceed with a closure request for Incident Number NRM2017643736.

PROPOSED SAMPLING

WPX is requesting a variance to the 200 square foot confirmation sampling requirement for the areas to be excavated, which would require an estimated 35 floor samples within the release extent, excluding sidewall samples.



Due to the large extent of the impacted area, WPX proposes increasing the confirmation sampling size to collecting a 5-point composite sample to represent each 500 square foot area. An estimated 14 confirmation samples will be collected from the excavation floor following the completion of remediation activities. Figure 4 illustrates the proposed sampling grids overlaying the representative excavation boundary, which assumes the entirety of the release footprint may need to be addressed. Each square in the grid represents a 500 square foot composite sampling area. Figure 4 does not illustrate sidewall sample locations, which will also be collected to represent 500 square feet sampling areas.

PROPOSED SCHEDULE

WPX will complete the additional proposed remediation activities and provide a follow-up report detailing all remediation activities and a request for closure or deferral within 90 days of the date of approval of this work plan by NMOCD.

If you have any questions or comments, please do not hesitate to contact Ms. Ashley Ager at (970) 385-1096.

Sincerely,

WSP USA Inc.

Joseph Hernandez

Associate Consultant, Geologist

syn S. Holy

Ashley L. Ager, P.G.

ashley L. ager

Managing Director, Geologist

cc: Lynda Laumbach, WPX

Robert Hamlet, NMOCD Victoria Venegas, NMOCD

Jim Amos, Bureau of Land Management

Attachments:

Figure 1 Site Location Map

Figure 2 Delineation Soil Sample Locations

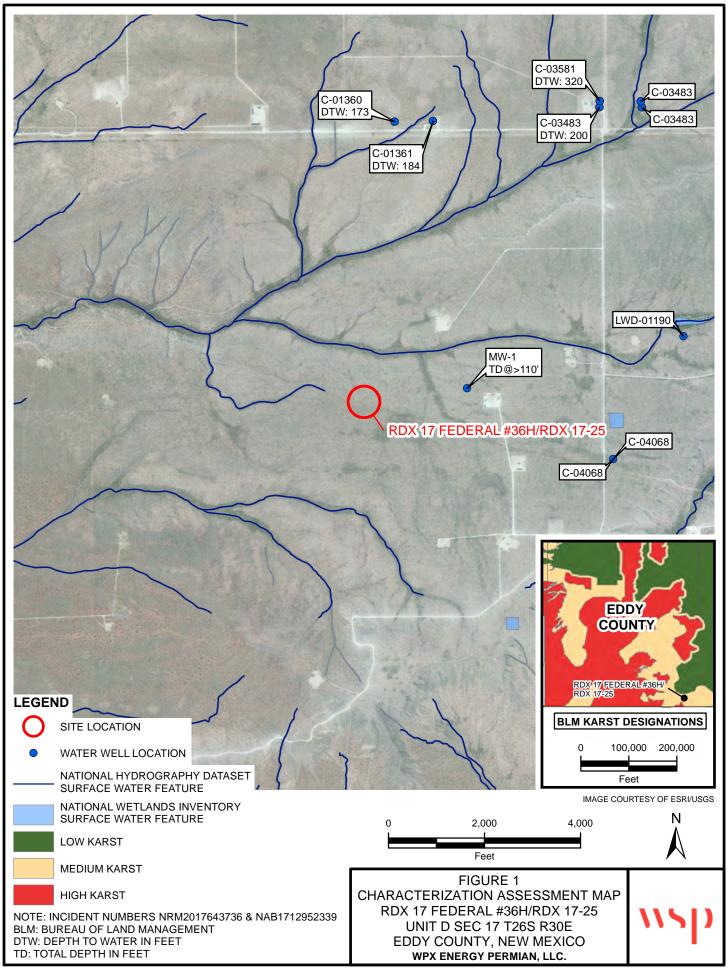
Figure 3 Buffer Sampling Area
Figure 4 Proposed Sampling Area
Table 1 Soil Analytical Results

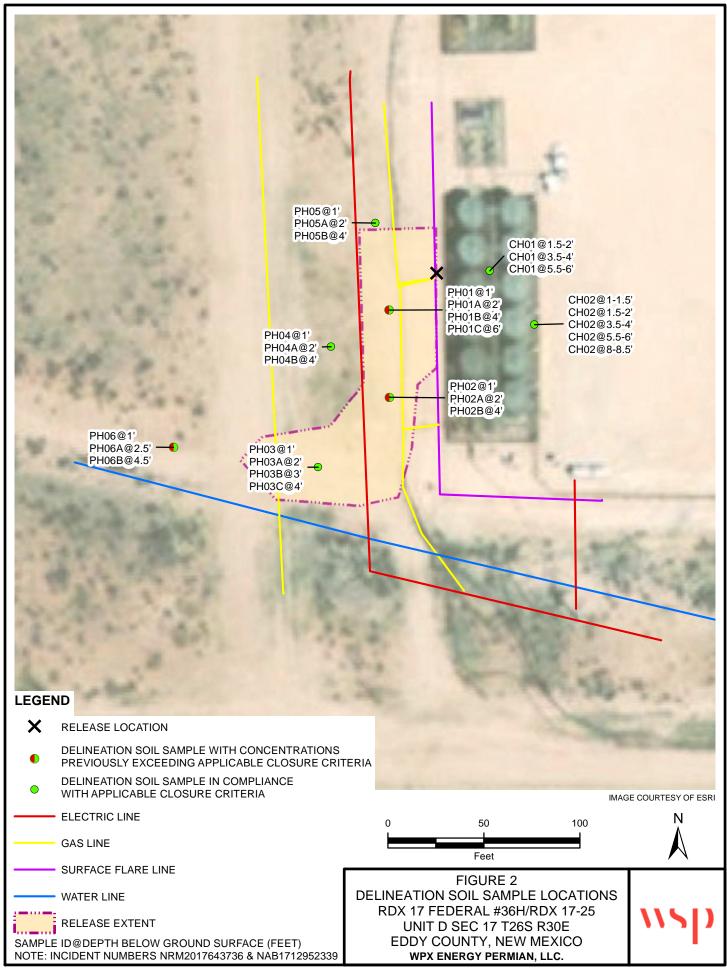
Attachment 1 Boring Log

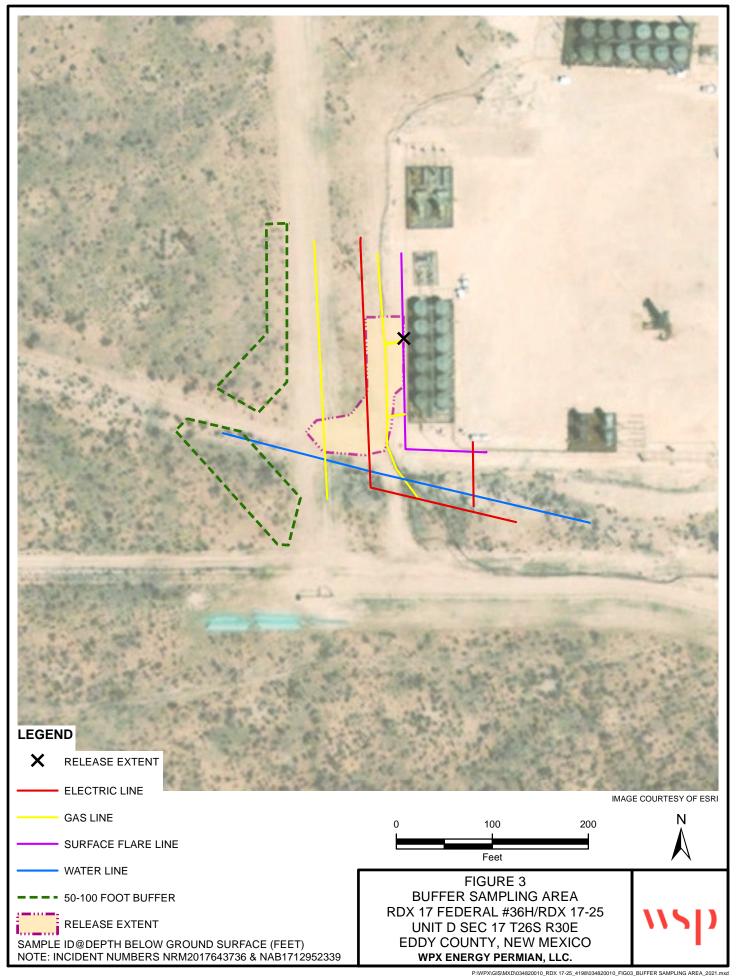
Attachment 2 Lithologic/Sampling Log

Attachment 3 Photographic Log

Attachment 4 Laboratory Analytical Reports







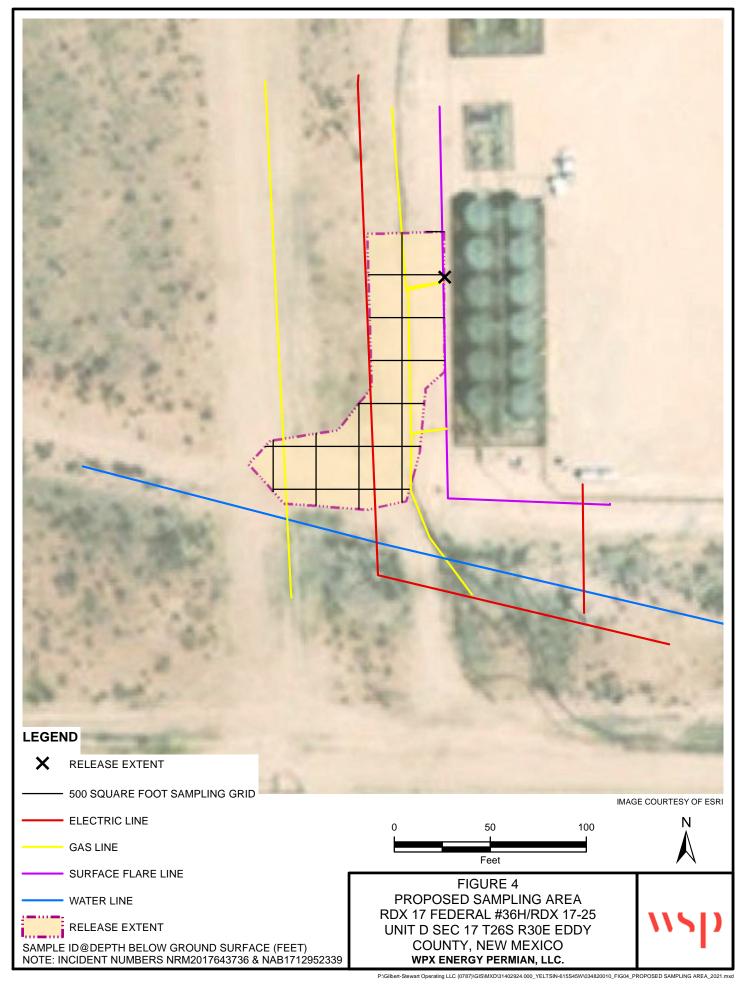


Table 1

Soil Analytical Results RDX 17 Federal #36H/RDX 17-25 Incident Number NRM2017643736 and NAB17129523392 Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1	Closure Criteria (NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Samp	les									
PH01	08/27/2020	1	< 0.00198	< 0.00198	<50.0	<50.0	<50.0	<50.0	< 50.0	12,300*
PH01A	08/27/2020	2	< 0.00200	< 0.00200	<50.1	<50.1	<50.1	<50.1	< 50.1	3,750*
PH01B	08/27/2020	4	< 0.00200	< 0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	3,720
PH01C	08/27/2020	6	< 0.00198	< 0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	6,480
PH02	08/27/2020	1	< 0.00199	< 0.00199	<49.9	69.5	<49.9	69.5	69.5	2,820*
PH02A	08/27/2020	2	< 0.00199	< 0.00199	<50.1	<50.1	<50.1	<50.1	< 50.1	17,700*
PH02B	08/27/2020	4	< 0.00200	< 0.00200	<50.0	<50.0	<50.0	<50.0	< 50.0	3,180
PH03	08/27/2020	1	< 0.00200	< 0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	1,890*
PH03A	08/27/2020	2	< 0.00202	< 0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	1,180*
РН03В	08/27/2020	3	< 0.00201	< 0.00201	<50.0	<50.0	<50.0	<50.0	< 50.0	512
PH03C	08/27/2020	4	< 0.00198	< 0.00198	<50.1	<50.1	<50.1	<50.1	< 50.1	227
PH04	08/27/2020	1	< 0.00200	< 0.00200	<50.0	<50.0	<50.0	<50.0	< 50.0	55.4
PH04A	08/27/2020	2	< 0.00200	< 0.00200	<50.0	<50.0	<50.0	<50.0	< 50.0	23.1
PH04B	08/27/2020	4	< 0.00198	< 0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	<9.92
PH05	08/27/2020	1	< 0.00198	< 0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	53.5
PH05A	08/27/2020	2	< 0.00200	< 0.00200	<50.1	<50.1	<50.1	<50.1	< 50.1	16.1
PH05B	08/27/2020	4	< 0.00199	< 0.00199	<49.8	<49.8	<49.8	<49.8	<49.8	18.0
PH06	08/27/2020	1	< 0.00200	< 0.00200	<50.2	<50.2	<50.2	<50.2	< 50.2	483
PH06A	08/27/2020	2.5	< 0.00202	< 0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	1,200*
РН06В	08/27/2020	4.5	< 0.00201	< 0.00201	< 50.0	<50.0	<50.0	< 50.0	< 50.0	969

Table 1

Soil Analytical Results RDX 17 Federal #36H/RDX 17-25 Incident Number NRM2017643736 and NAB17129523392 Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1	10	50	NE	NE	NE	1,000	2,500	20,000		
CH01	10/29/2020	1.5 - 2	< 0.00201	< 0.00201	<50.1	79.6	<50.1	79.6	79.6	344
CH01	10/29/2020	3.5 - 4	< 0.00200	< 0.00200	<13.9	16.3	<11.5	16.3	16.3	3,230
CH01	10/29/2020	5.5 - 6	< 0.00202	< 0.00202	<50.0	<50.0	<50.0	<50.0	< 50.0	606
CH02	10/29/2020	1 - 1.5	< 0.00201	0.107	<50.2	<50.2	<50.2	<50.2	< 50.2	342
CH02	10/29/2020	1.5 - 2	< 0.0196	0.594	88.2	748	59.4	896	896	660
CH02	10/29/2020	3.5 - 4	< 0.00202	0.647	60.4	298	<50.2	358	358	212
CH02	10/29/2020	5.5 - 6	< 0.00200	< 0.00200	<50.2	99.0	<50.2	99.0	99.0	148
CH02	10/29/2020	8 - 8.5	< 0.00202	< 0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	157

Notes:

ft - feet/foot

mg/kg - milligrams per kilograms

BTEX - benzene, toluene, ethylbenzene, and total xylenes

TPH - total petroleum hydrocarbons

GRO - gasoline range organics

DRO - diesel range organics

ORO - oil range organics

NMOCD - New Mexico Oil Conservation Division

NMAC - New Mexico Administrative Code

NE - Not Established

< - indicates result is less than the stated laboratory method practical quantitation limit

BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard

* - indicates sample was collected in area to be reclaimed after remediation is complete;

closure criteria for chloride concentration in the top 4 feet of soil is 600 mg/kg

\Rightarrow	<	HR CO SO	L M P L L U 1	IAN FIOI	C E N S		BORIN Boring/Well	Number: MV	W-1 /2020	Location: RDX Federal Co	om 17-44H		
Drilling Me	ethod:		Sampling l	Method:			Logged By:	12/0/	72020	Drilled By:	WPX Energy Drilled By:		
	Air Rotar	у			one			J. Lin	ın, PG	Talon L	PE		
Gravel Pacl	k Type: 0/20 Sar	nd	Gravel Pac	k Depth Into	erval: Bags		Seal Type:	one	Seal Depth Interval: None	Latitude: 32.0496	56		
Casing Typ		Diameter:		Depth Inter				Depth (ft. BGS	5):	Longitude:	.50		
PVC Screen Typ		2-inch		0-105 ft Diameter:	t bgs	Interval:		epth (ft. BGS):	10	-103.904 Depth to Water (ft. BTOC):	054 DTW Date:		
PVC	e:	Slot: 0.010-i1	nch	2-inch		110 ft	Well Iotal D		10	> 110	12/16/2020		
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Litholog	Well Completion			
0 5 10 15 20 25 30 35 40	NM	L	D	N	N	NM	CE	NS	Buff to pale pir	ık colored caliche	-		
45 50 55 60	NM	L	D	N	N	NM	SW	NS		ll graded sand with or silt			
65 70 75	NM	L	D	N	N	NM	SP	NS		orange poorly graded vith minor silt			
80 85 90	NM	L	D	N	N	NM	SW-SM SW-SC	NS		ge well-graded sand t and clay			
95 100 105	NM	L	D	N	N	NM	SP	NS		orange poorly graded or silt - TD: 110' bgs			

			•		W	SP USA		Pothole Name: Date:
\		5 H						PH01 8/27/2020
	.			Con	508 West	Stevens S	Site Name: RDX 17 Federal #36H/RDX 17-25	
				Cal	rispad, ive	ew Mexico	88220	Incident Number: NRM2017643736 and NAB1712952339
								WSP Job Number: TE034820010
		LITH	OLOG	SIC / SOII			G	Logged By: Anna Byers Method: Back Hoe
Lat/Lo	•				Field Scre	ening:		Hole Diameter: Total Depth:
	383063N, 1				Chloride	- 4.4.495.2		Not applicable 8 feet
				-				to distilled water. Values reported do not include a correction factor. ted BTEX and TPH concentrations below Closure Criteria for all initial soil samples.
vapoi	was not no	d Screene	,u (1471),	because the	laboratory	ariarytical res		ted BTEX and TITT concentrations below closure officina for all finitial soil samples.
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	(ft bas)		Lithology/Remarks
						0		
						_		
						_		harman and a sand (f.) with annual to soluble size of ancies
Dry	9,668	NA	No	PH01	1	- 1		brown, poorly-graded sand (f.) with gravel to cobble sized grains with no plasticity or odor, including root fragments
Diy	3,000	INA	140	1 1101	'	_ '	31 -31VI	I will no plasticity of odor, including foot fragments
						_		light brown to tan colored caliche; moderately cemented sand (f.)
						_		with gravel to cobble sized inclusions; odorless;
Dry	7,028	NA	No	PH01A	2	2	cche	cementation decreases with depth
						_		
						_		
Dry	8,228	NA	No		3	- 3	cche	
	0,220					_	000	
						_		
						_		
Dry	7,604	NA	No	PH01B	4	4	cche	
						_		
						_		
Drv	>2,464	NA	No		5	- 5	cche	
	,					_	000	
						_		
						_		
Dry	>2,464	NA	No	PH01C	6	6	cche	
						_		
						_		
						-		
						_		
Dry	2,208	NA	No		7.5	7.5	cche	well-cemented caliche shelf; increased finer grains
Dry	1,424	NA	No		8	8	cche	well-cemented caliche shelf

Total Depth/Back Hoe Refusal

								Pothole Name: Date:
					WS	SP USA		PH02 8/27/2020
				1	508 West S	Stevens 9	Street	Site Name: RDX 17 Federal #36H/RDX 17-25
					rlsbad, Nev			
							WSP Job Number: TE034820010	
		LITH	OLO	GIC / SOIL	L SAMPL	ING LO	G	Logged By: Anna Byers Method: Back Hoe
Lat/Lo			-		Field Scree	ening:		Hole Diameter: Total Depth:
	870579N, 1				Chloride			Not applicable 7.25 feet
								to distilled water. Values reported do not include a correction factor.
Vapor	was not flei	d screene	:d (NA),	, because the	laboratory ar	nalytical res	1	orted BTEX and TPH concentrations below Closure Criteria for all initial soil samples.
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	(ft bgs)	4 S C	Lithology/Remarks
					-	0		
Dry	9,668	NA	No	PH02	1 _	_ 1	SP-SM	brown, poorly-graded sand (f.) with gravel to cobble sized grains with no plasticity or odor, including root fragments
Dry	4,392	NA	No	PH02A	2			light brown to tan colored caliche; moderately cemented sand (f.) with gravel to cobble sized inclusions; odorless; cementation decreases with depth
Dry	2,652	NA	No		3	3 3	cche	
Dry	3,160	NA	No	PH02B	4	4	cche	
Dry	-	NA	No		5 _	_ 5 _	cche	
Dry	232	NA	No		6 <u>-</u>	<u> </u>	cche	
Dry	820	NA	No		7.25	7.25	cche	well-cemented caliche shelf; increased finer grains

Total Depth/Back Hoe Refusal

	\\')	Cai	508 West S rlsbad, Ne	w Mexico	Pothole Name: PH03 8/27/2020 Site Name: RDX 17 Federal #36H/RDX 17-25 Incident Number: NRM2017643736 and NAB1712952339 WSP Job Number: TE034820010				
Lat/Lo	na:	LITH	OLOG	SIC / SOII	L SAMPL Field Scree	Logged By: Anna Byers Method: Back Hoe Hole Diameter: Total Depth:					
	ng. 3606184N,	103.911	17449V	V	Chloride	anng.		Not applicable 4 feet			
								o distilled water. Values reported do not include a correction factor. ad BTEX and TPH concentrations below Closure Criteria for all initial soil sample	S.		
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Lithology/Remarks		
					- -	0		brown poorly graded and (f) with gravel to cabble sized gr	o in o		
Dry	824	NA	No	PH03	1 _	1		brown, poorly-graded sand (f.) with gravel to cobble sized gr with no plasticity or odor, including root fragments	allis		
Dry	1,024	NA	No	PH03	2	2	SP-SM				
Dry	<112	NA	No	PH03B	3	3	SP-SM				
Dry	<120	NA	No	PH03C	4	4	SP-SM	al Danth			

Total Depth

_		_			WC	DUCA		Pothole Name: Date:		
					WS	P USA		PH04 8/27/2020		
· ·	•			Ę	508 West S Isbad, Nev	Stevens S	Street	Site Name: RDX 17 Federal #36H/RDX 17-25		
				Car	Isbad, Nev	w Mexico	88220	Incident Number: NRM2017643736 and NAB1712952339		
								WSP Job Number: TE034820010		
	LITHOLOGIC / SOIL SAMPLING LOG Logged By: Anna Byers Method: Back Hoe									
Lat/Lo					Field Scree	ening:		Hole Diameter: Total Depth:		
	377848N, 1				Chloride			Not applicable 7.75 feet		
	Comments: Chloride field screening was conducted with a 1:4 dilution of soil to distilled water. Values reported do not include a correction factor. Vapor was not field screened (NA), because the laboratory analytical results reported BTEX and TPH concentrations below Closure Criteria for all initial soil samples.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks		
					-	0				
					-	-				
Dry	<112	NA	No	PH04	1 _	_ _ 1	SP-SM	brown, poorly-graded sand (f.) with gravel to cobble sized grains with no plasticity or odor, including root fragments		
					_	_				
Dry	<112	NA	No	PH04A	2	2	SP-SM	1		
2.,						_	0. 0			
					_					
Dn	-110	NIA	No		2	3	SP-SM			
Dry	<112	NA	No		3 _	_ 3	5P-5IVI	1		
					-	_				
					_	_				
Dry	<120	NA	No	PH04B	4	_ 4	SP-SM	light brown to tan colored caliche; poorly cemented sand (f.)		
					-	-		with gravel to cobble sized inclusions; odorless; cementation decreases with depth		
					-	_		dementation decreases with depth		
					-	_				
					_	_				
					_	_				
Dry	<120	NA	No		6	- 6	cche			
Dry	<120	INA	NO		6 _	_ 6	ccne			
					_	_				
					_	_				
					-	_				
Dry	<120	NA	No		7.75	7.75	cche	well-cemented caliche shelf; increased finer grains		
	~		-	-	-			otal Depth		

7			_		WS	P USA			Pothole Name:	Date:	
									PH05	8/27/2020	
	•			Ę	508 West S	Stevens S	street		Site Name: RDX 17 Federal #	36H/RDX 17-25	
and the second second second second second second second second second second second second second second second								Incident Number: NRM20176	43736 and NAB1712952339		
									WSP Job Number: TE034820	010	
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Anna Byers	Method: Back Hoe		
Lat/Lo	ng:				Field Scree	ening:			Hole Diameter:	Total Depth:	
	395548N, 1				Chloride				Not applicable	8 feet	
									ater. Values reported do not in		
Vapor	was not fie	ld screene	ed (NA),	because the	laboratory ar	nalytical res		ed BTEX an	d TPH concentrations below Clo	sure Criteria for all initial soil san	nples.
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		Litholog	y/Remarks	
					_	0					
					_	_					
					_	_		L		:4b	
Dry	<120	NA	No	PH05	1	- 1	SD SM		oorly-graded sand (f.) w plasticity or odor, includi	ith gravel to cobble sized	grains
DIY	<120	INA	INO	PHUS	' <u>-</u>		SP-SIVI	with no p	diasticity of odor, including	ig root fragments	
					-	-		light brov	wn to tan colored caliche	e; moderately cemented s	sand (f.)
					_	_			el to cobble sized inclus		(11)
Dry	<120	NA	No	PH05A	2	2	cche	cementa	tion decreases with dep	th	
					_	_					
					_	_					
Dry	<120	NA	No		3	3	cche				
DIY	<120	IVA	INO		3 _	_ 3	cone				
					-	-					
					_	_					
Dry	<120	NA	No	PH05B	4	4	cche				
					-	_					
					_	_					
					-	5					
					_	_					
					-	_					
						_					
Dry	<120	NA	No		6	6	cche				
					-	-					
					_	_					
					-	7					
					_						
					_	_					
	4.5		١.,								
Dry	188	NA	No		8	8	cche	consolid	ated caliche; increase o	finer sand grains	
							To	tal Depth			

									Pothole Name:	D	Pate:
			7		WS	P USA			PH06	8,	/27/2020
'				,	508 West Stevens Street				Site Name: RDX 17 Federal #36H/RDX 17-25		
				Car	rlsbad, Ne	w Mexico	88220		Incident Number: NRM2017643736 and NAB1712952339		
									WSP Job Number: TE03	34820010	
		LITH	OLOG	GIC / SOII	SAMPL	ING LO	G		Logged By: Anna Byers	N	Method: Back Hoe
Lat/Lo	•				Field Scree	ening:			Hole Diameter:		otal Depth:
	865400N,			:	Chloride	- 4.4 -1:1			Not applicable		feet
							ults report		ater. Values reported do in TPH concentrations belo		a correction ractor. Criteria for all initial soil samples.
Moisture Content	Chloride (ppm)	X X						marks			
Dry	232	NA	No	PH06	1 <u>-</u>	_ 0 - - - 1 - -	cche	with grav	vn to tan colored cal el to cobble sized in tion decreases with	nclusions	derately cemented sand (f.); odorless;
Dry	1,424	NA	No	PH06A	2.5	2.5	cche				
Dry	1,024	NA	No		3	3	cche				
Dry	844	NA	No	PH06B	4.5	- - - 4.5 - -	cche				
Dry	232	NA	No		6	6	cche				
,	*			<u>I</u>	-			tal Depth			

Released to Imaging: 8/22/2023 8:21:52 AMI

	LITHOLOGIC / SOII					P USA Stevens S w Mexico	88220		Pothole Name: CH01 Site Name: RDX 17 Fedd Incident Number: NRM20 WSP Job Number: TE03 Logged By: Anna Byers	0176437	36 and NAB1712952339
Lat/Lo	ng: 388628N, 1	102 0100	0.4.4.2\\\		Field Scree	ening:			Hole Diameter:		Total Depth:
Comm	nents: Chlo	ride field	screeni	•					Not applicable rater. Values reported do		
Vapor was not field screened (NA), because the laboratory analytical results reported BTEX and TPH content Chord (pp of the point of th								emarks			
Dry	1,740	NA NA	No	CH01	0	2 3 4 - 5		and san	decreasing cementa d (c.), moist, no odor	r	th depth, tan colored, gravel
Dry	364	NA	No	CH01	6	6	cche	Caliche,	poorly cemented, ta	ın grave	el and sand (c.)

Total Depth

									D 4 1 1:		Ī.,
,			_		WS	P USA			Pothole Name:		Date:
									CH02		10/29/2020
	V			5	508 West S Isbad, Ne	Stevens S	treet		Site Name: RDX 17 Fed		
				Car	isbad, Nei	w iviexico	88220		Incident Number: NRM2017643736 and NAB1712952339		
									WSP Job Number: TE0		ı
	LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Anna Byers	i	Method: Shaw Core Drill
Lat/Lo	ing: 380899N, 1	IN3 91080	071\//		Field Scree	ening:			Hole Diameter: Not applicable		Total Depth:
				ng was cond	Chloride ucted with a	a 1:4 dilutio	n of soil t	o distilled w		not includ	8.5 feet de a correction factor.
Comments: Chloride field screening was conducted with a 1:4 dilution of soil to distilled water. Values reported do not include a correction factor. Vapor was not field screened (NA), because the laboratory analytical results reported BTEX and TPH concentrations below Closure Criteria for all initial soil samples.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	(ft bgs)	USCS/Rock Symbol		Lith	nology/R	emarks
					0	0					
Dry Dry	224 516	NA NA	No No	CH02 CH02	1	- - - 1	cche	caliche,	well consolidated, g	gravel po	porly sorted, no odor
					3	_ 2 - - 3 - 3					
Dry	316	NA	No	CH02	4 - 5	4 - - - 5	SP	(c.), light	brown, mild odor		
Dry	148	NA	No	CH02	6	6	SP	(c.), light	brown, less odor		
Dry	120	NA	No	CH02	7 - 8	7 - 8	cche	caliche,	mod. cemented, no	odor	
						_					
							To	tal Depth			



	PHOTOGRAPHIC LOG	
WPX Energy Permian,	RDX 17 Federal #36H/RDX 17-25	TE034820010
LLC.	Eddy County, New Mexico	

Photo No.	Date
1	August 27, 2020

North view of the release area before delineation activities.

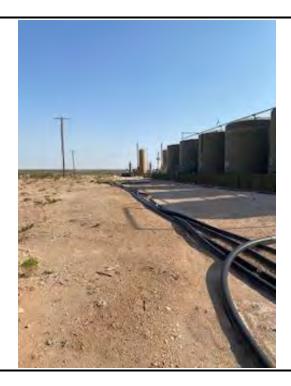


Photo No.	Date				
2	August 27, 2020				
C . 41. '	41 1				

South view of the release area before delineation activities.





	PHOTOGRAPHIC LOG	
WPX Energy Permian,	RDX 17 Federal #36H/RDX 17-25	TE034820010
LLC.	Eddy County, New Mexico	

Photo No. Date

3 August 27, 2020

East view of the release area before delineation activities.



Photo No.Date4August 27, 2020Southwest view of the Site during

delineation activities.



eurofins Environment Testing

Certificate of Analysis Summary 671316

WSP USA, Dallas, TX

Project Name: RDX 17-25

Project Id:

Contact:

034820010

Project Location:

Chris McKisson **Eddy County**

Date Received in Lab: Fri 08.28.2020 14:08

Report Date: 01.12.2021 16:10

Project Manager: Jessica Kramer

	Lab Id:	671316-0	001	671316-0	002	671316-0	003	671316-0	004	671316-0	005	671316-0)06
Analysis Requested	Field Id:	PH01		PH01	A	PH01 B	•	PH01 C	:	PH02		PH02 A	ı
Anaiysis Requesieu	Depth:	1- ft		2- ft		4- ft		6- ft		1- ft		2- ft	
	Matrix:	SOIL	,	SOIL		SOIL	,	SOIL	,	SOIL		SOIL	
	Sampled:	08.27.2020	09:19	08.27.2020 09:39		08.27.2020 12:29		08.27.2020 10:05		08.27.2020	10:15		
BTEX by EPA 8021B	Extracted:	08.28.2020	16:51	08.28.2020 16:51		08.28.2020	16:51	08.28.2020	16:51	08.28.2020	16:51	08.28.2020	16:51
	Analyzed:	08.28.2020	23:27	08.28.2020	23:47	08.29.2020	00:07	08.29.2020	01:23	08.29.2020	01:44	08.29.2020	02:04
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene	·	< 0.00198	0.00198	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00198	0.00198	< 0.00199	0.00199	< 0.00199	0.00199
Toluene		< 0.00198	0.00198	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00198	0.00198	< 0.00199	0.00199	< 0.00199	0.00199
Ethylbenzene		< 0.00198	0.00198	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00198	0.00198	< 0.00199	0.00199	< 0.00199	0.00199
m,p-Xylenes		< 0.00395	0.00395	<0.00399 <0.00200	0.00399	< 0.00399	0.00399	< 0.00397	0.00397	< 0.00398	0.00398	< 0.00398	0.00398
o-Xylene		< 0.00198			0.00200	< 0.00200	0.00200	< 0.00198	0.00198	< 0.00199	0.00199	< 0.00199	0.00199
Total Xylenes		< 0.00198	<0.00198 0.00198		0.00200	< 0.00200	0.00200	< 0.00198	0.00198	< 0.00199	0.00199	< 0.00199	0.00199
Total BTEX		< 0.00198	0.00198	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00198	0.00198	< 0.00199	0.00199	< 0.00199	0.00199
Inorganic Anions by EPA 300	Extracted:	08.28.2020	15:05	08.28.2020 15:05		08.28.2020 15:05		08.28.2020	15:05	08.28.2020	15:05	08.28.2020 15:05	
	Analyzed:	08.28.2020	19:44	08.28.2020	19:50	08.28.2020	19:55	08.28.2020 20:01		08.28.2020	20:17	08.28.2020	20:23
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		12300	198	3750	50.1	3720	50.2	6480	49.5	2820	49.9	17700	198
TPH by SW8015 Mod	Extracted:	08.28.2020	17:15	08.28.2020	17:15	08.28.2020	17:15	08.28.2020	17:15	08.28.2020	17:15	08.28.2020	17:15
	Analyzed:	08.29.2020	03:14	08.29.2020	03:35	08.29.2020	03:55	08.29.2020	04:15	08.29.2020	04:56	08.29.2020	05:16
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		< 50.0	50.0	< 50.1	50.1	<49.9	49.9	<49.9	49.9	<49.9	49.9	< 50.1	50.1
Diesel Range Organics (DRO)		< 50.0	50.0	<50.1	50.1	<49.9	49.9	<49.9	49.9	69.5	49.9	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)		< 50.0	50.0	< 50.1	50.1	<49.9	49.9	<49.9	49.9	<49.9	49.9	<50.1	50.1
Total TPH		< 50.0	50.0	< 50.1	50.1	<49.9	49.9	<49.9	49.9	69.5	49.9	<50.1	50.1

BRL - Below Reporting Limit

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





Certificate of Analysis Summary 671316 WSP USA, Dallas, TX

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Project Name: RDX 17-25

Project Id:

Project Location:

Contact:

034820010

Chris McKisson

Eddy County

Date Received in Lab: Fri 08.28.2020 14:08

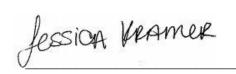
Report Date: 01.12.2021 16:10

Project Manager: Jessica Kramer

	Lab Id:	671316-0	007	671316-0	008	671316-0	009	671316-	010	671316-0	011	671316-0)12
Analysis Requested	Field Id:	PH02	В	PH03	;	PH03 A	.	PH03 E	3	PH03 C	.	PH04	
Anaiysis Requesieu	Depth:	4- ft		1- ft		2- ft		3- ft		4- ft		1- ft	
	Matrix:	SOIL	,	SOIL		SOIL	,	SOIL		SOIL		SOIL	
	Sampled:	08.27.2020	10:23	08.27.2020 10:47		11:07	08.27.2020 11:16		08.27.2020 11:22		08.27.2020	14:33	
BTEX by EPA 8021B	Extracted:	08.28.2020	16:51	08.28.2020 16:51		08.28.2020	16:51	08.28.2020	16:51	08.28.2020	16:51	08.28.2020	16:51
	Analyzed:	08.29.2020	02:24	08.29.2020	02:45	08.29.2020 03:05		08.29.2020	03:26	08.29.2020	03:46	08.29.2020	04:06
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00198	0.00198	< 0.00200	0.00200
Toluene		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00198	0.00198	< 0.00200	0.00200
Ethylbenzene		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00198	0.00198	< 0.00200	0.00200
m,p-Xylenes		< 0.00399	0.00399	< 0.00401	0.00401	< 0.00403	0.00403	< 0.00402	0.00402	< 0.00397	0.00397	< 0.00399	0.00399
o-Xylene		< 0.00200			0.00200	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00198	0.00198	< 0.00200	0.00200
Total Xylenes		<0.00200 0.00200		< 0.00200	0.00200	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00198	0.00198	< 0.00200	0.00200
Total BTEX		< 0.00200	0.00200	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00201	0.00201	< 0.00198	0.00198	< 0.00200	0.00200
Inorganic Anions by EPA 300	Extracted:	08.28.2020	15:05	08.28.2020 15:05		08.28.2020	15:05	08.28.2020	15:05	08.28.2020 15:05		08.28.2020	15:05
	Analyzed:	08.28.2020	20:29	08.28.2020	20:34	08.28.2020	20:51	08.28.2020 20:57		08.28.2020 21:02		08.28.2020	21:08
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		3180	49.7	1890	49.9	1180	49.8	512	49.9	227	9.96	55.4	9.98
TPH by SW8015 Mod	Extracted:	08.28.2020	17:15	08.28.2020	17:15	08.28.2020	17:15	08.28.2020	17:15	08.28.2020	17:15	08.28.2020	17:15
	Analyzed:	08.29.2020	05:37	08.29.2020	05:57	08.29.2020	06:17	08.29.2020	06:37	08.29.2020	06:57	08.29.2020	07:18
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		< 50.0	50.0	<49.9	49.9	<49.9	49.9	< 50.0	50.0	< 50.1	50.1	< 50.0	50.0
Diesel Range Organics (DRO)		< 50.0	50.0	<49.9	49.9	<49.9	49.9	< 50.0	50.0	< 50.1	50.1	< 50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		< 50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0	< 50.1	50.1	<50.0	50.0
Total TPH		< 50.0	50.0	<49.9	49.9	<49.9	49.9	< 50.0	50.0	<50.1	50.1	< 50.0	50.0

BRL - Below Reporting Limit

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Certificate of Analysis Summary 671316 WSP USA, Dallas, TX

WSI USA, Dallas, IA

Project Name: RDX 17-25

Project Id:

Contact:

034820010

Chris McKisson

Project Location: Eddy County

Date Received in Lab: Fri 08.28.2020 14:08

Report Date: 01.12.2021 16:10

Project Manager: Jessica Kramer

	Lab Id:	671316-0	013	671316-0	014	671316-0)15	671316-	016	671316-0	017	671316-0)18
Analysis Requested	Field Id:	PH04	A	PH04	В	PH05		PH05 A	1	PH05 B		PH06	
Anaiysis Requesieu	Depth:	2- ft		4- ft		1-		2-		4-		1-	
	Matrix:	SOIL	,	SOIL		SOIL	,	SOIL	_	SOIL		SOIL	
	Sampled:	08.27.2020	14:38	08.27.2020	14:44	08.27.2020 15:18		08.27.2020 15:23		08.27.2020 15:33		08.27.2020	16:37
BTEX by EPA 8021B	Extracted:	08.28.2020	16:51	08.28.2020 17:56		17:56	08.28.2020	17:56	08.28.2020 17:56		08.28.2020	17:56	
	Analyzed:	08.29.2020	04:27	08.29.2020	07:59	08.29.2020	08:20	08.29.2020	08:40	08.29.2020	09:01	08.29.2020	09:21
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		< 0.00200	0.00200	< 0.00198	0.00198	< 0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200
Toluene		< 0.00200	0.00200	< 0.00198	0.00198	< 0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200
Ethylbenzene		< 0.00200	0.00200	< 0.00198	0.00198	< 0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200
m,p-Xylenes		< 0.00399	0.00399	< 0.00396	0.00396	< 0.00396	0.00396	< 0.00399	0.00399	< 0.00398	0.00398	< 0.00401	0.00401
o-Xylene		<0.00200 0.00200		< 0.00198	0.00198	< 0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200
Total Xylenes		<0.00200 0.00200		< 0.00198	0.00198	< 0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200
Total BTEX		< 0.00200	0.00200	< 0.00198	0.00198	< 0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00200	0.00200
Inorganic Anions by EPA 300	Extracted:	08.28.2020	15:05	08.28.2020 17:09		08.28.2020 17:09		08.28.2020	17:09	08.28.2020	17:09	08.28.2020 17:09	
	Analyzed:	08.28.2020	21:13	08.28.2020	21:47	08.28.2020	22:04	08.28.2020 22:09		08.28.2020	22:15	08.28.2020	22:20
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		23.1	9.98	<9.92	9.92	53.5	9.96	16.1	9.98	18.0	10.1	483	202
TPH by SW8015 Mod	Extracted:	08.28.2020	17:15	08.28.2020	17:15	08.28.2020	17:00	08.28.2020	17:00	08.28.2020	17:00	08.28.2020	17:00
	Analyzed:	08.29.2020	07:38	08.29.2020	07:58	08.28.2020	18:28	08.28.2020	19:29	08.28.2020	19:49	08.28.2020	20:09
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		< 50.0	50.0	<49.8	49.8	<49.9	49.9	< 50.1	50.1	<49.8	49.8	< 50.2	50.2
Diesel Range Organics (DRO)		<50.0	50.0	<49.8	49.8	<49.9	49.9	< 50.1	50.1	<49.8	49.8	< 50.2	50.2
Motor Oil Range Hydrocarbons (MRO)		< 50.0	50.0	<49.8	49.8	<49.9	49.9	< 50.1	50.1	<49.8	49.8	< 50.2	50.2
Total TPH		< 50.0	50.0	<49.8	49.8	<49.9	49.9	< 50.1	50.1	<49.8	49.8	< 50.2	50.2

BRL - Below Reporting Limit

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

Jessica Vramer

eurofins Environment Testing

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Certificate of Analysis Summary 671316

WSP USA, Dallas, TX

Project Name: RDX 17-25

Project Id:

034820010

Date Received in Lab: Fri 08.28.2020 14:08

Contact:

Project Location:

Chris McKisson Eddy County **Report Date:** 01.12.2021 16:10

Project Manager: Jessica Kramer

	Lab Id:	671316-01	19	671316-02	20			
Analysis Requested	Field Id:	PH06 A		PH06 B				
Analysis Requested	Depth:	2.5-		4.5-				
	Matrix:	SOIL		SOIL				
	Sampled:	08.27.2020 1	6:41	08.27.2020 1	6:55			
BTEX by EPA 8021B	Extracted:	08.28.2020 1	7:56	08.28.2020 1	7:56			
	Analyzed:	08.29.2020 0	9:41	08.29.2020 1	0:02			
	Units/RL:	mg/kg	RL	mg/kg	RL			
Benzene		< 0.00202	0.00202	< 0.00201	0.00201			
Toluene		< 0.00202	0.00202	< 0.00201	0.00201			
Ethylbenzene		< 0.00202	0.00202	< 0.00201	0.00201			
m,p-Xylenes		<0.00403 0.00403		< 0.00402	0.00402			
o-Xylene	<0.00202 0.00202		0.00202		0.00201			
Total Xylenes		< 0.00202	0.00202	< 0.00201	0.00201			
Total BTEX		< 0.00202	0.00202	< 0.00201	0.00201			
Inorganic Anions by EPA 300	Extracted:	08.28.2020 1	7:09	08.28.2020 1	7:09			
	Analyzed:	08.28.2020 2	22:37	08.28.2020 2	2:43			
	Units/RL:	mg/kg	RL	mg/kg	RL			
Chloride		1200	49.5	969	9.98			
TPH by SW8015 Mod	Extracted:	08.28.2020 1	7:00	08.28.2020 1	7:00			
	Analyzed:	08.28.2020 2	20:29	08.28.2020 2	0:50			
	Units/RL:	mg/kg	RL	mg/kg	RL			
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	< 50.0	50.0			
Diesel Range Organics (DRO)		<49.8	49.8	<50.0	50.0			
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<50.0	50.0			
Total TPH		<49.8	49.8	< 50.0	50.0			

BRL - Below Reporting Limit

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

Jessian Kramer



Analytical Report 671316

for

WSP USA

Project Manager: Chris McKisson

RDX 17-25 034820010 01.12.2021

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

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

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

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



01.12.2021

Project Manager: Chris McKisson

WSP USA

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): 671316

RDX 17-25

Project Address: Eddy County

Chris McKisson:

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) 671316. 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. 671316 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,

Jessica Kramer

Jessica Vermer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 671316

WSP USA, Dallas, TX

RDX 17-25

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	08.27.2020 09:19	1 ft	671316-001
PH01 A	S	08.27.2020 09:39	2 ft	671316-002
PH01 B	S	08.27.2020 09:54	4 ft	671316-003
PH01 C	S	08.27.2020 12:29	6 ft	671316-004
PH02	S	08.27.2020 10:05	1 ft	671316-005
PH02 A	S	08.27.2020 10:15	2 ft	671316-006
PH02 B	S	08.27.2020 10:23	4 ft	671316-007
PH03	S	08.27.2020 10:47	1 ft	671316-008
PH03 A	S	08.27.2020 11:07	2 ft	671316-009
PH03 B	S	08.27.2020 11:16	3 ft	671316-010
PH03 C	S	08.27.2020 11:22	4 ft	671316-011
PH04	S	08.27.2020 14:33	1 ft	671316-012
PH04 A	S	08.27.2020 14:38	2 ft	671316-013
PH04 B	S	08.27.2020 14:44	4 ft	671316-014
PH05	S	08.27.2020 15:18	1	671316-015
PH05 A	S	08.27.2020 15:23	2	671316-016
PH05 B	S	08.27.2020 15:33	4	671316-017
PH06	S	08.27.2020 16:37	1	671316-018
PH06 A	S	08.27.2020 16:41	2.5	671316-019
PH06 B	S	08.27.2020 16:55	4.5	671316-020

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CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: WSP USA Project Name: RDX 17-25

 Project ID:
 034820010
 Report Date:
 01.12.2021

 Work Order Number(s):
 671316
 Date Received:
 08.28.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3135936 TPH by SW8015 Mod

Surrogate 1-Chlorooctane recovered above QC limits. Matrix interferences is suspected; data confirmed

by re-analysis.

Samples affected are: 671316-015 S,671316-015 SD.

WSP USA, Dallas, TX

RDX 17-25

Sample Id: **PH01** Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-001

Date Collected: 08.27.2020 09:19

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3135891

Prep Method: E300P

Tech: Analyst: MAB

MAB

Date Prep:

08.28.2020 15:05

% Moisture:

Basis:

Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12300	198	mg/kg	08.28.2020 19:44		20

Analytical Method: TPH by SW8015 Mod

DTH Tech:

Seq Number: 3135945

DTH Analyst:

Date Prep:

08.28.2020 17:15

% Moisture:

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.0	50.0		mg/kg	08.29.2020 03:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.0	50.0		mg/kg	08.29.2020 03:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.0	50.0		mg/kg	08.29.2020 03:14	U	1
Total TPH	PHC635	< 50.0	50.0		mg/kg	08.29.2020 03:14	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	95	%	70-135	08.29.2020 03:14
o-Terphenyl	84-15-1	100	%	70-135	08.29.2020 03:14

WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH01 Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-001 Date Collected: 08.27.2020 09:19 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

1,4-Difluorobenzene

Analyst: MAB Date Prep: 08.28.2020 16:51 % Moisture:

540-36-3

Seq Number: 3135888

Basis: Wet Weight

08.28.2020 23:27

70-130

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	08.28.2020 23:27	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	08.28.2020 23:27	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	08.28.2020 23:27	U	1
m,p-Xylenes	179601-23-1	< 0.00395	0.00395		mg/kg	08.28.2020 23:27	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	08.28.2020 23:27	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198		mg/kg	08.28.2020 23:27	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	08.28.2020 23:27	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	4	160-00-4	102	%	70-130	08.28.2020 23:27		

95



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RDX 17-25

Sample Id: PH01 A Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-002

Date Collected: 08.27.2020 09:39

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: Analyst: MAB MAB

% Moisture:

Seq Number: 3135891

Date Prep: 08.28.2020 15:05

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3750	50.1	mg/kg	08.28.2020 19:50		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

DTH

DTH Analyst: Seq Number: 3135945

08.28.2020 17:15 Date Prep:

% Moisture:

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.1	50.1		mg/kg	08.29.2020 03:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.1	50.1		mg/kg	08.29.2020 03:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.1	50.1		mg/kg	08.29.2020 03:35	U	1
Total TPH	PHC635	< 50.1	50.1		mg/kg	08.29.2020 03:35	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	94	%	70-135	08.29.2020 03:35
o-Terphenyl	84-15-1	98	%	70-135	08.29.2020 03:35



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RDX 17-25

Sample Id: PH01 A Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-002 Date Collected: 08.27.2020 09:39 Sample Depth: 2 ft

Prep Method: SW5035A

Analytical Method: BTEX by EPA 8021B

Tech: MAB

MAB Analyst:

Date Prep: 08.28.2020 16:51 % Moisture:

Basis: Wet Weight Seq Number: 3135888

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	08.28.2020 23:47	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	08.28.2020 23:47	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	08.28.2020 23:47	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	08.28.2020 23:47	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	08.28.2020 23:47	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	08.28.2020 23:47	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	08.28.2020 23:47	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	106	%	70-130	08.28.2020 23:47		
1,4-Difluorobenzene		540-36-3	100	%	70-130	08.28.2020 23:47		



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RDX 17-25

Sample Id: PH01 B

Matrix: Soil

Date Received:08.28.2020 14:08

Lab Sample Id: 671316-003

Date Collected: 08.27.2020 09:54

08.28.2020 15:05

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: M.

Analyst:

MAB

MAB Date Prep:

% Moisture:

Basis:

Wet Weight

Seq Number: 3135891

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3720	50.2	mg/kg	08.28.2020 19:55		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

DTH

Analyst: DTH
Seq Number: 3135945

Date Prep: 08.28.2020 17:15

% Moisture:

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9		mg/kg	08.29.2020 03:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9		mg/kg	08.29.2020 03:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9		mg/kg	08.29.2020 03:55	U	1
Total TPH	PHC635	<49.9	49.9		mg/kg	08.29.2020 03:55	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	94	%	70-135	08.29.2020 03:55
o-Terphenyl	84-15-1	98	%	70-135	08.29.2020 03:55



WSP USA, Dallas, TX

RDX 17-25

08.28.2020 16:51

Sample Id: PH01 B Matrix: Soil

Date Received:08.28.2020 14:08

Lab Sample Id: 671316-003 Date Collected: 08.27.2020 09:54

Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

WIZED

% Moisture:

Analyst: MAB

Seq Number: 3135888

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200	mg/kg	08.29.2020 00:07	U	1
Toluene	108-88-3	< 0.00200	0.00200	mg/kg	08.29.2020 00:07	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200	mg/kg	08.29.2020 00:07	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399	mg/kg	08.29.2020 00:07	U	1
o-Xylene	95-47-6	< 0.00200	0.00200	mg/kg	08.29.2020 00:07	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200	mg/kg	08.29.2020 00:07	U	1
Total BTEX		< 0.00200	0.00200	mg/kg	08.29.2020 00:07	U	1
10.00. 12.1		10.00200	0.00200		00.23.2020 00.07	C	-

Date Prep:

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	08.29.2020 00:07	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.29.2020 00:07	



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RDX 17-25

Sample Id: **PH01** C Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-004

Date Collected: 08.27.2020 12:29

Sample Depth: 6 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech:

Tech:

Analyst:

MAB

MAB

Date Prep: 08.28.2020 15:05 % Moisture:

Analyst: Seq Number: 3135891

Basis:

Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6480	49.5	mg/kg	08.28.2020 20:01		5

Analytical Method: TPH by SW8015 Mod

DTH

Seq Number: 3135945

DTH

Date Prep:

08.28.2020 17:15

% Moisture:

Prep Method: SW8015P

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9		mg/kg	08.29.2020 04:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9		mg/kg	08.29.2020 04:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9		mg/kg	08.29.2020 04:15	U	1
Total TPH	PHC635	<49.9	49.9		mg/kg	08.29.2020 04:15	U	1
Surrogate	C	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	94	%	70-135	08.29.2020 04:15
o-Terphenyl	84-15-1	98	%	70-135	08.29.2020 04:15



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RDX 17-25

Sample Id: PH01 C Matrix: Soil Date Received:08.28.2020 14:08

Date Prep:

Date Collected: 08.27.2020 12:29 Sample Depth: 6 ft

08.28.2020 16:51

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Basis: Wet Weight

Seq Number: 3135888

Lab Sample Id: 671316-004

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	08.29.2020 01:23	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	08.29.2020 01:23	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	08.29.2020 01:23	U	1
m,p-Xylenes	179601-23-1	< 0.00397	0.00397		mg/kg	08.29.2020 01:23	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	08.29.2020 01:23	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198		mg/kg	08.29.2020 01:23	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	08.29.2020 01:23	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	110	%	70-130	08.29.2020 01:23		
1,4-Difluorobenzene		540-36-3	101	%	70-130	08.29.2020 01:23		



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RDX 17-25

Sample Id: **PH02** Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-005

Date Collected: 08.27.2020 10:05

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech:

MAB

MAB Analyst:

Date Prep:

08.28.2020 15:05

% Moisture:

Seq Number: 3135891

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2820	49.9	mg/kg	08.28.2020 20:17		5

Analytical Method: TPH by SW8015 Mod

Tech:

DTH

Analyst: Seq Number: 3135945

DTH

Date Prep:

08.28.2020 17:15

% Moisture:

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9		mg/kg	08.29.2020 04:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	69.5	49.9		mg/kg	08.29.2020 04:56		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9		mg/kg	08.29.2020 04:56	U	1
Total TPH	PHC635	69.5	49.9		mg/kg	08.29.2020 04:56		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

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RDX 17-25

Sample Id: PH02 Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-005 Date Collected: 08.27.2020 10:05 Sample Depth: 1 ft

Prep Method: SW5035A

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB Date Prep: 08.28.2020 16:51 % M

% Moisture:

Seq Number: 3135888

Date Prep: 08.28.2020 16.31

Basis: Wet Weight

Parameter	Cas Numbe	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	08.29.2020 01:44	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	08.29.2020 01:44	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	08.29.2020 01:44	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	08.29.2020 01:44	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	08.29.2020 01:44	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	08.29.2020 01:44	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	08.29.2020 01:44	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	108	%	70-130	08.29.2020 01:44		
1,4-Difluorobenzene		540-36-3	101	%	70-130	08.29.2020 01:44		



WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH02 A Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-006

Date Collected: 08.27.2020 10:15

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech:

MAB

MAB Analyst:

Seq Number: 3135891

Date Prep:

08.28.2020 15:05

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17700	198	mg/kg	08.28.2020 20:23		20

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

DTH

DTH Analyst: Seq Number: 3135945

08.28.2020 17:15 Date Prep:

% Moisture:

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.1	50.1		mg/kg	08.29.2020 05:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.1	50.1		mg/kg	08.29.2020 05:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.1	50.1		mg/kg	08.29.2020 05:16	U	1
Total TPH	PHC635	< 50.1	50.1		mg/kg	08.29.2020 05:16	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	98	%	70-135	08.29.2020 05:16
o-Terphenyl	84-15-1	100	%	70-135	08.29.2020 05:16



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RDX 17-25

Sample Id: PH02 A Matrix: Soil

Soil Date Received:08.28.2020 14:08

70-130

Lab Sample Id: 671316-006 Date Collected: 08.27.2020 10:15 Sample Depth: 2 ft

540-36-3

Prep Method: SW5035A

08.29.2020 02:04

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

1,4-Difluorobenzene

Date Prep: 08.28.2020 16:51

% Moisture:

Seq Number: 3135888

Date Prep: 08.28.2020 16.31

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	08.29.2020 02:04	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	08.29.2020 02:04	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	08.29.2020 02:04	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	08.29.2020 02:04	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	08.29.2020 02:04	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	08.29.2020 02:04	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	08.29.2020 02:04	U	1
Surrogate	C	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	4	60-00-4	105	%	70-130	08.29.2020 02:04		

101



WSP USA, Dallas, TX

RDX 17-25

Sample Id: **PH02 B** Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-007

Date Collected: 08.27.2020 10:23

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech:

MAB

MAB Analyst: Seq Number: 3135891

Date Prep:

08.28.2020 15:05

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3180	49.7	mg/kg	08.28.2020 20:29		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

DTH

DTH Analyst: Seq Number: 3135945

08.28.2020 17:15 Date Prep:

% Moisture:

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.0	50.0		mg/kg	08.29.2020 05:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.0	50.0		mg/kg	08.29.2020 05:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.0	50.0		mg/kg	08.29.2020 05:37	U	1
Total TPH	PHC635	< 50.0	50.0		mg/kg	08.29.2020 05:37	U	1
Surrogate	C	as Number %	% Recovery	Units	Limits	Analysis Date	Flag	



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RDX 17-25

Sample Id: PH02 B Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-007 Date Collected: 08.27.2020 10:23 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 08.28.2020 16:51 % Moisture:

Seq Number: 3135888

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	08.29.2020 02:24	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	08.29.2020 02:24	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	08.29.2020 02:24	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	08.29.2020 02:24	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	08.29.2020 02:24	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	08.29.2020 02:24	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	08.29.2020 02:24	U	1
Surrogate	Ca	s Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	08.29.2020 02:24	
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.29.2020 02:24	

WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH03

Matrix: Soil

Date Received:08.28.2020 14:08

Lab Sample Id: 671316-008

Date Collected: 08.27.2020 10:47

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech:

Analyst:

MAB

MAB

Date Prep:

08.28.2020 15:05

% Moisture:

Basis: Wet Weight

Seq Number: 3135891

 Parameter
 Cas Number
 Result
 RL
 Units
 Analysis Date
 Flag
 Dil

 Chloride
 16887-00-6
 1890
 49.9
 mg/kg
 08.28.2020 20:34
 5

Analytical Method: TPH by SW8015 Mod

DTH

Tech: DTH

1-Chlorooctane

o-Terphenyl

Analyst: DTH
Seq Number: 3135945

Date Prep:

08.28.2020 17:15

% Moisture:

Prep Method: SW8015P

08.29.2020 05:57

08.29.2020 05:57

Basis:

70-135

70-135

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9		mg/kg	08.29.2020 05:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9		mg/kg	08.29.2020 05:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9		mg/kg	08.29.2020 05:57	U	1
Total TPH	PHC635	<49.9	49.9		mg/kg	08.29.2020 05:57	U	1
Surrogate	C	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

93

98

111-85-3

84-15-1

Wet Weight

Certificate of Analytical Results 671316

WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH03 Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-008 Date Collected: 08.27.2020 10:47 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Seq Number: 3135888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200	mg/kg	08.29.2020 02:45	U	1
Toluene	108-88-3	< 0.00200	0.00200	mg/kg	08.29.2020 02:45	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200	mg/kg	08.29.2020 02:45	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401	mg/kg	08.29.2020 02:45	U	1
o-Xylene	95-47-6	< 0.00200	0.00200	mg/kg	08.29.2020 02:45	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200	mg/kg	08.29.2020 02:45	U	1
Total BTEX		< 0.00200	0.00200	mg/kg	08.29.2020 02:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.29.2020 02:45	
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.29.2020 02:45	



WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH03 A Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-009

Date Collected: 08.27.2020 11:07

Sample Depth: 2 ft

Prep Method: E300P

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3135891

Tech: Analyst: MAB

MAB

Date Prep:

08.28.2020 15:05

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1180	49.8	mg/kg	08.28.2020 20:51		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

DTH

DTH Analyst: Seq Number: 3135945

Date Prep:

08.28.2020 17:15

% Moisture:

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9		mg/kg	08.29.2020 06:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9		mg/kg	08.29.2020 06:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9		mg/kg	08.29.2020 06:17	U	1
Total TPH	PHC635	<49.9	49.9		mg/kg	08.29.2020 06:17	U	1
Surrogate	C	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	94	%	70-135	08.29.2020 06:17
o-Terphenyl	84-15-1	98	%	70-135	08.29.2020 06:17



WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH03 A Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-009 Date Collected: 08.27.2020 11:07 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Applyot: MAB

MAB

MAB

MOSTURE: WMOisture:
Parameter	Cas Number	r Result	RL		TI:4	A l D4	El	Dil
rarameter	Cas Nullibei	r Kesuit	KL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	08.29.2020 03:05	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	08.29.2020 03:05	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	08.29.2020 03:05	U	1
m,p-Xylenes	179601-23-1	< 0.00403	0.00403		mg/kg	08.29.2020 03:05	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	08.29.2020 03:05	U	1
Total Xylenes	1330-20-7	< 0.00202	0.00202		mg/kg	08.29.2020 03:05	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	08.29.2020 03:05	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	104	%	70-130	08.29.2020 03:05		
4-Bromofluorobenzene		460-00-4	109	%	70-130	08.29.2020 03:05		



WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH03 B

Seq Number: 3135891

Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-010

Date Collected: 08.27.2020 11:16

Sample Depth: 3 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech:

Analyst:

Tech:

MAB

MAB

Date Prep:

08.28.2020 15:05

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	512	49.9	mg/kg	08.28.2020 20:57		5

Analytical Method: TPH by SW8015 Mod

DTH

DTH Analyst: Seq Number: 3135945

Date Prep:

08.28.2020 17:15

% Moisture:

Prep Method: SW8015P

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.0	50.0		mg/kg	08.29.2020 06:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.0	50.0		mg/kg	08.29.2020 06:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.0	50.0		mg/kg	08.29.2020 06:37	U	1
Total TPH	PHC635	< 50.0	50.0		mg/kg	08.29.2020 06:37	U	1
Surrogate	C	as Number	% Recovery	Units	Limits	Analysis Date	Flag	



WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH03 B Matrix: Soil

Date Received:08.28.2020 14:08

Lab Sample Id: 671316-010 Date Collected: 08.27.2020 11:16

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

MAB

Prep Method: SW5035A

Tech: MAB

Analyst:

Date Prep: 08.28.2020 16:51

% Moisture:

Seq Number: 3135888

Basis: Wet Weight

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	08.29.2020 03:26	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	08.29.2020 03:26	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	08.29.2020 03:26	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	08.29.2020 03:26	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	08.29.2020 03:26	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	08.29.2020 03:26	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	08.29.2020 03:26	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	105	%	70-130	08.29.2020 03:26		
4-Bromofluorobenzene		460-00-4	106	%	70-130	08.29.2020 03:26		

Dil



Certificate of Analytical Results 671316

WSP USA, Dallas, TX

RDX 17-25

Sample Id: **PH03** C Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-011

Date Collected: 08.27.2020 11:22

9.96

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

mg/kg

Prep Method: E300P

Tech:

Chloride

MAB

MAB Analyst: Seq Number: 3135891

Date Prep:

08.28.2020 15:05

% Moisture:

Basis: Wet Weight

08.28.2020 21:02

Analysis Date Parameter Cas Number Result RL Units Flag 227

16887-00-6

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

DTH

DTH Analyst: Seq Number: 3135945 Date Prep:

08.28.2020 17:15

% Moisture:

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.1	50.1		mg/kg	08.29.2020 06:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.1	50.1		mg/kg	08.29.2020 06:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.1	50.1		mg/kg	08.29.2020 06:57	U	1
Total TPH	PHC635	< 50.1	50.1		mg/kg	08.29.2020 06:57	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	101	%	70-135	08.29.2020 06:57
o-Terphenyl	84-15-1	105	%	70-135	08.29.2020 06:57

Wet Weight



Certificate of Analytical Results 671316

WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH03 C Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-011 Date Collected: 08.27.2020 11:22 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Seq Number: 3135888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198	mg/kg	08.29.2020 03:46	U	1
Toluene	108-88-3	< 0.00198	0.00198	mg/kg	08.29.2020 03:46	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198	mg/kg	08.29.2020 03:46	U	1
m,p-Xylenes	179601-23-1	< 0.00397	0.00397	mg/kg	08.29.2020 03:46	U	1
o-Xylene	95-47-6	< 0.00198	0.00198	mg/kg	08.29.2020 03:46	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198	mg/kg	08.29.2020 03:46	U	1
Total BTEX		< 0.00198	0.00198	mg/kg	08.29.2020 03:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	08.29.2020 03:46	
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.29.2020 03:46	

WSP USA, Dallas, TX

RDX 17-25

Sample Id: **PH04**

Seq Number: 3135891

Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-012

Date Collected: 08.27.2020 14:33

Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech:

Analyst:

MAB

MAB

Date Prep:

08.28.2020 15:05

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	55.4	9.98	mg/kg	08.28.2020 21:08		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: Analyst: DTH

Seq Number: 3135945

DTH

Date Prep:

08.28.2020 17:15

% Moisture:

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.0	50.0		mg/kg	08.29.2020 07:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.0	50.0		mg/kg	08.29.2020 07:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.0	50.0		mg/kg	08.29.2020 07:18	U	1
Total TPH	PHC635	< 50.0	50.0		mg/kg	08.29.2020 07:18	U	1
Surrogate	C	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH04 Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-012 Date Collected: 08.27.2020 14:33 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 08.28.2020 16:51 % Moisture:

Seq Number: 3135888

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	08.29.2020 04:06	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	08.29.2020 04:06	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	08.29.2020 04:06	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	08.29.2020 04:06	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	08.29.2020 04:06	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	08.29.2020 04:06	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	08.29.2020 04:06	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	100	%	70-130	08.29.2020 04:06		
1,4-Difluorobenzene		540-36-3	101	%	70-130	08.29.2020 04:06		

WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH04 A Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-013

Date Collected: 08.27.2020 14:38

Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3135891

Prep Method: E300P

Tech: Analyst: MAB

MAB

Date Prep:

08.28.2020 15:05

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Chloride	16887-00-6	23.1	9.98	mg/kg	08.28.2020 21:13		1	•

Analytical Method: TPH by SW8015 Mod

Tech:

DTH

DTH Analyst: Seq Number: 3135945

08.28.2020 17:15 Date Prep:

% Moisture:

Prep Method: SW8015P

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.0	50.0		mg/kg	08.29.2020 07:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.0	50.0		mg/kg	08.29.2020 07:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.0	50.0		mg/kg	08.29.2020 07:38	U	1
Total TPH	PHC635	< 50.0	50.0		mg/kg	08.29.2020 07:38	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	99	%	70-135	08.29.2020 07:38
o-Terphenyl	84-15-1	101	%	70-135	08.29.2020 07:38



WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH04 A Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-013 Date Collected: 08.27.2020 14:38 Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 08.28.2020 16:51 % Moisture:

Seq Number: 3135888

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	08.29.2020 04:27	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	08.29.2020 04:27	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	08.29.2020 04:27	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	08.29.2020 04:27	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	08.29.2020 04:27	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	08.29.2020 04:27	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	08.29.2020 04:27	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	100	%	70-130	08.29.2020 04:27		
4-Bromofluorobenzene		460-00-4	107	%	70-130	08.29.2020 04:27		

WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH04 B Matrix:

Date Received:08.28.2020 14:08

Lab Sample Id: 671316-014

Soil Date Collected: 08.27.2020 14:44

Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3135892

Prep Method: E300P

Tech: Analyst: MAB

MAB

Date Prep:

% Moisture:

08.28.2020 17:09

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.92	9.92	mg/kg	08.28.2020 21:47	U	1

Analytical Method: TPH by SW8015 Mod

DTH Tech:

Analyst:

DTH

Date Prep:

% Moisture: 08.28.2020 17:15

Basis:

Wet Weight

Seq Number: 3135945

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8		mg/kg	08.29.2020 07:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8		mg/kg	08.29.2020 07:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8		mg/kg	08.29.2020 07:58	U	1
Total TPH	PHC635	<49.8	49.8		mg/kg	08.29.2020 07:58	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	93	%	70-135	08.29.2020 07:58
o-Terphenyl	84-15-1	96	%	70-135	08.29.2020 07:58

WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH04 B Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-014

Date Collected: 08.27.2020 14:44

Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

MAB Tech:

Date Prep:

08.28.2020 17:56

% Moisture:

Basis: Wet Weight

I CCII.	IVII ID
Analyst:	MAB

Seq Number: 3135889

Parameter	Cas Number	Result	\mathbf{RL}		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	08.29.2020 07:59	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	08.29.2020 07:59	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	08.29.2020 07:59	U	1
m,p-Xylenes	179601-23-1	< 0.00396	0.00396		mg/kg	08.29.2020 07:59	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	08.29.2020 07:59	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198		mg/kg	08.29.2020 07:59	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	08.29.2020 07:59	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	105	%	70-130	08.29.2020 07:59		
1,4-Difluorobenzene		540-36-3	95	%	70-130	08.29.2020 07:59		



WSP USA, Dallas, TX

RDX 17-25

Sample Id: **PH05** Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-015

Date Collected: 08.27.2020 15:18

Sample Depth: 1

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: MAB

MAB

% Moisture:

Seq Number: 3135892

Analyst:

Date Prep: 08.28.2020 17:09

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	53.5	9.96	mg/kg	08.28.2020 22:04		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

DTH

DTH Analyst: Seq Number: 3135936

Date Prep: 08.28.2020 17:00 % Moisture:

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9		mg/kg	08.28.2020 18:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9		mg/kg	08.28.2020 18:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9		mg/kg	08.28.2020 18:28	U	1
Total TPH	PHC635	<49.9	49.9		mg/kg	08.28.2020 18:28	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	129	%	70-135	08.28.2020 18:28
o-Terphenyl	84-15-1	113	%	70-135	08.28.2020 18:28



WSP USA, Dallas, TX

RDX 17-25

08.28.2020 17:56

Sample Id: **PH05** Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-015 Date Collected: 08.27.2020 15:18 Sample Depth: 1

Prep Method: SW5035A

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst:

MAB Date Prep: Seq Number: 3135889

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	08.29.2020 08:20	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	08.29.2020 08:20	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	08.29.2020 08:20	U	1
m,p-Xylenes	179601-23-1	< 0.00396	0.00396		mg/kg	08.29.2020 08:20	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	08.29.2020 08:20	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198		mg/kg	08.29.2020 08:20	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	08.29.2020 08:20	U	1
Surrogate	Ca	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Fla
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.29.2020 08:20	
1,4-Difluorobenzene	540-36-3	100	%	70-130	08.29.2020 08:20	



WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH05 A Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-016

Date Collected: 08.27.2020 15:23

Sample Depth: 2

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech:

Analyst:

MAB

MAB

Date Prep:

08.28.2020 17:09

% Moisture:

Basis:

Wet Weight

Seq Number: 3135892

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.1	9.98	mg/kg	08.28.2020 22:09		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

DTH

DTH Analyst: Seq Number: 3135936

Date Prep:

08.28.2020 17:00

% Moisture:

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.1	50.1		mg/kg	08.28.2020 19:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.1	50.1		mg/kg	08.28.2020 19:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.1	50.1		mg/kg	08.28.2020 19:29	U	1
Total TPH	PHC635	< 50.1	50.1		mg/kg	08.28.2020 19:29	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	124	%	70-135	08.28.2020 19:29
o-Terphenyl	84-15-1	95	%	70-135	08.28.2020 19:29

WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH05 A

Matrix: Soil

Date Received:08.28.2020 14:08

Lab Sample Id: 671316-016

Seq Number: 3135889

Date Collected: 08.27.2020 15:23

Sample Depth: 2

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech:

Analyst:

MAB

MAB

Date Prep: 08.28.2020 17:56

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200	mg/kg	08.29.2020 08:40	U	1
Toluene	108-88-3	< 0.00200	0.00200	mg/kg	08.29.2020 08:40	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200	mg/kg	08.29.2020 08:40	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399	mg/kg	08.29.2020 08:40	U	1
o-Xylene	95-47-6	< 0.00200	0.00200	mg/kg	08.29.2020 08:40	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200	mg/kg	08.29.2020 08:40	U	1
Total BTEX		< 0.00200	0.00200	mg/kg	08.29.2020 08:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.29.2020 08:40	
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.29.2020 08:40	



WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH05 B

Matrix: Soil

Date Received:08.28.2020 14:08

Lab Sample Id: 671316-017

Date Collected: 08.27.2020 15:33

Sample Depth: 4

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3135892

Prep Method: E300P

Tech:

MAB

Analyst: MAB

Date Prep:

08.28.2020 17:09

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.0	10.1	mg/kg	08.28.2020 22:15		1

Analytical Method: TPH by SW8015 Mod

Tech:

DTH

Analyst: DTH
Seq Number: 3135936

Date Prep:

08.28.2020 17:00

% Moisture:

Prep Method: SW8015P

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8		mg/kg	08.28.2020 19:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8		mg/kg	08.28.2020 19:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8		mg/kg	08.28.2020 19:49	U	1
Total TPH	PHC635	<49.8	49.8		mg/kg	08.28.2020 19:49	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH05 B

Matrix: Soil

Date Received:08.28.2020 14:08

Lab Sample Id: 671316-017

Date Collected: 08.27.2020 15:33

Sample Depth: 4

Analytical Method: BTEX by EPA 8021B

Seq Number: 3135889

Jate Concetca: 00.27.2020 19.33

Prep Method: SW5035A

Tech: N

Analyst:

MAB MAB

Date Prep:

08.28.2020 17:56

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199	mg/kg	08.29.2020 09:01	U	1
Toluene	108-88-3	< 0.00199	0.00199	mg/kg	08.29.2020 09:01	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199	mg/kg	08.29.2020 09:01	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398	mg/kg	08.29.2020 09:01	U	1
o-Xylene	95-47-6	< 0.00199	0.00199	mg/kg	08.29.2020 09:01	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199	mg/kg	08.29.2020 09:01	U	1
Total BTEX		< 0.00199	0.00199	mg/kg	08.29.2020 09:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.29.2020 09:01	
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.29.2020 09:01	



WSP USA, Dallas, TX

RDX 17-25

Sample Id: **PH06** Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-018

Date Collected: 08.27.2020 16:37

Sample Depth: 1

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech:

MAB

MAB Analyst:

Date Prep:

08.28.2020 17:09

% Moisture:

Seq Number: 3135892

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	483	202	mg/kg	08.28.2020 22:20		20

Analytical Method: TPH by SW8015 Mod

DTH

Tech:

DTH Analyst: Seq Number: 3135936 Date Prep: 08.28.2020 17:00

% Moisture:

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.2	50.2		mg/kg	08.28.2020 20:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.2	50.2		mg/kg	08.28.2020 20:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.2	50.2		mg/kg	08.28.2020 20:09	U	1
Total TPH	PHC635	< 50.2	50.2		mg/kg	08.28.2020 20:09	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	105	%	70-135	08.28.2020 20:09
o-Terphenyl	84-15-1	93	%	70-135	08.28.2020 20:09



WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH06 Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-018 Date Collected: 08.27.2020 16:37 Sample Depth: 1

Prep Method: SW5035A

Analytical Method: BTEX by EPA 8021B

Tech: MAB

Analyst: MAB

Seq Number: 3135889

4-Bromofluorobenzene

MAB Date Prep: 08.28.2020 17:56

460-00-4

% Moisture:

Basis: Wet Weight

08.29.2020 09:21

70-130

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	08.29.2020 09:21	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	08.29.2020 09:21	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	08.29.2020 09:21	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401		mg/kg	08.29.2020 09:21	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	08.29.2020 09:21	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	08.29.2020 09:21	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	08.29.2020 09:21	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1 4-Difluorobenzene	5	540-36-3	105	%	70-130	08.29.2020.09:21		

108



WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH06 A Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-019

Date Collected: 08.27.2020 16:41

Sample Depth: 2.5

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3135892

Prep Method: E300P

Tech: Analyst: MAB

MAB

Date Prep:

08.28.2020 17:09

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1200	49.5	mg/kg	08.28.2020 22:37		5

Analytical Method: TPH by SW8015 Mod

DTH Tech:

Seq Number: 3135936

Analyst:

DTH

Date Prep:

08.28.2020 17:00

% Moisture:

Prep Method: SW8015P

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8		mg/kg	08.28.2020 20:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8		mg/kg	08.28.2020 20:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8		mg/kg	08.28.2020 20:29	U	1
Total TPH	PHC635	<49.8	49.8		mg/kg	08.28.2020 20:29	U	1
Surrogate	C	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	125	%	70-135	08.28.2020 20:29
o-Terphenyl	84-15-1	111	%	70-135	08.28.2020 20:29



WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH06 A

Matrix: Soil

Date Received:08.28.2020 14:08

Lab Sample Id: 671316-019

Date Collected: 08.27.2020 16:41

Sample Depth: 2.5

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MA

Analyst:

MAB MAB

Date Prep: 08.28.2020 17:56

% Moisture:

Seq Number: 3135889

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	08.29.2020 09:41	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	08.29.2020 09:41	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	08.29.2020 09:41	U	1
m,p-Xylenes	179601-23-1	< 0.00403	0.00403		mg/kg	08.29.2020 09:41	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	08.29.2020 09:41	U	1
Total Xylenes	1330-20-7	< 0.00202	0.00202		mg/kg	08.29.2020 09:41	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	08.29.2020 09:41	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	95	%	70-130	08.29.2020 09:41		
4-Bromofluorobenzene		460-00-4	107	%	70-130	08.29.2020 09:41		



WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH06 B Matrix: Soil Date Received:08.28.2020 14:08

Lab Sample Id: 671316-020

Date Collected: 08.27.2020 16:55

08.28.2020 17:09

Sample Depth: 4.5

Analytical Method: Inorganic Anions by EPA 300

Result

969

Prep Method: E300P

Tech:

MAB

MAB Analyst:

Date Prep:

Cas Number

16887-00-6

% Moisture:

Units

mg/kg

Parameter

Chloride

Seq Number: 3135892

Basis:

Analysis Date Flag Dil

Wet Weight

Prep Method: SW8015P

08.28.2020 22:43

Tech:

DTH

Analytical Method: TPH by SW8015 Mod

DTH Analyst: Seq Number: 3135936 Date Prep: 08.28.2020 17:00

RL

9.98

% Moisture:

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.0	50.0		mg/kg	08.28.2020 20:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.0	50.0		mg/kg	08.28.2020 20:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.0	50.0		mg/kg	08.28.2020 20:50	U	1
Total TPH	PHC635	< 50.0	50.0		mg/kg	08.28.2020 20:50	U	1
Surrogate	C	as Number %	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	97	%	70-135	08.28.2020 20:50
o-Terphenyl	84-15-1	98	%	70-135	08.28.2020 20:50



WSP USA, Dallas, TX

RDX 17-25

Sample Id: PH06 B Matrix: Soil

Date Received:08.28.2020 14:08

Lab Sample Id: 671316-020 Date Collected: 08.27.2020 16:55

Sample Depth: 4.5

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

08.28.2020 17:56 % IV

Seq Number: 3135889

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	08.29.2020 10:02	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	08.29.2020 10:02	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	08.29.2020 10:02	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	08.29.2020 10:02	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	08.29.2020 10:02	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	08.29.2020 10:02	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	08.29.2020 10:02	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	104	%	70-130	08.29.2020 10:02		
1,4-Difluorobenzene		540-36-3	101	%	70-130	08.29.2020 10:02		

Date Prep:



Flagging Criteria

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

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

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

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

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

^{**} Surrogate recovered outside laboratory control limit.

QC Summary 671316



WSP USA RDX 17-25

Analytical Method:	Inorganic Anions by EPA 300			Prep Method:	E300P
Seq Number:	3135891	Matrix:	Solid	Date Prep:	08.28.2020
MB Sample Id:	7710431-1-BLK	LCS Sample Id:	7710431-1-BKS	LCSD Sample Id:	7710431-1-BSD

RPD MB Spike LCS LCS Limits %RPD Units Analysis LCSD LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 263 105 266 90-110 20 08.28.2020 18:31 106 1 mg/kg

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P

 Seq Number:
 3135892
 Matrix:
 Solid
 Date Prep:
 08.28.2020

 MB Sample Id:
 7710432-1-BLK
 LCS Sample Id:
 7710432-1-BKS
 LCSD Sample Id:
 7710432-1-BSD

MB Spike LCS LCS LCSD LCSD Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result 08.28.2020 21:36 Chloride <10.0 250 263 105 266 106 90-110 1 20 mg/kg

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P

 Seq Number:
 3135891
 Matrix:
 Soil
 Date Prep:
 08.28.2020

 Parent Sample Id:
 671316-004
 MS Sample Id:
 671316-004 S
 MSD Sample Id:
 671316-004 SD

Spike **RPD Parent** MS MS %RPD Units MSD **MSD** Limits Analysis Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec Chloride 6480 20 08.28.2020 20:06 200 6690 105 6690 104 90-110 0 mg/kg

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P

 Seq Number:
 3135892
 Matrix:
 Soil
 Date Prep:
 08.28.2020

 Parent Sample Id:
 671316-014
 MS Sample Id:
 671316-014 S
 MSD Sample Id:
 671316-014 SD

RPD Parent Spike MS MS MSD MSD Limits %RPD Units Analysis Flag **Parameter** Result Limit Date Result Amount %Rec %Rec Result 08.28.2020 21:52 20 Chloride <9 94 199 205 103 205 103 90-110 0 mg/kg

Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P

 Seq Number:
 3135892
 Matrix:
 Soil
 Date Prep:
 08.28.2020

 Parent Sample Id:
 671325-004
 MS Sample Id:
 671325-004 S
 MSD Sample Id:
 671325-004 SD

Parent Spike MS MS Limits %RPD RPD Analysis MSD Units MSD Flag **Parameter** Result Limit Date Result Amount %Rec Result %Rec 08.28.2020 23:10 Chloride 156 199 353 99 350 97 90-110 1 20 mg/kg

Analytical Method:Inorganic Anions by EPA 300Prep Method:E300PSeq Number:3135891Matrix: SoilDate Prep:08.28.2020

Parent Sample Id: 671257-012 MS Sample Id: 671257-012 S

Spike MS MS Parent Limits Units Analysis Flag **Parameter** Result Amount Result %Rec Date 08.28.2020 18:48 90-110 mg/kg Chloride 245 201 447 100

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference [D] = 100*(C-A) / B RPD = 200* | (C-E) / (C+E) | [D] = 100*(C) / [B] Log Diff = Log (Sample Duplicate) - Log

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

Flag

Flag

QC Summary 671316



WSP USA RDX 17-25

Analytical Method:TPH by SW8015 ModPrep Method:SW8015PSeq Number:3135936Matrix:SolidDate Prep:08.28.2020

MB Sample Id: 7710466-1-BLK LCS Sample Id: 7710466-1-BKS LCSD Sample Id: 7710466-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	I
Gasoline Range Hydrocarbons (GRO)	< 50.0	1000	1080	108	1040	104	70-135	4	35	mg/kg	08.28.2020 17:48	
Diesel Range Organics (DRO)	< 50.0	1000	871	87	824	82	70-135	6	35	mg/kg	08.28.2020 17:48	
C	MB	MB	L	CS 1	LCS	LCSI	D LCS	D Li	mits	Units	Analysis	

Surrogate %Rec Flag %Rec Flag Flag Date %Rec 08.28.2020 17:48 1-Chlorooctane 102 129 117 70-135 % 08.28.2020 17:48 o-Terphenyl 80 95 86 70-135 %

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

 Seq Number:
 3135945
 Matrix:
 Solid
 Date Prep:
 08.28.2020

 MB Sample Id:
 7710492-1-BLK
 LCS Sample Id:
 7710492-1-BKS
 LCSD Sample Id:
 7710492-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Gasoline Range Hydrocarbons (GRO)	< 50.0	1000	975	98	945	95	70-135	3	35	mg/kg	08.28.2020 23:52
Diesel Range Organics (DRO)	< 50.0	1000	1080	108	1060	106	70-135	2	35	mg/kg	08.28.2020 23:52
	MR	MR	T.e	CS I	CS	LCSI	LCS	D Li	mite	Unite	Analysis

MB MB LCS **Surrogate** Flag Flag Date %Rec Flag %Rec %Rec 08.28.2020 23:52 1-Chlorooctane 120 133 129 70-135 % 08.28.2020 23:52 o-Terphenyl 126 130 125 70-135 %

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Seq Number: 3135936 Matrix: Solid Date Prep: 08.28.2020

MB Sample Id: 7710466-1-BLK

 Parameter
 MB Result
 Units Date
 Analysis Date
 Flag

 Motor Oil Range Hydrocarbons (MRO)
 <50.0</td>
 mg/kg
 08.28.2020 17:28
 8

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Seq Number: 3135945 Matrix: Solid Date Prep: 08.28.2020

MB Sample Id: 7710492-1-BLK

ParameterMB ResultUnits DateAnalysis DateFlagMotor Oil Range Hydrocarbons (MRO)<50.0mg/kg08.28.2020 23:32

Flag

Flag

Flag



WSP USA RDX 17-25

671316

 Analytical Method:
 TPH by SW8015 Mod
 Prep Method:
 SW8015P

 Seq Number:
 3135936
 Matrix:
 Soil
 Date Prep:
 08.28.2020

 Parent Sample Id:
 671316-015
 MS Sample Id:
 671316-015 SD
 MSD Sample Id:
 671316-015 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Gasoline Range Hydrocarbons (GRO)	<49.8	995	1060	107	1200	120	70-135	12	35	mg/kg	08.28.2020 18:49
Diesel Range Organics (DRO)	<49.8	995	863	87	847	85	70-135	2	35	mg/kg	08.28.2020 18:49

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	138	**	138	**	70-135	%	08.28.2020 18:49
o-Terphenyl	106		111		70-135	%	08.28.2020 18:49

 Analytical Method:
 TPH by SW8015 Mod
 Prep Method:
 SW8015P

 Seq Number:
 3135945
 Matrix:
 Soil
 Date Prep:
 08.28.2020

 Parent Sample Id:
 671309-001
 MS Sample Id:
 671309-001 S
 MSD Sample Id:
 671309-001 SD

Parent Spike MS MS MSD Limits %RPD **RPD** Units Analysis MSD **Parameter** Result Amount Result %Rec Result %Rec Limit Date 08.29.2020 00:52 Gasoline Range Hydrocarbons (GRO) < 50.2 842 84 1000 790 79 70-135 35 6 mg/kg 08.29.2020 00:52 Diesel Range Organics (DRO) < 50.2 1000 769 77 738 74 70-135 4 35 mg/kg

MS MS MSD Limits Units MSD Analysis **Surrogate** %Rec Flag Flag Date %Rec 08.29.2020 00:52 1-Chlorooctane 111 103 70-135 % 08.29.2020 00:52 o-Terphenyl 104 103 70-135 %

Analytical Method:BTEX by EPA 8021BPrep Method:SW5035ASeq Number:3135888Matrix:SolidDate Prep:08.28.2020

MB Sample Id: 7710427-1-BLK LCS Sample Id: 7710427-1-BKS LCSD Sample Id: 7710427-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	I
Benzene	< 0.00200	0.100	0.100	100	0.105	105	70-130	5	35	mg/kg	08.28.2020 18:47	
Toluene	< 0.00200	0.100	0.0951	95	0.0987	99	70-130	4	35	mg/kg	08.28.2020 18:47	
Ethylbenzene	< 0.00200	0.100	0.0996	100	0.104	104	71-129	4	35	mg/kg	08.28.2020 18:47	
m,p-Xylenes	< 0.00400	0.200	0.202	101	0.212	106	70-135	5	35	mg/kg	08.28.2020 18:47	
o-Xylene	< 0.00200	0.100	0.102	102	0.105	105	71-133	3	35	mg/kg	08.28.2020 18:47	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		96		101		70-130	%	08.28.2020 18:47
4-Bromofluorobenzene	103		99		100		70-130	%	08.28.2020 18:47

QC Summary 671316



WSP USA RDX 17-25

SW5035A Analytical Method: BTEX by EPA 8021B Prep Method: Date Prep: Seq Number: 3135889 Matrix: Solid 08.28.2020 LCS Sample Id: 7710428-1-BKS MB Sample Id: 7710428-1-BLK LCSD Sample Id: 7710428-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00200	0.100	0.0955	96	0.101	101	70-130	6	35	mg/kg	08.29.2020 06:03	
Toluene	< 0.00200	0.100	0.0901	90	0.0963	96	70-130	7	35	mg/kg	08.29.2020 06:03	
Ethylbenzene	< 0.00200	0.100	0.0920	92	0.0980	98	71-129	6	35	mg/kg	08.29.2020 06:03	
m,p-Xylenes	< 0.00400	0.200	0.186	93	0.197	99	70-135	6	35	mg/kg	08.29.2020 06:03	
o-Xylene	< 0.00200	0.100	0.0944	94	0.101	101	71-133	7	35	mg/kg	08.29.2020 06:03	
Surrogate	MB %Rec	MB Flag			LCS Flag	LCSI %Re			imits	Units	Analysis Date	
1,4-Difluorobenzene	101		10	00		100)	70	-130	%	08.29.2020 06:03	
4-Bromofluorobenzene	107		10	01		99		70	-130	%	08.29.2020 06:03	

Analytical Method: BTEX by EPA 8021B Prep Method:

Seq Number: 3135888 Matrix: Soil Date Prep: 08.28.2020 MS Sample Id: 671257-012 S MSD Sample Id: 671257-012 SD Parent Sample Id: 671257-012

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Benzene	< 0.00201	0.101	0.0919	91	0.101	101	70-130	9	35	mg/kg	08.28.2020 19:48
Toluene	< 0.00201	0.101	0.0866	86	0.0954	95	70-130	10	35	mg/kg	08.28.2020 19:48
Ethylbenzene	< 0.00201	0.101	0.0913	90	0.0987	99	71-129	8	35	mg/kg	08.28.2020 19:48
m,p-Xylenes	< 0.00402	0.201	0.185	92	0.204	101	70-135	10	35	mg/kg	08.28.2020 19:48
o-Xylene	< 0.00201	0.101	0.0892	88	0.0991	99	71-133	11	35	mg/kg	08.28.2020 19:48

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		95		70-130	%	08.28.2020 19:48
4-Bromofluorobenzene	97		102		70-130	%	08.28.2020 19:48

Prep Method: SW5035A Analytical Method: BTEX by EPA 8021B Seq Number: 3135889 Matrix: Soil Date Prep: 08.28.2020

MS Sample Id: 671316-014 S MSD Sample Id: 671316-014 SD Parent Sample Id: 671316-014

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00198	0.0990	0.0971	98	0.0891	90	70-130	9	35	mg/kg	08.29.2020 10:22	
Toluene	< 0.00198	0.0990	0.0925	93	0.0823	83	70-130	12	35	mg/kg	08.29.2020 10:22	
Ethylbenzene	< 0.00198	0.0990	0.0941	95	0.0821	83	71-129	14	35	mg/kg	08.29.2020 10:22	
m,p-Xylenes	< 0.00396	0.198	0.190	96	0.165	83	70-135	14	35	mg/kg	08.29.2020 10:22	
o-Xylene	< 0.00198	0.0990	0.0967	98	0.0807	81	71-133	18	35	mg/kg	08.29.2020 10:22	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		103		70-130	%	08.29.2020 10:22
4-Bromofluorobenzene	97		100		70-130	%	08.29.2020 10:22

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / BRPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

SW5035A

Flag

Chain of Custody

Work Order No: (071316

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334 Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasibad, NM (432) 704-5440 Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa FI (813) 620-2000 Most Table

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Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time) do lo guardi	1,0	Church Briens
	the control liated.	of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated. Relinquished by: (Signature) Received by: (Signature)	Xenco, but not analyzed	h sample submitted to	project and a charge of \$5 for each a	d to each project	Relinquished by: (Signature)
1631 / 245.1 / 7470 / 7471 : Hg		Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions	any to Xenco, its affiliate	order from client com	nstitutes a valid purchase	nt of samples co	Notice: Signature of this document and relinquishme of service. Xenco will be liable only for the cost of sa
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and the device and the	TAT et	ric	(E	900	Total Containers:	N/A	Sample Custody Seals: Yes-(No
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ENO	None: NO	9.9)	Due Date:	Due	Byers	Sampler's Name: Anna By
MeOH: Me	MeO	9)			Rush:	Country	
Preservative Codes			Pres.	tine	Routine	818	Project Number: Ø34826010
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Other:	Deliverables: EDD ☐ ADaPT ☐		abyers @ Henvicom		Email:	1 1.96	1 451-
TRAP	Reporting:Level II PST/UST TRRP Person IV	NM 88228		City, State ZIP:	SALDE	X	MIGH
s RRC Superfund	State of Project:	Vista Dr.	5315	Adc	Astreet	A	
ments	work Order Comments	Denov	WEX	Company Name:	Hock	Environmental	-1
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Page of	9-6701 WWW.xenco.com	simpa, E(013) 020-2000 West Palm Beach, FL (561) 689-6701	indition in the same				Project Manager: Tocook

tevised Date 022619 Rev. 2019.1

Chain of Custody

Work Order No: 671316

		4 2	8-28 14:68 2	80	le Littan	C	love topers
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time		Received by: (Signature)	>	Relinquished by: (Signature)
	d conditions nd the control polisited.	Nonce: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	pany to Xenco, its affiliates ar expenses incurred by the clie o Xenco, but not analyzed. The	order from client com bility for any losses or ch sample submitted t	es constitutes a valid purchase shall not assume any responsi roject and a charge of \$5 for ea	shment of samp t of samples and applied to each p	Nonce: signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assign of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced to the contract of
a Sr Ti Sn U V Zn 1631/245.1/7470/7471:Hg	K Se Ag SiO2 Na	B Cd Ca Cr Co Cu Fe Pb Mg N Cr Co Cu Pb Mn Mo Ni Se Ag T	1 Al Sb As Ba Be Sb As Ba Be Cd C	8RCRA 13PPM Texas 11 TCLP / SPLP 6010: 8RCRA 9	8RCRA TCLP/SPL	to be analy	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed
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Sample Comments	Sa		TP BTE	Depth	Date Time Sampled Sampled	Matrix	Sample Identification
received by 4:00pm	Superior		H (Total Containers:	NO N/A	Sample Custody Seals: Yes
the day received by the	TAT starts		(E	0.0	Correction Factor:	T	Yes
Zn Acetate+ NaOH: Zn	Zn Aceta		ea Ep		1-NM-00-	Z	
a)	NaOH: Na		9 A		Thermometer ID	0.8	Temperature (°C): 1. O
	HCL: HL		181 88	Qs No	Yes No Wet Ice:	Temp Blank:	SAMPLE RECEIPT 1
H2	H2S04: H2		21		Quote #:	4198	PO# 2RP-41
T (HNO3: HN)	Date:		Byers	1
o (None: NO		()			County	Project Location Eddy
Me	MeOH		Code	Ø	Routine	20010	Project Number: \$348
Preservative Codes		ANALYSIS REQUEST		Turn Around		17-25	Project Name: RDX 17
Other:	Deliverables: EDD ADaPT		@ Iteny, com	obyes	5641 Email:	894 - 5	Phone: 432 - 8
TRRP Level IV	Reporting:Level II Level III PST/UST TRRP Level IV	NW 88220	ZIP: Cartsbad	City, State ZIP:	SALDE	X	City, State ZIP: Midland
	State of Project:	Vista Dr	5315	Address:	Street	1	Address: 3570 North
RRC Superfund	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund		WAX ES	Company Name:	tal	Environmental	Company Name: LT Envi
	Work Order Comr		erent) Lynda L	Bill to: (if different)	rdez	Joseph Hernandez	Project Manager: Joseph
Page 2 of 2	D1 WWW. Xenco.com	Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasibad, NM (432) 704-5440 cenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701	Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasit Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm	04-5440 EL Paso,T	Ph	7	
		Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334	00 Dallas,TX (214) 902-030	ston, TX (281) 240-42		1000	ABOBATOBIES

Revised Date 022619 Rev. 2019.1

eurofins Environment Testing

Certificate of Analysis Summary 676679

LT Environmental, Inc., Arvada, CO

Project Name: RDX 17-25

Project Id: Contact:

034820010

Joseph Hernandez

Date Received in Lab: Mon 11.02.2020 15:50

Report Date: 11.05.2020 08:10

Project Location:

NM

Project Manager: Jessica Kramer

	Lab Id:	676679-001			
Analysis Requested	Field Id:	CH01@1.5-2'			
inalysis Requesica	Depth:	1.5-2 ft			
	Matrix:	SOIL			
	Sampled:	10.29.2020 10:00			
BTEX by EPA 8021B	Extracted:	11.03.2020 09:30			
	Analyzed:	11.03.2020 16:09			
	Units/RL:	mg/kg RL			
Benzene		< 0.00201 0.00201			
Toluene		< 0.00201 0.00201			
Ethylbenzene		< 0.00201 0.00201			
m,p-Xylenes		<0.00402 0.00402			
o-Xylene		< 0.00201 0.00201			
Total Xylenes		< 0.00201 0.00201			
Total BTEX		<0.00201 0.00201			
Chloride by EPA 300	Extracted:	11.02.2020 16:33			
	Analyzed:	11.02.2020 20:22			
	Units/RL:	mg/kg RL			
Chloride		344 9.96			
TPH by SW8015 Mod	Extracted:	11.02.2020 16:30			
	Analyzed:	11.03.2020 01:59			
	Units/RL:	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<50.1 50.1			
Diesel Range Organics (DRO)		79.6 50.1			
Motor Oil Range Hydrocarbons (MRO)		<50.1 50.1			
Total TPH		79.6 50.1			
		<u> </u>	<u> </u>		

BRL - Below Reporting Limit

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

Jessica Vramer



Analytical Report 676679

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

RDX 17-25 034820010 11.05.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



11.05.2020

Project Manager: Joseph Hernandez

LT Environmental, Inc. 4600 W. 60th Avenue Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 676679

RDX 17-25

Project Address: NM

Joseph Hernandez:

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) 676679. 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. 676679 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,

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 676679

LT Environmental, Inc., Arvada, CO

RDX 17-25

 Sample Id
 Matrix
 Date Collected
 Sample Depth
 Lab Sample Id

 CH01@1.5-2'
 S
 10.29.2020 10:00
 1.5 - 2 ft
 676679-001

Page 277 of 370

CASE NARRATIVE

eurofins Environment Testing Xenco

Client Name: LT Environmental, Inc.

Project Name: RDX 17-25

 Project ID:
 034820010
 Report Date:
 11.05.2020

 Work Order Number(s):
 676679
 Date Received:
 11.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Xenco

Certificate of Analytical Results 676679

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: CH01@1.5-2' Matrix: Soil Date Received:11.02.2020 15:50

Lab Sample Id: 676679-001

Date Collected: 10.29.2020 10:00

Sample Depth: 1.5 - 2 ft

Prep Method: E300P

Analytical Method: Chloride by EPA 300

MAB Tech:

Analyst:

MAB

Date Prep: 11.02.2020 16:33 % Moisture:

Basis:

Wet Weight

Seq Number: 3141207

Parameter Cas Number Result RL Units **Analysis Date** Flag Dil Chloride 16887-00-6 344 11.02.2020 20:22 9.96 mg/kg

Analytical Method: TPH by SW8015 Mod

Tech: MAB

CAC Analyst: Seq Number: 3141201

Date Prep: 11.02.2020 16:30 % Moisture:

Prep Method: SW8015P

Basis:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.1	50.1		mg/kg	11.03.2020 01:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	79.6	50.1		mg/kg	11.03.2020 01:59		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.1	50.1		mg/kg	11.03.2020 01:59	U	1
Total TPH	PHC635	79.6	50.1		mg/kg	11.03.2020 01:59		1
Surrogate	•	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Wet Weight

Certificate of Analytical Results 676679

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: CH01@1.5-2' Matrix: Soil Date Received:11.02.2020 15:50

Lab Sample Id: 676679-001 Date Collected: 10.29.2020 10:00 Sample Depth: 1.5 - 2 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

% Moisture: MAB Analyst: Date Prep: 11.03.2020 09:30 Basis:

Seq Number: 3141311

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	11.03.2020 16:09	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	11.03.2020 16:09	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	11.03.2020 16:09	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	11.03.2020 16:09	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	11.03.2020 16:09	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	11.03.2020 16:09	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	11.03.2020 16:09	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	102	%	70-130	11.03.2020 16:09		
4-Bromofluorobenzene		460-00-4	116	%	70-130	11.03.2020 16:09		



Flagging Criteria

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

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

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

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

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

^{**} Surrogate recovered outside laboratory control limit.

Flag

E300P

E300P

E300P

Units

11.02.2020

Analysis

QC Summary 676679

eurofins **Environment Testing** Xenco

LT Environmental, Inc.

RDX 17-25

LCSD

LCSD

Analytical Method: Chloride by EPA 300 Prep Method: Seq Number: 3141207 Matrix: Solid Date Prep:

LCS

7714384-1-BLK LCS Sample Id: 7714384-1-BKS MB Sample Id:

Spike

MB

LCSD Sample Id: 7714384-1-BSD

%RPD

Limits

RPD

Prep Method:

Parameter Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 253 101 252 90-110 0 20 11.02.2020 18:55 101 mg/kg

LCS

Analytical Method: Chloride by EPA 300

Prep Method: Seq Number: 3141207 Matrix: Soil Date Prep: 11.02.2020

676514-005 MS Sample Id: 676514-005 S MSD Sample Id: 676514-005 SD Parent Sample Id:

Parent Spike MS MS MSD MSD Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result 11.02.2020 19:11 Chloride 3690 199 3900 106 3880 95 90-110 1 20 mg/kg

Analytical Method: Chloride by EPA 300

3141207 Seq Number: Matrix: Soil Date Prep: 11.02.2020

MS Sample Id: 676679-001 S MSD Sample Id: 676679-001 SD Parent Sample Id: 676679-001

Spike **RPD Parent** MS MS %RPD Units MSD **MSD** Limits Analysis Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec Chloride 2 20 11.02.2020 20:28 344 200 530 93 542 99 90-110 mg/kg

Analytical Method: TPH by SW8015 Mod

SW8015P Prep Method: 3141201 Matrix: Solid Seq Number: Date Prep: 11.02.2020

MB Sample Id: 7714382-1-BLK LCS Sample Id: 7714382-1-BKS LCSD Sample Id: 7714382-1-BSD

MB Spike LCS LCS LCSD LCSD Limits %RPD **RPD** Units Analysis Flag **Parameter** Result Limit Date Result Amount %Rec %Rec Result Gasoline Range Hydrocarbons (GRO) 11.02.2020 18:36 91 35 < 50.0 1000 907 852 85 70-135 6 mg/kg 11.02.2020 18:36 Diesel Range Organics (DRO) 1040 104 1000 70-135 35 < 50.0 1000 100 4 mg/kg

LCS MBMB LCS LCSD Limits Units Analysis LCSD **Surrogate** Flag %Rec %Rec Flag Date Flag %Rec 11.02.2020 18:36 1-Chlorooctane 95 125 105 70-135 % 11.02.2020 18:36 o-Terphenyl 101 103 101 70-135 %

SW8015P Analytical Method: TPH by SW8015 Mod Prep Method:

Seq Number: 3141201 Matrix: Solid Date Prep: 11.02.2020

MB Sample Id: 7714382-1-BLK

MBUnits Analysis Flag **Parameter** Result Date

Motor Oil Range Hydrocarbons (MRO) 11.02.2020 18:16 < 50.0 mg/kg

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / B $RPD = 200* \mid (C-E) \mid (C+E) \mid$ [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result = MS/LCS Result = MSD/LCSD Result

MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec

Flag

Flag

Flag

QC Summary 676679

LT Environmental, Inc.

RDX 17-25

676514-007 S

Analytical Method: TPH by SW8015 Mod

3141201 Seq Number: Parent Sample Id:

676514-007

Matrix: Soil

SW8015P Prep Method:

Date Prep: 11.02.2020 MSD Sample Id: 676514-007 SD

RPD **Parent** Spike MS MS Limits %RPD Units Analysis MSD MSD **Parameter** Result Amount Result %Rec Result %Rec Limit Date Gasoline Range Hydrocarbons (GRO) < 50.2 1000 837 84 0 35 11.02.2020 19:37 838 84 70-135 mg/kg 11.02.2020 19:37 70-135 mg/kg Diesel Range Organics (DRO) < 50.2 1000 910 91 927 93 2 35

MS Sample Id:

MSD Limits Units MS MS MSD Analysis **Surrogate** %Rec Flag Flag Date %Rec 11.02.2020 19:37 1-Chlorooctane 129 133 70-135 % 11.02.2020 19:37 o-Terphenyl 118 123 70-135 %

Analytical Method: BTEX by EPA 8021B

3141311 Seq Number:

MB Sample Id:

7714461-1-BLK

Matrix: Solid

LCS Sample Id: 7714461-1-BKS

Prep Method:

SW5035A

Date Prep: 11.03.2020

LCSD Sample Id: 7714461-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Benzene	< 0.00200	0.100	0.101	101	0.106	106	70-130	5	35	mg/kg	11.03.2020 09:56
Toluene	< 0.00200	0.100	0.0955	96	0.101	101	70-130	6	35	mg/kg	11.03.2020 09:56
Ethylbenzene	< 0.00200	0.100	0.0976	98	0.102	102	71-129	4	35	mg/kg	11.03.2020 09:56
m,p-Xylenes	< 0.00400	0.200	0.197	99	0.205	103	70-135	4	35	mg/kg	11.03.2020 09:56
o-Xylene	< 0.00200	0.100	0.0967	97	0.102	102	71-133	5	35	mg/kg	11.03.2020 09:56
G	МВ	MB	L	cs I	LCS	LCSI) LCS	D Li	mits	Units	Analysis

Surrogate Flag Date %Rec %Rec Flag %Rec Flag 11.03.2020 09:56 99 1,4-Difluorobenzene 104 104 70-130 % 11.03.2020 09:56 4-Bromofluorobenzene 103 110 70-130 % 110

Analytical Method: BTEX by EPA 8021B

Seq Number: Parent Sample Id:

676514-007

3141311 Matrix: Soil

MS Sample Id: 676514-007 S

SW5035A Prep Method: Date Prep:

11.03.2020

MSD Sample Id: 676514-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	I
Benzene	< 0.00201	0.101	0.107	106	0.0886	89	70-130	19	35	mg/kg	11.03.2020 10:41	
Toluene	< 0.00201	0.101	0.0986	98	0.0879	88	70-130	11	35	mg/kg	11.03.2020 10:41	
Ethylbenzene	< 0.00201	0.101	0.0998	99	0.0910	91	71-129	9	35	mg/kg	11.03.2020 10:41	
m,p-Xylenes	< 0.00402	0.201	0.202	100	0.186	93	70-135	8	35	mg/kg	11.03.2020 10:41	
o-Xylene	< 0.00201	0.101	0.102	101	0.0943	94	71-133	8	35	mg/kg	11.03.2020 10:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		70-130	%	11.03.2020 10:41
4-Bromofluorobenzene	107		117		70-130	%	11.03.2020 10:41

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / BRPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample A = Parent Result

= MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec

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ature) Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	ignature)	Received by: (Signature)	ature)	by: (Signa	Relinquished by: (Signature)
	nces beyond the control riously negotiated.	of service. Xence will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	osses or expenses incurred by bmitted to Xenco, but not analy	any responsibility for any k ge of \$5 for each sample sub	es and shall not assume each project and a char	for the cost of samp 5.00 will be applied to	III be liable only n charge of \$75	Service. Xenco wi
	terms and conditions	Notice: Signature of this document and relinguishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions	lient company to Xenco, its affi	valid purchase order from cl	samples constitutes a	and relinguishment o	this document	stice: Signature of
1631/245.1/7470 /7471: Hg	Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn Ni Se Ag Ti U 1631/245.1/7470/74	Cd Ca Cr Co Cu Fe Cr Co Cu Pb Mn Mo	Al Sb As Ba Be B RA Sb As Ba Be Cd	\ 13PPM Texas 11 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	/ 6010 ;	Total 200.7 / 6010 Circle Method(s) a
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Sample Comments			TPH (E BTEX (Depth	Date Time Sampled Sampled	n Matrix	Sample Identification	Sample
lab, if received by 4:30pm			PA 8		Total Containers:	Yes No NA	-	Sample Custody Seals:
TAT starts the day recevied by the			802	10-2	Correction Factor:	Yes NO NA		Cooler Custody Seals:
			Mo 21B)	NMWO/	THE	Yes No		Received Intact:
			d)		Thermo	0-1 (2)		Temperature (°C):
			S	Wet ice: (Yes) No	(Yes) No	Temp Blank:	CEIPT	SAMPLE RECEIPT
				Due Date:		yers	Anna Byers	Sampler's Name:
				Rush:			Liner	P.O. Number:
				Routine 🖾		0010	034820010	Project Number:
Work Order Notes		ANALYSIS REQUEST		Turn Around		7-25	RDX 17-25	Project Name:
ADaPT L1 Other:	Deliverables: EDD		Email: jhernandez@ltenv.com & abyers@ltenv.com	mail: jhernandez@lte	E	2-2329	281-702-2329	Phone:
Ę	bvel III	Repo	Carlsbad, NM 88220	City, State ZIP:		Midland, TX 79705	Midland	City, State ZIP:
] "	Si	5315 Buena Vista Dr	Address:		3300 North A Street	3300 N	Address:
☐RP ☐rownfields f☐c		Prog	WPX Energy	Company Name:		LT Environmental, Inc.		Company Name:
Work Order Comments			Lynda Laumbach	Bill to: (if different)		Joseph Hernandez		Project Manager:
om Page of o	io) www.xenco.com	Midland,TX (432-704-8440) EL Paso,TX (915)585-3443 Lubbock,TX (606)794-1296 Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	i0) EL Paso, IX (915)585-34 Z (480-355-0900) Atlanta,GA	Midland, TX (432-704-544) 75-392-7550) Phoenix, AZ	Hobbs, NM (5	BURNICHER	WEIDEN	
		Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334	0 Dallas,TX (214) 902-0300	louston, TX (281) 240-4200	T			

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 11.02.2020 03.50.00 PM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 676679

Analyst:

Temperature Measuring device used: T NM 007

	Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		1	
#2 *Shipping container in good condition?		Yes	
#3 *Samples received on ice?		Yes	
#4 *Custody Seals intact on shipping contain	ner/ cooler?	Yes	
#5 Custody Seals intact on sample bottles?		Yes	
#6*Custody Seals Signed and dated?		Yes	
#7 *Chain of Custody present?		Yes	
#8 Any missing/extra samples?		No	
#9 Chain of Custody signed when relinquish	ned/ received?	Yes	
#10 Chain of Custody agrees with sample la	abels/matrix?	Yes	
#11 Container label(s) legible and intact?		Yes	
#12 Samples in proper container/ bottle?		Yes	
#13 Samples properly preserved?		Yes	
#14 Sample container(s) intact?		Yes	
#15 Sufficient sample amount for indicated	test(s)?	Yes	
#16 All samples received within hold time?		Yes	
#17 Subcontract of sample(s)?		N/A	
#18 Water VOC samples have zero headsp	ace?	N/A	

Must be completed fo	r after-hours deliver	y of samples	prior to placin	g in the refrigerator

	2119	
Checklist completed by:	Martha Castro	Date: 11.02.2020
Checklist reviewed by:	Jessica Vramer	Date: 11.03.2020

Jessica Kramer

PH Device/Lot#:

Page 285 of 370

Certificate of Analysis Summary 676680

LT Environmental, Inc., Arvada, CO

Project Name: RDX 17-25

Project Id: Contact: 034820010

DA 17-23

Joseph Hernandez

Date Received in Lab: Mon 11.02.2020 15:50 **Report Date:** 01.13.2021 16:20

Project Manager: Jessica Kramer

Project Location: Project Location:

	Lab Id:	676680-001			
4 1 . 5	Field Id:	CH01 @3.5-4'			
Analysis Requested	Depth:	3.5-4 ft			
	Matrix:	SOIL			
	Sampled:	10.29.2020 10:52			
BTEX by EPA 8021B	Extracted:	11.03.2020 09:30			
	Analyzed:	11.03.2020 16:32			
	Units/RL:	mg/kg RL			
Benzene		<0.00200 0.00200			
Toluene		<0.00200 0.00200			
Ethylbenzene		< 0.00200 0.00200			
m,p-Xylenes		< 0.00400 0.00400			
o-Xylene		< 0.00200 0.00200			
Total Xylenes		< 0.00200 0.00200			
Total BTEX		< 0.00200 0.00200			
Chloride by EPA 300	Extracted:	11.02.2020 16:33			
	Analyzed:	11.02.2020 20:39			
	Units/RL:	mg/kg RL			
Chloride		3230 49.9			
TPH by SW8015 Mod	Extracted:	11.02.2020 16:30			
	Analyzed:	11.03.2020 02:18			
	Units/RL:	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<13.9 50.1			
Diesel Range Organics (DRO)		16.3 J 50.1			
Motor Oil Range Hydrocarbons (MRO)		<11.5 50.1			
Total TPH		16.3 J 50.1			

BRL - Below Reporting Limit

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

Jessica Vramer



Analytical Report 676680

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

RDX 17-25 034820010 01.13.2021

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

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

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

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



01.13.2021

Project Manager: **Joseph Hernandez LT Environmental, Inc.** 4600 W. 60th Avenue

Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 676680

RDX 17-25
Project Address:

Joseph Hernandez:

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) 676680. 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. 676680 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,

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 676680

LT Environmental, Inc., Arvada, CO

RDX 17-25

 Sample Id
 Matrix
 Date Collected
 Sample Depth
 Lab Sample Id

 CH01 @3.5-4'
 S
 10.29.2020 10:52
 3.5 - 4 ft
 676680-001

Page 289 of 370

CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: LT Environmental, Inc.

Project Name: RDX 17-25

 Project ID:
 034820010
 Report Date:
 01.13.2021

 Work Order Number(s):
 676680
 Date Received:
 11.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Xenco

Certificate of Analytical Results 676680

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: **CH01** @**3.5-4**'

Matrix: Soil

Date Received:11.02.2020 15:50

Lab Sample Id: 676680-001

Date Collected: 10.29.2020 10:52

Sample Depth: 3.5 - 4 ft

Prep Method: E300P

Analytical Method: Chloride by EPA 300

Tech: MAB

MAB

Date Prep: 11.02.2020 16:33

% Moisture:

Seq Number: 3141207

Analyst:

Tech:

Basis: Wet Weight

Prep Method: SW8015P

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3230	49.9	mg/kg	11.02.2020 20:39		5

Analytical Method: TPH by SW8015 Mod

MAB

Analyst: CAC Seq Number: 3141201

Date Prep:

Prep: 11.02.2020 16:30

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<13.9	50.1		mg/kg	11.03.2020 02:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	16.3	50.1		mg/kg	11.03.2020 02:18	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<11.5	50.1		mg/kg	11.03.2020 02:18	U	1
Total TPH	PHC635	16.3	50.1		mg/kg	11.03.2020 02:18	J	1
Surrogate	C	as Number	% Recovery	Units	Limits	Analysis Date	Flag	

Wet Weight

Xenco

Certificate of Analytical Results 676680

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: CH01 @3.5-4' Matrix: Soil Date Received:11.02.2020 15:50

Lab Sample Id: 676680-001 Date Collected: 10.29.2020 10:52 Sample Depth: 3.5 - 4 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Seq Number: 3141311

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200	mg/kg	11.03.2020 16:32	U	1
Toluene	108-88-3	< 0.00200	0.00200	mg/kg	11.03.2020 16:32	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200	mg/kg	11.03.2020 16:32	U	1
m,p-Xylenes	179601-23-1	< 0.00400	0.00400	mg/kg	11.03.2020 16:32	U	1
o-Xylene	95-47-6	< 0.00200	0.00200	mg/kg	11.03.2020 16:32	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200	mg/kg	11.03.2020 16:32	U	1
Total BTEX		< 0.00200	0.00200	mg/kg	11.03.2020 16:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	11.03.2020 16:32	
4-Bromofluorobenzene	460-00-4	115	%	70-130	11.03.2020 16:32	



Flagging Criteria

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

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

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

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

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

^{**} Surrogate recovered outside laboratory control limit.

Limits

LCSD

Flag

Flag

Flag



LT Environmental, Inc.

RDX 17-25

Analytical Method: Chloride by EPA 300

Seq Number: 3141207

MB Sample Id:

7714384-1-BLK

Matrix: Solid LCS Sample Id: 7714384-1-BKS

E300P Prep Method:

Date Prep: 11.02.2020

LCSD Sample Id: 7714384-1-BSD

LCS MB Spike LCS LCSD **Parameter**

RPD %RPD Units Analysis

Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 253 101 252 90-110 0 20 11.02.2020 18:55 101 mg/kg

Analytical Method: Chloride by EPA 300

Seq Number: 3141207

Matrix: Soil

Prep Method: Date Prep: 11.02.2020

E300P

676514-005 MS Sample Id: Parent Sample Id:

676514-005 S

MSD Sample Id: 676514-005 SD

Parent Spike MS MS MSD MSD Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result

11.02.2020 19:11 Chloride 3690 199 3900 106 3880 95 90-110 1 20 mg/kg

Analytical Method: Chloride by EPA 300

3141207 Seq Number:

Matrix: Soil

Prep Method:

E300P

MS Sample Id: 676679-001 S Parent Sample Id: 676679-001

Date Prep: 11.02.2020

MSD Sample Id: 676679-001 SD Spike **RPD Parent** MS MS %RPD Units MSD **MSD** Limits Analysis

Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec Chloride 2 20 11.02.2020 20:28 344 200 530 93 542 99 90-110 mg/kg

Analytical Method: TPH by SW8015 Mod

3141201 Seq Number:

Matrix: Solid

Prep Method:

SW8015P

Date Prep: 11.02.2020

MB Sample Id: 7714382-1-BLK LCS Sample Id: 7714382-1-BKS LCSD Sample Id: 7714382-1-BSD

MB Spike LCS LCS LCSD LCSD Limits %RPD **RPD** Units Analysis **Parameter** Result Limit Date Result Amount %Rec %Rec Result Gasoline Range Hydrocarbons (GRO) 11.02.2020 18:36 91 35 <139 1000 907 852 85 70-135 6 mg/kg 11.02.2020 18:36 Diesel Range Organics (DRO) 1040 104 1000 70-135 35 <11.5 1000 100 4 mg/kg

LCS MBMB LCS LCSD Limits Units Analysis LCSD **Surrogate** Flag %Rec %Rec Flag Date Flag %Rec 11.02.2020 18:36 1-Chlorooctane 95 125 105 70-135 % 11.02.2020 18:36 o-Terphenyl 101 103 101 70-135 %

Analytical Method: TPH by SW8015 Mod

Seq Number: 3141201

Motor Oil Range Hydrocarbons (MRO)

Matrix: Solid

Prep Method: Date Prep: SW8015P

MB Sample Id: 7714382-1-BLK

MB**Parameter** Result

11.02.2020

Units

Analysis

Date 11.02.2020 18:16 mg/kg

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / B $RPD = 200* \mid (C-E) \mid (C+E) \mid$ [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

<11.5

LCS = Laboratory Control Sample = Parent Result

= MS/LCS Result = MSD/LCSD Result MS = Matrix Spike B = Spike AddedD = MSD/LCSD % Rec

Flag

QC Summary 676680

LT Environmental, Inc.

RDX 17-25

Analytical Method: TPH by SW8015 Mod

Seg Number: 3141201 Parent Sample Id:

676514-007

Matrix: Soil

SW8015P Prep Method:

Date Prep: 11.02.2020

MSD Sample Id: 676514-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Gasoline Range Hydrocarbons (GRO)	<13.9	1000	837	84	838	84	70-135	0	35	mg/kg	11.02.2020 19:37
Diesel Range Organics (DRO)	<11.5	1000	910	91	927	93	70-135	2	35	mg/kg	11.02.2020 19:37

MS Sample Id: 676514-007 S

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		133		70-135	%	11.02.2020 19:37
o-Terphenyl	118		123		70-135	%	11.02.2020 19:37

Analytical Method: BTEX by EPA 8021B

3141311 Seq Number:

MB Sample Id:

7714461-1-BLK

Matrix: Solid

LCS Sample Id: 7714461-1-BKS

Prep Method:

SW5035A

Date Prep: 11.03.2020

LCSD Sample Id:

7714461-1-BSD

MB Spike LCS LCS LCSD Limits %RPD **RPD** Units Analysis LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date

11.03.2020 09:56 < 0.00200 0.100 0.101 101 0.106 5 35 Benzene 106 70-130 mg/kg 11.03.2020 09:56 Toluene < 0.00200 0.100 0.0955 96 0.101 101 70-130 6 35 mg/kg 11.03.2020 09:56 Ethylbenzene < 0.00200 0.100 0.0976 98 0.102 102 71-129 4 35 mg/kg 11.03.2020 09:56 m,p-Xylenes < 0.00400 0.200 0.197 99 0.205 103 70-135 4 35 mg/kg 11.03.2020 09:56 < 0.00200 0.100 0.0967 97 0.102 102 71-133 5 35 o-Xylene mg/kg

MB MB LCS LCS LCSD Limits Units LCSD Analysis Surrogate %Rec Flag %Rec Flag Flag Date %Rec 11.03.2020 09:56 1,4-Difluorobenzene 104 99 104 70-130 % 11.03.2020 09:56 4-Bromofluorobenzene 103 70-130 % 110 110

SW5035A Analytical Method: BTEX by EPA 8021B Prep Method:

Seg Number: 3141311 Matrix: Soil Date Prep: 11.03.2020 676514-007 MS Sample Id: 676514-007 S MSD Sample Id: 676514-007 SD Parent Sample Id:

RPD **Parent** Spike MS MS MSD MSD Limits %RPD Units Analysis Flag **Parameter** Limit Date Result Amount Result %Rec %Rec Result 11.03.2020 10:41 < 0.00201 0.101 0.107 106 0.0886 70-130 19 35 Benzene 89 mg/kg 11.03.2020 10:41 70-130 35 Toluene < 0.00201 0.101 0.0986 98 0.0879 88 11 mg/kg Ethylbenzene < 0.00201 0.101 0.0998 99 0.0910 91 71-129 9 35 11.03.2020 10:41 mg/kg 0.202 100 35 11.03.2020 10:41 m,p-Xylenes < 0.00402 0.201 0.186 93 70-135 8 mg/kg < 0.00201 0.101 0.102 101 0.0943 71-133 8 35 mg/kg 11.03.2020 10:41 o-Xylene 94

MS MS **MSD MSD** Limits Units Analysis Surrogate Flag Date Flag %Rec %Rec 11.03.2020 10:41 1,4-Difluorobenzene 100 101 70-130 % 11.03.2020 10:41 4-Bromofluorobenzene 107 117 70-130 %

E = MSD/LCSD Result

					<		,
		4 2	14015:50	1	7	(Clark By
re) Date/Time	re) Received by: (Signature)	Relinquished by: (Signature)	Date/Time		Received by: (Signature)	nature)	Relinquished by: (Signature)
	s. It assigns standard terms and conditions are due to circumstances beyond the control enforced unless previously negotiated.	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	client company to Xenco, losses or expenses incu ubmitted to Xenco, but no	d purchase order from y responsibility for any of \$5 for each sample s	samples constitutes a vali s and shall not assume an ach project and a charge o	ent and relinquishment of solution of the cost of sample \$75,00 will be applied to e	tice: Signature of this docum- service. Xenco will be liable of Xenco. Aminimum charge of
SiO2 Na Sr Tl Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg	Ag SiO2	Be B Cd Ca Cr Co Cu Fe Pb Mg Mr 3e Cd Cr Co Cu Pb Mn Mo Ni Se Ag	1 Al Sb As Ba Be B RA Sb As Ba Be Cd	RCRA 13PPM Texas 11 . TCLP / SPLP 6010: 8RCRA	8RCRA 1yzed TCLP/	200.8 / 6020: d Metal(s) to be ana	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed
	/	/					
		×	× ×	3.5-4'	10/20/20 1025	41 5	CHO 6 3.5
Sample Comments		Chlorid	Numb TPH (E BTEX (Depth	Date Time Sampled Sampled	tion Matrix	Sample Identification
lab, if received by 4:30pm		de (E	PA 8	ers:	Total Containers:	Yes (No N/A	Sample Custody Seals:
TAT starts the day recevied by the		PA 3	015	tor: -0-7	Correction Factor:	Yes (NO N/A	Cooler Custody Seals:
		000.0	Mod	07	HUNO	Yes No	Received Intact:
)		eter ID	Thermometer ID	1-2/10	Temperature (°C):
				lce: (Yes) No	Yes No Wet Ice:	Temp Blank:	SAMPLE RECEIPT
				Due Date:	D	Anna Byers	Sampler's Name: Ann
				Rush:	Z		P.O. Number: Liner
				Routine 😾	R	034820010	Project Number: 034
Work Order Notes	EST	ANALYSIS REQUEST		Turn Around		RDX 17-25	Project Name: RD)
ADaPT Other:	Deliverables: EDD	@ltenv.com	jhernandez@ltenv.com & abyers@ltenv.com	Email: jhernandez@	En	281-702-2329	Phone: 281
DT/UST TDRP LDeLIV [Reporting:Level II	88220	Carlsbad, NM 88220	City, State ZIP:		Midland, TX 79705	City, State ZIP: Mid
	State of Project:	ista Dr		Address:		3300 North A Street	
fields F☐c ¶perfund	Program: UST/PST ☐RP ☐rownfields F☐C			Company Name:		LT Environmental, Inc.	
Comments	Work Order Comments	ich	t) Lynda Laumbach	Bill to: (if different)		Joseph Hernandez	Project Manager: Jos
Page of	620-2000) <u>www.xenco.com</u>	Midland, IX (432-744-3440) EL Paso, IX (915)585-3443 Lubbock, IX (606)794-1296 Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	AZ (480-355-0900) Att	5-392-7550) Phoenix	Hobbs,NM (57:		2000
		Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334	200 Dallas,TX (214) 90	uston, TX (281) 240-4	. H	A BITTO A TITLE OF	
0.	ANOIN CITIES INC.	Citatil of Custody	CHICALL C				

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 11.02.2020 03.50.00 PM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 676680

Analyst:

Temperature Measuring device used: TNM007

Date: 11.03.2020

	Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		1	
#2 *Shipping container in good condition?		Yes	
#3 *Samples received on ice?		Yes	
#4 *Custody Seals intact on shipping contain	ner/ cooler?	Yes	
#5 Custody Seals intact on sample bottles?		Yes	
#6*Custody Seals Signed and dated?		Yes	
#7 *Chain of Custody present?		Yes	
#8 Any missing/extra samples?		No	
#9 Chain of Custody signed when relinquish	ed/ received?	Yes	
#10 Chain of Custody agrees with sample la	bels/matrix?	Yes	
#11 Container label(s) legible and intact?		Yes	
#12 Samples in proper container/ bottle?		Yes	
#13 Samples properly preserved?		Yes	
#14 Sample container(s) intact?		Yes	
#15 Sufficient sample amount for indicated t	est(s)?	Yes	
#16 All samples received within hold time?		Yes	
#17 Subcontract of sample(s)?		N/A	
#18 Water VOC samples have zero headspa	ace?	N/A	

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

Checklist completed by:	Martha Castro	Date: 11.02.2020	_
Chacklist reviewed by:	locainen Weamer		

Jessica Kramer

PH Device/Lot#:

eurofins Environment Testing

Page 297 of 370

Certificate of Analysis Summary 676707

LT Environmental, Inc., Arvada, CO

Project Name: RDX 17-25

Project Id:

034820010

Date Received in Lab: Mon 11.02.2020 15:50

Contact:

Joseph Hernandez

Report Date: 11.04.2020 12:59

Project Location:

NM

Project Manager: Jessica Kramer

	Lab Id:	676707-001				
Analysis Requested	Field Id:	CH01 @ 5.5-6'				
Thulysis Requesicu	Depth:	5.5-6 ft				
	Matrix:	SOIL				
	Sampled:	10.29.2020 10:55				
BTEX by EPA 8021B	Extracted:	11.03.2020 14:07				
	Analyzed:	11.03.2020 17:47				
	Units/RL:	mg/kg RL				
Benzene		< 0.00202 0.00202				
Toluene		<0.00202 0.00202				
Ethylbenzene		<0.00202 0.00202				
m,p-Xylenes		<0.00403 0.00403				
o-Xylene		<0.00202 0.00202				
Total Xylenes		<0.00202 0.00202				
Total BTEX		<0.00202 0.00202				
Inorganic Anions by EPA 300	Extracted:	11.03.2020 13:00				
	Analyzed:	11.03.2020 15:21				
	Units/RL:	mg/kg RL				
Chloride		606 49.9				
TPH by SW8015 Mod	Extracted:	11.03.2020 13:27				
	Analyzed:	11.03.2020 16:21				
	Units/RL:	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	_	_		
Diesel Range Organics (DRO)		<50.0 50.0				
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0				
Total TPH		<50.0 50.0				
Diesel Range Organics (DRO) Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0 <50.0 50.0				

BRL - Below Reporting Limit

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

Jessica Weamer



Analytical Report 676707

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

RDX 17-25 034820010 11.04.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



11.04.2020

Project Manager: Joseph Hernandez

LT Environmental, Inc. 4600 W. 60th Avenue Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 676707

RDX 17-25

Project Address: NM

Joseph Hernandez:

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) 676707. 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. 676707 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,

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 676707

LT Environmental, Inc., Arvada, CO

RDX 17-25

 Sample Id
 Matrix
 Date Collected
 Sample Depth
 Lab Sample Id

 CH01 @ 5.5-6'
 S
 10.29.2020 10:55
 5.5 - 6 ft
 676707-001

Page 301 of 370

CASE NARRATIVE

eurofins Environment Testing Xenco

Client Name: LT Environmental, Inc.

Project Name: RDX 17-25

 Project ID:
 034820010
 Report Date:
 11.04.2020

 Work Order Number(s):
 676707
 Date Received:
 11.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 676707

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: **CH01** @ **5.5-6**'

Matrix: Soil

Date Received:11.02.2020 15:50

Lab Sample Id: 676707-001

Date Collected: 10.29.2020 10:55

Sample Depth: 5.5 - 6 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: N

MAB

Date Prep:

11.03.2020 13:00

% Moisture:

Basis:

Wet Weight

Analyst: MAB Seq Number: 3141306

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	606	49.9	mg/kg	11.03.2020 15:21		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

MAB

Analyst: CAC Seq Number: 3141297 Date Prep: 11.03.2020 13:27

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.0	50.0		mg/kg	11.03.2020 16:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.0	50.0		mg/kg	11.03.2020 16:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.0	50.0		mg/kg	11.03.2020 16:21	U	1
Total TPH	PHC635	< 50.0	50.0		mg/kg	11.03.2020 16:21	U	1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	131	%	70-135	11.03.2020 16:21
o-Terphenyl	84-15-1	117	%	70-135	11.03.2020 16:21

Xenco

Certificate of Analytical Results 676707

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: CH01 @ 5.5-6' Matrix: Soil Date Received:11.02.2020 15:50

Lab Sample Id: 676707-001 Date Collected: 10.29.2020 10:55 Sample Depth: 5.5 - 6 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

Analyst: MAB Date Prep: 11.03.2020 14:07 % Moisture:

Seq Number: 3141303

Bate Prep: 11.05.2020 14:07

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	11.03.2020 17:47	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	11.03.2020 17:47	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	11.03.2020 17:47	U	1
m,p-Xylenes	179601-23-1	< 0.00403	0.00403		mg/kg	11.03.2020 17:47	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	11.03.2020 17:47	U	1
Total Xylenes	1330-20-7	< 0.00202	0.00202		mg/kg	11.03.2020 17:47	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	11.03.2020 17:47	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	104	%	70-130	11.03.2020 17:47		
4-Bromofluorobenzene		460-00-4	89	%	70-130	11.03.2020 17:47		



Flagging Criteria

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

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

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

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

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

^{**} Surrogate recovered outside laboratory control limit.

QC Summary 676707

eurofins **Environment Testing** Xenco

LT Environmental, Inc.

RDX 17-25

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3141306

7714455-1-BLK

Matrix: Solid

LCS Sample Id: 7714455-1-BKS

E300P Prep Method:

Date Prep: 11.03.2020

LCSD Sample Id: 7714455-1-BSD

LCS RPD MB Spike LCS Limits %RPD Units Analysis LCSD LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date

Chloride <10.0 250 260 104 259 90-110 0 20 11.03.2020 15:10 104 mg/kg

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3141306

MB Sample Id:

Parent Sample Id:

Parent Sample Id:

676707-001

Matrix: Soil 676707-001 S MS Sample Id:

Prep Method:

E300P

Date Prep: 11.03.2020

MSD Sample Id: 676707-001 SD

Parent Spike MS MS MSD MSD Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result

11.03.2020 15:26 Chloride 606 200 796 95 806 100 90-110 1 20 mg/kg

Analytical Method: Inorganic Anions by EPA 300

676720-001

3141306 Seq Number:

Matrix: Soil

MS Sample Id:

E300P

Date Prep: 11.03.2020

Prep Method:

MSD Sample Id: 676720-001 SD

Spike **RPD Parent** MS MS %RPD Units MSD **MSD** Limite Analysis Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec Chloride 107 20 11.03.2020 16:43 148 200 361 363 108 90-110 1 mg/kg

Analytical Method: TPH by SW8015 Mod

Seq Number:

3141297

Matrix: Solid

676720-001 S

SW8015P Prep Method:

Date Prep: 11.03.2020

7714426-1-BLK LCS Sample Id: 7714426-1-BKS LCSD Sample Id: 7714426-1-BSD MB Sample Id:

MB Spike LCS LCS LCSD LCSD Limits %RPD **RPD** Units Analysis **Parameter** Result Limit Date Result Amount %Rec %Rec Result Gasoline Range Hydrocarbons (GRO) 11.03.2020 15:40 35 < 50.0 1000 1180 118 1130 113 70-135 4 mg/kg 11.03.2020 15:40 Diesel Range Organics (DRO) 70-135 4 35 < 50.0 1000 1250 125 1200 120 mg/kg

LCS MBMB LCS LCSD Limits Units Analysis LCSD **Surrogate** Flag %Rec %Rec Flag Date Flag %Rec 11.03.2020 15:40 1-Chlorooctane 122 130 126 70-135 % 11.03.2020 15:40 o-Terphenyl 117 120 118 70-135 %

Analytical Method: TPH by SW8015 Mod

Seq Number: 3141297

Motor Oil Range Hydrocarbons (MRO)

Matrix: Solid

Prep Method: Date Prep: SW8015P 11.03.2020

MB Sample Id: 7714426-1-BLK

MB**Parameter**

Result < 50.0

Units

Analysis Date

Flag

Flag

11.03.2020 15:20 mg/kg

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / B $RPD = 200* \mid (C-E) \mid (C+E) \mid$ [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result

= MS/LCS Result = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

Flag

Flag

SW8015P

QC Summary 676707

LT Environmental, Inc.

RDX 17-25

Analytical Method:TPH by SW8015 ModPrep Method:Seq Number:3141297Matrix: SoilDate Prep:

 Seq Number:
 3141297
 Matrix:
 Soil
 Date Prep:
 11.03.2020

 Parent Sample Id:
 676707-001
 MS Sample Id:
 676707-001 S
 MSD Sample Id:
 676707-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Gasoline Range Hydrocarbons (GRO)	< 50.3	1010	1130	112	1050	105	70-135	7	35	mg/kg	11.03.2020 16:41
Diesel Range Organics (DRO)	< 50.3	1010	1150	114	1140	114	70-135	1	35	mg/kg	11.03.2020 16:41

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		133		70-135	%	11.03.2020 16:41
o-Terphenyl	123		105		70-135	%	11.03.2020 16:41

Analytical Method:BTEX by EPA 8021BPrep Method:SW5035ASeq Number:3141303Matrix: SolidDate Prep:11.03.2020

 Seq Number:
 3141303
 Matrix:
 Solid
 Date Prep:
 11.03.2020

 MB Sample Id:
 7714462-1-BLK
 LCS Sample Id:
 7714462-1-BKS
 LCSD Sample Id:
 7714462-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Benzene	< 0.00200	0.100	0.0975	98	0.0945	95	70-130	3	35	mg/kg	11.03.2020 15:44
Toluene	< 0.00200	0.100	0.0952	95	0.0926	93	70-130	3	35	mg/kg	11.03.2020 15:44
Ethylbenzene	< 0.00200	0.100	0.0880	88	0.0861	86	71-129	2	35	mg/kg	11.03.2020 15:44
m,p-Xylenes	< 0.00400	0.200	0.178	89	0.173	87	70-135	3	35	mg/kg	11.03.2020 15:44
o-Xylene	< 0.00200	0.100	0.0872	87	0.0851	85	71-133	2	35	mg/kg	11.03.2020 15:44

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		100		100		70-130	%	11.03.2020 15:44
4-Bromofluorobenzene	88		85		85		70-130	%	11.03.2020 15:44

Analytical Method:BTEX by EPA 8021BPrep Method:SW5035ASeq Number:3141303Matrix:SoilDate Prep:11.03.2020

Parent Sample Id: 676707-001 MS Sample Id: 676707-001 S MSD Sample Id: 676707-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00201	0.101	0.129	128	0.117	117	70-130	10	35	mg/kg	11.03.2020 16:29	
Toluene	< 0.00201	0.101	0.123	122	0.111	111	70-130	10	35	mg/kg	11.03.2020 16:29	
Ethylbenzene	< 0.00201	0.101	0.111	110	0.0997	100	71-129	11	35	mg/kg	11.03.2020 16:29	
m,p-Xylenes	< 0.00402	0.201	0.225	112	0.200	100	70-135	12	35	mg/kg	11.03.2020 16:29	
o-Xylene	< 0.00201	0.101	0.109	108	0.0983	98	71-133	10	35	mg/kg	11.03.2020 16:29	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		99		70-130	%	11.03.2020 16:29
4-Bromofluorobenzene	86		85		70-130	%	11.03.2020 16:29

Chain of Custody

Work Order No: 676767

A Solution of Single A Solution of Single A Solution of Single A Solution of Single A Solution of Single A Solution of Single And Inch assume any responsibility for any losses or expenses incurred by the client if such losses are due to cit and this document and relinquishment of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to cit and things of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unit by: (Signature) Received by: (Signature) Received by: (Signature) Date/Time Relinquished by: (Signature) Relinquished by: (Signature)	e identification Matrix Sampled Samp		4 6			0	<	
Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: BRCRA Sb As Ba Be B Cd Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Circle Method(s) and the control of samples constitutes a valid purchase order from olient company to Xenco, staffillates and subcontractors. It assigns standard terms and conditions of service. Xenco valid by its biable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client it such losses are due to circumstances beyond the control of Xenco, but not analyzed. These terms will be enforced unless previously negotiated. Received by: (Signature) Received by: (Signature) Received by: (Signature) Received by: (Signature) Received	ple Identification Matrix Sampled Sampled Sampled Sampled Depth 2		2				200	-
Total 200.7 / 6010 200.8 / 6020: **RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010: 8RCRA Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Circle Method(s) and finduishment of samples constitutes a valid purchase order from client company to Xenco, its stillers and subcontractors. It assigns standard terms and conditions of sarvice. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any lesses or expenses incurred by the client if such losses are due to incurrances by made the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	Imple Identification Date Time Sampled Sampled Sampled Sampled Sampled Sampled Depth Sampled		Relinquished by: (Signature	Date/Time	: (Signature)	Received by	by: (Signature)	ished
© 5.5 - 6' S	Date Sampled Sampled Depth E H W X X X X X X X X X X X X X X X X X X	andar s pre	 is affiliates and subcontractors. It assigns signed by the client if such losses are due to circ of analyzed. These terms will be enforced unlea 	client company to Xence y losses or expenses incu jubmitted to Xenco, but n	tes a valid purchase order from sume any responsibility for any charge of \$5 for each sample s	ishment of samples constitust of samples and shall not as applied to each project and a	It is document and relinquest to be liable only for the cost charge of \$75.00 will be	will of th
5-6' S 18/20/20 1055 5.5-6' 1 x x	Matrix Sampled Sampled Depth Depth Number of Sampled Sampled Sampled Depth Number of Sampled Sampled Sampled Sampled Sampled Depth Number of Sampled Sampled Sampled Depth Number of Sampled S	Mg Mr Se Ag	Be B Cd Ca Cr Co Cu Fe Pb le Cd Cr Co Cu Pb Mn Mo Ni	11 Al Sb As Ba CRA Sb As Ba E	CRA 13PPM Texas CLP / SPLP 6010: 8RC	to be analyzed T	7 6010 200.8 / 6010 20(s) and Metal(s)	
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Yes No N/A Total Containers:			300	5 Mc	1	NA S	Yes	er Custody S
Yes No N/A Correction Factor: -0-7 PA 8015 Mo EPA 8021 B	Seals: Yes No N/A Correction Factor: -2 21B		.0)	od)	hermometer ID		3):	oerature (°C
Thermometer ID Tes No +N MO 0 7 Yes No N/A Correction Factor: -0-7 Yes No N/A Total Containers: 1	Yes No NA Correction Factor: -0-7			\$	Wet ice: Yes No	mp Blank: Yes No		MPLE RE
Temp Blank: Yes No Wet Ice: Yes No Thermometer ID Yes No N/A Correction Factor: -0-7 er of Containers: PA 8015 Mod) EPA 8021B)	PT Temp Blank: Yes No Wet Ice: Yes No Thermometer ID Yes No NA Correction Factor: -0-7 Containers Temp Blank: Yes No Wet Ice: Yes No No No No No No No No No No No No No				Due Date:		e: Anna Byers	Sampler's Name:
Temp Blank: Yes No Wet Ice: Yes No Thermometer ID Yes No N/A Correction Factor: ~0~7 PA 8015 Mod) EPA 8021B)	PT Temp Blank: Yes No Wet Ice: Yes No Thermometer ID Yes No NA Correction Factor: -0-7 Containers Tomp Blank: Yes No Wet Ice: Yes No No Thermometer ID Thermometer ID Thermometer ID Thermometer ID Thermometer ID Thermometer ID Thermometer ID Thermometer ID Thermometer ID Thermometer ID Thermometer ID Thermometer ID Thermometer ID Thermometer ID Thermometer ID							P.O. Number:
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Turn Around	Turn Around ANAL	===	rs@ltenv.com	@ltenv.com & abye	Email: jhernandez		281-702-2329	
Email:	281-702-2329	T	A 88220		City, State ZI	9705	Midland, TX 7	ate ZIP:
City, State ZIP: Carlsbad, NM 88220 Carlsbad,	Midland, TX 79705 City, State ZIP: Carlsbad, NM 88220 Registration of the process		Vista Dr		Address:	Street	3300 North A	S
Address: Address: S315 Buena Vista Dr	Address: S315 Buena Vista Dr	o 1			Company Na	ental, Inc.		oany Name
Tenvironmental, Inc. Company Name: WPX Energy Pry S300 North A Street Address: S315 Buena Vista Dr S315 Buena Vista	Temp Blank: Yes No Yes Yes No Yes			ciny Lynda Laurindon	Cili co. (ii dileterit)		ace of Heriandez	Project Manager:

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Work Order #: 676707

Analyst:

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient

Date/ Time Received: 11.02.2020 03.50.00 PM

Temperature Measuring device used: T_NM_007

	Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		1	
#2 *Shipping container in good condition?		Yes	
#3 *Samples received on ice?		Yes	
#4 *Custody Seals intact on shipping contain	iner/ cooler?	Yes	
#5 Custody Seals intact on sample bottles?		Yes	
#6*Custody Seals Signed and dated?		Yes	
#7 *Chain of Custody present?		Yes	
#8 Any missing/extra samples?		No	
#9 Chain of Custody signed when relinquisl	ned/ received?	Yes	
#10 Chain of Custody agrees with sample la	abels/matrix?	Yes	
#11 Container label(s) legible and intact?		Yes	
#12 Samples in proper container/ bottle?		Yes	Samples received in bulk containers.
#13 Samples properly preserved?		Yes	
#14 Sample container(s) intact?		Yes	
#15 Sufficient sample amount for indicated	test(s)?	Yes	
#16 All samples received within hold time?		Yes	
#17 Subcontract of sample(s)?		No	
#18 Water VOC samples have zero headsp	pace?	N/A	

* Must be	completed for	after-hours	delivery of	samples	prior to	placing in	the r	efrigerato	16

Checklist completed by: Date: 11.03.2020 Checklist reviewed by:

Jessica Kramer

Jessica Kramer Date: 11.03.2020

PH Device/Lot#:

Environment Testing

Certificate of Analysis Summary 676709

LT Environmental, Inc., Arvada, CO

Project Id:

💸 eurofins

034820029

Project Name: RDX 17-25

Contact:

Joseph Hernandez

Report Date: 11.05.2020 08:11

Date Received in Lab: Mon 11.02.2020 15:50

NM Project Manager: Jessica Kramer **Project Location:**

	Lab Id:	676709-001			
Analysis Requested	Field Id:	CH02 @ 1-1.5'			
Anaiysis Kequesiea	Depth:	1-1.5 ft			
	Matrix:	SOIL			
	Sampled:	10.29.2020 11:35			
BTEX by EPA 8021B	Extracted:	11.03.2020 09:30			
	Analyzed:	11.03.2020 18:37			
	Units/RL:	mg/kg RL			
Benzene		< 0.00201 0.00201			
Toluene		0.00783 0.00201			
Ethylbenzene		0.0187 0.00201			
m,p-Xylenes		0.0368 0.00402			
o-Xylene		0.0433 0.00201			
Total Xylenes		0.0801 0.00201			
Total BTEX		0.107 0.00201			
Inorganic Anions by EPA 300	Extracted:	11.03.2020 13:00			
	Analyzed:	11.03.2020 15:43			
	Units/RL:	mg/kg RL			
Chloride		342 10.0			
TPH by SW8015 Mod	Extracted:	11.03.2020 13:27			
	Analyzed:	11.03.2020 17:42			
	Units/RL:	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<50.2 50.2		_	
Diesel Range Organics (DRO)		<50.2 50.2			
Motor Oil Range Hydrocarbons (MRO)		<50.2 50.2			
Total TPH		<50.2 50.2			

BRL - Below Reporting Limit

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

Jessica Vramer



Analytical Report 676709

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

RDX 17-25 034820029 11.05.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



11.05.2020

Project Manager: Joseph Hernandez

LT Environmental, Inc. 4600 W. 60th Avenue Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 676709

RDX 17-25

Project Address: NM

Joseph Hernandez:

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) 676709. 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. 676709 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,

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 676709

LT Environmental, Inc., Arvada, CO

RDX 17-25

 Sample Id
 Matrix
 Date Collected
 Sample Depth
 Lab Sample Id

 CH02 @ 1-1.5'
 S
 10.29.2020 11:35
 1 - 1.5 ft
 676709-001

Page 313 of 370

CASE NARRATIVE

eurofins

Environment Testing
Xenco

Client Name: LT Environmental, Inc.

Project Name: RDX 17-25

 Project ID:
 034820029
 Report Date:
 11.05.2020

 Work Order Number(s):
 676709
 Date Received:
 11.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Environment Testing

Certificate of Analytical Results 676709

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: **CH02** @ **1-1.5**'

Matrix: Soil

Date Received:11.02.2020 15:50

Lab Sample Id: 676709-001

Date Collected: 10.29.2020 11:35

Sample Depth: 1 - 1.5 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech:
Analyst:

MAB

MAB

Date Prep:

11.03.2020 13:00

% Moisture:

Basis: Wet Weight

Seq Number: 3141306

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	342	10.0	mg/kg	11.03.2020 15:43		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

MAB

Analyst: CAC Seq Number: 3141297 Date Prep: 11.03.2020 13:27

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.2	50.2		mg/kg	11.03.2020 17:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.2	50.2		mg/kg	11.03.2020 17:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.2	50.2		mg/kg	11.03.2020 17:42	U	1
Total TPH	PHC635	< 50.2	50.2		mg/kg	11.03.2020 17:42	U	1
Surrogate	C	as Number %	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	134	%	70-135	11.03.2020 17:42
o-Terphenyl	84-15-1	127	%	70-135	11.03.2020 17:42

Certificate of Analytical Results 676709

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: CH02 @ 1-1.5' Matrix: Soil Date Received:11.02.2020 15:50

Lab Sample Id: 676709-001

Date Collected: 10.29.2020 11:35

11.03.2020 09:30

Sample Depth: 1 - 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech:

MAB

Date Prep:

% Moisture:

MAB Analyst: Seq Number: 3141311

Basis: Wet Weight

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	11.03.2020 18:37	U	1
Toluene	108-88-3	0.00783	0.00201		mg/kg	11.03.2020 18:37		1
Ethylbenzene	100-41-4	0.0187	0.00201		mg/kg	11.03.2020 18:37		1
m,p-Xylenes	179601-23-1	0.0368	0.00402		mg/kg	11.03.2020 18:37		1
o-Xylene	95-47-6	0.0433	0.00201		mg/kg	11.03.2020 18:37		1
Total Xylenes	1330-20-7	0.0801	0.00201		mg/kg	11.03.2020 18:37		1
Total BTEX		0.107	0.00201		mg/kg	11.03.2020 18:37		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	98	%	70-130	11.03.2020 18:37		
4-Bromofluorobenzene		460-00-4	120	%	70-130	11.03.2020 18:37		



Flagging Criteria

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

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

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

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

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 676709

eurofins **Environment Testing** Xenco

LT Environmental, Inc.

RDX 17-25

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3141306

Matrix: Solid

E300P Prep Method:

Date Prep: 11.03.2020

7714455-1-BSD

E300P

E300P

Flag

mg/kg

Prep Method:

Date Prep:

LCS Sample Id: 7714455-1-BKS LCSD Sample Id: MB Sample Id: 7714455-1-BLK

LCS RPD MB Spike LCS Limits %RPD Units Analysis LCSD LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date

Chloride <10.0 250 260 104 259 90-110 0 20 11.03.2020 15:10 104 mg/kg

Analytical Method: Inorganic Anions by EPA 300

Prep Method: Seq Number: 3141306 Matrix: Soil Date Prep: 11.03.2020

676707-001 S 676707-001 MS Sample Id: MSD Sample Id: 676707-001 SD Parent Sample Id:

Parent Spike MS MS MSD MSD Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result

11.03.2020 15:26 Chloride 606 200 796 95 806 100 90-110 1 20 mg/kg

Analytical Method: Inorganic Anions by EPA 300

148

200

3141306 Seq Number: Matrix: Soil Date Prep: 11.03.2020

361

MS Sample Id: 676720-001 S MSD Sample Id: 676720-001 SD Parent Sample Id: 676720-001

Spike **RPD Parent** MS MS %RPD Units MSD **MSD** Limite Analysis Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec Chloride 107 20 11.03.2020 16:43

363

108

90-110

1

Analytical Method: TPH by SW8015 Mod

SW8015P Prep Method: 3141297 Matrix: Solid Seq Number: Date Prep: 11.03.2020

MB Sample Id: 7714426-1-BLK LCS Sample Id: 7714426-1-BKS LCSD Sample Id: 7714426-1-BSD

MB Spike LCS LCS LCSD LCSD Limits %RPD **RPD** Units Analysis

Parameter Result Limit Date Result Amount %Rec %Rec Result Gasoline Range Hydrocarbons (GRO) 11.03.2020 15:40 35 < 50.0 1000 1180 118 1130 113 70-135 4 mg/kg 11.03.2020 15:40 Diesel Range Organics (DRO) 70-135 4 35 < 50.0 1000 1250 125 1200 120 mg/kg

LCS MBMB LCS LCSD Limits Units Analysis LCSD **Surrogate** Flag %Rec %Rec Flag Date Flag %Rec 11.03.2020 15:40 1-Chlorooctane 122 130 126 70-135 %

11.03.2020 15:40 o-Terphenyl 117 120 118 70-135 %

SW8015P Analytical Method: TPH by SW8015 Mod Prep Method:

Seq Number: 3141297 Matrix: Solid MB Sample Id: 7714426-1-BLK

MBUnits Analysis Flag **Parameter** Result Date

Motor Oil Range Hydrocarbons (MRO) 11.03.2020 15:20 < 50.0 mg/kg

11.03.2020

Flag

Flag

QC Summary 676709

LT Environmental, Inc.

RDX 17-25

Analytical Method:TPH by SW8015 ModPrep Method:SW8015PSeq Number:3141297Matrix: SoilDate Prep:11.03.2020

Parent Sample Id: 676707-001 MS Sample Id: 676707-001 S MSD Sample Id: 676707-001 SD

Parameter	Parent	Spike	MS	MS	MSD	MSD	Limits	%RPD	RPD	Units	Analysis
rarameter	Result	Amount	Result	%Rec	Result	%Rec			Limit		Date
Gasoline Range Hydrocarbons (GRO)	< 50.3	1010	1130	112	1050	105	70-135	7	35	mg/kg	11.03.2020 16:41
Diesel Range Organics (DRO)	< 50.3	1010	1150	114	1140	114	70-135	1	35	mg/kg	11.03.2020 16:41

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		133		70-135	%	11.03.2020 16:41
o-Terphenyl	123		105		70-135	%	11.03.2020 16:41

Analytical Method:BTEX by EPA 8021BPrep Method:SW5035ASeq Number:3141311Matrix:SolidDate Prep:11.03.2020

 Seq Number:
 3141311
 Matrix:
 Solid
 Date Prep:
 11.03.2020

 MB Sample Id:
 7714461-1-BLK
 LCS Sample Id:
 7714461-1-BKS
 LCSD Sample Id:
 7714461-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Benzene	< 0.00200	0.100	0.101	101	0.106	106	70-130	5	35	mg/kg	11.03.2020 09:56
Toluene	< 0.00200	0.100	0.0955	96	0.101	101	70-130	6	35	mg/kg	11.03.2020 09:56
Ethylbenzene	< 0.00200	0.100	0.0976	98	0.102	102	71-129	4	35	mg/kg	11.03.2020 09:56
m,p-Xylenes	< 0.00400	0.200	0.197	99	0.205	103	70-135	4	35	mg/kg	11.03.2020 09:56
o-Xylene	< 0.00200	0.100	0.0967	97	0.102	102	71-133	5	35	mg/kg	11.03.2020 09:56

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		99		104		70-130	%	11.03.2020 09:56
4-Bromofluorobenzene	110		103		110		70-130	%	11.03.2020 09:56

Analytical Method:BTEX by EPA 8021BPrep Method:SW5035ASeq Number:3141311Matrix: SoilDate Prep:11.03.2020

Parent Sample Id: 676514-007 MS Sample Id: 676514-007 S MSD Sample Id: 676514-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00201	0.101	0.107	106	0.0886	89	70-130	19	35	mg/kg	11.03.2020 10:41	
Toluene	< 0.00201	0.101	0.0986	98	0.0879	88	70-130	11	35	mg/kg	11.03.2020 10:41	
Ethylbenzene	< 0.00201	0.101	0.0998	99	0.0910	91	71-129	9	35	mg/kg	11.03.2020 10:41	
m,p-Xylenes	< 0.00402	0.201	0.202	100	0.186	93	70-135	8	35	mg/kg	11.03.2020 10:41	
o-Xylene	< 0.00201	0.101	0.102	101	0.0943	94	71-133	8	35	mg/kg	11.03.2020 10:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		70-130	%	11.03.2020 10:41
4-Bromofluorobenzene	107		117		70-130	%	11.03.2020 10:41

		Hobbs.NM (575	392-7550) Phoenix A	דעשה שבב הסטטי אווייין	75-392-7550) Phoenix A7 (480-355-0900) Athanh CA (770-440-2000) T		
Project Manager:	Joseph Hernandez		Bill to: (if different)	Lynda Laumhach	Bill to: (if different) Lynda aumhach	www.xenco.com	Page 1 of 1
Company Name:	LT Environmental, Inc.	nc.	Company Name:				ments
	3300 North A Street		Address:	5315 Buena Vista Dr	,7	State of Project:	s F_C ¶perfund
City, State ZIP:	Midland, TX 79705		City, State ZIP:	Carlshad NM 88220	330	buol III	
Phone:	281-702-2329	Email:	ail: jhernandez@lte	ihernandez@ltenv.com & abvers@ltenv.com	ltenv.com		ADAPT Other
Project Name:	RDX 17-25		Turn Around		AMATON		
Project Number:	034820010	Ro	Routine W		ANAL 1313 REQUEST		Work Order Notes
P.O. Number:	Liner	Rush:					
Sampler's Name: A	Anna Byers	Du	Due Date:				
SE	PT Temp Blank	Voc No W					
Temperature (°C):	7	The	100/ 140	#15			
Received Intact:	TYPE No	+NM00		od)			
Cooler Custody Seals:	Yes No	Correction	102	15 M			
Sample Custody Seals:	Yes (No) N/A		1	PA 80		TAT	TAT starts the day recevied by the lab, if received by 4:30pm
Sample Identification	-	X Sampled Sampled	Depth	TPH (E			Sample Comments
CH\$2@1-	-1.5'	18/20/20 1135	1-1.5/ 1	×			
				<i> </i>			
	-						1
Circle Method(s) a	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	~	RCRA 13PPM Texas 11 /	Al Sb As Ba Be	Cd Ca Cr Co Cu Fe	Mo Ni K Se Ag SiO2	Zn
Notice: Signature of this docu of service. Xenco will be liabl of Xenco. A minimum charge	ument and relinquishment on the cost of sample of \$75,00 will be applied to	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses a of Xenco. A minimum change of \$75.00 will be applied to each project and assume any responsibility for any losses or expenses incurred by the client if such losses a	urchase order from clien	it company to Xenco, its at	gnature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control. A minimum change of \$7.5,00 will be applied to each protect and a standard tree protect and such losses are due to circumstances beyond the control.		110
Relinquished by: (Signature)	Signature)	Received by: (Signature)	ıre)	Date/Time	Polinguished by: (Ciant)	previously negotiated.	
Jame B			2/10	02-51 02	2	neceived by: (signature)	Date/Time
	0	7	-		4		
		6			n		

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 11.02.2020 03.50.00 PM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 676709

Analyst:

Temperature Measuring device used: T_NM_007

	Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		1	
#2 *Shipping container in good condition?		Yes	
#3 *Samples received on ice?		Yes	
#4 *Custody Seals intact on shipping contain	ner/ cooler?	Yes	
#5 Custody Seals intact on sample bottles?		Yes	
#6*Custody Seals Signed and dated?		Yes	
#7 *Chain of Custody present?		Yes	
#8 Any missing/extra samples?		No	
#9 Chain of Custody signed when relinquish	ned/ received?	Yes	
#10 Chain of Custody agrees with sample la	abels/matrix?	Yes	
#11 Container label(s) legible and intact?		Yes	
#12 Samples in proper container/ bottle?		Yes	Samples received in bulk containers.
#13 Samples properly preserved?		Yes	
#14 Sample container(s) intact?		Yes	
#15 Sufficient sample amount for indicated	test(s)?	Yes	
#16 All samples received within hold time?		Yes	
#17 Subcontract of sample(s)?		No	
#18 Water VOC samples have zero headsp	ace?	N/A	

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

Checklist completed by:

Cloe Clifton

Checklist reviewed by:

Date: 11.03.2020

Date: 11.03.2020

Date: 11.03.2020

PH Device/Lot#:

eurofins Environment Testing

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Certificate of Analysis Summary 676712

LT Environmental, Inc., Arvada, CO

Project Name: RDX 17-25

Project Id:

034820029

X 17-25

Date Received in Lab: Mon 11.02.2020 15:50

Contact: Joseph Hernandez

Report Date: 11.05.2020 08:14 **Project Manager:** Jessica Kramer

Project Location: NM					Project M	Ianager: Jessica Krar	mer
	Lab Id:	676712-0	001				
Analysis Paguested	Field Id:	CH02 @ 1.	.5- 2'				
Analysis Requested	Depth:	1.5-2 ft					
	Matrix:	:: SOIL					
Sampled:		10.29.2020 11:48					
BTEX by EPA 8021B Extracted:		11.03.2020 09:30					
Analyzed:		11.04.2020 10:23					
	Units/RL:	mg/kg	RL				
Benzene	< 0.0196	0.0196					
Toluene	< 0.0196	0.0196					
Ethylbenzene	0.0667	0.0196					
m,p-Xylenes	0.377	0.0392					
o-Xylene	0.150	0.0196					
Total Xylenes	0.527	0.0196					
Total BTEX	0.594	0.0196					
Inorganic Anions by EPA 300 Extracted:		11.03.2020	13:00				
	Analyzed:	11.03.2020	15:54				
	Units/RL:	mg/kg	RL				
Chloride	660	10.0					
TPH by SW8015 Mod Extracted:		11.03.2020	13:27				
	Analyzed:	11.03.2020	18:22				
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)	88.2	50.0					
Diesel Range Organics (DRO)	748	50.0					
Motor Oil Range Hydrocarbons (MRO)	59.4	50.0					

BRL - Below Reporting Limit

Total TPH

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

896

50.0

Jessica Vramer



Analytical Report 676712

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

RDX 17-25 034820029 11.05.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



11.05.2020

Project Manager: Joseph Hernandez

LT Environmental, Inc. 4600 W. 60th Avenue Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 676712

RDX 17-25

Project Address: NM

Joseph Hernandez:

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) 676712. 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. 676712 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,

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 676712

LT Environmental, Inc., Arvada, CO

RDX 17-25

 Sample Id
 Matrix
 Date Collected
 Sample Depth
 Lab Sample Id

 CH02 @ 1.5- 2'
 S
 10.29.2020 11:48
 1.5 - 2 ft
 676712-001

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CASE NARRATIVE

eurofins

Environment Testing
Xenco

Client Name: LT Environmental, Inc.

Project Name: RDX 17-25

 Project ID:
 034820029
 Report Date:
 11.05.2020

 Work Order Number(s):
 676712
 Date Received:
 11.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Xenco

Certificate of Analytical Results 676712

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: CH02 @ 1.5- 2' Matrix: Soil Date Received:11.02.2020 15:50

Lab Sample Id: 676712-001

Date Collected: 10.29.2020 11:48

Sample Depth: 1.5 - 2 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech:

MAB

MAB Analyst: Seq Number: 3141306 Date Prep:

11.03.2020 13:00

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	660	10.0	mg/kg	11.03.2020 15:54		1

Analytical Method: TPH by SW8015 Mod

Tech: MAB

Analyst: Seq Number: 3141297

CAC

Date Prep:

11.03.2020 13:27

% Moisture:

Prep Method: SW8015P

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	88.2	50.0		mg/kg	11.03.2020 18:22		1
Diesel Range Organics (DRO)	C10C28DRO	748	50.0		mg/kg	11.03.2020 18:22		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	59.4	50.0		mg/kg	11.03.2020 18:22		1
Total TPH	PHC635	896	50.0		mg/kg	11.03.2020 18:22		1
Surrogate	C	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	125	%	70-135	11.03.2020 18:22
o-Terphenyl	84-15-1	133	%	70-135	11.03.2020 18:22

Certificate of Analytical Results 676712

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: CH02 @ 1.5- 2' Matrix: Soil Date Received:11.02.2020 15:50

Lab Sample Id: 676712-001

Date Collected: 10.29.2020 11:48

Sample Depth: 1.5 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech:

Analyst:

MAB MAB

Date Prep: 11.03.2020 09:30 % Moisture:

Seq Number: 3141311

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.0196	0.0196		mg/kg	11.04.2020 10:23	U	1
Toluene	108-88-3	< 0.0196	0.0196		mg/kg	11.04.2020 10:23	U	1
Ethylbenzene	100-41-4	0.0667	0.0196		mg/kg	11.04.2020 10:23		1
m,p-Xylenes	179601-23-1	0.377	0.0392		mg/kg	11.04.2020 10:23		1
o-Xylene	95-47-6	0.150	0.0196		mg/kg	11.04.2020 10:23		1
Total Xylenes	1330-20-7	0.527	0.0196		mg/kg	11.04.2020 10:23		1
Total BTEX		0.594	0.0196		mg/kg	11.04.2020 10:23		1
Surrogate	C	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	5	40-36-3	95	%	70-130	11.04.2020 10:23		



Flagging Criteria

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

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

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

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

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 676712

eurofins **Environment Testing** Xenco

LT Environmental, Inc.

RDX 17-25

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3141306

Matrix: Solid LCS Sample Id: 7714455-1-BKS 7714455-1-BLK

E300P Prep Method:

Date Prep: 11.03.2020

LCSD Sample Id: 7714455-1-BSD

LCS RPD MB Spike LCS Limits %RPD Units Analysis LCSD LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date

Chloride <10.0 250 260 104 259 90-110 0 20 11.03.2020 15:10 104 mg/kg

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3141306

MB Sample Id:

676707-001

Matrix: Soil

Prep Method: Date Prep: 11.03.2020

E300P

676707-001 S MS Sample Id: Parent Sample Id:

MSD Sample Id: 676707-001 SD

Parent Spike MS MS MSD MSD Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result

11.03.2020 15:26 Chloride 606 200 796 95 806 100 90-110 1 20 mg/kg

Analytical Method: Inorganic Anions by EPA 300

3141306 Seq Number:

Matrix: Soil

Prep Method:

E300P

Date Prep: 11.03.2020 MS Sample Id: 676720-001 S Parent Sample Id: 676720-001

MSD Sample Id: 676720-001 SD

Spike **RPD Parent** MS MS %RPD Units MSD **MSD** Limite Analysis Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec Chloride 107 20 11.03.2020 16:43 148 200 361 363 108 90-110 1 mg/kg

Analytical Method: TPH by SW8015 Mod

Seq Number:

3141297

Matrix: Solid

Prep Method:

SW8015P

MB Sample Id:

7714426-1-BLK LCS Sample Id: 7714426-1-BKS Date Prep: 11.03.2020

LCSD Sample Id: 7714426-1-BSD

MB Spike LCS LCS LCSD LCSD Limits %RPD **RPD** Units Analysis **Parameter** Result Limit Date Result Amount %Rec %Rec Result Gasoline Range Hydrocarbons (GRO) 11.03.2020 15:40 35 < 50.0 1000 1180 118 1130 113 70-135 4 mg/kg 11.03.2020 15:40 Diesel Range Organics (DRO) 70-135 4 35 < 50.0 1000 1250 125 1200 120 mg/kg

LCS MBMB LCS LCSD Limits Units Analysis LCSD **Surrogate** Flag %Rec %Rec Flag Date Flag %Rec 11.03.2020 15:40 1-Chlorooctane 122 130 126 70-135 % 11.03.2020 15:40 o-Terphenyl 117 120 118 70-135 %

Analytical Method: TPH by SW8015 Mod

Seq Number: 3141297

Matrix: Solid

Prep Method: Date Prep: SW8015P 11.03.2020

MB Sample Id: 7714426-1-BLK

Parameter Result

MB

Units

Analysis Flag Date

Flag

Motor Oil Range Hydrocarbons (MRO) < 50.0

mg/kg

11.03.2020 15:20

Flag

Flag

QC Summary 676712

LT Environmental, Inc.

RDX 17-25

Analytical Method: TPH by SW8015 Mod

Seq Number: 3141297 Parent Sample Id:

Matrix: Soil

SW8015P Prep Method:

11.03.2020 Date Prep:

676707-001 MS Sample Id: 676707-001 S MSD Sample Id: 676707-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	
Gasoline Range Hydrocarbons (GRO)	< 50.3	1010	1130	112	1050	105	70-135	7	35	mg/kg	11.03.2020 16:41	
Diesel Range Organics (DRO)	< 50.3	1010	1150	114	1140	114	70-135	1	35	mg/kg	11.03.2020 16:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		133		70-135	%	11.03.2020 16:41
o-Terphenyl	123		105		70-135	%	11.03.2020 16:41

Analytical Method: BTEX by EPA 8021B

7714461-1-BLK

Prep Method:

SW5035A

3141311 Seq Number: Matrix: Solid Date Prep: 11.03.2020 LCSD Sample Id: 7714461-1-BSD MB Sample Id:

LCS Sample Id: 7714461-1-BKS

MB Spike LCS LCS LCSD Limits %RPD **RPD** Units Analysis LCSD **Parameter** Result Amount Result %Rec Result %Rec Limit Date 11.03.2020 09:56 < 0.00200 0.100 0.101 101 0.106 5 35 Benzene 106 70-130 mg/kg 11.03.2020 09:56 Toluene < 0.00200 0.100 0.0955 96 0.101 101 70-130 6 35 mg/kg $11.03.2020\ 09{:}56$ Ethylbenzene < 0.00200 0.100 0.0976 98 0.102 102 71-129 4 35 mg/kg m,p-Xylenes 0.200 0.205 11.03.2020 09:56 < 0.00400 0.197 99 103 70-135 4 35 mg/kg

o-Xylene	< 0.00200	0.100	0.0967	97	0.102	102 7	1-133	5	35	mg/kg	11.03.2020 09:56
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag		LCSD %Rec	LCSD Flag	Liı	mits	Units	Analysis Date
1,4-Difluorobenzene	104		99			104		70-	130	%	11.03.2020 09:56
4-Bromofluorobenzene	110		103			110		70-	130	%	11.03.2020 09:56

SW5035A Analytical Method: BTEX by EPA 8021B Prep Method:

Seq Number: 3141311 Matrix: Soil Date Prep: 11.03.2020 Parent Sample Id: 676514-007 MS Sample Id: 676514-007 S MSD Sample Id: 676514-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00201	0.101	0.107	106	0.0886	89	70-130	19	35	mg/kg	11.03.2020 10:41	
Toluene	< 0.00201	0.101	0.0986	98	0.0879	88	70-130	11	35	mg/kg	11.03.2020 10:41	
Ethylbenzene	< 0.00201	0.101	0.0998	99	0.0910	91	71-129	9	35	mg/kg	11.03.2020 10:41	
m,p-Xylenes	< 0.00402	0.201	0.202	100	0.186	93	70-135	8	35	mg/kg	11.03.2020 10:41	
o-Xylene	< 0.00201	0.101	0.102	101	0.0943	94	71-133	8	35	mg/kg	11.03.2020 10:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		70-130	%	11.03.2020 10:41
4-Bromofluorobenzene	107		117		70-130	%	11.03.2020 10:41

Chain of Custody

Work Order No: (276712

							(
		2	10/20 15:50		1		lum h
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	signature)	Received by: (Signature)	gnature)	Relinquished by: (Signature)
	dard terms and conditions stances beyond the control previously negotiated.	vortice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	client company to Xenco, its a losses or expenses incurred I ubmitted to Xenco, but not ana	valid purchase order from e any responsibility for an ge of \$5 for each sample s	of samples constitutes a bles and shall not assum seach project and a char	ent and relinquishment of only for the cost of samp f\$75.00 will be applied to	service: Signature of this docum service. Xenco will be liable Xenco. A minimum charge o
Na Sr Tl Sn U V Zn 1631/245.1/7470/7471:Hg	Ag SiO2	B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo d Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	1 Al Sb As Ba Be B	3RCRA 13PPM Texas 11 TCLP / SPLP 6010: 8RCRA	8RCRA	200.8 / 6020: nd Metal(s) to be a	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed
		(
		>					
			×	18 1.5-2'	8411 de/29/di	5-2' 5	CHØZ@1.
Sample Comments			Numb TPH (E BTEX (Time Depth	Date Sampled	ation Matrix	Sample Identification
lab, if received by 4:30pm			PA 8	tainers:	Total Containers	Yes No N/A	Sample Custody Seals:
TAT starts the day received by the			015 I	Factor: -0-2		Yes AND NA	Cooler Custody Seals:
			Mod B)	M007	生	(Yes No	Received Intact:
)	Thermometer ID	Therm	0-1 2-1	Temperature (°C):
				Wet Ice: Yes No	(Yes) No	Temp Blank:	SAMPLE RECEIPT
				Due Date:		Anna Byers	Sampler's Name: An
				Rush: (er	P.O. Number: Liner
				Routine (D)		034820010	Project Number: 03
Work Order Notes	T	ANALYSIS REQUEST		Turn Around		RDX 17-25	Project Name: RL
Other:	Deliverables: EDD		Email: jhernandez@ltenv.com & abyers@ltenv.com	Email: jhernandez@		281-702-2329	Phone: 28
ST TOPP COMEN CO	Reporting:Level III \$T/UST		Carlsbad, NM 88220	City, State ZIP:		Midland, TX 79705	City, State ZIP: Mi
				Address:		3300 North A Street	Address: 33
lds FDc ¶perfund [Program: UST/PST ☐RP ☐rownfields F☐C		me: WPX Energy	Company Name:	ç,	LT Environmental, Inc	Company Name: LT
mments	Work Order Comments		nt) Lynda Laumbach	Bill to: (if different)		Joseph Hernandez	Project Manager: Jo

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 11.02.2020 03.50.00 PM

Air and Metal samples Acceptable Range: Ambient

Work Order #: 676712

Analyst:

Temperature Measuring device used: T_NM_007

	Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		1	
#2 *Shipping container in good condition?		Yes	
#3 *Samples received on ice?		Yes	
#4 *Custody Seals intact on shipping contai	ner/ cooler?	Yes	
#5 Custody Seals intact on sample bottles?		Yes	
#6*Custody Seals Signed and dated?		Yes	
#7 *Chain of Custody present?		Yes	
#8 Any missing/extra samples?		No	
#9 Chain of Custody signed when relinquish	ned/ received?	Yes	
#10 Chain of Custody agrees with sample la	abels/matrix?	Yes	
#11 Container label(s) legible and intact?		Yes	
#12 Samples in proper container/ bottle?		Yes	Samples received in bulk containers.
#13 Samples properly preserved?		Yes	Contamoro
#14 Sample container(s) intact?		Yes	
#15 Sufficient sample amount for indicated	test(s)?	Yes	
#16 All samples received within hold time?		Yes	
#17 Subcontract of sample(s)?		No	
#18 Water VOC samples have zero headsp	ace?	N/A	

* Must be	completed for	after-hours	delivery of	samples	prior to	placing in	the r	efrigerato	16

Checklist completed by:	Cloe Clifton	Date: <u>11.03.2020</u>
Checklist reviewed by:	Jessica Vramer	Date: 11 03 2020

Jessica Kramer

PH Device/Lot#:

eurofins Environment Testing

Certificate of Analysis Summary 676713

LT Environmental, Inc., Arvada, CO

Project Name: RDX 17-25

Project Id:

034820010

Contact:

Joseph Hernandez

Date Received in Lab: Mon 11.02.2020 15:50 **Report Date:** 11.05.2020 08:36

NM **Project Location:**

Project Manager: Jessica Kramer

Lab Id:	676713-001					
Field Id:	CH02 @3.5-4'					
Depth:	3.5-4 ft					
Matrix:	SOIL					
Sampled:	10.29.2020 12:10					
Extracted:	11.03.2020 09:30					
Analyzed:	11.03.2020 19:44					
Units/RL:	mg/kg RL					
	<0.00202 0.00202					
	0.0244 0.00202					
	0.0502 0.00202					
	0.437 0.00403					
	0.647 0.00202					
Extracted:	11.03.2020 13:00					
Analyzed:	11.03.2020 16:10					
Units/RL:	mg/kg RL					
	212 10.0					
Extracted:	11.03.2020 13:27					
Analyzed:	11.03.2020 18:43					
Units/RL:	mg/kg RL					
	60.4 50.2					
	298 50.2					
	<50.2 50.2					
	358 50.2					
	Field Id: Depth: Matrix: Sampled: Extracted: Analyzed: Units/RL: Extracted: Analyzed: Units/RL: Extracted: Analyzed: Analyzed:	Field Id: CH02 @3.5-4' Depth: 3.5-4 ft Matrix: SOIL Sampled: 10.29.2020 12:10 Extracted: 11.03.2020 09:30 Analyzed: 11.03.2020 19:44 Units/RL: mg/kg RL <0.00202	Field Id: CH02 @3.5-4' Depth: 3.5-4 ft Matrix: SOIL Sampled: 10.29.2020 12:10 Extracted: 11.03.2020 09:30 Analyzed: 11.03.2020 19:44 Units/RL: mg/kg RL <0.00202 0.00202 0.0244 0.00202 0.0502 0.00202 0.437 0.00403 0.135 0.00202 0.572 0.00202 0.647 0.00202 Extracted: 11.03.2020 13:00 Analyzed: 11.03.2020 16:10 Units/RL: mg/kg RL 212 10.0 Extracted: 11.03.2020 13:27 Analyzed: 11.03.2020 18:43 Units/RL: mg/kg RL 212 10.0 Extracted: 11.03.2020 18:43 Units/RL: mg/kg RL 60.4 50.2 298 50.2 <50.2 50.2	Field Id: CH02 @ 3.5-4' Depth: 3.5-4 ft Matrix: SOIL Sampled: 10.29.2020 12:10 Extracted: 11.03.2020 09:30 Analyzed: 11.03.2020 19:44 Units/RL: mg/kg RL <0.00202 0.00202 0.0502 0.00202 0.437 0.00403 0.135 0.00202 0.572 0.00202 0.647 0.00202 Extracted: 11.03.2020 13:00 Analyzed: 11.03.2020 16:10 Units/RL: mg/kg RL 212 10.0 Extracted: 11.03.2020 18:43 Units/RL: mg/kg RL 11.03.2020 18:43 Units/RL: mg/kg RL 60.4 50.2 298 50.2 <50.2 50.2	Field Id: CH02 @3.5-4' Depth: 3.5-4 ft Matrix: SOIL Sampled: 10.29.2020 12:10 Extracted: 11.03.2020 09:30 Analyzed: 11.03.2020 19:44 Units/RL: mg/kg RL <-0.00202 0.00202 0.0502 0.00202 0.0437 0.00403 0.135 0.00202 0.572 0.00202 0.647 0.00202 Extracted: 11.03.2020 13:00 Analyzed: 11.03.2020 16:10 Units/RL: mg/kg RL 212 10.0 Extracted: 11.03.2020 13:27 Analyzed: 11.03.2020 18:43 Units/RL: mg/kg RL 60.4 50.2 298 50.2 <-50.2 50.2	Field Id: CH02 @3.5-4* Depth: 3.5-4 ft Matrix: SOIL Sampled: 10.29.2020 12:10 Extracted: 11.03.2020 09:30 Analyzed: 11.03.2020 19:44 Units/RL: mg/kg RL -0.00202 0.00202 0.0244 0.00202 0.0502 0.00202 0.437 0.00403 0.135 0.00202 0.572 0.00202 0.647 0.00202 Extracted: 11.03.2020 13:00 Analyzed: 11.03.2020 16:10 Units/RL: mg/kg RL Extracted: 11.03.2020 16:10 Units/RL: mg/kg RL

BRL - Below Reporting Limit

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

Jessica Weamer



Analytical Report 676713

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

RDX 17-25 034820010 11.05.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



11.05.2020

Project Manager: Joseph Hernandez

LT Environmental, Inc. 4600 W. 60th Avenue Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 676713

RDX 17-25

Project Address: NM

Joseph Hernandez:

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) 676713. 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. 676713 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,

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 676713

LT Environmental, Inc., Arvada, CO

RDX 17-25

 Sample Id
 Matrix
 Date Collected
 Sample Depth
 Lab Sample Id

 CH02 @3.5-4'
 S
 10.29.2020 12:10
 3.5 - 4 ft
 676713-001

Page 337 of 370

CASE NARRATIVE

eurofins
Environment Testing
Xenco

Client Name: LT Environmental, Inc.

Project Name: RDX 17-25

 Project ID:
 034820010
 Report Date:
 11.05.2020

 Work Order Number(s):
 676713
 Date Received:
 11.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 676713

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: CH02 @3.5-4' Matrix: Soil

Date Received:11.02.2020 15:50

Lab Sample Id: 676713-001

Date Collected: 10.29.2020 12:10

Sample Depth: 3.5 - 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech:

MAB

MAB Analyst:

Date Prep:

11.03.2020 13:00

% Moisture: Basis:

Wet Weight

Seq Number: 3141306

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	212	10.0	mg/kg	11.03.2020 16:10		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

MAB

CACAnalyst: Seq Number: 3141297 Date Prep: 11.03.2020 13:27 % Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	60.4	50.2		mg/kg	11.03.2020 18:43		1
Diesel Range Organics (DRO)	C10C28DRO	298	50.2		mg/kg	11.03.2020 18:43		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.2	50.2		mg/kg	11.03.2020 18:43	U	1
Total TPH	PHC635	358	50.2		mg/kg	11.03.2020 18:43		1
Surrogate	(Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	126	%	70-135	11.03.2020 18:43
o-Terphenyl	84-15-1	127	%	70-135	11.03.2020 18:43

Xenco

Certificate of Analytical Results 676713

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: CH02 @3.5-4' Matrix: Soil

Date Received:11.02.2020 15:50

Lab Sample Id: 676713-001 Date Collected: 10.29.2020 12:10 Sample Depth: 3.5 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Date Prep: 11.03.2020 09:30

% Moisture:

MAB Analyst: Seq Number: 3141311

Basis: Wet Weight

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	11.03.2020 19:44	U	1
Toluene	108-88-3	0.0244	0.00202		mg/kg	11.03.2020 19:44		1
Ethylbenzene	100-41-4	0.0502	0.00202		mg/kg	11.03.2020 19:44		1
m,p-Xylenes	179601-23-1	0.437	0.00403		mg/kg	11.03.2020 19:44		1
o-Xylene	95-47-6	0.135	0.00202		mg/kg	11.03.2020 19:44		1
Total Xylenes	1330-20-7	0.572	0.00202		mg/kg	11.03.2020 19:44		1
Total BTEX		0.647	0.00202		mg/kg	11.03.2020 19:44		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	110	%	70-130	11.03.2020 19:44		
1,4-Difluorobenzene		540-36-3	88	%	70-130	11.03.2020 19:44		



Flagging Criteria

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

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

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

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

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 676713

eurofins **Environment Testing** Xenco

LT Environmental, Inc.

RDX 17-25

259

MSD

Result

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3141306

7714455-1-BLK

Matrix: Solid LCS Sample Id: 7714455-1-BKS

E300P

Prep Method: Date Prep: 11.03.2020

LCSD Sample Id: 7714455-1-BSD Units

mg/kg

MB Sample Id: **Parameter**

Chloride

Chloride

MB Spike Result Amount

<10.0

LCS LCS Result %Rec

260

LCSD LCSD Result %Rec

104

Limits

90-110

RPD %RPD Limit 0 20

Analysis Date

Flag 11.03.2020 15:10

Analytical Method: Inorganic Anions by EPA 300

Seq Number: Parent Sample Id:

3141306 676707-001

Matrix: Soil 676707-001 S MS Sample Id:

104

Prep Method: Date Prep:

20

E300P

11.03.2020 MSD Sample Id: 676707-001 SD

mg/kg

Parameter

Parent Spike Result Amount

606

MS MS Result %Rec 796 95

MSD Limits %Rec 806 100 90-110

%RPD RPD Limit

1

Units

Analysis Flag Date 11.03.2020 15:26

Analytical Method: Inorganic Anions by EPA 300

Seq Number: Parent Sample Id: 3141306 676720-001

Matrix: Soil MS Sample Id:

200

250

676720-001 S

E300P Prep Method: Date Prep:

11.03.2020 MSD Sample Id: 676720-001 SD

Parameter Chloride

Spike **Parent** Result Amount 148 200

MS MS Result %Rec 107 361

MSD Result 363

MSD Limite %Rec 108 90-110

RPD %RPD Limit 20 1

Units mg/kg

Analysis Flag Date 11.03.2020 16:43

Analytical Method: TPH by SW8015 Mod

Seq Number:

3141297

Matrix: Solid

Prep Method: Date Prep:

SW8015P

11.03.2020

MB Sample Id:

7714426-1-BLK

LCS Sample Id: 7714426-1-BKS LCSD Sample Id: 7714426-1-BSD

MB Spike LCS LCS LCSD LCSD Limits %RPD **RPD** Units Analysis **Parameter** Result Limit Date Result Amount %Rec %Rec Result Gasoline Range Hydrocarbons (GRO) 11.03.2020 15:40 35 < 50.0 1000 1180 118 1130 113 70-135 4 mg/kg 11.03.2020 15:40 Diesel Range Organics (DRO) 70-135 4 35 < 50.0 1000 1250 125 1200 120 mg/kg

LCS MBMB LCS LCSD Limits Units Analysis LCSD **Surrogate** Flag %Rec %Rec Flag Date Flag %Rec 11.03.2020 15:40 1-Chlorooctane 122 130 126 70-135 % 11.03.2020 15:40 o-Terphenyl 117 120 118 70-135 %

Analytical Method: TPH by SW8015 Mod

Seq Number:

3141297

Matrix: Solid

MB Sample Id: 7714426-1-BLK

Prep Method:

SW8015P

Date Prep:

11.03.2020

Flag

Flag

Parameter Motor Oil Range Hydrocarbons (MRO)

MBResult

< 50.0

mg/kg

Units

Date 11.03.2020 15:20

Analysis

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / B $RPD = 200* \mid (C-E) \mid (C+E) \mid$ [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result = MS/LCS Result = MSD/LCSD Result

MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

Flag

Flag

QC Summary 676713

LT Environmental, Inc.

RDX 17-25

Analytical Method:TPH by SW8015 ModPrep Method:SW8015PSeq Number:3141297Matrix: SoilDate Prep:11.03.2020

Parent Sample Id: 676707-001 MS Sample Id: 676707-001 S MSD Sample Id: 676707-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Gasoline Range Hydrocarbons (GRO)	< 50.3	1010	1130	112	1050	105	70-135	7	35	mg/kg	11.03.2020 16:41
Diesel Range Organics (DRO)	< 50.3	1010	1150	114	1140	114	70-135	1	35	mg/kg	11.03.2020 16:41

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		133		70-135	%	11.03.2020 16:41
o-Terphenyl	123		105		70-135	%	11.03.2020 16:41

Analytical Method:BTEX by EPA 8021BPrep Method:SW5035ASeq Number:3141311Matrix:SolidDate Prep:11.03.2020

 Seq Number:
 3141311
 Matrix:
 Solid
 Date Prep:
 11.03.2020

 MB Sample Id:
 7714461-1-BLK
 LCS Sample Id:
 7714461-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Benzene	< 0.00200	0.100	0.101	101	0.106	106	70-130	5	35	mg/kg	11.03.2020 09:56
Toluene	< 0.00200	0.100	0.0955	96	0.101	101	70-130	6	35	mg/kg	11.03.2020 09:56
Ethylbenzene	< 0.00200	0.100	0.0976	98	0.102	102	71-129	4	35	mg/kg	11.03.2020 09:56
m,p-Xylenes	< 0.00400	0.200	0.197	99	0.205	103	70-135	4	35	mg/kg	11.03.2020 09:56
o-Xylene	< 0.00200	0.100	0.0967	97	0.102	102	71-133	5	35	mg/kg	11.03.2020 09:56

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		99		104		70-130	%	11.03.2020 09:56
4-Bromofluorobenzene	110		103		110		70-130	%	11.03.2020 09:56

Analytical Method:BTEX by EPA 8021BPrep Method:SW5035ASeq Number:3141311Matrix: SoilDate Prep:11.03.2020

Parent Sample Id: 676514-007 MS Sample Id: 676514-007 S MSD Sample Id: 676514-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00201	0.101	0.107	106	0.0886	89	70-130	19	35	mg/kg	11.03.2020 10:41	
Toluene	< 0.00201	0.101	0.0986	98	0.0879	88	70-130	11	35	mg/kg	11.03.2020 10:41	
Ethylbenzene	< 0.00201	0.101	0.0998	99	0.0910	91	71-129	9	35	mg/kg	11.03.2020 10:41	
m,p-Xylenes	< 0.00402	0.201	0.202	100	0.186	93	70-135	8	35	mg/kg	11.03.2020 10:41	
o-Xylene	< 0.00201	0.101	0.102	101	0.0943	94	71-133	8	35	mg/kg	11.03.2020 10:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		70-130	%	11.03.2020 10:41
4-Bromofluorobenzene	107		117		70-130	%	11.03.2020 10:41

Pepth Number of Concess and subcontractors. It assigns standard terms and conditions ach varies preventing ach map of series of variety and series are may less errors with sear and subcontractors. It assigns standard terms and conditions ach samiling for any losses or varieties incurred by the client if such observations and subcontractors. It assigns standard terms and conditions ach samiling for any losses or varieties and subcontractors. It assigns standard terms and conditions ach samiling to any losses or varieties and subcontractors. It assigns standard terms and conditions ach samiling to any losses or varieties and subcontractors. It assigns standard terms and conditions ach samiling to any losses or varieties and subcontractors. It assigns standard terms and conditions ach samiling to any losses or varieties and subcontractors. It assigns standard terms and conditions ach samiling to any losses or varieties and subcontractors. It assigns standard terms and conditions ach samiling to any losses or varieties and subcontractors. It assigns standard terms and conditions ach samiling to any losses and subcontractors. It assigns standard terms and conditions ach samiling to any losses and subcontractors. It assigns standard terms and conditions ach samiling to any losses and subcontractors. It assigns standard terms and conditions ach samiling to any losses and subcontractors. It assigns standard terms and conditions ach samiling to any losses. The subcontractors are subcontractors. It assigns standard terms and conditions ach amount and subcontractors. It assigns standard terms and conditions are subcontractors. It assigns standard terms and conditions are subcontractors. It assigns standard terms and conditions are subcontractors. It assigns standard terms and conditions are subcontractors. It assigns standard terms and conditions are subcontractors. It assigns standard terms are conditions.		
Ag SiO2 Na 1631	4	0
ADAPT ADAPT ADAPT AG SiO2 Na 1631		lun by
Ag SiO2 Na 3	Received by: (Signature)	Relinquished by: (Signature)
Reporting: Level II	ussiment of samples constitutes a valid purchase ussiment of samples and shall not assume any responsib applied to each project and a charge of \$5 for each	service. Xenco will be liable only for the or service. A minimum charge of \$75.00 will be
City, State ZIP: Carlsbad, NM 88220 Reporting: Level II Breal III Br	8020: 8RCRA 13PPM to be analyzed TCLP / SPLP 60	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed
City, State ZIP: Carlsbad, NM 88220 Reporting: Incident com & abyers@litenv.com & abyers@litenv.com Deliverables: EDD ADaPT		
City, State ZIP: Carisbad, NM 88220 Reporting: Level II Byel III By		
City, State ZIP: Carlsbad, NM 88220 Deliverables: EDD ADAPT		
City, State ZIP: Carisbad, NM 88220 Reporting:Level \$\]		
City, State ZIP: Carisbad, NM 88220 Reporting:Level Jivus: Imermandez@ltenv.com & abyers@ltenv.com		
City, State ZIP: Carlsbad, NM 88220 Reporting:Level II \$\$\text{\$\		
City, State ZIP: Carlsbad, NM 88220 Reporting:Level] #7/US In Around		
City, State ZIP: Carlsbad, NM 88220 Reporting:Level Pvel el Pvel Pvel Pvel Pvel Pvel Pvel Pvel Pvel Pvel		
City, State ZIP: Carlsbad, NM 88220 Reporting:Level II Javel III Jav		
City, State ZIP: Carlsbad, NM 88220 Reporting:Level \$\pi\ulling \text{IT/US:} Carlsbad, NM 88220 Deliverables: EDD ADaPT		CH02@3.5-4"
City, State ZIP: Carlsbad, NM 88220 Reporting:Level \$\pivet \$\pivet \$\pivet \$\pivet \$\pivet \$\pivet \$\pivet \$\p	۵.	Sample Identification
City, State ZIP: Carlsbad, NM 88220 Reporting:Level II \$\frac{1}{2}\$ ADAPT Im Around ANALYSIS REQUEST ANALYSIS REQUEST	No) N/A Total Containers:	Sample Custody Seals: Yes 1
City, State ZIP: Carlsbad, NM 88220 Reporting:Level	N/A Correction Factor: -	Cooler Custody Seals: Yes No
City, State ZIP: Carlsbad, NM 88220 Reporting:Level III \$\frac{1}{2} \text{TUST T RP L el IV} Carlsbad, NM 88220 Deliverables: EDD ADaPT Other: ANALYSIS REQUEST Work Order Notes Carlsbad, NM 88220 Carlsbad, NM 88220 Deliverables: EDD ADaPT Other: ANALYSIS REQUEST Work Order Notes Carlsbad, NM 88220 Deliverables: EDD ADaPT Other: Work Order Notes Carlsbad, NM 88220 Deliverables: EDD ADaPT Other: Work Order Notes Carlsbad, NM 88220 Deliverables: EDD ADaPT Other: Work Order Notes Carlsbad, NM 88220 Other:	NO HUMOO	Received Intact: (Yes
City, State ZIP: Carlsbad, NIM 88220 Reporting:Level II Svel III StrUST T RP Gel IV	Thermometer ID	
Reporting:Level II		SAMPLE RECEIPT TO
Reporting:Level II	Due Date:	Sampler's Name: Anna Byers
Reporting:Level II	Rush:	P.O. Number: Liner
Reporting:Level II Byel III BT/UST T RP L el IV Deliverables: EDD ADaPT Other: ANALYSIS REQUEST Work Order Notes	Routine	Project Number: 034820010
Reporting:Level II □ □ T/UST T□RP L□ el IV Deliverables: EDD □ ADaPT □ Other:	Turn An	Project Name: RDX 17-25
Carlsbad, NM 88220 Reporting:Level III	Email: jherr	Phone: 281-702-2329
		City, State ZIP: Midland, TX 79705
5315 Buena Vista Dr State of Project:		Address: 3300 North A Street
Company Name: WPX Energy Program: UST/PST □RP □rownfields F□C ¶ perfund		Company Name: LT Environmental, Inc
Work Order Com		Project Manager: Joseph Hernandez
	Midland, TX Hobbs, NM (575-392-7550	LABORATOR
Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334	Houston, TX (

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 11.02.2020 03.50.00 PM Air and Metal samples Acceptable Range: Ambient

Work Order #: 676713 Temperature Measuring device used : T_NM_007

	Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		1	
#2 *Shipping container in good condition?		Yes	
#3 *Samples received on ice?		Yes	
#4 *Custody Seals intact on shipping contain	ner/ cooler?	Yes	
#5 Custody Seals intact on sample bottles?		Yes	
#6*Custody Seals Signed and dated?		Yes	
#7 *Chain of Custody present?		Yes	
#8 Any missing/extra samples?		No	
#9 Chain of Custody signed when relinquish	ed/ received?	Yes	
#10 Chain of Custody agrees with sample la	bels/matrix?	Yes	
#11 Container label(s) legible and intact?		Yes	
#12 Samples in proper container/ bottle?		Yes	Samples received in bulk containers.
#13 Samples properly preserved?		Yes	
#14 Sample container(s) intact?		Yes	
#15 Sufficient sample amount for indicated t	est(s)?	Yes	
#16 All samples received within hold time?		Yes	
#17 Subcontract of sample(s)?		No	
#18 Water VOC samples have zero headspa	ace?	N/A	

[•] Must be completed	for after-hours	delivery of	f samples	prior to p	lacing in t	he refrigerator

Checklist completed by:	Cloe Clifton	Date: <u>11.03.2020</u>
Checklist reviewed by:	Jessica Vramer Jessica Kramer	Date: <u>11.03.2020</u>

PH Device/Lot#:

Analyst:

eurofins Environment Testing

Certificate of Analysis Summary 676715

LT Environmental, Inc., Arvada, CO

Environmental, mel, mil vada, e

Project Id:

034820010

NM

Project Name: RDX 17-25

Contact:
Project Location:

Joseph Hernandez

Date Received in Lab: Mon 11.02.2020 15:50

Report Date: 11.05.2020 08:37

Project Manager: Jessica Kramer

Lab Id:	676715-001			
	070715 001			
Analysis Requested Field Id:	CH02 @ 5.5-6'			
Depth:	5.5-6 ft			
Matrix:	SOIL			
Sampled: 1	0.29.2020 12:30			
BTEX by EPA 8021B Extracted: 1	1.03.2020 09:30			
Analyzed: 1	1.03.2020 20:06			
Units/RL:	mg/kg RL			
Benzene	<0.00200 0.00200			
Toluene	<0.00200 0.00200			
Ethylbenzene	<0.00200 0.00200			
m,p-Xylenes	<0.00399 0.00399			
o-Xylene	<0.00200 0.00200			
Total Xylenes	<0.00200 0.00200			
Total BTEX	<0.00200 0.00200			
Inorganic Anions by EPA 300 Extracted: 1	1.03.2020 13:00			
Analyzed: 1	1.03.2020 16:16			
Units/RL:	mg/kg RL			
Chloride	148 49.9			
TPH by SW8015 Mod Extracted: 1	1.03.2020 13:27			
Analyzed: 1	1.03.2020 19:03			
Units/RL:	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)	<50.2 50.2			
Diesel Range Organics (DRO)	99.0 50.2			
Motor Oil Range Hydrocarbons (MRO)	<50.2 50.2			
Total TPH	99.0 50.2			

BRL - Below Reporting Limit

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

Jessica Weamer



Analytical Report 676715

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

RDX 17-25 034820010 11.05.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



11.05.2020

Project Manager: Joseph Hernandez

LT Environmental, Inc. 4600 W. 60th Avenue Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 676715

RDX 17-25

Project Address: NM

Joseph Hernandez:

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) 676715. 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. 676715 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,

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 676715

LT Environmental, Inc., Arvada, CO

RDX 17-25

 Sample Id
 Matrix
 Date Collected
 Sample Depth
 Lab Sample Id

 CH02 @ 5.5-6'
 S
 10.29.2020 12:30
 5.5 - 6 ft
 676715-001

Page 349 of 370

CASE NARRATIVE

eurofins Environment Testing Xenco

Client Name: LT Environmental, Inc.

Project Name: RDX 17-25

 Project ID:
 034820010
 Report Date:
 11.05.2020

 Work Order Number(s):
 676715
 Date Received:
 11.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 676715

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: CH02 @ 5.5-6' Matrix: Soil Date Received:11.02.2020 15:50

Lab Sample Id: 676715-001

Seq Number: 3141306

Date Collected: 10.29.2020 12:30

Sample Depth: 5.5 - 6 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: Analyst: MAB

MAB

Date Prep:

11.03.2020 13:00

% Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	148	49.9	mg/kg	11.03.2020 16:16		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

MAB

CACAnalyst: Seq Number: 3141297 Date Prep: 11.03.2020 13:27 % Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	< 50.2	50.2		mg/kg	11.03.2020 19:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	99.0	50.2		mg/kg	11.03.2020 19:03		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	< 50.2	50.2		mg/kg	11.03.2020 19:03	U	1
Total TPH	PHC635	99.0	50.2		mg/kg	11.03.2020 19:03		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	127	%	70-135	11.03.2020 19:03
o-Terphenyl	84-15-1	132	%	70-135	11.03.2020 19:03

Xenco

Certificate of Analytical Results 676715

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: **CH02** @ **5.5-6**'

Matrix: Soil

Date Received:11.02.2020 15:50

Lab Sample Id: 676715-001

Date Collected: 10.29.2020 12:30

Sample Depth: 5.5 - 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 11.03.2020 09:30

% Moisture:

Seq Number: 3141311

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	11.03.2020 20:06	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	11.03.2020 20:06	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	11.03.2020 20:06	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	11.03.2020 20:06	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	11.03.2020 20:06	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	11.03.2020 20:06	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	11.03.2020 20:06	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	76	%	70-130	11.03.2020 20:06		
4-Bromofluorobenzene		460-00-4	98	%	70-130	11.03.2020 20:06		



Flagging Criteria

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

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

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

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

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

^{**} Surrogate recovered outside laboratory control limit.

QC Summary 676715



LT Environmental, Inc.

RDX 17-25

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3141306

7714455-1-BLK

Matrix: Solid

LCS

E300P Prep Method:

Date Prep: 11.03.2020

7714455-1-BSD

MB Sample Id: **Parameter**

MB

LCS Sample Id:

7714455-1-BKS

LCSD

LCSD Sample Id: RPD %RPD Units Limit

20

Analysis Flag

Chloride

Result Amount <10.0

Spike

250

200

Result %Rec 260 104

LCS

Result 259

LCSD

%Rec 90-110 104

Limits

0

mg/kg

Date 11.03.2020 15:10

Analytical Method: Inorganic Anions by EPA 300

Seq Number:

3141306

Matrix: Soil

Prep Method: Date Prep:

E300P 11.03.2020

Parent Sample Id:

676707-001

676707-001 S MS Sample Id:

MSD Sample Id:

676707-001 SD Units

Parameter

Chloride

Parent Spike Result Amount 606

MS MS Result %Rec

796

MSD Result

806

MSD Limits %Rec

90-110

100

%RPD RPD Limit

1

Analysis

Flag Date 11.03.2020 15:26

Analytical Method: Inorganic Anions by EPA 300

Seq Number:

3141306

Matrix: Soil

Prep Method:

20

E300P

Date Prep: 11.03.2020

mg/kg

Parent Sample Id:

676720-001

MS Sample Id: 676720-001 S

107

95

1

MSD Sample Id: 676720-001 SD

Parameter

Chloride

Spike **Parent** Result Amount

148

MS MS Result %Rec

361

MSD Result 363

MSD Limite %Rec

90-110

108

RPD %RPD Limit Units

Analysis Flag Date

11.03.2020 16:43

Analytical Method: TPH by SW8015 Mod

Seq Number:

3141297

Spike

MB

Flag

200

Prep Method:

mg/kg

SW8015P

MB Sample Id:

7714426-1-BLK

Matrix: Solid

Date Prep:

20

11.03.2020

Parameter

MB

LCS Sample Id: 7714426-1-BKS LCSD Sample Id: 7714426-1-BSD

Units Analysis

Gasoline Range Hydrocarbons (GRO) Diesel Range Organics (DRO)

< 50.0 1000 < 50.0 1000

LCS LCS Result %Rec

LCSD LCSD %Rec Result

Limits

%RPD **RPD** Limit

Date

Result Amount 35 1180 118 1130 113 70-135 4 mg/kg 11.03.2020 15:40 70-135 4 35 1250 125 1200 120

Matrix: Solid

Surrogate

MB%Rec LCS

11.03.2020 15:40

117

%Rec

LCS

mg/kg

Analysis

11.03.2020 15:40

1-Chlorooctane

o-Terphenyl

122

130 120 Flag 126

LCSD LCSD Flag %Rec

Limits Units 70-135

Date 11.03.2020 15:40 %

3141297

Analytical Method: TPH by SW8015 Mod

118

Prep Method:

70-135

SW8015P

Parameter

Seq Number:

MBResult

MB Sample Id: 7714426-1-BLK

Date Prep:

11.03.2020

Flag

Flag

Motor Oil Range Hydrocarbons (MRO)

< 50.0

Units mg/kg

%

Date 11.03.2020 15:20

Analysis

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / B $RPD = 200* \mid (C-E) \mid (C+E) \mid$ [D] = 100 * (C) / [B]Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result = MS/LCS Result = MSD/LCSD Result

MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

Flag

Flag

Flag

QC Summary 676715

LT Environmental, Inc.

RDX 17-25

Analytical Method: TPH by SW8015 Mod
Seq Number: 3141297 Matrix:

Prep Method: SW8015P
Soil Date Prep: 11.03.2020

Parent Sample Id: 676707-001 MS Sample Id: 676707-001 S

MSD Sample Id: 676707-001 SD

RPD **Parent** Spike MS MS Limits %RPD Units Analysis MSD MSD **Parameter** Result Amount Result %Rec Result %Rec Limit Date Gasoline Range Hydrocarbons (GRO) < 50.3 1010 1130 1050 35 11.03.2020 16:41 112 105 70-135 7 mg/kg 11.03.2020 16:41 1010 70-135 mg/kg Diesel Range Organics (DRO) < 50.3 1150 114 1140 1 35 114

MSD Units MS MS Limits Analysis MSD **Surrogate** %Rec Flag Flag Date %Rec 11.03.2020 16:41 1-Chlorooctane 129 133 70-135 % 105 11.03.2020 16:41 o-Terphenyl 123 70-135 %

Analytical Method: BTEX by EPA 8021B

 BTEX by EPA 8021B
 Prep Method:
 SW5035A

 3141311
 Matrix:
 Solid
 Date Prep:
 11.03.2020

 Seq Number:
 3141311
 Matrix:
 Solid
 Date Prep:
 11.03.2020

 MB Sample Id:
 7714461-1-BLK
 LCS Sample Id:
 7714461-1-BKS
 LCSD Sample Id:
 7714461-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Benzene	< 0.00200	0.100	0.101	101	0.106	106	70-130	5	35	mg/kg	11.03.2020 09:56
Toluene	< 0.00200	0.100	0.0955	96	0.101	101	70-130	6	35	mg/kg	11.03.2020 09:56
Ethylbenzene	< 0.00200	0.100	0.0976	98	0.102	102	71-129	4	35	mg/kg	11.03.2020 09:56
m,p-Xylenes	< 0.00400	0.200	0.197	99	0.205	103	70-135	4	35	mg/kg	11.03.2020 09:56
o-Xylene	< 0.00200	0.100	0.0967	97	0.102	102	71-133	5	35	mg/kg	11.03.2020 09:56
S	MB	MB	L	CS I	LCS	LCSI) LCS	D Li	mits	Units	Analysis

Surrogate %Rec Flag %Rec Flag %Rec Flag Date 11.03.2020 09:56 1,4-Difluorobenzene 104 99 104 70-130 % 11.03.2020 09:56 4-Bromofluorobenzene 103 110 70-130 % 110

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

 Seq Number:
 3141311
 Matrix:
 Soil
 Date Prep:
 11.03.2020

 Parent Sample Id:
 676514-007
 MS Sample Id:
 676514-007 S
 MSD Sample Id:
 676514-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	F
Benzene	< 0.00201	0.101	0.107	106	0.0886	89	70-130	19	35	mg/kg	11.03.2020 10:41	
Toluene	< 0.00201	0.101	0.0986	98	0.0879	88	70-130	11	35	mg/kg	11.03.2020 10:41	
Ethylbenzene	< 0.00201	0.101	0.0998	99	0.0910	91	71-129	9	35	mg/kg	11.03.2020 10:41	
m,p-Xylenes	< 0.00402	0.201	0.202	100	0.186	93	70-135	8	35	mg/kg	11.03.2020 10:41	
o-Xylene	< 0.00201	0.101	0.102	101	0.0943	94	71-133	8	35	mg/kg	11.03.2020 10:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		101		70-130	%	11.03.2020 10:41
4-Bromofluorobenzene	107		117		70-130	%	11.03.2020 10:41

E = MSD/LCSD Result

Despth Hammandez Despth Hammandez Despth Hammandez Despth Hammandez Despth De	Ag SiO2 Na S 1631	Date Simpled 5.5 6 6 5 6 6 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Total 200.7 / 60 Circle Method(s) service. Xenco will be lia Xenco. A minimum charg Relinquished by:
Work Order Cc RP	Ag SiO2 Na S 1631	S. 5 - C Sampled 5. 5 - C Sampled 8. 10020: 8. 200.8 / 6020: 8. 200.8	Total 200.7 / 60. Circle Method(s) Service: Xenco will be lia Xenco. A minimum charg
Work Order Cc RP	Ag SiO2 Na S	Date S.5.5 - 6' S \(\psi/\frac{1}{2}\sigma_{\chingle\c	Total 200.7 / 60. Circle Method(s) Circle Signature of this do service. Xenco will be lia Xenco. A minimum charge.
Work Order Cc RP □rownfle Nel III □}T/US □ ADaPT □ ADAPT □ ADAPT □ ADAPT □ ADAPT □ ADAPT □ ADAPT □ ADAPT □ ADAPT □ ADAPT □ ADAPT □ ADAPT □ A	Ag SiO2 Na S	S. 5 - 6' Sampled 5. 5 - 6' S \(\phi/\) \(\ph	Total 200.7 / 60. Circle Method(s) Signature of this do
Design Hermandez Design Herm	Depth Number of A St. S – (c) 1 X X X X X X X X X X X X X X X X X X	Samples Solution Samples Solution Samples Solution Samples Solution Samples Solution Samples Solution Samples Solution Samples Solution Samples Solution Samples Solution Solution Samples Solution Solutio	Total 200.7 / 60-
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Work Order Cc	Number of X TPH (EPA S X Chloride (E	Matrix	
	Depth Number of TPH (EPA) Chloride (E)	Matrix S	
	Number of TPH (EPA is BTEX (EPA Chloride (E	Matrix	
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Doseph Hermandez	8() () () () () () () () () ()	Yes (No) N/A	Sample Custody Seal
	Con 015 II 015 II 015 II	Yes AND NA	Cooler Custody Seals
	mtai Mod B)	The state of the s	Received Intact:
Manager: Joseph Hernandez Bill to: (if different) Lynda Laumbach Work Order Comments ny Name: LT Environmental, Inc. Company Name: WPX Energy Program: UST/PST RP Townfields	ners	10	Temperature (°C):
Manager: Joseph Herrandez Bill to: (rf different) Lynda Laumbach Work Order Comments my Name: LT Environmental, Inc. Company Name: WPX Energy Program: UST/PST RP Inventibles FIC Sperifieds FIC Sperifieds FIC Sperifieds FIC Sperified Sperified Sperified ste zIP: Midland, TX 79705 City, State ZIP: Carlsbad, NM 88220 Reporting: Level II Spel III ST/UST TRP Unit Spel III TUST TRP Unit Spel III TUST TRP Unit Spel III Sperified Sperified ADaPT Other: Name: RDX 17-25 Turn Around ANALYSIS REQUEST ANALYSIS REQUEST Work Order Notes Number: D34820010 Rush: Rush: Anna Byers Due Date: Due Date: Due Date:	Tes	Temp Blank: Yes	SAMPLE RECE
Manager: Joseph Hernandez Bill to: (# different) Lynda Laumbach Work Order Comments my Name: LT Environmental, Inc. Company Name: WPX Energy Program: UST/PST RP Gram: UST/PST REquent RPX Energy state ZIP: Midland, TX 79705 City, State ZIP: Carlsbad, NM 88220 Reporting: Level II RP Gram: UST/PST Reporting: Level	Due Date:	Anna Byers	Sampler's Name:
Manager: Joseph Hernandez Bill to: (# different) Lynda Laumbach Work Order Comments my Name: LT Environmental, Inc. Company Name: WPX Energy Program: UST/PST		Liner	P.O. Number:
Manager: Joseph Hernandez Bill to: (#different) Lynda Laumbach Work Order Comments my Name: LT Environmental, Inc. Company Name: WPX Energy Program: UST/PST RP Fownfields RC State of Project: Reporting: Level III Strius TRP IIII Strius TRP Lei IV ste ZIP: Midland, TX 79705 City, State ZIP: Carlsbad, NM 88220 Reporting: Level III Svel III Strius TRP Lei IV 281-702-2329 Email: hernandez@ltenv.com & abyers@ltenv.com ANALYSIS REQUEST ANALYSIS REQUEST	X	034820010	Project Number:
Manager: Joseph Hernandez Bill to: (# different) Lynda Laumbach Work Order Comments my Name: LT Environmental, Inc. Company Name: WPX Energy Program: UST/PST	ANALYSIS REQUEST	RDX 17-25	Project Name:
Manager: Joseph Hernandez Bill to: (if different) Lynda Laumbach Work Order Comments ny Name: LT Environmental, Inc. Company Name: WPX Energy Program: UST/PST RP Fownfields RC State of Project: Program: UST/PST RP Fownfields RC State of Project: s: 3300 North A Street Address: 5315 Buena Vista Dr State of Project: ate ZIP: Midland, TX 79705 City, State ZIP: Carlsbad, NM 88220 Reporting: Level II Program: UST/PST RP Fownfields RC State Of Project:	Deliverables: EDD ADaPT Other:	281-702-2329	Phone:
Manager: Joseph Hernandez Bill to: (if different) Lynda Laumbach Work Order Comments y Name: LT Environmental, Inc. Company Name: WPX Energy Program: UST/PST ☐RP ☐rownfields ☐C 3300 North A Street Address: 5315 Buena Vista Dr State of Project:	e ZIP: Carlsbad, NM 88220 Reporting:Level II ☐ bvel III ☐ \$T/UST T☐ RP ☐ L☐ el IV	Midland, TX 79705	City, State ZIP:
LT Environmental, Inc. Bill to: (if different) Lynda Laumbach Work Order Comments LT Environmental, Inc. Company Name: WPX Energy Program: UST/PST TRP Transfields of the company Name: New Tr	5315 Buena Vista Dr State of Project:	3300 North A Street	Address:
Joseph Hernandez Bill to: (if different) Lynda Laumbach Work Order Comments	WPX Energy Program: UST/PST RP Foundfields d	LT Environmental, Inc.	Company Name:
	Lynda Laumbach		Project Manager:

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 11.02.2020 03.50.00 PM Air and Metal samples Acceptable Range: Ambient

Work Order #: 676715 Temperature Measuring device used : T_NM_007

	Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		1	
#2 *Shipping container in good condition?		Yes	
#3 *Samples received on ice?		Yes	
#4 *Custody Seals intact on shipping contai	ner/ cooler?	Yes	
#5 Custody Seals intact on sample bottles?		Yes	
#6*Custody Seals Signed and dated?		Yes	
#7 *Chain of Custody present?		Yes	
#8 Any missing/extra samples?		No	
#9 Chain of Custody signed when relinquish	ned/ received?	Yes	
#10 Chain of Custody agrees with sample la	abels/matrix?	Yes	
#11 Container label(s) legible and intact?		Yes	
#12 Samples in proper container/ bottle?			Samples received in bulk containers.
#13 Samples properly preserved?			
#14 Sample container(s) intact?			
#15 Sufficient sample amount for indicated test(s)?			
#16 All samples received within hold time?		Yes	
#17 Subcontract of sample(s)?		No	
#18 Water VOC samples have zero headsp	ace?	N/A	

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

Checklist completed by:	Cloe Clifton	Date: <u>11.03.2020</u>
Checklist reviewed by:	Jessica Warner Jessica Kramer	Date: <u>11.03.2020</u>

PH Device/Lot#:

Analyst:

eurofins Environment Testing

Contact:

Project Location:

Certificate of Analysis Summary 676719

LT Environmental, Inc., Arvada, CO

Environmental, me., Alvada, et

Project Name: RDX 17-25

Project Id: 034820010

Joseph Hernandez

NM

Date Received in Lab: Mon 11.02.2020 15:50

Report Date: 11.05.2020 08:10

Project Manager: Jessica Kramer

	Lab Id:	676719-001			
Analysis Requested	Field Id:	CH02 @ 8-8.5'			
muysis Requesicu	Depth:	8-8.5 ft			
	Matrix:	SOIL			
	Sampled:	10.29.2020 13:15			
BTEX by EPA 8021B	Extracted:	11.03.2020 09:30			
	Analyzed:	11.03.2020 21:14			
	Units/RL:	mg/kg RL			
Benzene		< 0.00202 0.00202			
Toluene		< 0.00202 0.00202			
Ethylbenzene		< 0.00202 0.00202			
m,p-Xylenes		< 0.00403 0.00403			
o-Xylene		< 0.00202 0.00202			
Total Xylenes		< 0.00202 0.00202			
Total BTEX		<0.00202 0.00202			
Inorganic Anions by EPA 300	Extracted:	11.03.2020 13:00			
	Analyzed:	11.03.2020 16:32			
	Units/RL:	mg/kg RL			
Chloride		157 10.0			
TPH by SW8015 Mod	Extracted:	11.03.2020 13:27			
	Analyzed:	11.03.2020 20:04			
	Units/RL:	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8			
Diesel Range Organics (DRO)		<49.8 49.8	_		_
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8			
Total TPH		<49.8 49.8			
		<u> </u>		 	

BRL - Below Reporting Limit

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

Jessica Vramer



Analytical Report 676719

for

LT Environmental, Inc.

Project Manager: Joseph Hernandez

RDX 17-25 034820010 11.05.2020

Collected By: Client

1089 N Canal Street Carlsbad, NM 88220

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8) Xenco-Tampa: Florida (E87429), North Carolina (483)



11.05.2020

Project Manager: Joseph Hernandez

LT Environmental, Inc. 4600 W. 60th Avenue Arvada, CO 80003

Reference: Eurofins Xenco, LLC Report No(s): 676719

RDX 17-25

Project Address: NM

Joseph Hernandez:

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) 676719. 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. 676719 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,

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 676719

LT Environmental, Inc., Arvada, CO

RDX 17-25

 Sample Id
 Matrix
 Date Collected
 Sample Depth
 Lab Sample Id

 CH02 @ 8-8.5'
 S
 10.29.2020 13:15
 8 - 8.5 ft
 676719-001

Page 361 of 370

CASE NARRATIVE

eurofins Environment Testing Xenco

Client Name: LT Environmental, Inc.

Project Name: RDX 17-25

 Project ID:
 034820010
 Report Date:
 11.05.2020

 Work Order Number(s):
 676719
 Date Received:
 11.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 676719

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: CH02 @ 8-8.5' Matrix: Soil Date Received:11.02.2020 15:50

Lab Sample Id: 676719-001

Date Collected: 10.29.2020 13:15

Sample Depth: 8 - 8.5 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: Analyst: MAB

MAB

Date Prep:

11.03.2020 13:00

% Moisture:

Basis:

Wet Weight

Seq Number: 3141306

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	157	10.0	mg/kg	11.03.2020 16:32		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech:

MAB

CACAnalyst: Seq Number: 3141297 Date Prep: 11.03.2020 13:27 % Moisture:

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8		mg/kg	11.03.2020 20:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8		mg/kg	11.03.2020 20:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8		mg/kg	11.03.2020 20:04	U	1
Total TPH	PHC635	<49.8	49.8		mg/kg	11.03.2020 20:04	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date
1-Chlorooctane	111-85-3	135	%	70-135	11.03.2020 20:04
o-Terphenyl	84-15-1	124	%	70-135	11.03.2020 20:04

Wet Weight

11.03.2020 21:14

70-130

Xenco

Certificate of Analytical Results 676719

LT Environmental, Inc., Arvada, CO

RDX 17-25

Sample Id: CH02 @ 8-8.5' Matrix: Soil Date Received:11.02.2020 15:50

Lab Sample Id: 676719-001 Date Collected: 10.29.2020 13:15 Sample Depth: 8 - 8.5 ft

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: MAB

540-36-3

Seq Number: 3141311

1,4-Difluorobenzene

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	11.03.2020 21:14	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	11.03.2020 21:14	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	11.03.2020 21:14	U	1
m,p-Xylenes	179601-23-1	< 0.00403	0.00403		mg/kg	11.03.2020 21:14	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	11.03.2020 21:14	U	1
Total Xylenes	1330-20-7	< 0.00202	0.00202		mg/kg	11.03.2020 21:14	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	11.03.2020 21:14	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	4	460-00-4	115	%	70-130	11.03.2020 21:14		

103



Flagging Criteria

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

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

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

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

- + NELAC certification not offered for this compound.
- * (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 676719

eurofins **Environment Testing** Xenco

LT Environmental, Inc.

RDX 17-25

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3141306

MB

Matrix: Solid

LCS

Limits

E300P Prep Method: Date Prep:

RPD

%RPD

%RPD

Limite

11.03.2020

Analysis

LCS Sample Id: 7714455-1-BKS MB Sample Id: 7714455-1-BLK

LCS

LCSD Sample Id: 7714455-1-BSD

Units

Spike LCSD LCSD Flag **Parameter** Result Amount Result %Rec Result %Rec Limit Date Chloride <10.0 250 260 104 259 90-110 0 20 11.03.2020 15:10 104 mg/kg

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3141306 Matrix: Soil

Prep Method: Date Prep: 11.03.2020

E300P

676707-001 S 676707-001 MS Sample Id: Parent Sample Id:

MSD Sample Id:

676707-001 SD

Parent Spike MS MS MSD MSD Limits %RPD RPD Units Analysis **Parameter** Flag Result Amount Result %Rec %Rec Limit Date Result

11.03.2020 15:26 Chloride 606 200 796 95 806 100 90-110 1 20 mg/kg

Analytical Method: Inorganic Anions by EPA 300

3141306

MS

Prep Method:

E300P

Seq Number: Matrix: Soil Date Prep: 11.03.2020 Parent Sample Id: 676720-001

MS

MS Sample Id: 676720-001 S MSD Sample Id: 676720-001 SD

Units

Spike **RPD Parent** MSD **MSD** Analysis Flag **Parameter** Result Result Limit Date Amount %Rec Result %Rec Chloride 107 20 11.03.2020 16:43 148 200 361 363 108 90-110 1 mg/kg

Analytical Method: TPH by SW8015 Mod

Seq Number:

3141297

Matrix: Solid

SW8015P Prep Method:

Date Prep: 11.03.2020

7714426-1-BLK LCS Sample Id: 7714426-1-BKS LCSD Sample Id: 7714426-1-BSD MB Sample Id:

MB Spike LCS LCS LCSD LCSD Limits %RPD **RPD** Units Analysis **Parameter** Result Limit Date Result Amount %Rec %Rec Result Gasoline Range Hydrocarbons (GRO) 11.03.2020 15:40 35 < 50.0 1000 1180 118 1130 113 70-135 4 mg/kg 11.03.2020 15:40 Diesel Range Organics (DRO) 70-135 4 35 < 50.0 1000 1250 125 1200 120 mg/kg

LCS MBMB LCS LCSD Limits Units Analysis LCSD **Surrogate** Flag %Rec %Rec Flag Date Flag %Rec 11.03.2020 15:40 1-Chlorooctane 122 130 126 70-135 % 11.03.2020 15:40 o-Terphenyl 117 120 118 70-135 %

Analytical Method: TPH by SW8015 Mod

Seq Number: 3141297 Matrix: Solid

Prep Method: Date Prep: SW8015P 11.03.2020

Parameter

MBResult

MB Sample Id: 7714426-1-BLK

Units

Analysis Date

Flag

Flag

Motor Oil Range Hydrocarbons (MRO)

< 50.0

mg/kg

11.03.2020 15:20

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100*(C-A) / B $RPD = 200* \mid (C-E) \mid (C+E) \mid$ [D] = 100 * (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample = Parent Result

= MS/LCS Result = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

Flag

Flag

11.03.2020 16:41

Diesel Range Organics (DRO)

QC Summary 676719

LT Environmental, Inc.

RDX 17-25

1140

70-135

114

1

35

Analytical Method: TPH by SW8015 Mod
Seg Number: 3141297 Matrix: Soil

1010

1150

< 50.3

Prep Method: SW8015P

Date Prep: 11.03.2020

mg/kg

MS Sample Id: 676707-001 S MSD Sample Id: 676707-001 SD Parent Sample Id: 676707-001 RPD **Parent** Spike MS MS Limits %RPD Units Analysis MSD MSD **Parameter** Result Amount Result %Rec Result %Rec Limit Date Gasoline Range Hydrocarbons (GRO) < 50.3 1010 35 11.03.2020 16:41 1130 112 1050 105 70-135 7 mg/kg

114

MS MS MSD MSD Limits Units Analysis **Surrogate** Flag Flag Date %Rec %Rec 11.03.2020 16:41 1-Chlorooctane 129 133 70-135 % 11.03.2020 16:41 o-Terphenyl 123 105 70-135 %

Analytical Method:BTEX by EPA 8021BPrep Method:SW5035ASeq Number:3141311Matrix:SolidDate Prep:11.03.2020MB Sample Id:7714461-1-BLKLCS Sample Id:7714461-1-BKSLCSD Sample Id:7714461-1-BSD

MB Spike LCS LCS LCSD Limits %RPD **RPD** Units Analysis LCSD **Parameter** Result Amount Result %Rec Result %Rec Limit Date 0.106 11.03.2020 09:56 < 0.00200 0.100 0.101 101 70-130 5 35 Benzene 106 mg/kg 11.03.2020 09:56 Toluene < 0.00200 0.100 0.0955 96 0.101 101 70-130 6 35 mg/kg 11.03.2020 09:56 Ethylbenzene 0.100 0.0976 98 0.102 71-129 4 35 < 0.00200 102 mg/kg 11.03.2020 09:56 m,p-Xylenes < 0.00400 0.200 0.197 99 0.205 103 70-135 4 35 mg/kg 11.03.2020 09:56 < 0.00200 0.100 0.0967 97 0.102 102 71-133 5 35 o-Xylene mg/kg

Limits MB MB LCS LCS LCSD LCSD Units Analysis Surrogate %Rec Flag %Rec Flag Flag Date %Rec 11.03.2020 09:56 1,4-Difluorobenzene 104 99 104 70-130 % 103 70-130 % 11 03 2020 09:56 4-Bromofluorobenzene 110 110

 Analytical Method:
 BTEX by EPA 8021B
 Prep Method:
 SW5035A

 Seq Number:
 3141311
 Matrix:
 Soil
 Date Prep:
 11.03.2020

 Parent Sample Id:
 676514-007
 MS Sample Id:
 676514-007 S
 MSD Sample Id:
 676514-007 SD

RPD Parent Spike MS MS MSD **MSD** Limits %RPD Units Analysis Flag **Parameter** Limit Date Result Amount Result %Rec %Rec Result 11.03.2020 10:41 < 0.00201 0.101 0.107 106 0.0886 70-130 19 35 Benzene 89 mg/kg 11.03.2020 10:41 70-130 35 Toluene < 0.00201 0.101 0.0986 98 0.0879 88 11 mg/kg Ethylbenzene < 0.00201 0.101 0.0998 99 0.0910 91 71-129 9 35 11.03.2020 10:41 mg/kg 0.202 100 35 11.03.2020 10:41 m,p-Xylenes < 0.00402 0.201 0.186 93 70-135 8 mg/kg < 0.00201 0.101 0.102 101 0.0943 71-133 8 35 mg/kg 11.03.2020 10:41 o-Xylene 94

MS MS **MSD MSD** Limits Units Analysis Surrogate Flag Flag %Rec %Rec Date 11.03.2020 10:41 1,4-Difluorobenzene 100 101 70-130 % 11.03.2020 10:41 4-Bromofluorobenzene 107 117 70-130 %

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference [D] = 100*(C-A) / B RPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B] Log Diff = Log(Sample Duplics

 $Log\ Diff. = Log(Sample\ Duplicate) - Log(Original\ Sample)$

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result

E = MSD/LCSD Result

MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

					1	-	•
		2	05:51 02/4)1		C		mis
gnature) Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	gnature)	Received by: (Signature)	Signature)	Relinquished by: (Signature)
	It assigns standard terms and conditions to due to circumstances beyond the control forced unless previously negotiated.		Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xonco, its affiliates and subcontractors. Of service, Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses a of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be e	valid purchase order from o any responsibility for any l ge of \$5 for each sample su	samples constitutes a ves and shall not assume each project and a charge	ment and relinquishment of le only for the cost of sample of \$75.00 will be applied to	tice: Signature of this doc service. Xenco will be liab Xenco. A minimum charge
SiO2 Na Sr TI Sn U V Zn 1631 / 245.1 / 7470 / 7471 : Hg	Ni K Se Ag	ı Fe ı Mo	RA Sb As Ba Be C	RCRA 13PPM Texas 11 TCLP / SPLP 6010: 8RCRA	8RCRA alyzed TCLP /	otal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 Circle Method(s) a
	7						
	/						
			1				
							/-
			/ × × /	8-8.5	10/20/30 1315	-8.5'	CHEZO B
Sample Comments			TPH (E BTEX (Depth	Date Time Sampled Sampled	cation Matrix	Sample Identification
lab, if received by 4:30pm			PA 8		Total Containers:	Yes(No)N/A	Sample Custody Seals:
TAT starts the day received by the			015 N 80211	2.0-2	Correction Factor:	VD/I	Cooler Custody Seals:
			Mod B)	7	THINGO	(res No	Received Intact:
)	((2	Temperature (°C):
				Wet Ice: Yes No	Yes No	Temp Blank:	SAMPLE RECEIPT
				Due Date:		Anna Byers	Sampler's Name: A
				Rush:		Liner	P.O. Number: Li
				Routine 🕏		034820010	ň
Work Order Notes	31	ANALYSIS REQUEST		Turn Around		RDX 17-25	Project Name: R
ADaPT Other:	Deliverables: EDD	env.com	Email: jhernandez@ltenv.com & abyers@ltenv.com	Email: jhernandez@l		281-702-2329	Phone: 2
□\$T/UST T□RP U□eIIV [Reporting:Level II	20	Carlsbad, NM 88220	City, State ZIP:		Midland, TX 79705	City, State ZIP: M
				Address:		3300 North A Street	Address: 3:
□RP □rownfields f□c ¶perfund	Program: UST/PST RP			Company Name:		LT Environmental, Inc.	Company Name: L
Work Order Comments			Lynda Laumbach	Bill to: (if different)		Joseph Hernandez	Project Manager: Ju
ocom Page of of		Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334 Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296 Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)	Houston,TX (281) 240-4200 Dallas,TX (214) 802-0300 San Antonio,TX (210) Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (805)7 575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tam	Houston,TX (281) 240-42 Midland,TX (432-704-54 575-392-7550) Phoenix,	Hobbs,NM (BOHATORIES	PARI

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Acceptable Temperature Range: 0 - 6 degC

Date/ Time Received: 11.02.2020 03.50.00 PM Air and Metal samples Acceptable Range: Ambient

Work Order #: 676719

Analyst:

Temperature Measuring device used: T_NM_007

	Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		1	
#2 *Shipping container in good condition?		Yes	
#3 *Samples received on ice?		Yes	
#4 *Custody Seals intact on shipping contain	ner/ cooler?	Yes	
#5 Custody Seals intact on sample bottles?		Yes	
#6*Custody Seals Signed and dated?		Yes	
#7 *Chain of Custody present?		Yes	
#8 Any missing/extra samples?		No	
#9 Chain of Custody signed when relinquish	ed/ received?	Yes	
#10 Chain of Custody agrees with sample la	bels/matrix?	Yes	
#11 Container label(s) legible and intact?		Yes	
#12 Samples in proper container/ bottle?		Yes	Samples received in bulk containers.
#13 Samples properly preserved?		Yes	
#14 Sample container(s) intact?		Yes	
#15 Sufficient sample amount for indicated	est(s)?	Yes	
#16 All samples received within hold time?		Yes	
#17 Subcontract of sample(s)?		No	
#18 Water VOC samples have zero headsp	ace?	N/A	

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

Checklist completed by:	Cloe Clifton	Date: <u>11.03.2020</u>
Checklist reviewed by:	Jessica Vramer	Date: 11.03.2020

Jessica Kramer

PH Device/Lot#:

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

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 201020

CONDITIONS

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	201020
	Action Type:
	[IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created B	y Condition	Condition Date
amaxw	Work plan approved. Variance approved for sampling sidewalls and excavation base every 500 square feet. Submit a closure report by 6/30/2023.	3/27/2023

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

CONDITIONS

Action 253800

CONDITIONS

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	253800
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	8/22/2023