

CLOSURE REQUEST REPORT

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

Site Information:

RDX Federal 17 #035H

Incident Number nAB1928154373

Unit D, Section 17, Township 26 South, Range 30 East Eddy County, New Mexico (32.048192°, -103.909715°)

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SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of WPX Energy Permian, LLC (WPX), presents the following Closure Request Report (CRR) detailing excavation and soil sampling activities to address an inadvertent release of produced water at the RDX Federal 17 #035H (Site) and to propose reclamation activities to reestablish vegetation within the remediated footprint. Based on laboratory analytical results from confirmation soil sampling activities at the Site, WPX is requesting No Further Action (NFA) for Incident Number nAB1928154373.

SITE LOCATION AND RELEASE BACKGROUND

The production well (API 30-015-43884) for this Site is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM), located (32.0492796, -103.909725) as provided on the initial Form C-141. The subject release is located south of the production well (32.048192°, -103.909715°), which is depicted on **Figure 1** in **Appendix A**.

On September 8, 2019, a check valve failure resulted in the release of approximately 10 barrels (bbls) of produced water onto a pipeline Right-of-Way (ROW) south of the well pad. A vacuum truck was dispatched to the Site and recovered approximately 4 bbls of fluids. The incident was reported to the New Mexico Conservation Division (NMOCD) on a Release Notification and Corrective Action Form (Form C-141) on September 16, 2019, and was subsequently assigned Incident Number nAB1928154373. The observed extent of the release was mapped with a handheld Global Positioning System (GPS) unit, hereafter referred to as the Area of Concern (AOC), which is depicted on **Figure 2** in **Appendix A**.

In September and November 2019, a third-party environmental consultant oversaw remediation activities to the Maximum Extent Practical (MEP) and prepared a Deferral Request Report (DDR), requesting that residual impacted soil be left in place surrounding active utility infrastructure. The DDR was denied on March 16, 2020, by the NMOCD due to the following:

- "The OCD can only grant a deferral on an "Active Well Pad."
- "Soil sample points FS06 through FS09, SW01, SW02, and SW04 will need to be further delineated and safely excavated using a hydrovac and/or shovel. This will probably require coordinating with Solaris to remove the contaminated soil."
- "All off pad areas must contain a minimum of 4 feet non-waste containing uncontaminated, earthen material with chloride concentrations less than 600 mg/kg. In the pasture area, 4 feet below the ground surface, soil contamination limits revert back to Table 1 "Closure Criteria for Soils Impacted my a Release" Included in the spill rule http://164.64.110.134/parts/title19/19.015.0029.html."
- "Looking at the OCD Environmental Map and a few other resources, Below 4 feet in the pasture at this location, you would need to delineate and excavate to 20,000 mg/kg for chlorides."
- "Surface to 4 feet below ground surface the release will need to be delineated and excavated to 600 mg/kg for chlorides."

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Etech prepared a Closure Variance Request (CVR) to leave residual impacts in-situ surrounding active surface equipment/infrastructure and subsurface utilities containing a fragile subsurface pipeline within a shallow, well consolidated caliche and proposed corrective measures to improve vegetation regrowth. The CVR was submitted on August 2, 2023, and was denied on January 17, 2024, by the NMOCD due to the following:

The Closure Variance Report is Denied. Please follow the conditions set forth in the review of the original Remediation Plan. Cleanup of off-pad impacts cannot be deferred as they would not meet the deferral requirements of 19.15.29.12(C)(2) NMAC. The difference between on and off-pad releases is when the reclamation and restoration must occur. Off-pad releases must be reclaimed and restored immediately. Onpad reclamation and restoration can wait until operations have ceased, but still must be done."

Following the denial of the CVR, WPX coordinated the removal of surface infrastructure from the AOC area and coordinated with owner(s) of the subsurface infrastructure to determine soil removal requirements and/or encroachment guidelines as it pertained to each company. Continued remediation efforts are detailed in this updated CRR.

Previous remediation summaries may be referenced in the original reports submitted to the NMOCD.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

Based on the desktop review for the Site 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.

As summarized in the previous reports, depth to groundwater was determined to be greater than 100 feet below ground surface (bgs) and is further supported by a recently advanced based on a soil boring (MW-1) that was drilled by Talon LPE for WPX on December 16, 2020, located approximately 0.34 miles east of the Site on the RDX Federal Com 17-44H well pad. The soil boring location may be referenced on **Figure 1A** in **Appendix A**. 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 fluids were observed throughout the drilling process nor after a 72-hour observation period. Following the observation period, the boring was plugged and abandoned according to the appropriate regulations. The boring log for the referenced boring is provided in **Appendix B**.

All other potential receptors are not within the established buffers in NMAC 19.15.29.12. Receptor details from the site characterization are included in **Figure 1B** and **Figure 1C** in **Appendix A**.

Based on the results from the desktop review and estimated regional depth to groundwater at the Site, 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
TPH-Gasoline Range Organics (GRO) + TPH-Diesel Range Organics (DRO)	EPA 8015 M/D	1,000 mg/kg
Benzene	EPA 8021B/8260B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8021B/8260B	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.

All potential receptors are not within the established buffers in NMAC 19.15.29.12. Receptor details and sources used to determine the site characterization are included in **Figure 1A**, **Figure 1B**, and **Figure 1C** in **Appendix A**. Referenced well records are provided as **Appendix B**.

DELINEATION SOIL SAMPLING ACTIVITIES

On July 3, 2024, Etech conducted delineation to reassess the lateral extent of residual impacts associated with the AOC. Eight delineation potholes, labeled from a continuation of previous delineation soil samples (PH10 through PH17) were advanced to 4 feet bgs within proximity to the original lateral delineation soil sampling locations presented in the DDR. Delineation was driven by field screening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach[®] chloride QuanTab[®] test strips. Two soil samples were collected for laboratory analysis per delineation soil sampling location, representing the highest observed field screening concentration(s) and the terminus depth. Field screening results and soil descriptions are detailed on Soil Sampling Logs included in **Appendix C**. Photographic documentation of excavation activities is included in **Appendix D**.

The delineation soil samples were 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 the COCs. The delineation soil sample locations are shown in **Figure 2** in **Appendix A**.

DELINEATION LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all delineation soil samples indicated all analyzed COCs were below the Site Closure Criteria. 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**.

EXCAVATION SOIL SAMPLING ACTIVITIES

From October 14 to October 29, 2024, Etech directed the removal of identified residual soil impacts via hydro-excavation and mechanical heavy equipment based on laboratory analytical results from the DDR, recent delineation soil sample analytical results, and visual observation. The excavation was advanced to 4 feet bgs and laterally driven by field screening soil for VOCs and chloride as previously described. Photographic documentation of excavation activities is included in **Appendix D**.

Following the removal of impacted soil, Etech collected 5-point composite confirmation soil samples from the floors (FS01 through FS31) and sidewalls (SW01 through SW08) of the excavation, representing no more than 200 square feet per composite soil sample. The 5-point composite soil samples were comprised of five equivalent aliquots homogenized in a 1-gallon, resealable plastic bag. The samples were handled and analyzed as previously described.

Approximately 980 cubic yards (CY) of additional impacted soil was removed from the Site, totaling approximately 1,255 CY removed from the Site when including completed remediation detailed in the DRR. Impacted soil was transported to the R360 Red Bluff Landfill Facility in Orla, Texas under WPX approved manifests. The excavation extent and locations of confirmation excavation soil samples are shown in **Figure 3** in **Appendix A**.

EXCAVATION LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all final confirmation excavation soil samples indicated all analyzed COCs were below the Site Closure Criteria. 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**.

RECLAMATION

Upon receipt of laboratory analytical results, the excavation, which measured approximately 6,116 square feet, was backfilled with 1,255 CY of clean, locally sourced soil and the Site was restored to "as close to its original state" as possible. The final soil cover was contoured to match the Site's pre-existing grade to prevent ponding of water and erosion. BLM Seed Mix #2 (Sandy Sites) will be hand-broadcasted over the entire disturbed area in the next favorable growing season following BLM guidelines (**Appendix G**). The selected seed blend will provide the maximum results of vegetation regrowth and ground surface coverage to match pre-existing conditions at the Site.

On November 6, 2024, Etech assessed the backfill material for its capacity to host vegetative growth in comparison to the native surrounding soil. Three 5-point composite soil samples were collected from the backfill stockpile material for use the as soil cover for the excavation area (SC01 through SC03), representing approximately 418 CY per soil sample. One discrete soil sample was collected outside of the excavation disturbance area (BG01) from the surface (0-0.25 feet bgs) via hand shovel. The collected soil samples were field screened for VOCs and chloride, as previously described, and qualitatively evaluated for nutrient density of pH, Nitrogen (N), Phosphorus (P), and Potassium (K) utilizing a HoldAll® Soil Test Kit according to the operating manual, which is included in **Appendix H**.

Field screening results indicated the backfill material appears to correlate with surrounding soil nutrient content currently supporting native vegetative growth, as summarized in **Table 2** included in **Appendix E**. The restoration area and the location of field screened soil sample BG01 are shown in **Figure 4** in **Appendix A**. Photographic documentation of restoration activities is included in **Appendix D**.

CLOSURE REQUEST

Based on laboratory analytical results for confirmation excavation soil samples, WPX believes that residual soil impacts associated with the inadvertent release have been excavated and removed from the Site and the remediated area subsequently restored "as close to its original state" as possible. Concentrations of COCs for all final confirmation excavation soil samples were below the Site Closure Criteria and/or reclamation standard. WPX believes the completed remedial actions have met the requirements set forth in NMAC 19.15.29.13 regulations to be protective of human health, the environment and groundwater. As such, NFA appears warranted until the next favorable growing season and this CRR associated with Incident Number nRM2019548894 should be respectfully considered for Closure by the NMOCD.

If you have any questions or comments, please do not hesitate to contact Joseph Hernandez at (432) 305-6413 or joseph@etechenv.com or Anna Byers at (432) 305-6415 or anna@etechenv.com. **Appendix I** provides correspondence and/or email notification receipts associated with the subject release. Previous remediation activities and soil sample analytical results for the subject release can be referenced in archived reports in **Appendix J**.

Sincerely, Etech Environmental and Safety Solutions, Inc.

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Anna Byers Senior Geologist

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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 1A: Site Characterization Map Groundwater
 - Figure 1B: Site Characterization Map Surficial Receptors
 - Figure 1C: Site Characterization Map Subsurface Receptors
 - Figure 2: Delineation Soil Sample Locations
 - Figure 3: Excavation Soil Sample Locations
 - Figure 4: Restoration Area
- Appendix B: Referenced Well Records
- Appendix C: Soil Sampling Logs
- Appendix D: Photographic Log
- Appendix E: Tables
- Appendix F: Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix G: BLM Seed Mixture 2 for Sandy Sites
- Appendix H: HoldAll® Operating Manual
- Appendix I: Correspondence & Notifications
- Appendix J: Archived Reports

APPENDIX A

Figures









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APPENDIX B

Referenced Well Records



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		HR	L		ġ.		BORIN Boring/Well		MONITORING W	ELL COMPLETION	DIAG	RAM	
COMPLIANCE							_		<i>W</i> -1	RDX Federal Com 17-44H			
SOLUTIONS							Date:	12/8/	/2020	Client: WPX End	ergy		
Drilling Me	ethod: Air Rotar	•••7	Sampling I		one		Logged By:	Llin	ın, PG	Drilled By: Talon L	DE		
Gravel Pacl	k Type:	*	Gravel Pac	ek Depth Inte	erval:		Seal Type:		Seal Depth Interval:	Latitude:			
1 Casing Typ	0/20 Sar	nd Diameter:		3 B Depth Inter	ags val:			one Depth (ft. BGS	None	32.0496 Longitude:	56		_
PVC Screen Typ		2-inch		0-105 ft Diameter:	t bgs	Interval:		11	10	-103.904 Depth to Water (ft. BTOC):	054 DTW Date		
PVC	e:	Slot: 0.010-in	nch	2-inch	-	110 ft	Well Total D	epth (ft. BGS): 1	10	> 110		e: 5/2020)
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Litholog	y/Remarks	Well Completic		
$ \begin{array}{c} 0 \\ 5 \\ 10 \\ 15 \\ 20 \\ 25 \\ 30 \\ 35 \\ 40 \\ \end{array} $	NM	L	D	N	N	NM	CE	NS	Buff to pale pin	-			
45 50 55 60	NM	L	D	N	N	NM	SW	NS	Pinky orange well graded sand with minor silt		-		
65 70 75	NM	L	D	Ν	N	NM	SP	NS	Pinky pale brown orange poorly graded fine sand with minor silt		-		
80 85 90	NM	L	D	N	N	NM	SW-SM SW-SC	NS	Pinky brown orange well-graded sand with silt and clay		-		
95 100 105	NM	L	D	N	N	NM	SP	NS	Pinky pale brown orange poorly graded fine sand with minor silt - TD: 110' bgs		-		

APPENDIX C

Soil Sampling Logs



















APPENDIX D

Photographic Log









PHOTOGRAPHIC LOG WPX Energy Permian, LLC RDX Federal 17 #035H Incident Number nAB1928154373



Photograph 9Date: 11/06/2024Description: Nutrient testing results for backfill
material sample SC01.



Photograph 11Date: 11/08/2024Description: Southeastern view of the backfilled
excavation.



Photograph 10Date: 11/06/2024Description: Nutrient testing results for
background soils (BG01).



Photograph 12Date: 11/08/2024Description: Eastern view of the backfilledexcavation.

APPENDIX E

Tables



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etec	CH			Table 1 SOIL SAMPLE ANALYTICAL RESULTS WPX Energy Permian, LLC RDX Federal 17 #035H 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
				Delir	eation Soil Samples -	nAB1928154373	•	•	•	•
PH10	07/03/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	168
PH10	07/03/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	167
PH11	07/03/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	58.9
PH11	07/03/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	158
PH12	07/03/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
PH12	07/03/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	20.4
PH13	07/03/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
PH13	07/03/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	78.9
PH14	07/03/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	205
PH14	07/03/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	74.2
PH15	07/03/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	99.3
PH15	07/03/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	65.3
PH16	07/03/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	92.3
PH16	07/03/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	64.8
PH17	07/03/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	97.7
PH17	07/03/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	63.5
				Exca	vation Soil Samples -	nAB1928154373				
FS01	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	562
FS02	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	530
FS03	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,090
FS04	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	910
FS05	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,230
FS06	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,230
FS07	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	926
FS08	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	869
FS09	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	882
FS10	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	902
FS11	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	883

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Table 1 SOIL SAMPLE ANALYTICAL RESULTS WPX Energy Permian, LLC RDX Federal 17 #035H 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 Closur Release (NMAC 19.15.2		ils Impacted by a	10	50	NE	NE	NE	1,000	2,500	20,000
FS12	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,670
FS13	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,620
FS14	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,130
FS15	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,030
FS16	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	131
FS17	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<100
FS18	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<100
FS19	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<100
FS20	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<100
FS21	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,050
FS22	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,020
FS23	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	963
FS24	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS25	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	485
FS26	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	481
FS27	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	565
FS28	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	140
FS29	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	130
FS30	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	117
FS31	10/29/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	450
SW01	10/29/2024	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<100
SW02	10/29/2024	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<100
SW03	10/29/2024	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	324
SW04	10/29/2024	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	216

Table 1 SOIL SAMPLE ANALYTICAL RESULTS

Released to	
Imaging:	
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FE	H									
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 Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
SW05	10/29/2024	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	270
SW06	10/29/2024	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	204
SW07	10/29/2024	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<100
SW08	10/29/2024	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<100

Table 1

Notes:

6

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 Text in "grey" represents excavated soil samples

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

[†] 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.

•

GTEC	H		Table 2 SOIL SAMPLE FIELD SCREENING RESULTS WPX Energy Permian, LLC RDX Federal 17 #035H Eddy County, New Mexico						
Sample I.D. Sample Sample Dept Date (feet bgs)		Sample Depth (feet bgs)	Nitrogen Potash		Phosphorous	PH (ppm)	Chloride (ppm)		
			Restora	ation Soil Samples					
SC01	11/06/2024	-	Very Low	High	Very Low	7.5	<116		
SC02	11/06/2024	-	Very Low	Medium	Very Low	7.5	284		
SC03	11/06/2024	-	Very Low	Medium	Very Low	7.5	188		
BG01	11/06/2024	0-0.25	Very Low	Medium	Very Low	7.5	<116		

Notes: bgs: below ground surface ppm: parts per million "-" symbol: sample depth is not applicable

APPENDIX F

Laboratory Analytical Reports & Chain-of-Custody Documentation





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 Federal 17 #035H

Work Order: E407039

Job Number: 01058-0007

Received: 7/9/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 7/15/24

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: 7/15/24

Anna Byers 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX Federal 17 #035H Workorder: E407039 Date Received: 7/9/2024 11:20:00AM

Anna Byers,





Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/9/2024 11:20:00AM, under the Project Name: RDX Federal 17 #035H.

The analytical test results summarized in this report with the Project Name: RDX Federal 17 #035H 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

Field Offices: Southern New Mexico Area Lynn Jarboe Laboratory Technical Representative Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@envirotech-inc.com Raina Schwanz Laboratory Administrator Office: 505-632-1881 rainaschwanz@envirotech-inc.com

Michelle Gonzales Client Representative Office: 505-421-LABS(5227) Cell: 505-947-8222 mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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C		
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		Sample Sum	v			
5315 Buena Vista Dr		Project Name: Project Number: Project Manager:	RDX Federal 17 #(01058-0007 Anna Byers)35H	Reported: 07/15/24 12:19	
Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container	
PH10 0.5'	E407039-01A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H10 4'	E407039-02A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
PH11 0.5'	E407039-03A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H11 4'	E407039-04A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H12 0.5'	E407039-05A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H12 4'	E407039-06A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H13 0.5'	E407039-07A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H13 4'	E407039-08A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H14 0.5'	E407039-09A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H14 4'	E407039-10A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H15 0.5'	E407039-11A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H15 4'	E407039-12A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H16 0.5'	E407039-13A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H16 0.5'	E407039-14A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H17 0.5'	E407039-15A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	
H17 4'	E407039-16A	Soil	07/03/24	07/09/24	Glass Jar, 2 oz.	



	S	ample D	ata				
WPX Energy - Carlsbad	Project Name		K Federal 1	7 #035H	I		D ()
5315 Buena Vista Dr Carlsbad NM, 88220	Project Numb Project Manag		58-0007 a Byers				Reported: 7/15/2024 12:19:58PM
Carisbad NM, 88220	Project Manag	ger: Ann	a byers				//15/2024 12.19.58FW
		PH10 0.5'					
		E407039-01					
		Reporting					
Analyte	Result	Limit	Dilı	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
o-Xylene	ND	0.0250		1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		94.0 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		96.4 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2428036	
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		94.0 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		96.4 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		95.6 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: JM			Batch: 2428040
Chloride	168	20.0		1	07/09/24	07/09/24	



Samp	le Data
Samp	ne Data

	D	ample D	ata				
WPX Energy - Carlsbad	Project Name	e: RDZ	K Federal 1	17 #035H	Н		
5315 Buena Vista Dr	Project Num	ber: 0103	58-0007				Reported:
Carlsbad NM, 88220	Project Mana	iger: Ann	a Byers				7/15/2024 12:19:58PM
		PH10 4'					
		E407039-02					
		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	: BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
p-Xylene	ND	0.0250		1	07/09/24	07/10/24	
o,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Fotal Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		94.1 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		94.8 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.3 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2428036	
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		94.1 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		94.8 %	70-130		07/09/24	07/10/24	
urrogate: Toluene-d8		95.3 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV			Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Dil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		86.2 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: JM		Batch: 2428040
Chloride	167	20.0		1	07/09/24	07/09/24	



Sample Data

	D	ample D	uu				
WPX Energy - Carlsbad	Project Name	RD2	K Federal 1	17 #035H	ł		
5315 Buena Vista Dr	Project Numb	ber: 0105	58-0007				Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers				7/15/2024 12:19:58PM
		PH11 0.5'					
		E407039-03					
		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
p-Xylene	ND	0.0250		1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		94.2 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.8 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2428036	
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		94.2 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.8 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV			Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		94.5 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	JM		Batch: 2428040
Chloride	58.9	20.0		1	07/09/24	07/09/24	



Samp	le Data
Samp	ne Data

	5	ample D	ala				
WPX Energy - Carlsbad	Project Name	: RDY	K Federal 1	7 #035I	ł		
5315 Buena Vista Dr	Project Numb		58-0007				Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers				7/15/2024 12:19:58PM
		PH11 4'					
		E407039-04					
		Reporting					
Analyte	Result	Limit	Dilı	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
p-Xylene	ND	0.0250		1	07/09/24	07/10/24	
o,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.5 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		95.8 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.9 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA			Batch: 2428036
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.5 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		95.8 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.9 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV			Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Dil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		95.3 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	JM		Batch: 2428040
Chloride	158	20.0		1	07/09/24	07/09/24	



Sample Data

		impic D					
WPX Energy - Carlsbad	Project Name:		K Federal 1	17 #035H	H		
5315 Buena Vista Dr	Project Numbe		58-0007				Reported:
Carlsbad NM, 88220	Project Manag	er: Ann	a Byers				7/15/2024 12:19:58PM
		PH12 0.5'					
		E407039-05					
		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
p-Xylene	ND	0.0250		1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.9 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		98.2 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.9 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2428036	
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.9 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		98.2 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.9 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV			Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		100 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	JM		Batch: 2428040
Chloride	ND	20.0		1	07/09/24	07/09/24	



Sample Data

	5	ample D	ala				
WPX Energy - Carlsbad	Project Name	e: RDX	K Federal 1	7 #035H	[
5315 Buena Vista Dr	Project Numb	ber: 0105	58-0007				Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers				7/15/2024 12:19:58PM
		PH12 4'					
		E407039-06					
		Reporting					
Analyte	Result	Limit	Dilu	ition	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Benzene	ND	0.0250	1	1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250	1	1	07/09/24	07/10/24	
Toluene	ND	0.0250	1	1	07/09/24	07/10/24	
p-Xylene	ND	0.0250	:	1	07/09/24	07/10/24	
o,m-Xylene	ND	0.0500	1	1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.9 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.7 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA			Batch: 2428036
Gasoline Range Organics (C6-C10)	ND	20.0	:	1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.9 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.7 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0	1	1	07/09/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	:	1	07/09/24	07/11/24	
Surrogate: n-Nonane		97.6 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	JM		Batch: 2428040
Chloride	20.4	20.0	i	1	07/09/24	07/09/24	



Sample Data

	D	ample D	uu				
WPX Energy - Carlsbad	Project Name	: RD2	K Federal	17 #035H	ł		
5315 Buena Vista Dr	Project Numb	oer: 0103	58-0007				Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers				7/15/2024 12:19:58PM
		PH13 0.5'					
		E407039-07					
		Reporting					
Analyte	Result	Limit	Dil	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
p-Xylene	ND	0.0250		1	07/09/24	07/10/24	
o,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Fotal Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		94.9 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		95.3 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.4 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
urrogate: Bromofluorobenzene		94.9 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		95.3 %	70-130		07/09/24	07/10/24	
urrogate: Toluene-d8		95.4 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Dil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		91.1 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	JM		Batch: 2428040
Chloride	ND	20.0		1	07/09/24	07/09/24	



Sample Data

	5	ample D	ata				
WPX Energy - Carlsbad	Project Name	: RDX	K Federal 1	7 #0351	H		
5315 Buena Vista Dr	Project Numb	oer: 0105	01058-0007				Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers				7/15/2024 12:19:58PM
		PH13 4'					
		E407039-08					
		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
p-Xylene	ND	0.0250		1	07/09/24	07/10/24	
o,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		92.6 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		94.5 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		96.6 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	BA		Batch: 2428036
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		92.6 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		94.5 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		96.6 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	NV		Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Dil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		97.6 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	JM		Batch: 2428040
Chloride	78.9	20.0		1	07/09/24	07/09/24	



Sample Data

		mpic D					
WPX Energy - Carlsbad	Project Name:		K Federal	17 #035H	H		
5315 Buena Vista Dr	Project Numbe						Reported:
Carlsbad NM, 88220	Project Manage	er: Ann	a Byers				7/15/2024 12:19:58PM
		PH14 0.5'					
]	E407039-09					
		Reporting					
Analyte	Result	Limit	Dil	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
p-Xylene	ND	0.0250		1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.2 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		96.7 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.2 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		96.7 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		90.8 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	JM		Batch: 2428040
Chloride	205	40.0		2	07/09/24	07/09/24	



Samp	le Data
Samp	ne Data

		ample D	uu				
WPX Energy - Carlsbad	Project Name:	RDZ	K Federal				
5315 Buena Vista Dr	Project Numb	er: 0103	01058-0007				Reported:
Carlsbad NM, 88220	Project Manag	ger: Ann	a Byers				7/15/2024 12:19:58PM
		PH14 4'					
		E407039-10					
		Reporting					
Analyte	Result	Limit	Dil	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	: BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
p-Xylene	ND	0.0250		1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.6 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.5 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	: BA		Batch: 2428036
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.6 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.5 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: NV		Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Dil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		86.3 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: JM		Batch: 2428040
Chloride	74.2	20.0		1	07/09/24	07/09/24	



Sample Data

	5	ample D	uu				
WPX Energy - Carlsbad	Project Name	: RD2	K Federal				
5315 Buena Vista Dr	Project Numb	oer: 0103	58-0007				Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers				7/15/2024 12:19:58PM
		PH15 0.5'					
		E407039-11					
		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
p-Xylene	ND	0.0250		1	07/09/24	07/10/24	
o,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Fotal Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		94.1 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		96.2 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		94.1 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130		07/09/24	07/10/24	
urrogate: Toluene-d8		96.2 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Dil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		86.1 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	JM		Batch: 2428040
Chloride	99.3	20.0		1	07/09/24	07/09/24	



	D	ample D	uu				
WPX Energy - Carlsbad	Project Name	e: RDZ	K Federal 1	17 #0351	H		
5315 Buena Vista Dr	Project Numb	ber: 0105	58-0007				Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers				7/15/2024 12:19:58PM
		PH15 4'					
		E407039-12					
		Reporting					
Analyte	Result	Limit	Dil	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	: BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
p-Xylene	ND	0.0250		1	07/09/24	07/10/24	
p,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.0 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		99.8 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.8 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	: BA		Batch: 2428036
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.0 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		99.8 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.8 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: NV		Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		90.1 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: JM		Batch: 2428040
Chloride	65.3	20.0		1	07/09/24	07/09/24	



Sample Data

		ample D	uu				
WPX Energy - Carlsbad	Project Name	: RD2	K Federal				
5315 Buena Vista Dr	Project Numb	oer: 0103	58-0007				Reported:
Carlsbad NM, 88220	Project Manag	ger: Ann	a Byers				7/15/2024 12:19:58PM
		PH16 0.5'					
		E407039-13					
		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
p-Xylene	ND	0.0250		1	07/09/24	07/10/24	
o,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.9 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.2 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.9 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.2 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Dil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		92.4 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	JM		Batch: 2428040
Chloride	92.3	20.0		1	07/09/24	07/09/24	



Sample Data

		ample D	uu				
WPX Energy - Carlsbad	Project Name	: RD2	K Federal				
5315 Buena Vista Dr	Project Numb	oer: 0103	58-0007				Reported:
Carlsbad NM, 88220	Project Manag	ger: Ann	a Byers				7/15/2024 12:19:58PM
		PH16 0.5'					
		E407039-14					
		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
p-Xylene	ND	0.0250		1	07/09/24	07/10/24	
o,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.2 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		98.7 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		96.2 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.2 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		98.7 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		96.2 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Dil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		95.6 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	JM		Batch: 2428040
Chloride	64.8	20.0		1	07/09/24	07/09/24	



Sample Data

		ample D	uu				
WPX Energy - Carlsbad	Project Name	: RD2	K Federal 1				
5315 Buena Vista Dr	Project Numb	oer: 0103	58-0007				Reported:
Carlsbad NM, 88220	Project Manag	ger: Ann	a Byers				7/15/2024 12:19:58PM
		PH17 0.5'					
		E407039-15					
		Reporting					
Analyte	Result	Limit	Dil	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
p-Xylene	ND	0.0250		1	07/09/24	07/10/24	
o,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Total Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		94.2 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.9 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	BA		Batch: 2428036
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		94.2 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.9 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	NV		Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Dil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		69.4 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	JM		Batch: 2428040
Chloride	97.7	20.0		1	07/09/24	07/09/24	



Sample Data

	5	ample D	ata				
WPX Energy - Carlsbad	Project Name		K Federal 1	7 #0351	H		
5315 Buena Vista Dr	Project Numb		58-0007	Reported:			
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers	7/15/2024 12:19:58PM			
		PH17 4'					
		E407039-16					
		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	BA		Batch: 2428036
Benzene	ND	0.0250		1	07/09/24	07/10/24	
Ethylbenzene	ND	0.0250		1	07/09/24	07/10/24	
Toluene	ND	0.0250		1	07/09/24	07/10/24	
o-Xylene	ND	0.0250		1	07/09/24	07/10/24	
o,m-Xylene	ND	0.0500		1	07/09/24	07/10/24	
Fotal Xylenes	ND	0.0250		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.7 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.8 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	BA		Batch: 2428036
Gasoline Range Organics (C6-C10)	ND	20.0		1	07/09/24	07/10/24	
Surrogate: Bromofluorobenzene		93.7 %	70-130		07/09/24	07/10/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130		07/09/24	07/10/24	
Surrogate: Toluene-d8		95.8 %	70-130		07/09/24	07/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2428029
Diesel Range Organics (C10-C28)	ND	25.0		1	07/09/24	07/11/24	
Dil Range Organics (C28-C36)	ND	50.0		1	07/09/24	07/11/24	
Surrogate: n-Nonane		89.6 %	50-200		07/09/24	07/11/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	JM		Batch: 2428040
Chloride	63.5	20.0		1	07/09/24	07/09/24	



QC Summary Data

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WPX Energy - Carlsbad		Project Name:	RI	OX Federal 17	7 #035H				Reported:	
5315 Buena Vista Dr		Project Number:	01	058-0007						
Carlsbad NM, 88220		Project Manager:	Ar	nna Byers				7/3	7/15/2024 12:19:58PM	
		Volatile Organic	Compo	unds bv El	PA 82601	3	Analyst: BA			
			-	-					Analyst. DA	
Analyte	D14	Reporting Limit	Spike Level	Source Result	Daa	Rec Limits	RPD	RPD Limit		
	Result mg/kg	mg/kg	mg/kg	mg/kg	Rec %	%	%	%	Notes	
	ilig/kg	iiig/kg	iiig/kg	ilig/kg	70	70	70	70	Notes	
Blank (2428036-BLK1)							Prepared: 07	7/09/24 Ana	lyzed: 07/10/24	
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: Bromofluorobenzene	0.470		0.500		94.0	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.502		0.500		100	70-130				
Surrogate: Toluene-d8	0.477		0.500		95.3	70-130				
LCS (2428036-BS1)							Prepared: 0	7/00/24 Ana	lyzed: 07/10/24	
, , ,	2.20		2.50		05.2	70.120	Trepared. 0	nonz + Ana	Iyzeu. 07/10/24	
Benzene	2.38	0.0250	2.50		95.2	70-130				
Ethylbenzene	2.47	0.0250	2.50		98.6	70-130				
Toluene	2.30	0.0250	2.50		92.1	70-130				
p-Xylene	2.34	0.0250	2.50		93.7	70-130				
p,m-Xylene	4.63	0.0500	5.00		92.5	70-130				
Total Xylenes	6.97	0.0250	7.50		92.9	70-130				
Surrogate: Bromofluorobenzene	0.465		0.500		92.9	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.8	70-130				
Surrogate: Toluene-d8	0.481		0.500		96.2	70-130				
Matrix Spike (2428036-MS1)				Source:	E407039-(05	Prepared: 07	7/09/24 Ana	lyzed: 07/10/24	
Benzene	2.42	0.0250	2.50	ND	96.7	48-131				
Ethylbenzene	2.49	0.0250	2.50	ND	99.6	45-135				
Toluene	2.34	0.0250	2.50	ND	93.5	48-130				
o-Xylene	2.47	0.0250	2.50	ND	98.8	43-135				
p,m-Xylene	4.84	0.0500	5.00	ND	96.7	43-135				
Total Xylenes	7.31	0.0250	7.50	ND	97.4	43-135				
Surrogate: Bromofluorobenzene	0.471		0.500		94.1	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.8	70-130				
Surrogate: Toluene-d8	0.483		0.500		96.6	70-130				
Matrix Spike Dup (2428036-MSD1)				Source:	E407039-0	05	Prepared: 07	7/09/24 Ana	lyzed: 07/10/24	
Benzene	2.41	0.0250	2.50	ND	96.3	48-131	0.373	23	-	
Ethylbenzene	2.52	0.0250	2.50	ND	101	45-135	1.12	27		
Toluene	2.36	0.0250	2.50	ND	94.3	48-130	0.874	24		
	2.50		2.50	ND	102	43-130	3.01	24		
o-Xylene	2.54 4.99	0.0250								
p,m-Xylene	4.99 7.54	0.0500	5.00 7.50	ND ND	99.9 100	43-135 43-135	3.19 3.13	27 27		
Total Xylenes		0.0250		ND			3.13	21		
Surrogate: Bromofluorobenzene	0.483		0.500		96.5	70-130				
	0.407		0.500		99.4	70-130				
Surrogate: 1,2-Dichloroethane-d4 Surrogate: Toluene-d8	0.497 0.482		0.500		96.4	70-130				



QC Summary Data

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WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(RDX Federal 17 01058-0007 Anna Byers	7 #035H				Reported: 7/15/2024 12:19:58PM
	No		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 (2428036-BLK1)							Prepared: 0	7/09/24 A	Analyzed: 07/10/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.470		0.500		94.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.502		0.500		100	70-130			
Surrogate: Toluene-d8	0.477		0.500		95.3	70-130			
LCS (2428036-BS2)							Prepared: 0	7/09/24 A	Analyzed: 07/10/24
Gasoline Range Organics (C6-C10)	45.2	20.0	50.0		90.4	70-130			
Surrogate: Bromofluorobenzene	0.480		0.500		96.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.487		0.500		97.4	70-130			
Surrogate: Toluene-d8	0.489		0.500		97.8	70-130			
Matrix Spike (2428036-MS2)				Source:	E407039-(05	Prepared: 0	7/09/24 A	Analyzed: 07/10/24
Gasoline Range Organics (C6-C10)	43.2	20.0	50.0	ND	86.5	70-130			
Surrogate: Bromofluorobenzene	0.473		0.500		94.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.6	70-130			
Surrogate: Toluene-d8	0.486		0.500		97.2	70-130			
Matrix Spike Dup (2428036-MSD2)				Source:	E407039-(05	Prepared: 0	7/09/24 A	Analyzed: 07/10/24
Gasoline Range Organics (C6-C10)	43.9	20.0	50.0	ND	87.8	70-130	1.56	20	
Surrogate: Bromofluorobenzene	0.475		0.500		94.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.474		0.500		94.7	70-130			
Surrogate: Toluene-d8	0.484		0.500		96.7	70-130			



QC Summary Data

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WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	C	RDX Federal 17 01058-0007 Anna Byers	7 #035H				Reported: 7/15/2024 12:19:58PM
	Nonha	alogenated Org	anics by	y EPA 8015I) - DRO	/ORO			Analyst: NV
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2428029-BLK1)							Prepared: 0	7/09/24 4	Analyzed: 07/11/24
Diesel Range Organics (C10-C28)	ND	25.0					1		
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.2		50.0		96.4	50-200			
LCS (2428029-BS1)							Prepared: 0	7/09/24 A	Analyzed: 07/11/24
Diesel Range Organics (C10-C28)	265	25.0	250		106	38-132			
Surrogate: n-Nonane	53.8		50.0		108	50-200			
Matrix Spike (2428029-MS1)				Source:	E407039-	09	Prepared: 0	7/09/24 A	Analyzed: 07/11/24
Diesel Range Organics (C10-C28)	264	25.0	250	ND	106	38-132			
Surrogate: n-Nonane	55.2		50.0		110	50-200			
Matrix Spike Dup (2428029-MSD1)				Source:	E407039-	09	Prepared: 0	7/09/24 A	Analyzed: 07/11/24
Diesel Range Organics (C10-C28)	230	25.0	250	ND	92.0	38-132	13.9	20	
Surrogate: n-Nonane	44.8		50.0		89.7	50-200			

QC Summary Data

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WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220		Project Name: Project Number: Project Manager:		RDX Federal 17 01058-0007 Anna Byers	7 #035H				Reported: 7/15/2024 12:19:58PM
		Anions	by EPA	300.0/9056A	1				Analyst: JM
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2428040-BLK1)							Prepared: 0	7/09/24 A	nalyzed: 07/09/24
Chloride	ND	20.0							
LCS (2428040-BS1)							Prepared: 0	7/09/24 A	nalyzed: 07/09/24
Chloride	248	20.0	250		99.3	90-110			
Matrix Spike (2428040-MS1)				Source:	E407039-()9	Prepared: 0	7/09/24 A	nalyzed: 07/09/24
Chloride	425	40.0	250	205	88.1	80-120			
Matrix Spike Dup (2428040-MSD1)				Source:	E407039-0)9	Prepared: 0	7/09/24 A	nalyzed: 07/09/24
Chloride	439	40.0	250	205	93.7	80-120	3.22	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 Federal 17 #035H	
	5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
	Carlsbad NM, 88220	Project Manager:	Anna Byers	07/15/24 12:19

ND At	nalyte NOT DETECTED at or above	the reporting limit
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- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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

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



Reproject Information

8:00 07.03.24 S 1 PH10 I 0.5' I X I 8:00 07.03.24 S 1 PH10 I 0.5' I X I 8:00 07.03.24 S 1 PH10 I 0.5' I X I 8:40 07.03.24 S 1 PH10 J 4' I I X I 9:00 07.03.24 S 1 PH11 J 0.5' I X I 9:00 07.03.24 S 1 PH11 J 4' I I X I 9:00 07.03.24 S 1 PH12 S 0.5' I X I 9:40 07.03.24 S 1 PH12 G 4' I I X I 9:40 07.03.24 S 1 PH13 J 0.5' I I X I 10:20 07.03.24 S 1 PH13 J	Client: V	VPX Energ	gy Permia	an, LLC.		120	Bill To	To Lab Use Only TAT EPA Pro					rogram									
Toget Manager: Ana Byers Address: 3303 Buena Vista Dr. E. 40-73.03 Dis Social Soci		A SHARESH C HARD							Lab	WO	#						1D	2D 3	D	Standard		1
defers: 3300 W Courty Rd 100 Analysis and Method RCRA Vis.State, ZD, Oddsan, TV, 7725-100 Number State Number State Direct: State ZD, 7725-7502 Number State Number State Olicetted by: Edvs state, ZD, 7275-7502 Number State Number State Olicetted by: Edvs state, ZD, 7275-7502 Number State Number State State Number State Number State Number Number State 000 600 67.03.4 5 1 PH10 1 0.5 1 Remarks 900 62.0 67.03.4 5 1 PH11 3 0.5 1 Number Numer Number Number	Project	Manager:	Anna Bye	ers					E	40	70	39	OK	259	3-00	FO.				5 day TAT		
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10:00 07.03.24 5 1 PH13 7 0.5' X Image: Construction of the construction of	9:20	07.03.24	S	1			PH12	5	0.5								x					
10:20 07.03.24 S 1 PH13 8 4' Image: Construction of the stand of	9:40	07.03.24	S	1	-		PH12	6	4'								x		1			
10:40 07.03.24 S 1 PH14 9 0.5 X Image: Construction of the sample of the	10:00	07.03.24	S	1			PH13	7	0.5								x					
11:00 07.03.24 5 1 PH14 10 4' Additional Instructions: (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, the or time of collection is considered fraud and may be grounds for legal action. Sampled by:GM Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 *C on subsequent days. elinquished by: (Signature) 01/08/7.4 10/09/00 Received by: (Signature) Pate Time Lab Use Only elinquished by: (Signature) 02/08/7.4 10/09/00 Received by: (Signature) Pate Time Avg Temp °C_ 4 Image Received by: (Signature) 0ate Time Avg Temp °C_ 4 Avg Signature) 0ate Time Avg Temp °C_ 4 Avg Signature) 0ate Time Avg Temp °C_ 4 Avg Signature) 0ate Time Time Avg Temp °C_ 4 Avg Signature) 0ate Time	10:20	07.03.24	S	1			PH13	8	4'								x		1			
dditional Instructions: (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, the or time of collection is considered fraud and may be grounds for legal action. Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an arg temp above 0 but less than 6°C on subsequent days. elinquished by: (Signature) Date Time Lab Use Only aliquicibility of this sample. Time Received by: (Signature) Date Time aliquicibility of this sample. Time Received by: (Signature) Date Time aliquished by: (Signature) Date Time Lab Use Only aliquished by: (Signature) Date Time Time 7555 T1 T2 T3 aliquished by: (Signature) Date Time 75.50.1 AVG Temp °C_4 AVG Temp °C_4 T1 T2 T3 aliquished active to the districe for the analysis of the above other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above on the report. ort: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above imples is applica	10:40	07.03.24	S	1			PH14	9	0.5	-	-						x					
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elinghished by: (Signature) The forme for the analysis of the above imple Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA ote: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above imples 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. Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA the container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA the container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA the container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA the container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA the container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA the container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA the container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA the container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA the container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA the poly of the plane type of t		my	F				1000 Curles	1-00	17	11	500	<u>د</u>	Rece	eived	d on ic	ce:	0	/ N				
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Page 27 of 29 Cenvirol	samples is	applicable of	only to thos	e samples	received by th	ne laborator	y with this COC. The liability of the labo	ratory is limited	to the	amo	unt pa	id for	on the	e repo	ort.		11					
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Reproject Information

Chain of Custody

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lient: W	VPX Energ	y Permia	an, LLC.		Bi	ll To		1		La	b Us	se Onl	ly				TAT		EPA P	rogram
	RDX Fede				Attention: Jim Raley			Lab	WO	#		Job N	lum	ber	1D 21	D 31	_	tandard	CWA	SDWA
	Manager:				Address: 5315 Buena			E	40.	103				-0007			5	day TAT	-	
	: 13000 W				City, State, Zip: Carlsh		0	-	-			Analys	sis an	d Metho	d		-			RCRA
	te, Zip_Oc		, 79765		Phone: 575-885-7502			-	LO,											
	132-305-64				Email: jim.raley@dvr	.com			8015										State	
mail: D	evon-tear	n@etech	nenv.com	1	WO: 21280176				þ									NM CO	UT AZ	TX
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Time	Date	Matrix	No. of Containers	Sample ID			Lab	Depth(ft.)	HG	BTEX by	VOC by	Metals	Chloric		BGDOC	GDOC			Remarks	
Sampled	Sampled		Containers				Number	De	TP	BT	2 V	ž	5		BG	5				_
11:20	07.03.24	S	1	S	PH15		11	0.5							x					
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11:40	07.03.24	S	1		PH15		12	4'							x					
11.40	07.05.24	5	1	1	THIS		12	1						-						
12:00	07.03.24	S	1		PH16		13	0.5							x					
12.00	07.05.24	3	1		1110		12	0.5	-	-					^					
12:20	07.03.24	S	1		PH16		1.1	4'	1				T		x		1			
12.20	07.05.24	3	1		PHIO		14	4							X					
12:40	07.03.24	S	1		PH17		.6	0.5'							~					1.00
12:40	07.03.24	2	1		PHI		15	0.5							x					
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13:00	07.03.24	S	1		PH17		16	4'							X					
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field ener	alas) attact to	the unlidit	unnel suthon	ticity of this same	le. I am aware that tampering with or i	stantionally midale	alling the cam	nlo los:	ation			Samples	s requir	ing thermal	preservation	n must b	e receiv	ed on ice the da	w they are sam	oled or
				I may be grounds fo			ching the sam	pie ioca	actori,		$ \lambda$		2					than 6 °C on sub		
	ed by: (Signa		Date				Date	- 200-	Time					-	Lab	Use (July	-	and the second second	
cinquisi	-1-14	Đ	07	108/24 10	2:00 Mudller	C.L	7-8.	14	Part of the	Dod		Deen	ined	on ice:	DI	NI	July			
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Received by OCD: 2/20/2025 1:24:13 PM

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

		Sampie	Receipt Checkinst (SRC)		
Instructions	: Please take note of any NO check	marks.			
If we receive	e no response concerning these items	within 24 hours of the date of this noti	ice, all the samples will be ana	lyzed as requested.	
Cliente	WPX Energy - Carlshad	Data Pagaiyad	07/00/24 11-20	West-Orden ID:	E407020

Client:	WPX Energy - Carlsbad	Date Received:	07/09/24	11:20		Work Order ID:	E407039
	(575) 200-6754	Date Logged In:	07/08/24	16:43		Logged In By:	Alexa Michaels
	anna@etechenv.vom	Due Date:		17:00 (4 day TAT)		Logged in Dy.	
	0			,			
<u>Chain of C</u>	Sustody (COC)						
	sample ID match the COC?		Yes				
	number of samples per sampling site location ma	atch the COC	Yes				
	nples dropped off by client or carrier?		Yes	Carrier:			
	COC complete, i.e., signatures, dates/times, reque	ested analyses?	Yes				
	samples received within holding time? Note: Analysis, such as pH which should be conducted i.e, 15 minute hold time, are not included in this disucss		Yes			Comment	s/Resolution
	rn Around Time (TAT)						
-	COC indicate standard TAT, or Expedited TAT?		Yes				
Sample Co	oler						
	mple cooler received?		Yes				
8. If yes, wa	as cooler received in good condition?		Yes				
9. Was the	sample(s) received intact, i.e., not broken?		Yes				
10. Were cu	ustody/security seals present?		No				
11. If yes, v	were custody/security seals intact?		NA				
:	sample received on ice? If yes, the recorded temp is 4°C Note: Thermal preservation is not required, if samples a minutes of sampling		Yes				
	sible ice, record the temperature. Actual sample	e temperature: <u>4°</u>	<u>'C</u>				
<u>Sample Co</u>	ntainer						
14. Are aqu	eous VOC samples present?		No				
15. Are VO	OC samples collected in VOA Vials?		NA				
16. Is the h	ead space less than 6-8 mm (pea sized or less)?		NA				
17. Was a ti	rip blank (TB) included for VOC analyses?		NA				
18. Are nor	n-VOC samples collected in the correct containers	s?	Yes				
19. Is the ap	propriate volume/weight or number of sample conta	iners collected?	Yes				
<u>Field Labe</u>	—						
	eld sample labels filled out with the minimum inf nple ID?	formation:	Yes				
	te/Time Collected?		Yes				
Col	llectors name?		Yes				
Sample Pro	<u>eservation</u>						
21. Does th	e COC or field labels indicate the samples were p	preserved?	No				
22. Are san	nple(s) correctly preserved?		NA				
24. Is lab fi	lteration required and/or requested for dissolved	metals?	No				
<u>Multiphase</u>	e Sample Matrix						
26. Does th	e sample have more than one phase, i.e., multiphe	ase?	No				
27. If yes, d	loes the COC specify which phase(s) is to be ana	lyzed?	NA				
Subcontra	ct Laboratory						
	nples required to get sent to a subcontract laborate	ory?	No				
29. Was a s	ubcontract laboratory specified by the client and	if so who?	NA	Subcontract Lab): NA		
<u>Client Ins</u>	truction						



envirotech Inc.

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

Date



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 Federal 17 #035H

RDA Federal 17 #035F

Work Order: E410369

Job Number: 01058-0007

Received: 10/31/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 11/1/24

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: 11/1/24

Anna Byers 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX Federal 17 #035H Workorder: E410369 Date Received: 10/31/2024 6:30:00AM

Anna Byers,



P

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/31/2024 6:30:00AM, under the Project Name: RDX Federal 17 #035H.

The analytical test results summarized in this report with the Project Name: RDX Federal 17 #035H 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

Field Offices: Southern New Mexico Area Lynn Jarboe Laboratory Technical Representative Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@envirotech-inc.com Raina Schwanz Laboratory Administrator Office: 505-632-1881 rainaschwanz@envirotech-inc.com

Michelle Gonzales Client Representative Office: 505-421-LABS(5227) Cell: 505-947-8222 mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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San	nle	Sm	mm	arv	

Sample Summary								
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	RDX Federal 17 #(01058-0007 Anna Byers)35H	Reported: 11/01/24 13:03			
lient Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container			
501 4'	E410369-01A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
502 4'	E410369-02A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
503 4'	E410369-03A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
504 4'	E410369-04A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
505 4'	E410369-05A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
506 4'	E410369-06A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
507 4'	E410369-07A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
508 4'	E410369-08A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
509 4'	E410369-09A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
510 4'	E410369-10A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
511 4'	E410369-11A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
512 4'	E410369-12A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
513 4'	E410369-13A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
514 4'	E410369-14A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
\$15 4'	E410369-15A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
S16 4'	E410369-16A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
517 4'	E410369-17A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
518 4'	E410369-18A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
519 4'	E410369-19A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			
520 4'	E410369-20A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.			



	S	Sample D	ata			
WPX Energy - Carlsbad	Project Nam		K Federal 17	#035H		
5315 Buena Vista Dr	Project Num		58-0007			Reported:
Carlsbad NM, 88220	Project Mana	ager: Ann	a Byers			11/1/2024 1:03:48PM
		FS01 4'				
		E410369-01				
		Reporting				
Analyte	Result	Limit	Dilutio	on Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	nalyst: BA		Batch: 2444110
Benzene	ND	0.0250	1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250	1	10/30/24	10/31/24	
Toluene	ND	0.0250	1	10/30/24	10/31/24	
o-Xylene	ND	0.0250	1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500	1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130	10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.0 %	70-130	10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130	10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	Analyst: BA		Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130	10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.0 %	70-130	10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130	10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	nalyst: NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0	1	10/31/24	10/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/31/24	10/31/24	
Surrogate: n-Nonane		95.5 %	50-200	10/31/24	10/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: DT		Batch: 2444123
Chloride	562	40.0	2	10/31/24	10/31/24	



Sample Data

	D	ample D	ala				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name Project Numb Project Mana	ber: 0103	K Federal 1 58-0007 a Byers	7 #0351	Н		Reported: 11/1/2024 1:03:48PM
Carisbau INN, 88220	Floject Malla	gei. Ain	a Byers				11/1/2024 1.03.40110
		FS02 4'					
		E410369-02					
		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		114 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.9 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		109 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2444110		
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		114 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.9 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		109 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	10/31/24	
Oil Range Organics (C28-C36)	ND	50.0		1	10/31/24	10/31/24	
Surrogate: n-Nonane		89.2 %	50-200		10/31/24	10/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	DT		Batch: 2444123
Chloride	530	40.0		2	10/31/24	10/31/24	



Sample Data

	G	sample D	ala			
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name Project Num Project Mana	ber: 0105	K Federal 17 58-0007 a Byers	#035H		Reported: 11/1/2024 1:03:48PM
		FS03 4'				
		E410369-03				
Analyte	Result	Reporting Limit	Diluti	on Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	nalyst: BA		Batch: 2444110
Benzene	ND	0.0250	1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250	1	10/30/24	10/31/24	
Toluene	ND	0.0250	1	10/30/24	10/31/24	
p-Xylene	ND	0.0250	1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500	1	10/30/24	10/31/24	
Fotal Xylenes	ND	0.0250	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130	10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		94.6 %	70-130	10/30/24	10/31/24	
Surrogate: Toluene-d8		111 %	70-130	10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	g Analyst: BA		Batch: 2444110	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130	10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		94.6 %	70-130	10/30/24	10/31/24	
Surrogate: Toluene-d8		111 %	70-130	10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	nalyst: NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0	1	10/31/24	10/31/24	
Dil Range Organics (C28-C36)	ND	50.0	1	10/31/24	10/31/24	
Surrogate: n-Nonane		93.5 %	50-200	10/31/24	10/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: DT		Batch: 2444123
Chloride	1090	200	10	10/31/24	10/31/24	


	6	ample D	ala				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name Project Numb Project Manag	er: 0103	K Federal 1 58-0007 a Byers	7 #035H	H		Reported: 11/1/2024 1:03:48PM
		FS04 4'					
		E410369-04					
		Reporting					
Analyte	Result	Limit	Dilı	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		114 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		112 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	BA		Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		114 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		112 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	10/31/24	
Oil Range Organics (C28-C36)	ND	50.0		1	10/31/24	10/31/24	
Surrogate: n-Nonane		97.7 %	50-200		10/31/24	10/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	DT		Batch: 2444123
Chloride	910	200	1	0	10/31/24	10/31/24	



	5	ample D	ala				
WPX Energy - Carlsbad 5315 Buena Vista Dr	Project Name Project Numb	er: 0103	RDX Federal 17 #035H 01058-0007				Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers				11/1/2024 1:03:48PM
		FS05 4'					
		E410369-05					
		Reporting					
Analyte	Result	Limit	Dilu	ition	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2444110
Benzene	ND	0.0250	1	1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250	1	1	10/30/24	10/31/24	
Toluene	ND	0.0250	1	1	10/30/24	10/31/24	
p-Xylene	ND	0.0250	1	1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500	1	1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250	1	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		114 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.6 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	BA		Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0	1	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		114 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.6 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0	1	1	10/31/24	10/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	1	10/31/24	10/31/24	
Surrogate: n-Nonane		90.7 %	50-200		10/31/24	10/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	DT		Batch: 2444123
Chloride	1230	200	1	0	10/31/24	10/31/24	



	5	ample D	ara				
WPX Energy - Carlsbad	Project Name	: RD2	K Federal 1	7 #035I	ł		
5315 Buena Vista Dr	Project Numb		01058-0007			Reported:	
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers				11/1/2024 1:03:48PM
		FS06 4'					
		E410369-06					
		Reporting					
Analyte	Result	Limit	Dilı	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Foluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250	-	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		115 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		96.1 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		111 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	BA		Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		115 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		96.1 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		111 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	10/31/24	
Oil Range Organics (C28-C36)	ND	50.0		1	10/31/24	10/31/24	
Surrogate: n-Nonane		86.0 %	50-200		10/31/24	10/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	DT		Batch: 2444123
Chloride	1230	200	1	0	10/31/24	10/31/24	



	5	ample D	ala				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Project Numb Project Manag	er: 0103	K Federal 58-0007 a Byers	17 #0351	H		Reported: 11/1/2024 1:03:48PM
		FS07 4'					
		E410369-07					
Analyte	Result	Reporting Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
oluene	ND	0.0250		1	10/30/24	10/31/24	
-Xylene	ND	0.0250		1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		114 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		111 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	: BA		Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		114 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		111 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	10/31/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	10/31/24	
Surrogate: n-Nonane		96.2 %	50-200		10/31/24	10/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	DT		Batch: 2444123
Chloride	926	100		5	10/31/24	10/31/24	



	0	ample D	ala				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name Project Numb Project Mana	ber: 0105	K Federal 1 58-0007 a Byers	17 #0351	H		Reported: 11/1/2024 1:03:48PM
		FS08 4'					
		E410369-08					
Analyte	Result	Reporting Limit	Dil	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
o-Xylene	ND	0.0250		1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Fotal Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		112 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		89.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	: BA		Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		112 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		89.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	10/31/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	10/31/24	
Surrogate: n-Nonane		96.0 %	50-200		10/31/24	10/31/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: DT		Batch: 2444123
Chloride	869	40.0		2	10/31/24	10/31/24	



	5	ample D	aca				
WPX Energy - Carlsbad	Project Name	: RD2	K Federal 17	7 #035H			
5315 Buena Vista Dr	Project Numb	oer: 0103	58-0007			Reported:	
Carlsbad NM, 88220	Project Manag	ger: Ann	a Byers				11/1/2024 1:03:48PM
		FS09 4'					
		E410369-09					
		Reporting					
Analyte	Result	Limit	Dilut	tion Pr	epared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	I	Analyst: BA			Batch: 2444110
Benzene	ND	0.0250	1	10	/30/24	10/31/24	
Ethylbenzene	ND	0.0250	1	10	/30/24	10/31/24	
Toluene	ND	0.0250	1	10	/30/24	10/31/24	
p-Xylene	ND	0.0250	1	10	/30/24	10/31/24	
p,m-Xylene	ND	0.0500	1	10	/30/24	10/31/24	
Total Xylenes	ND	0.0250	1	10	/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130	10	/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		90.8 %	70-130	10	/30/24	10/31/24	
Surrogate: Toluene-d8		111 %	70-130	10	/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	I	Analyst: BA			Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0	1	10	/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130	10	/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		90.8 %	70-130	10	/30/24	10/31/24	
Surrogate: Toluene-d8		111 %	70-130	10	/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	I	Analyst: NV			Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0	1	10	/31/24	11/01/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10	/31/24	11/01/24	
Surrogate: n-Nonane		96.0 %	50-200	10	/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	I	Analyst: DT			Batch: 2444123
Chloride	882	200	10	0 10	/31/24	10/31/24	



	5	ample D	ala				
WPX Energy - Carlsbad	Project Name		K Federal 1	17 #0351	Η		
5315 Buena Vista Dr	Project Numb		58-0007			Reported:	
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers				11/1/2024 1:03:48PM
		FS10 4'					
		E410369-10					
		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	: BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
oluene	ND	0.0250		1	10/30/24	10/31/24	
-Xylene	ND	0.0250		1	10/30/24	10/31/24	
,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Fotal Xylenes	ND	0.0250		1	10/30/24	10/31/24	
urrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		91.6 %	70-130		10/30/24	10/31/24	
urrogate: Toluene-d8		111 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	BA		Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		91.6 %	70-130		10/30/24	10/31/24	
urrogate: Toluene-d8		111 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		91.6 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: DT		Batch: 2444123
Chloride	902	100		5	10/31/24	10/31/24	



Sampl	e Data
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	2	ample D	ลเล			
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name Project Num Project Mana	ber: 0103	X Federal 17 # 58-0007 a Byers	035H		Reported: 11/1/2024 1:03:48PM
		FS11 4'				
		E410369-11				
Analyte	Result	Reporting Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	An	alyst: BA		Batch: 2444110
Benzene	ND	0.0250	1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250	1	10/30/24	10/31/24	
oluene	ND	0.0250	1	10/30/24	10/31/24	
-Xylene	ND	0.0250	1	10/30/24	10/31/24	
,m-Xylene	ND	0.0500	1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250	1	10/30/24	10/31/24	
urrogate: Bromofluorobenzene		114 %	70-130	10/30/24	10/31/24	
urrogate: 1,2-Dichloroethane-d4		92.4 %	70-130	10/30/24	10/31/24	
urrogate: Toluene-d8		110 %	70-130	10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: BA		Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/30/24	10/31/24	
'urrogate: Bromofluorobenzene		114 %	70-130	10/30/24	10/31/24	
urrogate: 1,2-Dichloroethane-d4		92.4 %	70-130	10/30/24	10/31/24	
urrogate: Toluene-d8		110 %	70-130	10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0	1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0	1	10/31/24	11/01/24	
'urrogate: n-Nonane		90.5 %	50-200	10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: DT		Batch: 2444123
Chloride	883	200	10	10/31/24	10/31/24	



Sampl	e Data
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	5	ample D	ata				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name Project Numb Project Manag	er: 0105	K Federal 58-0007 a Byers	17 #0351	H		Reported: 11/1/2024 1:03:48PM
		-					
		FS12 4' E410369-12					
		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	: BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		96.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		111 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	: BA		Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		96.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		111 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Oil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		90.1 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: DT		Batch: 2444123
Chloride	1670	100		5	10/31/24	10/31/24	



Sample	e Data
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	5	ample D	ala				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name Project Numb Project Manag	oer: 010.	K Federal 58-0007 a Byers	17 #0351	H		Reported: 11/1/2024 1:03:48PM
		FS13 4'					
		E410369-13					
Analyte	Result	Reporting Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	: BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		115 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		94.0 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		109 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA			Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		115 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		94.0 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		109 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Oil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		89.3 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	DT		Batch: 2444123
Chloride	1620	40.0		2	10/31/24	10/31/24	



Sampl	e	Data	
Samp		Data	

	5	ample D	ala				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name Project Numb Project Mana	ber: 0105	K Federal 58-0007 a Byers	17 #0351	Н		Reported: 11/1/2024 1:03:48PM
		FS14 4'					
		E410369-14					
Analyte	Result	Reporting Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	: BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Foluene	ND	0.0250		1	10/30/24	10/31/24	
o-Xylene	ND	0.0250		1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Fotal Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		117 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA			Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		117 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		91.9 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: DT		Batch: 2444123
Chloride	2130	40.0		2	10/31/24	10/31/24	



		ample D	ata				
WPX Energy - Carlsbad 5315 Buena Vista Dr	Project Name: Project Numbe	er: 010:	K Federal 1 58-0007	7 #035H	ł		Reported:
Carlsbad NM, 88220	Project Manag	ger: Ann		11/1/2024 1:03:48PM			
		FS15 4'					
		E410369-15					
		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		93.2 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA			Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		93.2 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Oil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		93.9 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	DT		Batch: 2444123
Chloride	2030	40.0		2	10/31/24	10/31/24	



Sampl	e	Data	
Samp		Data	

	5	ample D	ata				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name Project Numb Project Mana	oer: 0103	K Federal 58-0007 a Byers	17 #0351	H		Reported: 11/1/2024 1:03:48PM
		FS16 4'					
		E410369-16					
Analyte	Result	Reporting Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	: BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Foluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		93.4 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		109 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA			Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		93.4 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		109 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Oil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		85.9 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	DT		Batch: 2444123
Chloride	131	20.0		1	10/31/24	10/31/24	



Sample Data	
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	D	sample D	ata				
WPX Energy - Carlsbad	Project Name	e: RDZ	K Federal 1	7 #035I	H		
5315 Buena Vista Dr	Project Numl	ber: 0103	58-0007				Reported:
Carlsbad NM, 88220	Project Mana	nger: Ann	a Byers				11/1/2024 1:03:48PM
		FS17 4'					
		E410369-17					
		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Fotal Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA			Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		92.3 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	DT		Batch: 2444123
Chloride	ND	100		5	10/31/24	10/31/24	



	D	ample D	ata				
WPX Energy - Carlsbad	Project Name:	RDZ	K Federal	17 #035I	H		
5315 Buena Vista Dr	Project Numbe		58-0007			Reported:	
Carlsbad NM, 88220	Project Manag	ger: Ann	a Byers				11/1/2024 1:03:48PM
		FS18 4'					
		E410369-18					
		Reporting					
Analyte	Result	Limit	Dil	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Fotal Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	BA		Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		98.3 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	DT		Batch: 2444123
Chloride	ND	100		5	10/31/24	10/31/24	



	D	ample D	uu				
WPX Energy - Carlsbad	Project Name	e: RDZ	K Federal	17 #0351	Н		
5315 Buena Vista Dr	Project Numl		58-0007				Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers		11/1/2024 1:03:48PM		
		FS19 4'					
		E410369-19					
		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		115 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		94.2 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		109 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	: BA		Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		115 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		94.2 %	70-130		10/30/24	10/31/24	
urrogate: Toluene-d8		109 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		89.4 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: DT		Batch: 2444123
Chloride	ND	100		5	10/31/24	10/31/24	



		ample D	ata				
WPX Energy - Carlsbad	Project Name:	RD2	K Federal	17 #0351	H		
5315 Buena Vista Dr	Project Numb	er: 0103	58-0007				Reported:
Carlsbad NM, 88220	Project Manag	ger: Ann	a Byers	11/1/2024 1:03:48PM			
		FS20 4'					
		E410369-20					
		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	BA		Batch: 2444110
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Foluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Fotal Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		97.9 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	BA		Batch: 2444110
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		116 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		97.9 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		110 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	NV		Batch: 2444118
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		95.4 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	DT		Batch: 2444123
Chloride	ND	100		5	10/31/24	10/31/24	



QC Summary Data

WPX Energy - Carlsbad		Ducient Nome:	DI	DX Federal 17	7 #035H				
		Project Name:		058-0007	π05511				Reported:
5315 Buena Vista Dr		Project Number:							1/1/2024 1.02 (022
Carlsbad NM, 88220		Project Manager:	Ar	nna Byers				1	1/1/2024 1:03:48PM
	V	olatile Organic	Compou	unds by El	PA 8260E	8			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 (2444110-BLK1)]	Prepared: 10)/30/24 An	alyzed: 10/31/24
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
p-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.579		0.500		116	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.1	70-130			
Surrogate: Toluene-d8	0.555		0.500		111	70-130			
LCS (2444110-BS1)]	Prepared: 10)/30/24 An	alyzed: 10/31/24
Benzene	2.60	0.0250	2.50		104	70-130			
Ethylbenzene	2.64	0.0250	2.50		106	70-130			
Foluene	2.65	0.0250	2.50		106	70-130			
p-Xylene	2.80	0.0250	2.50		112	70-130			
o,m-Xylene	5.62	0.0500	5.00		112	70-130			
Total Xylenes	8.42	0.0250	7.50		112	70-130			
Surrogate: Bromofluorobenzene	0.594		0.500		119	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.6	70-130			
Surrogate: Toluene-d8	0.548		0.500		110	70-130			
LCS Dup (2444110-BSD1)]	Prepared: 10	0/30/24 An	alyzed: 10/31/24
Benzene	2.60	0.0250	2.50		104	70-130	0.0384	23	
Ethylbenzene	2.67	0.0250	2.50		107	70-130	1.13	27	
Toluene	2.68	0.0250	2.50		107	70-130	1.37	24	
p-Xylene	2.80	0.0250	2.50		112	70-130	0.0357	27	
p,m-Xylene	5.66	0.0500	5.00		113	70-130	0.692	27	
Total Xylenes	8.45	0.0250	7.50		113	70-130	0.451	27	
Surrogate: Bromofluorobenzene	0.594		0.500		119	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.471		0.500		94.1	70-130			
Surrogate: Toluene-d8	0.554		0.500		111	70-130			



QC Summary Data

		QC 5	umm	ary Data	a				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220		Project Name: Project Number: Project Manager	(RDX Federal 17 01058-0007 Anna Byers	7 #035H				Reported: 11/1/2024 1:03:48PM
,	Noi	nhalogenated (15D - GI	RO			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 (2444110-BLK1)							Prepared: 1	0/30/24 A	nalyzed: 10/31/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.579		0.500		116	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.1	70-130			
Surrogate: Toluene-d8	0.555		0.500		111	70-130			
LCS (2444110-BS2)							Prepared: 1	0/30/24 A	nalyzed: 10/31/24
Gasoline Range Organics (C6-C10)	47.5	20.0	50.0		95.0	70-130			
Surrogate: Bromofluorobenzene	0.596		0.500		119	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.4	70-130			
Surrogate: Toluene-d8	0.546		0.500		109	70-130			
LCS Dup (2444110-BSD2)							Prepared: 1	0/30/24 A	nalyzed: 10/31/24
Gasoline Range Organics (C6-C10)	47.4	20.0	50.0		94.8	70-130	0.209	20	
Surrogate: Bromofluorobenzene	0.595		0.500		119	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.471		0.500		94.1	70-130			
Surrogate: Toluene-d8	0.562		0.500		112	70-130			



QC Summary Data

		QC D	umme	ii y Data	a				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220		Project Name: Project Number: Project Manager	0	DX Federal 17 1058-0007 nna Byers	7 #035H				Reported: 11/1/2024 1:03:48PM
	Nonh	alogenated Org	ganics by	EPA 8015I) - DRO	/ORO			Analyst: NV
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2444118-BLK1)							Prepared: 1	0/31/24 A	nalyzed: 10/31/24
Diesel Range Organics (C10-C28) Oil Range Organics (C28-C36)	ND ND	25.0 50.0							
Surrogate: n-Nonane	46.1	50.0	50.0		92.2	50-200			
LCS (2444118-BS1)							Prepared: 1	0/31/24 A	nalyzed: 10/31/24
Diesel Range Organics (C10-C28)	277	25.0	250		111	38-132			
Surrogate: n-Nonane	52.1		50.0		104	50-200			
LCS Dup (2444118-BSD1)							Prepared: 1	0/31/24 A	nalyzed: 10/31/24
Diesel Range Organics (C10-C28)	279	25.0	250		112	38-132	0.578	20	
Surrogate: n-Nonane	50.9		50.0		102	50-200			



QC Summary Data

		-		v					
WPX Energy - Carlsbad		Project Name:	F	DX Federal 1	7 #035H				Reported:
5315 Buena Vista Dr		Project Number:					-		
Carlsbad NM, 88220		Project Manager	:: A	anna Byers		11/1/2024 1:03:48PM			
		Anions	by EPA	300.0/90564	۸				Analyst: DT
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2444123-BLK1)							Prepared: 1	0/31/24 A	analyzed: 10/31/24
Chloride	ND	20.0							
LCS (2444123-BS1)							Prepared: 1	0/31/24 A	analyzed: 10/31/24
Chloride	250	20.0	250		99.9	90-110			
LCS Dup (2444123-BSD1)							Prepared: 1	0/31/24 A	analyzed: 10/31/24
Chloride	251	20.0	250		101	90-110	0.632	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 Federal 17 #035H	
l	5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
	Carlsbad NM, 88220	Project Manager:	Anna Byers	11/01/24 13:03

ND	Analyte NOT DETECTED at or above the reporting limit	
----	------------------------------------------------------	--

- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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

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

0		Information .
PIO	ect	Information

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Client: W	PX Energy	Permiar	n, LLC.		Bill To			Li	ab Us	se Or	nly		TAT					EPA Program		
Project:	RDX Feder	Iral 17 #0	035H		Attention: Jim Raley		Lab	WO	ŧ			Num		1D	2D 3D Star		andard	CWA	SDWA	
	lanager: A				Address: 5315 Buena Vista Dr.		EC	016	34	29	010	58	.0001				48	SH TAT		
	13000 W				City, State, Zip: Carlsbad, NM, 88220	0	-		1.1		Anal	ysis a	nd Metho	d				0		RCRA
	e, Zip_Od		79765		Phone: 575-885-7502			S	1			1		1				1		
Phone: 4	32-305-64	17			Email: jim.raley@dvn.com			801	10										State	
Email: De	von-team	@eteche	env.com	1	WO: 21181900	_		Vd C									1	NM CO	UT AZ	TX
					Incident ID: nAB1928154373			/ORIC												
Collector	hu Eduto	Vann						DRO	021	60	10	0.00		WN		¥				
	by: Edyte	Konan	1			Lab	(ft.)	RO/	by 8	y 82	s 60	de 3		18				×		
Time Sampled	Sampled	Matrix	No. of Containers	Sample ID		Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC			Remarks	
10:00	10.29.24	s	1		FS01	1	4'			-				x						
10:10	10.29.24	S	1		FS02	1	4'	-		-	-	-		1	-	-				
10:10	10.29.24	2	1		F502	2	4							X	-					
10:20	10.29.24	S	1		FS03	3	4'							x	-					
10:30	10.29.24	S	1	-	FS04	4	4'							x				1		
10:40	10.29.24	S	1		FS05		4'							x						
10:50	10.29.24	S	1	FS06		6	4'							x						
11:00	10.29.24	S	1		FS07	7	4'							x						
11:10	10.29.24	S	1		FS08	8	4'							x						
11:20	10.29.24	S	1		FS09	9	4'							×						
11:30	10.29.24	S	1		FS10	10	4'							x						
Addition	al Instruct	ions:							1						-					
, (field samp	ler), attest to	the validity	and authenti	city of this sample. I	am aware that tampering with or intentionally mislabell	ing the sample	locatio	n,			Sample	es requi	ring thermal (preserv	ation mu	ust be re	ceived o	on ice the day t	hey are sampl	ed or receive
late or time	of collection i	s considered	d fraud and n	nay be grounds for le	gal action. Sampled by: EK					_	packed	d in Ice a	it an avg tem	a above	0 but le	ess than	6°C on s	subsequent da	15.	
	d by: (Signa		Date	29/24 8:0	Dem Machele Ganales	Date 10-29-2	14	Time	001	0	Rec	eived	on ice:		ab U		nly	-		
Relinquishe	diff: Island	tureland	Date	Time	Referred by: Signature)	Date 10-30 -		Time	63	0	T1	circu	onneer	T2				<u>T3</u>		
Relinquishe	d by: (Signa	ture)	Date	30.24 Time	315 Carth Mar	Date 10.31.7	14	Time 10	31	1	AVG	Tor	p°C_	1						
ample Mat	ix: 5 - Soil Sd	- Solid Se -		queous, O - Other	0. s Mun mus	Container	Type	100	lass	n - po	ly/nla	astic	ag - ambe	er gla	ss v -	VOA				-
					unless other arrangements are made. Hazardous														1	

C

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Client: W	PX Energy	Permiar	n, LLC.		Bill To				La	ab Us	se On	ly				T/	EPA Program		
	RDX Fedeo				Attention: Jim Raley		Lab	WO#	ŧ .			Numbe		1D	2D	3D	Standard	CWA	SDWA
Project N	Aanager: A	nna Bye	rs		Address: 5315 Buena Vista Dr.		E	110	36	9	01058.0007						48H TAT		
	13000 W				City, State, Zip: Carlsbad, NM,	88220	12				Analy	sis and	Metho	ł		_			RCRA
	e, Zip_Od		79765		Phone: 575-885-7502			5											
	32-305-64				Email: jim.raley@dvn.com			801										State	
Email: De	evon-team	@eteche	env.com		WO: 21181900			0 by									NM CO	UT AZ	TX
					Incident ID: nAB1928154373			/OR			1 1			-					
Callector	l hu Tabata	Vanan					1	DRO	021	60	10	00.00		NN		¥			
	by: Edyte	Konan		1		Lab	(H.)	RO/	by 8	y 82	s 60	de 3		N		0	×		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Number	Depth(ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 802:	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC		Remarks	
11:40	10.29.24	S	1		FS11	11	4'							x					
11:50	10.29.24	S	1		F\$12									х					
12:00	10.29.24	S	1		F\$13	13	4'							x					
12:10	10.29.24	S	1		FS14	14	4'							x					
12:20	10.29.24	S	1		F\$15		4'							x					
12:30	10.29.24	S	1		FS16	16	4'							x					
12:40	10.29.24	S	1		FS17	17	4'						1	x					
12:50	10.29.24	S	1		FS18	18	4'							x					
13:00	10.29.24	S	1		FS19	19	4'							x					
13:10	10.29.24	S	1		FS20	20	4'							x					
Addition	al Instruct	ions:																	
				city of this sample. I nay be grounds for le	am aware that tampering with or intentionally m gal action. Sampled by: EK	islabelling the sample	locatio	on,			10000000						ceived on ice the day 5 °C on subsequent da		led or receive
A REAL PROPERTY AND A REAL	ed by: (Signa	COLUMN DOC MALES	Date		03 Pm Michelle Gonzo	les Date	24	Time	700	2	Rece	eived o	n ice:		ab U	se Or	ily		
Rélinquish	ed by: (Signa	ture) onza	i Date	Time	100 Received by: (Signature)	Date 10.30		Time	30		T1			T2			Т3		
Relinquish	ed by: (Signa	ture)	Date	Time	315 Received by (Signature)	- 10.31.2		Time (30)		Temp	°c (4					
ALAU RAS	U	Solid Sa		queous, O - Other		Container			lass	n - nc				r ala	SV-	VOA			

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Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

lient:	WPX Energy - Carlsbad Da	te Received:	10/31/24 06:	30	Work Order ID: E410369
Phone:	(575) 200-6754 Da	te Logged In:	10/30/24 12:	37	Logged In By: Caitlin Mars
Email:	. ,	ie Date:		00 (1 day TAT)	,
<u>Chain o</u>	f Custody (COC)				
1. Does	the sample ID match the COC?		Yes		
2. Does	the number of samples per sampling site location match	the COC	Yes		
3. Were	samples dropped off by client or carrier?		Yes	Carrier: C	Courier
4. Was t	he COC complete, i.e., signatures, dates/times, requested	analyses?	Yes		
5. Were	all samples received within holding time? Note: Analysis, such as pH which should be conducted in the i.e, 15 minute hold time, are not included in this disucssion.	field,	Yes		Comments/Resolution
Sample	Turn Around Time (TAT)				
	the COC indicate standard TAT, or Expedited TAT?		Yes		Project RDX Federal 17 #035H has been
Sample			-		separated into 2 reports due to sample
	a sample cooler received?		Yes		volume. WO are E410369 & E410370.
	, was cooler received in good condition?		Yes		· · · · · · · · · · · · · · · · · · ·
-	he sample(s) received intact, i.e., not broken?		Yes		
	e custody/security seals present?		No		
	es, were custody/security seals intact?		NA		
-	the sample received on ice? If yes, the recorded temp is 4°C, i.e. Note: Thermal preservation is not required, if samples are re-		Yes		
	minutes of sampling				
13. If no	visible ice, record the temperature. Actual sample tem	nperature: <u>4°</u>	<u>C</u>		
Sample	<u>Container</u>				
14. Are	aqueous VOC samples present?		No		
	VOC samples collected in VOA Vials?		NA		
15. Are	I I I I I I I I I I I I I I I I I I I				
	e head space less than 6-8 mm (pea sized or less)?		NA		
16. Is th	-		NA NA		
16. Is th 17. Was	e head space less than 6-8 mm (pea sized or less)?				
16. Is th 17. Was 18. Are	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses?	collected?	NA		
 16. Is th 17. Was 18. Are 19. Is the Field Late 	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel_		NA Yes		
 16. Is th 17. Was 18. Are 19. Is the Field La 20. Wer 	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform		NA Yes Yes		
 16. Is th 17. Was 18. Are 19. Is the Field La 20. Were 	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform. Sample ID?		NA Yes Yes Yes		
 16. Is th 17. Was 18. Are 19. Is the Field La 20. Were 	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform. Sample ID? Date/Time Collected?		NA Yes Yes Yes Yes		
 16. Is th 17. Was 18. Are 19. Is the Field La 20. Were 	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform. Sample ID? Date/Time Collected? Collectors name?		NA Yes Yes Yes		
 16. Is th 17. Was 18. Are 19. Is the Field La 20. Wer 	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform. Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u>	ation:	NA Yes Yes Yes Yes		
 16. Is th 17. Was 18. Are 19. Is the Field La 20. Wer Sample 21. Doe	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform. Sample ID? Date/Time Collected? Collectors name?	ation:	NA Yes Yes Yes Yes Yes		
 16. Is th 17. Was 18. Are 19. Is the Field La 20. Wer Sample 21. Doe 22. Are 	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform. Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were preservation	ation: rved?	NA Yes Yes Yes Yes No		
 16. Is th 17. Was 18. Are 19. Is the Field L3 20. Were 20. Were 21. Doe 22. Are 24. Is la 	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform. Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were prese sample(s) correctly preserved? b filteration required and/or requested for dissolved meta	ation: rved?	NA Yes Yes Yes Yes No NA		
 16. Is th 17. Was 18. Are 19. Is the Field La 20. Were 20. Were 21. Doe 22. Are 24. Is la Multipl 	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform. Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were prese sample(s) correctly preserved? b filteration required and/or requested for dissolved meta mase Sample Matrix	ation: rved?	NA Yes Yes Yes Yes No NA No		
 16. Is th 17. Was 18. Are 19. Is the Field La 20. Wer 20. Wer 21. Doe 22. Are 24. Is la Multipl 26. Doe 	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform. Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were prese sample(s) correctly preserved? b filteration required and/or requested for dissolved meta	ation: rved? ls?	NA Yes Yes Yes Yes No NA No		
 16. Is th 17. Was 18. Are 19. Is the Field La 20. Wer 20. Wer 21. Doe 22. Are 24. Is la Multipl 26. Doe 27. If ye 	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform. Sample ID? Date/Time Collected? Collectors name? Preservation s the COC or field labels indicate the samples were prese sample(s) correctly preserved? b filteration required and/or requested for dissolved meta hase Sample Matrix s the sample have more than one phase, i.e., multiphase?	ation: rved? ls?	NA Yes Yes Yes Yes No NA No		
16. Is th 17. Was 18. Are 19. Is the Field L: 20. Wer 21. Doe 22. Are 24. Is la Multiph 26. Doe 27. If ye	e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? e appropriate volume/weight or number of sample containers abel e field sample labels filled out with the minimum inform. Sample ID? Date/Time Collected? Collectors name? <u>Preservation</u> s the COC or field labels indicate the samples were prese sample(s) correctly preserved? b filteration required and/or requested for dissolved meta hase Sample Matrix s the sample have more than one phase, i.e., multiphase? is, does the COC specify which phase(s) is to be analyzed	ation: rved? ls?	NA Yes Yes Yes Yes No NA No		

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Date

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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 Federal 17 #035H

Work Order: E410370

Job Number: 01058-0007

Received: 10/31/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 11/1/24

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: 11/1/24

Anna Byers 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX Federal 17 #035H Workorder: E410370 Date Received: 10/31/2024 6:30:00AM

Anna Byers,





Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/31/2024 6:30:00AM, under the Project Name: RDX Federal 17 #035H.

The analytical test results summarized in this report with the Project Name: RDX Federal 17 #035H 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

Field Offices: Southern New Mexico Area Lynn Jarboe Laboratory Technical Representative Office: 505-421-LABS(5227) Cell: 505-320-4759 ljarboe@envirotech-inc.com Raina Schwanz Laboratory Administrator Office: 505-632-1881 rainaschwanz@envirotech-inc.com

Michelle Gonzales Client Representative Office: 505-421-LABS(5227) Cell: 505-947-8222 mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

		Sample Sum			
WPX Energy - Carlsbad		Project Name:	RDX Federal 17 #0)35H	Reported:
5315 Buena Vista Dr		Project Number:	01058-0007		Reporteur
Carlsbad NM, 88220		Project Manager:	Anna Byers		11/01/24 15:55
lient Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S21 4'	E410370-01A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
322 4'	E410370-02A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
523 4'	E410370-03A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
324 4'	E410370-04A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
325 4'	E410370-05A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
326 4'	E410370-06A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
527 4'	E410370-07A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
528 4'	E410370-08A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
329 4'	E410370-09A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
30 4'	E410370-10A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
31 4'	E410370-11A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.



	S	Sample D	ata			
WPX Energy - Carlsbad	Project Name		K Federal 17	#035H		
5315 Buena Vista Dr	Project Num		58-0007			Reported:
Carlsbad NM, 88220	Project Mana	ager: Ann	a Byers			11/1/2024 3:55:52PM
		FS21 4'				
		E410370-01				
		Reporting				
Analyte	Result	Limit	Diluti	on Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	А	nalyst: RKS		Batch: 2444111
Benzene	ND	0.0250	1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250	1	10/30/24	10/31/24	
Toluene	ND	0.0250	1	10/30/24	10/31/24	
p-Xylene	ND	0.0250	1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500	1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		97.0 %	70-130	10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		94.2 %	70-130	10/30/24	10/31/24	
Surrogate: Toluene-d8		103 %	70-130	10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2444111	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		97.0 %	70-130	10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		94.2 %	70-130	10/30/24	10/31/24	
Surrogate: Toluene-d8		103 %	70-130	10/30/24	10/31/24	
onhalogenated Organics by EPA 8015D - DRO/ORO mg/kg mg/kg		А	nalyst: NV		Batch: 2444119	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0	1	10/31/24	11/01/24	
Surrogate: n-Nonane		96.5 %	50-200	10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	А	nalyst: IY		Batch: 2444125
Chloride	1050	200	10	10/31/24	10/31/24	



	5	ample D	ata				
WPX Energy - Carlsbad	Project Name	: RD2	K Federal 17				
5315 Buena Vista Dr	Project Numb	oer: 0103	58-0007				Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers				11/1/2024 3:55:52PM
		FS22 4'					
		E410370-02					
		Reporting					
Analyte	Result	Limit	Dilu	tion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	L	Analyst: H	RKS		Batch: 2444111
Benzene	ND	0.0250	1		10/30/24	10/31/24	
Ethylbenzene	ND	0.0250	1		10/30/24	10/31/24	
Toluene	ND	0.0250	1		10/30/24	10/31/24	
p-Xylene	ND	0.0250	1		10/30/24	10/31/24	
p,m-Xylene	ND	0.0500	1		10/30/24	10/31/24	
Total Xylenes	ND	0.0250	1		10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		100 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		96.1 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		103 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2444111	
Gasoline Range Organics (C6-C10)	ND	20.0	1		10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		100 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		96.1 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		103 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: N	W		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0	1		10/31/24	11/01/24	
Oil Range Organics (C28-C36)	ND	50.0	1		10/31/24	11/01/24	
Surrogate: n-Nonane		103 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: I	Y		Batch: 2444125
Chloride	1020	200	10	0	10/31/24	10/31/24	



	D	ample D	uu				
WPX Energy - Carlsbad	Project Name	e: RD2	K Federal 17				
5315 Buena Vista Dr	Project Numl	ber: 0103	58-0007		Reported:		
Carlsbad NM, 88220	Project Mana	iger: Ann	a Byers				11/1/2024 3:55:52PM
		FS23 4'					
		E410370-03					
		Reporting					
Analyte	Result	Limit	Dilu	tion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: R	KS		Batch: 2444111
Benzene	ND	0.0250	1		10/30/24	10/31/24	
Ethylbenzene	ND	0.0250	1		10/30/24	10/31/24	
Toluene	ND	0.0250	1		10/30/24	10/31/24	
o-Xylene	ND	0.0250	1		10/30/24	10/31/24	
o,m-Xylene	ND	0.0500	1		10/30/24	10/31/24	
Total Xylenes	ND	0.0250	1		10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		98.7 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		102 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2444111	
Gasoline Range Organics (C6-C10)	ND	20.0	1		10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		98.7 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130		10/30/24	10/31/24	
urrogate: Toluene-d8		102 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: N	V		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0	1		10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0	1		10/31/24	11/01/24	
Surrogate: n-Nonane		96.6 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: IY	7		Batch: 2444125
Chloride	963	200	10	0	10/31/24	10/31/24	



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WPX Energy - Carlsbad	Project Name	:: RD2	X Federal 17 #03:	5H		
5315 Buena Vista Dr	Project Numb	oer: 010	58-0007			Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers			11/1/2024 3:55:52PM
		FS24 4'				
		E410370-04				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	st: SL		Batch: 2444143
Benzene	ND	0.0250	1	11/01/24	11/01/24	
Ethylbenzene	ND	0.0250	1	11/01/24	11/01/24	
Toluene	ND	0.0250	1	11/01/24	11/01/24	
p-Xylene	ND	0.0250	1	11/01/24	11/01/24	
p,m-Xylene	ND	0.0500	1	11/01/24	11/01/24	
Total Xylenes	ND	0.0250	1	11/01/24	11/01/24	
Surrogate: 4-Bromochlorobenzene-PID		88.9 %	70-130	11/01/24	11/01/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	st: SL		Batch: 2444143
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/01/24	11/01/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.3 %	70-130	11/01/24	11/01/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	st: NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0	1	10/31/24	11/01/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/31/24	11/01/24	
Surrogate: n-Nonane		107 %	50-200	10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	st: IY		Batch: 2444125
Chloride	ND	20.0	1	11/01/24	11/01/24	



		ample D	utu			
WPX Energy - Carlsbad	Project Name	e: RD2	K Federal 17			
5315 Buena Vista Dr	Project Num	ber: 0103	58-0007			Reported:
Carlsbad NM, 88220	Project Mana	iger: Ann	a Byers			11/1/2024 3:55:52PM
		FS25 4'				
		E410370-05				
		Reporting				
Analyte	Result	Limit	Dilut	ion Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	A	analyst: RKS		Batch: 2444111
Benzene	ND	0.0250	1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250	1	10/30/24	10/31/24	
Toluene	ND	0.0250	1	10/30/24	10/31/24	
p-Xylene	ND	0.0250	1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500	1	10/30/24	10/31/24	
Fotal Xylenes	ND	0.0250	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		97.2 %	70-130	10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	10/30/24	10/31/24	
Surrogate: Toluene-d8		105 %	70-130	10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		97.2 %	70-130	10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	10/30/24	10/31/24	
Surrogate: Toluene-d8		105 %	70-130	10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	analyst: NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0	1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0	1	10/31/24	11/01/24	
Surrogate: n-Nonane		99.8 %	50-200	10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	analyst: IY		Batch: 2444125
Chloride	485	200	10	10/31/24	10/31/24	



	5	ample D	ata				
WPX Energy - Carlsbad	ergy - Carlsbad Project Name: RDX Federal 17 #035H						
5315 Buena Vista Dr	Project Numb	per: 0103	58-0007				Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers				11/1/2024 3:55:52PM
		FS26 4'					
		E410370-06					
		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	RKS		Batch: 2444111
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		99.0 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		103 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS			Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		99.0 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		103 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		89.3 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: IY		Batch: 2444125
Chloride	481	100		5	10/31/24	10/31/24	



Sample Data

	L.	bample D	ata				
WPX Energy - Carlsbad	X Energy - Carlsbad Project Name: RDX Federal 17 #035H						
5315 Buena Vista Dr	Project Num	ber: 010	58-0007				Reported:
Carlsbad NM, 88220	Project Mana	ager: Ann	a Byers				11/1/2024 3:55:52PM
		FS27 4'					
		E410370-07					
		Reporting					
Analyte	Result	Limit	Dil	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	: RKS		Batch: 2444111
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		97.5 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		104 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS			Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		97.5 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		104 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	mg/kg Analyst: NV			Batch: 2444119	
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		90.3 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: IY		Batch: 2444125
Chloride	565	40.0		2	10/31/24	10/31/24	


	D	ample D	uu				
WPX Energy - Carlsbad	Project Name	: RD2	K Federal	17 #035I	H		
5315 Buena Vista Dr	Project Numb	oer: 0103	58-0007				Reported:
Carlsbad NM, 88220	Project Manager: Anna Byers					11/1/2024 3:55:52PM	
		FS28 4'					
		E410370-08					
		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	RKS		Batch: 2444111
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Fotal Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		100 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		94.9 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		103 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	RKS		Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		100 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		94.9 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		103 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		91.7 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	: IY		Batch: 2444125
Chloride	140	20.0		1	10/31/24	10/31/24	



	5	ample D	ata				
WPX Energy - Carlsbad	Project Name	RD2	K Federal	17 #0351	Н		
5315 Buena Vista Dr	Project Numb	ber: 0103	58-0007				Reported:
Carlsbad NM, 88220	Project Manager: Anna Byers					11/1/2024 3:55:52PM	
		FS29 4'					
		E410370-09					
		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	RKS		Batch: 2444111
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		96.3 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		97.2 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		105 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	RKS		Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		96.3 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		97.2 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		105 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Oil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		92.0 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: IY		Batch: 2444125
Chloride	130	20.0		1	10/31/24	10/31/24	



	5	ample D	ata				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Project Numbo Project Manag	er: 010:	K Federal 58-0007 a Byers	17 #0351	H		Reported: 11/1/2024 3:55:52PM
		FS30 4'					
		E410370-10					
		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	RKS		Batch: 2444111
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		96.3 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		91.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		104 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	RKS		Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		96.3 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		91.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		104 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Oil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		95.9 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	IY		Batch: 2444125
Chloride	117	20.0		1	10/31/24	10/31/24	



Sample Data

	G	ample D	ala			
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name Project Num Project Mana	ber: 010:	K Federal 17 58-0007 a Byers	#035H		Reported: 11/1/2024 3:55:52PM
		FS31 4'				
		E410370-11				
		Reporting				
Analyte	Result	Limit	Dilut	on Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	А	nalyst: RKS		Batch: 2444111
Benzene	ND	0.0250	1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250	1	10/30/24	10/31/24	
Toluene	ND	0.0250	1	10/30/24	10/31/24	
o-Xylene	ND	0.0250	1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500	1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		98.1 %	70-130	10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130	10/30/24	10/31/24	
Surrogate: Toluene-d8		106 %	70-130	10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	А	nalyst: RKS		Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		98.1 %	70-130	10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130	10/30/24	10/31/24	
Surrogate: Toluene-d8		106 %	70-130	10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	8015D - DRO/ORO mg/kg			nalyst: NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0	1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0	1	10/31/24	11/01/24	
Surrogate: n-Nonane		90.7 %	50-200	10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: IY		Batch: 2444125
Chloride	450	40.0	2	10/31/24	10/31/24	



QC Summary Data

WPX Energy - Carlsbad		Project Name:	RI	DX Federal 17	7 #035H				D (1
5315 Buena Vista Dr		Project Number:		058-0007					Reported:
Carlsbad NM, 88220		·							11/1/2024 3:55:52PM
Carisbad NNI, 88220		Project Manager:	Al	nna Byers					11/1/2024 5.55.52FW
	V	olatile Organic	Compo	unds by EI	PA 8260E	6			Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2444111-BLK1)							Prepared: 1	0/30/24 A	nalyzed: 10/31/24
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: Bromofluorobenzene	0.488		0.500		97.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		98.9	70-130			
Surrogate: Toluene-d8	0.495		0.500		98.9	70-130			
LCS (2444111-BS1)							Prepared: 1	0/30/24 A	nalyzed: 11/01/24
Benzene	2.40	0.0250	2.50		96.0	70-130			
Ethylbenzene	2.58	0.0250	2.50		103	70-130			
Toluene	2.53	0.0250	2.50		101	70-130			
o-Xylene	2.68	0.0250	2.50		107	70-130			
p,m-Xylene	5.40	0.0500	5.00		108	70-130			
Total Xylenes	8.09	0.0250	7.50		108	70-130			
Surrogate: Bromofluorobenzene	0.498		0.500		99.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			
LCS Dup (2444111-BSD1)							Prepared: 1	0/30/24 A	nalyzed: 10/31/24
Benzene	2.08	0.0250	2.50		83.3	70-130	14.2	23	
Ethylbenzene	2.40	0.0250	2.50		96.0	70-130	7.17	27	
Toluene	2.26	0.0250	2.50		90.3	70-130	11.3	24	
o-Xylene	2.42	0.0250	2.50		97.0	70-130	10.1	27	
p,m-Xylene	4.89	0.0500	5.00		97.7	70-130	10.0	27	
Total Xylenes	7.31	0.0250	7.50		97.5	70-130	10.1	27	
Surrogate: Bromofluorobenzene	0.481		0.500		96.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.6	70-130			
			0.500		99.9	70-130			



QC Summary Data

		<u> </u>		ily Date					
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	0	DX Federal 17 1058-0007 nna Byers	7 #035H				Reported: 11/1/2024 3:55:52PM
		, ,		by EPA 802	21 B				Analyst: SL
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Anaryst. 5E
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2444143-BLK1)							Prepared: 1	1/01/24 A	nalyzed: 11/01/24
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	7.05		8.00		88.1	70-130			
LCS (2444143-BS1)							Prepared: 1	1/01/24 A	analyzed: 11/01/24
Benzene	5.25	0.0250	5.00		105	70-130			
Ethylbenzene	5.13	0.0250	5.00		103	70-130			
Toluene	5.22	0.0250	5.00		104	70-130			
o-Xylene	5.12	0.0250	5.00		102	70-130			
p,m-Xylene	10.4	0.0500	10.0		104	70-130			
Total Xylenes	15.5	0.0250	15.0		104	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.12		8.00		89.0	70-130			
LCS Dup (2444143-BSD1)							Prepared: 1	1/01/24 A	analyzed: 11/01/24
Benzene	5.26	0.0250	5.00		105	70-130	0.147	20	
Ethylbenzene	5.15	0.0250	5.00		103	70-130	0.410	20	
Toluene	5.24	0.0250	5.00		105	70-130	0.281	20	
o-Xylene	5.14	0.0250	5.00		103	70-130	0.298	20	
p,m-Xylene	10.5	0.0500	10.0		105	70-130	0.367	20	
Total Xylenes	15.6	0.0250	15.0		104	70-130	0.345	20	
Surrogate: 4-Bromochlorobenzene-PID	7.13		8.00						



QC Summary Data

		QU D	umm	ary Date	u.				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	(RDX Federal 17)1058-0007 Anna Byers	7 #035H				Reported: 11/1/2024 3:55:52PM
	No	nhalogenated C		,	15D - G	RO			Analyst: RKS
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2444111-BLK1)							Prepared: 1	0/30/24 A	nalyzed: 10/31/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.488		0.500		97.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		98.9	70-130			
Surrogate: Toluene-d8	0.495		0.500		98.9	70-130			
LCS (2444111-BS2)							Prepared: 1	0/30/24 A	nalyzed: 10/31/24
Gasoline Range Organics (C6-C10)	49.7	20.0	50.0		99.5	70-130			
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.479		0.500		95.8	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			
LCS Dup (2444111-BSD2)							Prepared: 1	0/30/24 A	nalyzed: 10/31/24
Gasoline Range Organics (C6-C10)	48.4	20.0	50.0		96.9	70-130	2.62	20	
Surrogate: Bromofluorobenzene	0.478		0.500		95.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.506		0.500		101	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			



QC Summary Data

		Y VY	/	ary Dut					
WPX Energy - Carlsbad		Project Name:		RDX Federal 1	7 #035H				Reported:
5315 Buena Vista Dr		Project Number		01058-0007					
Carlsbad NM, 88220		Project Manage	r: .	Anna Byers					11/1/2024 3:55:52PM
	No	nhalogenated	Organic	s by EPA 80	15D - G	RO			Analyst: SL
Analyte		Reporting	Spike	Source		Rec		RPD	
-	Result	Limit	Level	Result	Rec	Limits	RPD	Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2444143-BLK1)							Prepared: 1	1/01/24 A	nalyzed: 11/01/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.05		8.00		88.2	70-130			
LCS (2444143-BS2)							Prepared: 1	1/01/24 A	nalyzed: 11/01/24
Gasoline Range Organics (C6-C10)	42.1	20.0	50.0		84.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.31		8.00		91.4	70-130			
LCS Dup (2444143-BSD2)							Prepared: 1	1/01/24 A	nalyzed: 11/01/24
Gasoline Range Organics (C6-C10)	41.8	20.0	50.0		83.6	70-130	0.641	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.23		8.00		90.3	70-130			



QC Summary Data

WPX Energy - Carlsbad		Project Name:	RI	DX Federal 17	#035H				Reported:
5315 Buena Vista Dr		Project Number:	01	058-0007					-
Carlsbad NM, 88220		Project Manager:	A	nna Byers					11/1/2024 3:55:52PM
	Nonha	logenated Org	anics by	EPA 8015E) - DRO/	ORO			Analyst: NV
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2444119-BLK1)							Prepared: 10	0/31/24 A	Analyzed: 11/01/24
Diesel Range Organics (C10-C28)	ND	25.0							
		25.0							
Dil Range Organics (C28-C36)	ND	50.0							
	ND 48.8		50.0		97.6	50-200			
Surrogate: n-Nonane			50.0		97.6	50-200	Prepared: 10	0/31/24 A	Analyzed: 11/01/24
Surrogate: n-Nonane LCS (2444119-BS1)			50.0		97.6	<i>50-200</i> 38-132	Prepared: 10	0/31/24 A	nalyzed: 11/01/24
Surrogate: n-Nonane LCS (2444119-BS1) Diesel Range Organics (C10-C28)	48.8	50.0					Prepared: 10	0/31/24 A	Analyzed: 11/01/24
Dil Range Organics (C28-C36) Surrogate: n-Nonane LCS (2444119-BS1) Diesel Range Organics (C10-C28) Surrogate: n-Nonane LCS Dup (2444119-BSD1)	48.8 265	50.0	250		106	38-132			Analyzed: 11/01/24 Analyzed: 11/01/24
Surrogate: n-Nonane LCS (2444119-BS1) Diesel Range Organics (C10-C28) Surrogate: n-Nonane	48.8 265	50.0	250		106	38-132			·



QC Summary Data

		-		v					
WPX Energy - Carlsbad		Project Name:	R	DX Federal 1	7 #035H				Reported:
5315 Buena Vista Dr		Project Number:	0	1058-0007					-
Carlsbad NM, 88220		Project Manager:	А	anna Byers					11/1/2024 3:55:52PM
		Anions	by EPA	300.0/90564	4				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 (2444125-BLK1)							Prepared: 10)/31/24 <i>A</i>	Analyzed: 10/31/24
Chloride	ND	20.0							
LCS (2444125-BS1)							Prepared: 10)/31/24 A	Analyzed: 10/31/24
Chloride	254	20.0	250		102	90-110			
LCS Dup (2444125-BSD1)							Prepared: 10)/31/24 <i>A</i>	Analyzed: 10/31/24
Chloride	254	20.0	250		102	90-110	0.0382	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.



WPX Energy - Carlsbad	Project Name:	RDX Federal 17 #035H	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/01/24 15:55

ND	Analyte NOT DETECTED at or above the reporting limit
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- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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 Information

Climate M		Deside	110		Dill T-		E	410	15		CM	0	3124	1		TA	T		EDAD	Irogram
	PX Energy				Bill To					States and the	e On			1D		3D		ndard	CWA	SDW/
	RDX Fedeo Aanager: A				Attention: Jim Raley Address: 5315 Buena Vista Dr			Lab WO#			Job Number 01058-6007			10	20	50	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TAT	CVVA	JUWA
	13000 W				City, State, Zip: Carlsbad, NM,		E	113		_			d Meth	od	-		401	110		RCRA
	te, Zip_Od				Phone: 575-885-7502	, 00220	-	1				313 01	I	1	T			_	-	- Herty
	32-305-64		15105		Email: jim.raley@dvn.com		-	015											State	-
	evon-team		env.com		WO: 21181900			by 8									IN	IM CO	UT AZ	TX
	d by: Edyte				Incident ID: nAB1928154373		-1	TPH GRO/DRO/ORO by 8015	8021	3260	5010	300.0		MN		TX		×		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Lab Number	Depth(ft.)	TPH GRO	BTEX by	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC		GDOC			Remarks	5
13:20	10.29.24	S	1		FS21	1	4'							x						
13:40	10.29.24	S	1		FS22	2	4'							x						
14:00	10.29.24	S	1		FS23	3	4'							х						
14:20	10.29.24	S	1		FS24	4	4'							x						
14:40	10.29.24	S	1		FS25	5	4'							x						
15:00	10.29.24	S	1	9	FS26	6	4'							x						
15:20	10.29.24	S	1		FS27	7	4'							x						
15:40	10.29.24	S	1		FS28	8	4'							x						
16:00	10.29.24	S	1		FS29	9	4'							x						
16:20	10.29.24	S	1		FS30	10	4'							x						
Addition	al Instruct	tions:	1				1													
				icity of this sample. I nay be grounds for le	am aware that tampering with or intentionally is a sampled by: EK	mislabelling the sample	locatio	n,										ice the day t bsequent da	they are samp ys.	led or receiv
	ed by: (Signa		Date	Time	300 pm Received by: (Signature)	rales 10:29	24	Time 2	000)	Rece	eived	on ice:		ab Us	se Or	nly		-	
elinquishe	ed by: (Signa	iture)	8 Date	Time	200 Received by: (Signature)	Date 10-30		Time			T1			T2			т	3		
elinquish	d by (Signa	H.	Date	30.14 2	315 Carth Ma	Date		lime			AVG	Tem	p°C	4						
	iv S - Soil Sd	- Solid Se -	Sludge, A - A	queous, O - Other		Containe	Type	· g - p	lass, p					per glas	5. V -	VOA		1000	_	

C

envirotech

Received by OCD: 2/20/2025 1:24:13 PM

Released to Imaging: 3/4/2025 2:08:17 PM

	PX Energy				Bill To				_		se Or					TA			rogram
	RDX Fedeo				Attention: Jim Raley		Lab	WO#				Num) 2D	3D	Standard	CWA	SDWA
	Aanager: A				Address: 5315 Buena Vista Dr.			110	51		01058.000						48H TAT		
	13000 W		() ()		City, State, Zip: Carlsbad, NM, 88220				-		Analy	ysis ar	nd Meth	nod					RCRA
	e, Zip_Od		79765		Phone: 575-885-7502	(2											
	32-305-64				Email: jim.raley@dvn.com			801										State	
Email: De	evon-team	n@eteche	env.com		WO: 21181900	daguar bepth(ft.) TPH GRO/DRO/ORO by 8015 BTEX by 8021											NM C	D UT AZ	TX
					Incident ID: nAB1928154373			/OR			1.1								
								ORO	021	60	0	00.00		144		×			
	by: Edyte	e Konan	-	l			Depth(ft.)	RO/	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			2	1.00	×		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Lab	epth	HG	LEX I	DC b	etal	llori		00000		GDOC		Remarks	
Sampleu	Sampleu					Number	ă	Ħ	8	>	Z	Ċ			ň	U			
16:30	10.29.24	S	1		FS31	11	4'							1	(
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Addition	al Instruct	tions:																	
(field same	ler) attest to	the validity	and authenti	icity of this sample. La	m aware that tampering with or intentionally mislabellin	a the cample	locatio				Sample	es requi	ring therma	al prese	vation m	ust be rec	eived on ice the da	v they are sample	ed or received
				nay be grounds for leg		ig are sample	locatio	,					e				°C on subsequent		
	ed by: (Signa		Date			Date		Time						-	Labl	Jse On	lv.		
	they		10	123/24 08.	OP Provide by: (Signature)	10-29	24	2	000)	Rece	eived	on ice		P/ M				
elinquishe	ed by: (Signa	ture)	Date	Time	Received by (Signature)	Date	01		-			circu	on ice		1				
Mich	elle G	onin	108/10-	30-24 16	N. J. GO	10.30	24	110	3	0	T1			TZ			Т3		
elinguishe	d by: (\$igna	iture	Date	Time	Received by: (signature)	Date		Time									-		
K.I.	. /	H.	in.	30.24 23	15 Couth Man	10.31.	7.4	10:	31	2.4	AVG	Tem	p°C_	4					
ample Matr	ix: S - Soil. Sd	- Solid, Sg - S		queous, O - Other	Jugarte	Container				- po	lv/nla	astic.	ag - am	her gl	ass. V	VOA			
					nless other arrangements are made. Hazardous												report for the	analysis of th	e above
					ratory with this COC. The liability of the laboratory														

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Client:	WPX Energy - Carlsbad D	ate Received:	10/31/24 06:3	30	Work Order ID: E410370
Phone:	(575) 200-6754 D	ate Logged In:	10/30/24 12:4	12	Logged In By: Caitlin Mars
Email:		ue Date:	11/01/24 17:0	00 (1 day TAT)	
Chain o	f Custody (COC)				
1. Does 1	he sample ID match the COC?		Yes		
2. Does t	he number of samples per sampling site location match	the COC	Yes		
3. Were	samples dropped off by client or carrier?		Yes	Carrier: C	Courier
4. Was th	ne COC complete, i.e., signatures, dates/times, requested	d analyses?	Yes		
5. Were	all samples received within holding time? Note: Analysis, such as pH which should be conducted in th i.e, 15 minute hold time, are not included in this disucssion.	e field,	Yes		Comments/Resolution
Sample '	<u> Turn Around Time (TAT)</u>				
6. Did th	e COC indicate standard TAT, or Expedited TAT?		Yes		Project RDX Federal 17 #035H has been
Sample	<u>Cooler</u>				separated into 2 reports due to sample
7. Was a	sample cooler received?		Yes		volume. WO are E410369 & E410370.
8. If yes,	was cooler received in good condition?		Yes		
9. Was th	he sample(s) received intact, i.e., not broken?		Yes		
10. Were	custody/security seals present?		No		
11. If ye	s, were custody/security seals intact?		NA		
12. Was t	he sample received on ice? If yes, the recorded temp is 4°C, i.e Note: Thermal preservation is not required, if samples are re minutes of sampling		Yes		
12 16	visible ice, record the temperature. Actual sample ter				
13. II no	visible ice, record me temperature. Actual sample ter	mperature: 4°	С		
		mperature: <u>4°</u>	<u>C</u>		
Sample	Container	mperature: <u>4</u> °	<u>C</u> No		
<u>Sample</u> 14. Are a		mperature: <u>4°</u>			
<u>Sample</u> 14. Are a 15. Are ⁹	<u>Container</u> aqueous VOC samples present?	mperature: <u>4°</u>	No		
Sample 14. Are a 15. Are ⁹ 16. Is the	Container aqueous VOC samples present? VOC samples collected in VOA Vials?	mperature: <u>4°</u>	No NA		
Sample 14. Are a 15. Are 7 16. Is the 17. Was	Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)?	mperature: <u>4°</u>	No NA NA		
Sample 14. Are a 15. Are 7 16. Is the 17. Was 18. Are 1	Container queous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses?	. –	No NA NA NA		
Sample 14. Are a 15. Are 7 16. Is the 17. Was 18. Are 1	Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers?	. –	No NA NA Yes		
Sample 14. Are a 15. Are 3 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were	Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers bel field sample labels filled out with the minimum inform	s collected?	No NA NA Yes Yes		
Sample 14. Are a 15. Are 7 16. Is the 17. Was 18. Are 6 19. Is the Field La 20. Were	Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers bel field sample labels filled out with the minimum inform Sample ID?	s collected?	No NA NA Yes Yes Yes		
Sample 14. Are a 15. Are 7 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S	Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected?	s collected?	No NA NA Yes Yes Yes Yes		
Sample 14. Are a 15. Are 7 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S I 0 0	Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name?	s collected?	No NA NA Yes Yes Yes		
Sample 14. Are a 15. Are 7 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S I C Sample	Container iqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation	s collected?	No NA NA Yes Yes Yes Yes		
Sample 14. Are a 15. Are ³ 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S I C Sample 21. Does	Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name?	s collected?	No NA NA Yes Yes Yes Yes		
Sample 14. Are a 15. Are ³ 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S I C Sample 21. Does 22. Are s	Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers? bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were preservation	s collected? nation: erved?	No NA NA Yes Yes Yes Yes Yes		
Sample 14. Are a 15. Are 3 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were S 10. Were 21. Does 22. Are s 24. Is lat	Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers? bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta	s collected? nation: erved?	No NA NA Yes Yes Yes Yes No NA		
Sample 14. Are a 15. Are 7 16. Is the 17. Was 18. Are 7 19. Is the Field La 20. Were 20. Were 21. Does 22. Are 5 24. Is lat Multiph	Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers? bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta ase Sample Matrix.	s collected? nation: erved? als?	No NA NA Yes Yes Yes Yes No NA No		
Sample 14. Are a 15. Are a 15. Are a 16. Is the 17. Was 18. Are a 19. Is the Field La 20. Were Sample 21. Does 22. Are a 24. Is lat Multiph 26. Does	Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers? bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta	s collected? nation: erved? als?	No NA NA Yes Yes Yes Yes No NA		
Sample 14. Are a 15. Are 3 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were Sample 21. Does 22. Are s 24. Is lat Multiph 26. Does 27. If yer	Container iqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? non-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers? bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta ase Sample Matrix the sample have more than one phase, i.e., multiphase?	s collected? nation: erved? als?	No NA NA NA Yes Yes Yes Yes No NA No		
Sample 14. Are a 15. Are 3 16. Is the 17. Was 18. Are 1 19. Is the Field La 20. Were 5 10. 20. Were 21. Does 22. Are 5 24. Is lat Multiph 26. Does 27. If ye:	Container aqueous VOC samples present? VOC samples collected in VOA Vials? e head space less than 6-8 mm (pea sized or less)? a trip blank (TB) included for VOC analyses? hon-VOC samples collected in the correct containers? appropriate volume/weight or number of sample containers? bel field sample labels filled out with the minimum inform Sample ID? Date/Time Collected? Collectors name? Preservation the COC or field labels indicate the samples were prese sample(s) correctly preserved? o filteration required and/or requested for dissolved meta ase Sample Matrix the sample have more than one phase, i.e., multiphase? s, does the COC specify which phase(s) is to be analyze	s collected? nation: erved? als? o	No NA NA NA Yes Yes Yes Yes No NA No		

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



envirotech Inc.

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Practical Solutions for a Better Tomorrow

Analytical Report

WPX Energy - Carlsbad

Project Name: RDX Federal 17 #035H

Work Order: E410371

Job Number: 01058-0007

Received: 10/31/2024

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 11/1/24

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: 11/1/24

Anna Byers 5315 Buena Vista Dr Carlsbad, NM 88220

Project Name: RDX Federal 17 #035H Workorder: E410371 Date Received: 10/31/2024 6:30:00AM

Anna Byers,



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Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/31/2024 6:30:00AM, under the Project Name: RDX Federal 17 #035H.

The analytical test results summarized in this report with the Project Name: RDX Federal 17 #035H 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,

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Envirotech Web Address: www.envirotech-inc.com

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*		Sample Sum	mary		Ŭ
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	RDX Federal 17 #0 01058-0007 Anna Byers)35H	Reported: 11/01/24 15:36
lient Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
W01 0-4'	E410371-01A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
W02 0-4'	E410371-02A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
W03 0-4'	E410371-03A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
W04 0-4'	E410371-04A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
W05 0-4'	E410371-05A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
W06 0-4'	E410371-06A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
W07 0-4'	E410371-07A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.
W08 0-4'	E410371-08A	Soil	10/29/24	10/31/24	Glass Jar, 2 oz.



	S	ample D	ata				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name Project Numb Project Mana	er: 0105	K Federal 17 58-0007 a Byers	7 #035H			Reported: 11/1/2024 3:36:35PM
	T Toject Manaj	-	a Byers				11112021 5.50.55111
		SW01 0-4' E410371-01					
		Reporting					
Analyte	Result	Limit	Dilu	ition 1	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: RK	S		Batch: 2444111
Benzene	ND	0.0250	1	1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250	1	1	10/30/24	10/31/24	
Toluene	ND	0.0250	1	1	10/30/24	10/31/24	
o-Xylene	ND	0.0250	1	L i	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500	1	1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250	1	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		101 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		97.3 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		105 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS	S		Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0	1	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		101 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		97.3 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		105 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: NV			Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0	1	1	10/31/24	11/01/24	
Oil Range Organics (C28-C36)	ND	50.0	1	1	10/31/24	11/01/24	
Surrogate: n-Nonane		91.3 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: IY			Batch: 2444125
Chloride	ND	100	5	5	10/31/24	10/31/24	



Sample Data

		imple D					
WPX Energy - Carlsbad 5315 Buena Vista Dr	Project Name: Project Numbe	r: 0105	K Federal 58-0007	17 #035I	ł		Reported:
Carlsbad NM, 88220	Project Manage	er: Ann	a Byers	11/1/2024 3:36:35PM			
		SW02 0-4'					
]	E410371-02					
		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	RKS		Batch: 2444111
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Fotal Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		99.5 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		104 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	RKS		Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		99.5 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		104 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		96.7 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	IY		Batch: 2444125
Chloride	ND	100		5	10/31/24	10/31/24	



Sample Data

		impic D	uu				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Project Numbe Project Manag	er: 010:	X Federal 1 58-0007 a Byers	7 #0351	ł		Reported: 11/1/2024 3:36:35PM
		SW03 0-4'					
		E410371-03					
Analyte	Result	Reporting Limit		ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	RKS		Batch: 2444111
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
o-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		98.6 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		102 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	RKS		Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		98.6 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		102 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Oil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		98.5 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	IY		Batch: 2444125
Chloride	324	200		10	10/31/24	10/31/24	



Sample Data

	D.	imple D	uca				
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: Project Numbe Project Manag	er: 0103	K Federal 1 58-0007 a Byers	7 #035H	I		Reported: 11/1/2024 3:36:35PM
		SW04 0-4'					
		E410371-04					
Analyte	Result	Reporting Limit	Dih	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	RKS		Batch: 2444111
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
o-Xylene	ND	0.0250		1	10/30/24	10/31/24	
p,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		96.8 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		96.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		105 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	RKS		Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		96.8 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		96.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		105 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Oil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		107 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	IY		Batch: 2444125
Chloride	216	200	1	10	10/31/24	10/31/24	



Sample Data

	5	ample D	ala			
WPX Energy - Carlsbad	Project Name	: RDZ	K Federal 17 #	035H		
5315 Buena Vista Dr	Project Numb	ber: 0105	58-0007			Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers	11/1/2024 3:36:35PM		
		SW05 0-4'				
		E410371-05				
		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	An	alyst: RKS		Batch: 2444111
Benzene	ND	0.0250	1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250	1	10/30/24	10/31/24	
Toluene	ND	0.0250	1	10/30/24	10/31/24	
p-Xylene	ND	0.0250	1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500	1	10/30/24	10/31/24	
Fotal Xylenes	ND	0.0250	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		98.5 %	70-130	10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130	10/30/24	10/31/24	
Surrogate: Toluene-d8		105 %	70-130	10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: RKS		Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		98.5 %	70-130	10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130	10/30/24	10/31/24	
urrogate: Toluene-d8		105 %	70-130	10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0	1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0	1	10/31/24	11/01/24	
Surrogate: n-Nonane		99.4 %	50-200	10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: IY		Batch: 2444125
Chloride	270	200	10	10/31/24	10/31/24	



		imple D					
WPX Energy - Carlsbad 5315 Buena Vista Dr	Project Name: Project Numbe		K Federal 1 58-0007	17 #0351	H		Reported:
Carlsbad NM, 88220	Project Manage		a Byers	11/1/2024 3:36:35PM			
		SW06 0-4'					
]	E410371-06					
		Reporting					
Analyte	Result	Limit	Dil	ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst	RKS		Batch: 2444111
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Total Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		96.2 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.0 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		103 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	: RKS		Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		96.2 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.0 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		103 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		91.1 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: IY		Batch: 2444125
Chloride	204	200		10	10/31/24	10/31/24	



Sample Data

		imple D	uuu				
WPX Energy - Carlsbad 5315 Buena Vista Dr	Project Name: Project Numbe	r: 010:	K Federal 58-0007	17 #035I	Н		Reported:
Carlsbad NM, 88220	Project Manag	er: Ann	a Byers	11/1/2024 3:36:35PM			
	1	SW07 0-4'					
]	E410371-07					
		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	RKS		Batch: 2444111
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Fotal Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		99.1 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		105 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	RKS		Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		99.1 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		95.8 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		105 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		99.1 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	IY		Batch: 2444125
Chloride	ND	100		5	10/31/24	10/31/24	



Sample Data

	S	ample D	utu				
WPX Energy - Carlsbad	Project Name	e: RD2	K Federal	17 #035H	Н		
5315 Buena Vista Dr	Project Numb		58-0007				Reported:
Carlsbad NM, 88220	Project Mana	ger: Ann	a Byers	11/1/2024 3:36:35PM			
		SW08 0-4'					
		E410371-08					
		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	RKS		Batch: 2444111
Benzene	ND	0.0250		1	10/30/24	10/31/24	
Ethylbenzene	ND	0.0250		1	10/30/24	10/31/24	
Toluene	ND	0.0250		1	10/30/24	10/31/24	
p-Xylene	ND	0.0250		1	10/30/24	10/31/24	
o,m-Xylene	ND	0.0500		1	10/30/24	10/31/24	
Fotal Xylenes	ND	0.0250		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		98.9 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		98.5 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		104 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst	RKS		Batch: 2444111
Gasoline Range Organics (C6-C10)	ND	20.0		1	10/30/24	10/31/24	
Surrogate: Bromofluorobenzene		98.9 %	70-130		10/30/24	10/31/24	
Surrogate: 1,2-Dichloroethane-d4		98.5 %	70-130		10/30/24	10/31/24	
Surrogate: Toluene-d8		104 %	70-130		10/30/24	10/31/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst	: NV		Batch: 2444119
Diesel Range Organics (C10-C28)	ND	25.0		1	10/31/24	11/01/24	
Dil Range Organics (C28-C36)	ND	50.0		1	10/31/24	11/01/24	
Surrogate: n-Nonane		106 %	50-200		10/31/24	11/01/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst	: IY		Batch: 2444125
Chloride	ND	100		5	10/31/24	10/31/24	



QC Summary Data

WPX Energy - Carlsbad		Project Name:	RI	DX Federal 1	7 #035H				Demente de
5315 Buena Vista Dr		Project Number:		058-0007					Reported:
Carlsbad NM, 88220		Project Manager:		na Byers					11/1/2024 3:36:35PM
Curiscus 1 (11, 00220				-					
	V	olatile Organic	c Compou	unds by El	PA 82601	3			Analyst: RKS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2444111-BLK1)]	Prepared: 1	0/30/24 A	nalyzed: 10/31/24
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: Bromofluorobenzene	0.488		0.500		97.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		98.9	70-130			
Surrogate: Toluene-d8	0.495		0.500		98.9	70-130			
LCS (2444111-BS1)]	Prepared: 1	0/30/24 A	nalyzed: 11/01/24
Benzene	2.40	0.0250	2.50		96.0	70-130			
Ethylbenzene	2.58	0.0250	2.50		103	70-130			
Foluene	2.53	0.0250	2.50		101	70-130			
p-Xylene	2.68	0.0250	2.50		107	70-130			
p,m-Xylene	5.40	0.0500	5.00		108	70-130			
Total Xylenes	8.09	0.0250	7.50		108	70-130			
Surrogate: Bromofluorobenzene	0.498		0.500		99.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			
LCS Dup (2444111-BSD1)]	Prepared: 1	0/30/24 A	nalyzed: 10/31/24
Benzene	2.08	0.0250	2.50		83.3	70-130	14.2	23	
Ethylbenzene	2.40	0.0250	2.50		96.0	70-130	7.17	27	
Toluene	2.26	0.0250	2.50		90.3	70-130	11.3	24	
o-Xylene	2.42	0.0250	2.50		97.0	70-130	10.1	27	
p,m-Xylene	4.89	0.0500	5.00		97.7	70-130	10.0	27	
Total Xylenes	7.31	0.0250	7.50		97.5	70-130	10.1	27	
Surrogate: Bromofluorobenzene	0.481		0.500		96.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.6	70-130			
Surrogate: Toluene-d8	0.500		0.500		99.9	70-130			



QC Summary Data

		QU D	u	ary Dat					
WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	5315 Buena Vista Dr Project Number: 01058-0007						Reported: 11/1/2024 3:36:35PM		
	Noi	nhalogenated C	Organics	s by EPA 80	15D - G	RO			Analyst: RKS
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2444111-BLK1)							Prepared: 1	0/30/24 A	nalyzed: 10/31/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.488		0.500		97.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		98.9	70-130			
Surrogate: Toluene-d8	0.495		0.500		98.9	70-130			
LCS (2444111-BS2)							Prepared: 1	0/30/24 A	nalyzed: 10/31/24
Gasoline Range Organics (C6-C10)	49.7	20.0	50.0		99.5	70-130			
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.479		0.500		95.8	70-130			
Surrogate: Toluene-d8	0.517		0.500		103	70-130			
LCS Dup (2444111-BSD2)							Prepared: 1	0/30/24 A	nalyzed: 10/31/24
Gasoline Range Organics (C6-C10)	48.4	20.0	50.0		96.9	70-130	2.62	20	
Surrogate: Bromofluorobenzene	0.478		0.500		95.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.506		0.500		101	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			



QC Summary Data

WPX Energy - Carlsbad		Project Name:	RI	DX Federal 17	#035H				Reported:
5315 Buena Vista Dr		Project Number:	01	058-0007					-
Carlsbad NM, 88220		Project Manager:	Aı	nna Byers					11/1/2024 3:36:35PM
	Nonha	logenated Org	anics by	EPA 8015E) - DRO/	'ORO			Analyst: NV
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2444119-BLK1)							Prepared: 10	0/31/24 A	nalyzed: 11/01/24
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
	n.D	50.0							
Surrogate: n-Nonane	48.8	50.0	50.0		97.6	50-200			
0		50.0	50.0		97.6	50-200	Prepared: 10	0/31/24 A	nalyzed: 11/01/24
LCS (2444119-BS1)		25.0	50.0		97.6	50-200 38-132	Prepared: 10	0/31/24 A	analyzed: 11/01/24
LCS (2444119-BS1) Diesel Range Organics (C10-C28)	48.8						Prepared: 10	0/31/24 A	nalyzed: 11/01/24
LCS (2444119-BS1) Diesel Range Organics (C10-C28) Surrogate: n-Nonane	48.8 265		250		106	38-132			analyzed: 11/01/24 analyzed: 11/01/24
Surrogate: n-Nonane LCS (2444119-BS1) Diesel Range Organics (C10-C28) Surrogate: n-Nonane LCS Dup (2444119-BSD1) Diesel Range Organics (C10-C28)	48.8 265		250		106	38-132			



QC Summary Data

		-		v					
WPX Energy - Carlsbad		Project Name:	R	DX Federal 1	7 #035H				Reported:
5315 Buena Vista Dr		Project Number:	0	1058-0007					-
Carlsbad NM, 88220		Project Manager:	А	anna Byers					11/1/2024 3:36:35PM
		Anions	by EPA	300.0/90564	4				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 (2444125-BLK1)							Prepared: 10)/31/24 A	analyzed: 10/31/24
Chloride	ND	20.0							
LCS (2444125-BS1)							Prepared: 10)/31/24 A	analyzed: 10/31/24
Chloride	254	20.0	250		102	90-110			
LCS Dup (2444125-BSD1)							Prepared: 10)/31/24 A	analyzed: 10/31/24
Chloride	254	20.0	250		102	90-110	0.0382	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.



WPX Energy - Carlsbad	Project Name:	RDX Federal 17 #035H	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Anna Byers	11/01/24 15:36

orting limit
(

- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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

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



Released to Imaging: 3/4/2025 2:08:17 PM

Client: W	ent: WPX Energy Permian, LLC. Bill To		Bill To	ĺ.			La	ab Us	se On	ly	Use Only				TAT				
	RDX Feded				Attention: Jim Raley	ntion: Jim Raley Lab WO#				Job Number				2D	3D	Standard	CWA	SDWA	
Project N	Manager: A	nna Bye	rs		Address: 5315 Buena Vista Dr.		E410371			11	01058.0007						48H TAT		
Address:	: 13000 W	County F	d 100		City, State, Zip: Carlsbad, NM, 88	220							d Metho	t					RCRA
City, Stat	te, Zip_Ode	essa,TX,	79765		Phone: 575-885-7502			S											1.00
Phone: 4	32-305-64	17			Email: jim.raley@dvn.com]	801									1.0	State	
Email: De	evon-team	@eteche	env.com		WO: 21181900			Vd C									NM CO	UT AZ	TX
					Incident ID: nAB1928154373			ORG											
Collecter	d by: Edyte	Konan					-	TPH GRO/DRO/ORO by 8015	8021	VOC by 8260	010	Chloride 300.0		MN		¥			
Time	Date		No. of	L		Lab	H(ft	GRO	BTEX by 8021	by 8	Metals 6010	ride		DO		N	~		1 <u> </u>
Sampled	Sampled	Matrix	Containers	Sample ID		Number	Depth(ft.)	HdT	BTE	VOC	Meta	Chlo	_	BGDOC		GDOC		Remarks	
8:40	10.29.24	S	1		SW01	I	0-4'							x					
8:50	10.29.24	S	1		SW02	2	0-4'							x					
9:00	10.29.24	S	1		SW03	3	0-4'							x					
9:10	10.29.24	S	1		SW04	4	0-4'							x					
9:20	10.29.24	S	1	1	SW05	5	0-4'							x					
9:30	10.29.24	S	1		SW06	6	0-4'							x					
9:40	10.29.24	S	1		SW07	7	0-4'							x					
9:50	10.29.24	S	1		SW08	8	0-4'							x					
				1012	9120221														
_																			
Addition	nal Instruct	ions:		1			-	-											
					am aware that tampering with or intentionally misla	abelling the sample	locatio	n,	_								ceived on ice the day		led or receive
				nay be grounds for le		Inete		Times	_		packed	i in ice a	t an avg temp		_			iys.	
	ed by: (Signa	2			200Pm Michaele General		24		00	D	Rece	eived	on ice:)/ N	se On	цý		
Relinquish	ed by: (Starta	ture) Onza	les W	30.24 Time	000 Received by: (Signature)	Date 10.30	2.24	Time		>	T1			<u>T2</u>		_	<u>T3</u>		
Relinguish	ed by: (Signa	ture)	Date	30.24 L	315 Received by Signature	Date 10.31.2	24	Time	30	2	AVG	Tem	p°c_4	1					
- unit	alun C. Call Ed	- Solid Se -		queous, O - Other		Container									5. V -	VOA			

envirotech

Envirotech Analytical Laboratory

Sample Receipt Checklist (SRC)

Client:	WPX Energy - Carlsbad	Date Received:	10/31/24	06:30	Work Order ID:	E410371
Phone:	(575) 200-6754	Date Logged In:	10/30/24	12:54	Logged In By:	Caitlin Mars
Email:	anna@etechenv.com	Due Date:	11/01/24	17:00 (1 day TAT)		
Chain of	Custody (COC)					
1. Does tl	he sample ID match the COC?		Yes			
2. Does tl	he number of samples per sampling site location mat	ch 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 ir i.e, 15 minute hold time, are not included in this disucssic		Yes		<u>Commen</u>	ts/Resolution
Sample T	<u>Furn Around Time (TAT)</u>					
	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	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			
12. Was th	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	<i>,</i>	Yes			
13. If no	visible ice, record the temperature. Actual sample	temperature: 4°	С			
	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			
	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:				
S	ample ID?		Yes			
	Date/Time Collected?		Yes	L		
	collectors name?		Yes			
	Preservation	10	••			
	the COC or field labels indicate the samples were pr	eserved?	No			
	ample(s) correctly preserved?	atala?	NA			
	filteration required and/or requested for dissolved m	ietais?	No			
	ase 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	/zed?	NA			
Subcontr	act Laboratory					
Subconti						
	amples required to get sent to a subcontract laborato	ry?	No			

Date

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

APPENDIX G

BLM Seed Mixture 2 for Sandy Sites

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



Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	l <u>b/acre</u>
Sand dropseed (Sporobolus cryptandrus)	1.0 1.0
Sand love grass (Eragrostis trichodes) Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

APPENDIX H

HoldAll® Operating Manual

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






SOIL TEST KIT



Plants & Flowers

757860

Grasses & Lawns



Fruits & Veggies



Trees & Shrubs

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757860



SOIL TEST KIT

Tests Your Soil for a Healthy Garden

• pH • Nitrogen(N) • Phosphorus(P) • Potassium(K) •

PREPARING YOUR SOIL SAMPLES

For lawns, annuals or house plants, take the soil sample from about 2-3" below the surface. For perennials especially shrubs, vegetables and fruit, the sample should be from 4" deep.

Avoid touching the soil with your hands. Test different areas of your soil, as it may differ according to past cultivation, underlying soil differences or a localized condition. It is preferable to make individual tests on several samples from different areas, than to mix the samples together.

Place your soil sample into a clean container. Break the sample up with the trowel or spoon and allow it to dry out naturally. This is not essential, however it makes working with the sample easier. Remove any small stones, organic material such as grass, weeds or roots and hard particles of lime. Then crumble the sample finely and mix it thoroughly. Tube caps and capsules are color-coded for simplicity:

Green = pH	Purple = Nitrogen
Blue = Phosphorus	Orange = Potash

pH TEST:

1. Remove cap from the green capped tube.

2. Fill tube with soil to the first line.

3. Carefully open a green capsule and pour powder into the tube.

4. Add water (preferably distilled) to the fourth line.

5. Cap tube and shake thoroughly.

6. Allow soil to settle and color to develop for about a minute.

7. Compare color of solution to the pH color chart. Repeat for remaining capsules.



NITROGEN, PHOSPHORUS & POTASH TESTS:

Fill a clean jar or can with 1 part soil and 5 parts water. Thoroughly shake or stir the soil and water together for at least one minute and then allow the mixture to stand undisturbed until it settles (30 minutes to 24 hours, dependent on soil). A fine clay soil will take much longer to settle out than a course sandy soil. The clarity of the solution will also vary, the clearer the better, however cloudiness will not affect the accuracy of the test.

Nitrogen	Phosphorous	Potash
High	High	High
Medium	Medium	Medium
Low	Low	Low
Very Low	Very Low	Very Low

1. Remove the cap from the tube. (Please note that the color of the capsules should match the color of the tube cap.) Using dropper provided, fill the tube to the fourth line with liquid from your soil mixture. Avoid disturbing the sediment

2. Carefully separate the two halves of one of the capsules. Pour the powder into the tube.

3. Cap the tube and shake thoroughly. Allow color to develop for 10 minutes.

4. Compare color of solution to the appropriate portion of the plant food color chart. For best results allow daylight, not direct sunlight, to illuminate the solution. Note your results. Repeat for remaining capsules.



Raising and lowering pH is not an exact science & most plants have a reasonably wide tolerance, certainly to within 1 pH point. Consult the pH Preference List and you will see that the majority can manage well on a pH around 6.5 but some need an alkaline soil and some a particularly acid soil. Altering pH takes time so do not expect rapid changes; rather, work steadily towards giving a plant its ideal conditions.

ADJUSTING pH

pH can be adjusted to provide more suitable growing conditions for the different plants you wish to grow. Or, you can leave the pH of the soil as it is and select plants that like the level revealed by your test. Once you have your pH reading, check the pH Preference List for the pH levels of over 450 popular plants, trees, shrubs, vegetables and fruits. If your pH reading differs significantly from the list's recommended levels, follow instructions below for adjusting soil pH. You can correct pH at any time of the year but it

SOIL TYPES

Sandy Soils: A light, coarse soil comprised of crumbling and alluvial debris. Loam Soils: A medium friable soil, consisting of a blend of coarse (sand) alluvium and fine (clay) particles mixed within fairly broad limits with a little lime and humus. Clay Soils: A heavy, clinging, impermeable is best to start in the Fall and check progress in the Spring. After working to adjust your soil, retest for pH level in 40-60 days. If results are still significantly off, retreat your soil, not exceeding recommended application levels. Allow one month to pass between adding lime and adding fertilizers.

soil, comprised of very fine particles with little lime and humus and tending to be waterlogged in winter and very dry in summer.

ADJUSTING SOIL pH - HOW MUCH TO APPLY

Material	phChange	Sandy	Loamy	Clay
Dolomitic or Calcic	+0.5 unit (0.5 pH)	2.5	2.5	2.5
Limestone	+1.0 unit (1.0 pH)	5.0	5.0	5.0
Hydrated Lime	+0.5 unit (0.5 pH)	1.25 - 2.0	1.25 - 2.0	1.25 - 2.0
	+1.0 unit (1.0 pH)	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0
Iron Sulfate	-0.5 unit (0.5 pH)	0.75	0.75	0.75
	-1.0 unit (1.0 pH)	1.5	1.5	1.5
Aluminum Sulfate	-0.5 unit (0.5 pH)	0.5 - 0.75	0.5 - 0.75	0.5 - 0.75
	-1.0 unit (1.0 pH)	1 - 1.25	1 - 1.25	1 - 1.25

Amounts listed are pounds per 100 square feet. Do not add more than 5lbs. of lime or sulfur in one application.

FEEDING PRIOR TO PLANTING

Adequate reserves of plant food should be available in the soil before planting vegetables, preparing a seed or flower bed, sodding or seeding a lawn, or planting shrubs and trees. To make up any deficiencies, apply fertilizers from the following chart according to your soil test result.

TEST RESULTS	Very	1.00	1.1.1	1.1
Nitrogen Fertilizers (%N)	Low	Low	Medium	High
Dried Blood (11%)	36	19	6	N/A
Nitrate of Soda (16%)	27	14	3	N/A.
Phosphate Fertilizers (%P)				
Bone Meal (19%)	27	14	6	N/A.
Triple Superphosphate (46%)	10.25	5.25-5.5	2.25	N/A
Potash Fertilizers (%K)				
Muriate of Potash (60%)	8.75-9	4.75-5	2.25-2.5	N/A
Amounts listed are ounces per 100 square feet (0)	acas referred to are by weight)			

Amounts listed are ounces per 100 square feet. (Ounces referred to are by weight)

FEEDING ESTABLISHED PLANTS AND BEDS

Based on your test results, apply the appropriate fertilizer(s) in the amounts recommended in the following chart.

RECOMMENDATIONS FOR N, P AND K RESULTS

	Very Low			Low		Medium			
	N	P	К	N	P	K	Ν	P	K
Lawn	22.0-22.5	0.75-1.0	4.75-5.0	14.0-14.5	1.0-1.5	2.25-2.5	3.75-4.0	0	0
Fruit	14.0-14.5	6.5	13.5-14.0	7.75-8.0	4.0-4.25	8.75-9.0	3.75-4.0	2.25	4.75-5.0
Flower	14.0-14.25	6.5	13.5-14.0	7.75-8.0	4.0-4.25	8.75-9.0	3.75-4.0	2.25	4.75-5.0
Shrubs (flowering)	14.0-14.25	8.25-8.5	13.5-14.0	7.75-8.0	4.0-4.25	8.75-9.0	3.75-4.0	1.0-1.25	4.75-5.0
Shrubs (foliage)	22.0-22.5	10.5-10.75	8.75-9.0	14.0-14.5	5.25-5.5	4.75-5.0	3.75-4.0	2.25	2.25-2.5
Veggies (root)	14.0-14.25	12.0-12.25	8.75-9.0	14.0-14.5	5.25-5.5	4.75-5.0	3.75-4.0	3.0	2.25-2.5
Veggies (leafy)	28.25-29.0	10.25	8.75-9.0	14.0-14.5	5.25-5.5	4.75-5.0	7.75-8.0	2.25	2.25-2.5
Tree	14.0-14.5	10.25	8.75-9.0	7.75-8.0	5.25-5.5	4.75-5.0	3.75-4.0	2.25	2.25-2.5
General Feed	22.0-22.5	8.25-8.5	8.75-9.0	10.5-11.0	4.0-4.25	4.75-5.0	3.75-4.0	1.0-1.25	2.25-2.5

	High			
	N	P	K	
Lawn	N/A	N/A	N/A	
Fruit	N/A	N/A	N/A	
Flower	N/A	N/A	N/A	
Shrubs (flowering)	N/A	N/A	N/A	
Shrubs (foliage)	N/A	N/A	N/A	
Veggies (root)	N/A	N/A	N/A	
Veggies (leafy)	N/A	N/A	N/A	
Tree	N/A	N/A	N/A	
General Feed	N/A	N/A	N/A	

The recommendations are based on the following fertilizers sources: Nitrate of Soda (16% N), Triple Superphosphate (46% P2O5) and Muriate of Potassium (60% K2O). The amounts listed are in oz. /100 sq. ft. (Ounces referred to are by weight, not volume.) If you wish to use other fertilizer, simply check the package for the percentage of nutrients for N, P, & K and adjust the application level accordingly.

SPECIAL RECOMMENDATIONS FOR LAWNS

For a new lawn, pay special attention to soil preparation before planting. Proper soil preparation for any size lawn will have a significant impact on the amount of water and care it demands in the future. Till the soil to a depth of at least 12' and incorporate plenty of organic material (9' or more). Test your soil for pH and adjust to the levels recommended on pH Preference List for your type of grass. Refer to the Adjusting Soil pH chart for recommended lime or sulfate applications. For established lawns, Nitrogen is the most essential nutrient to promote lush growth and deep, green color. Phosphorus and Potassium, in lesser quantilies, are also important for strong root formation and growth. Compound fertilizers will supply all 3 nutrients, or you can select an individual fertilizer, such as Nitrate of Soda. The following chart gives recommended application levels specifically for lawns, based on your Nitrogen soil test results.

RECOMMENDATIONS FOR LAWNS

Fertilzer Type	Very Low	Low
24-4-4	4.0 lbs.	2.0 lbs.
24-3-4	3.1 lbs.	1.55 lbs.
30-4-4	3,0 lbs.	1.5 lbs.
	Medium	High
	meann	nign
24-4-4	1.0 lbs.	N/A
24-4-4 24-3-4		

Amounts listed are pounds per 1000 square feet.

SAFETY & HYGIENE

Dispose of test solutions by rinsing down the sink. Empty gelatin capsules should be disposed of immediately with household waste. Wash the test tubes and caps in warm, soapy water immediately after each use. Make sure any sediment or color staining is removed. Rinse well and dry. Each bag of capsules should be stored inside the blister, Fit the caps on each test tube. Place all components back into the package. The blister pack has been specially designed to be reused as a storage container. Store your kit in clean, dry conditions, indoors. The powders are safe in normal domestic terms but like all chemicals and pharmaceuticals, they should be put away and kept out of reach of children. Try to avoid touching the powders. Always wash your hands thoroughly after making your tests. Do not eat, drink or smoke while using the soil test kit. Keep powders away from food, drink and animal feed. If taken internally, drink copious amounts of water and seek medical advice.

CAUTIONS

Where a lot of fertilizer is needed to correct one plant food, divide the applications over several weeks. Do not add lime and fertilizer together; lime first. Allow at least one month to pass before applying fertilizer. Retest 30 days after applying fertilizer.



Plant pH Preference List

NAME PH NAME PH FRUIT VEGETABLES AND HERBS		NAME HOUSE and GREENHOUSE		NAME pH FLOWERS, TREES		NAME pH FLOWERS, TREES			
APPLE	5.0 - 6.5	SAGE	5.5 - 6.5	GENISTA	6.5 - 7.5	AND SHRUB		AND SHRU	
APRICOT	6.0 - 7.0	SHALLOT	5.5 - 7.0	GERANIUM	6.0 - 8.0	ASPERULA	6.0 - 8.0	LAUREL	6.5 - 7.5
AVOCADO	6.0 - 7.5	SORGHUM	5.5 - 7.5	GLOXINIA	5.5 - 6.5	ASPHODOLINE	6.0 - 8.0	LAVENDER	6.5 - 7.5
BANANA	5.0 - 7.0	SOYBEAN	5.5 - 6.5	GRAPE IVY	5.0 - 6.5	ASTER	5.5 - 7.5	LIATRIS	5.5 - 7.5
BLACKBERRY	5.0 - 6.0	SPEARMINT	5.5 - 7.5	GRAPE HYACINTH	6.0 - 7.5	AUBRITA	6.0 - 7.5	LIGUSTRUM	5.0 - 7.5
BLUEBERRY	4.0 - 6.0	SPINACH	6.0 - 7.5	GREVILLEA	5.5 - 6.5	AZALEA	4.5 - 6.0	LILAG	6.0 - 7.5
CANTALOUPE	6.5 - 7.5	SWEDE	5.0 - 7.0	GYNURA	5.5 - 6.5	BALLOON FLOWER	6.0 - 6.5	LILY OF THE VALLEY	4.5 - 6.0
CHERRY	6.0 - 7.5	THYME	5.5 - 7.0	HEDERA (IVY)	6.0 - 8.0	BAYBERRY	4.0 - 6.0	LITHOSPERMUM	5.0 - 6.5
RANBERRY	5.5 - 6.5	TOMATO	5.5 - 7.5	HELIOTROPIUM	5.0 - 6.0	BERGENIA	6.0 - 7.5	LOBELIA	6.5 - 7.5
URRANT: Black	6.0 - 8.0	TURNIP	5.5 - 7.0	HENS AND CHICKENS	6.0 - 7.0	BLEEDING HEART	6.0 - 7.5	LUPINUS	5.5 - 7.0
	5.5 - 7.0	WATER CRESS	6.0 - 8.0	HERRINGBONE PLANT	6.0 - 6.0	BLUEBELL	6.0 - 7.6		5.0 - 6.0
Red								MAGNOLIA	
White	6.0 - 8.0	HOUSE and GREENHOUS		HIBISCUS PLANT	6.0 - B.O	BROOM	5.0 - 6.0	MAHONIA	6.0 - 7.0
DAMSON	6.0 - 7.5	ABUTILON	5.5 - 6.5	HOYA	5.0 - 6.5	BUDDLEIA	6.0 - 7.0	MARIGOLD	5.5 - 7.0
GOOSEBERRY	5.0 - 6.5	ACORUS	5.0 - 6.5	IMPATIENS	5.5 - 6.5	BUPHTHALUM	6.0 - 8.0	MOLINIA	4.0 - 5.0
SRAPEVINE	6.0 - 7.0	AECHMEA	5.0 - 5.5	IVY TREE	6.0 - 7.0	BUTTERFLY BUSH	4.0 - 6.0	MORAEA	5.5 - 6.5
GRAPEFRUIT	6.0 - 7.5	AFRICAN VIOLET	6.0 - 7.0	JACARANDA	6.0 - 7.5	CALENDULA	5.5 - 7.0	MORNING GLORY	6.0 - 7.5
AZELNUT	6.0 - 7.0	AGLAONEMA	5.0 - 6.0	JAPANESE SEDGE	6.0 - 8.0	CAMASSIA	6.0 - 8.0	MOSS	6.0 - 8.0
IOP	6.0 - 7.5	AMARYLIS	5.5 - 6.5	JASMINUM	5.5 - 7.0	CANDYTUFT	6.0 - 7.5	MOSS, SPHAGNUM	3.5 - 5.0
UCKLEBERRY	4.0 - 6.0	ANTHURIUM	5.0 - 6.0	JERUSALEM CHERRY	5.5 - 6.5	CANNA	6.0 - 8.0	MYOSOTIS	6.0 - 7.0
EMON	6.0 - 7.0	APHELANDRA	50-60	JESSAMONE	5.0 - 6.0	CANTERBURY BELLS	7.0 - 7.5	NARCISSUS	6.0 - 8.5
	6.0 - 7.0		5.0 - 6.0		6.0 - 7.5		4.0 - 6.0		5.5 - 7.5
YCHEE		ARAUCARIA		KALANCHOE		CARDINAL FLOWER		NASTURTIUM	
IANGO	5.0 - 6.0	ASPARAGUS FERN	6.0 - 8.0	KANGAROO THORN	6.0 - 8.0	CARNATION	6.0 - 7.5	NICOTIANA	5.5 - 6.5
AELON	5.5 - 6.5	ASPIDISTRA	4.0 - 5.5	KANGAROO VINE	5.0 - 6.5	CATALPA	6.0 - 8.0	PACHYSANDRA	5.0 - 8.0
IULBERRY	6.0 - 7.5	AZAELA	4.5 - 6.0	LANTANA	5.5 - 7.0	CELOSIA	6.0 - 7.0	PAEONIA	6.0 - 7.5
IECTARINE	6.0 - 7.5	BABY'S BREATH	6.0 - 7.5	LAURUS (BAY TREE)	5.0 - 6.0	CENTAUREA	5.0 - 6.5	PANSY	5.5 - 7.0
EACH	6.0 - 7.5	BABY'S TEARS	5.0 - 6.0	LEMON PLANT	6.0 - 7.5	CERASTIUM	6.0 - 7.0	PASSION FLOWER	6.0 - 8.0
PEAR	6.0 - 7.5	BEGONIA	5.5 - 7.0	MIMOSA	5.0 - 7.0	CHRYSANTHEMUM	6.0 - 7.0	PASQUE FLOWER	5.0 - 6.0
INEAPPLE	5.0 - 6.0	BIRD OF PARADISE	6.0 - 6.5	MIND YOUR OWN BUSINESS	5.0 - 5.5	CISSUS	6.0 - 7.5	PAULOWNIA	6.0 - 8.0
LUM	6.0 - 7.5		5.0 - 6.0		5.0 - 5.0		6.0 - 7.5		
		BISHOP'S CAP	Contraction of the second	MONSTERA		CISTUS		PENSTEMON	5.507.0
OMEGRANATE	5.5-6.5	BLACK-EYED SUSAN	5.5 - 7.5	MYRTLE	6.0 - 8.0	CLARKIA	6.0 - 6.5	PERIWINKLE	6.0 - 7.5
DUINCE	6.0 - 7.5	BLOOD LEAF	5.5 - 6.5	NEVER NEVER PLANT	5.0 - 6.0	CLIANTHUS	6.0 - 7.5	PETUNIA	6.0 - 7.5
RASPBERRY	5.0 - 7.5	BOTTLEBRUSH	6.0 - 7.5	NICODEMIA (INDOOR OAK)	6.0 - 8.0	CLEMATIS	5.5 - 7.0	PINKS	6.0 - 7.5
RHUBARB	5.5 - 7.0	BOUGAINVILLEA	5.5 - 7.5	NORFOLK ISLAND PINE	5.0 - 6.0	COLCHICUM	5.5 - 6.5	POLYGONUM	6.0 - 7.5
STRAWBERRY	5.0 - 7.5	BOXWOOD	6.0 - 7.5	OLEANDER	6.0 - 7.5	COLUMBINE	6.0 - 7.0	POLYANTHUS	6.0 - 7.5
WATERMELON	5.5 - 6.5	BROMELIADS	5.0-7.5	OPLISMENUS	5.0 - 6.0	CONVOLVULUS	6.0 - 8.0	POPPY	6.0 - 7.5
VEGETABLES AN		BUTTERFLY FLOWER	6.0 - 7.5	ORCHID	4.5 - 5.5	COREOPSIS	5.0 - 6.0	PORTULACA	5.5 - 7.5
ARTICHOKE	6.5 - 7.5	CACTI	4.5 - 6.0	OXALIS	6.0 - 8.0	CORONILLA	6.5 - 7.5	PRIMROSE	5.5 - 6.5
ASPARAGUS	6.0 - 8.0	CALCAOLARIA	6.0 - 7.0	PALMS	6.0 - 7.5	CORYDALIS	6.0 - 8.0	PRIMULA	6.0 - 7.5
BASIL	5.5-6.5	CALADIUM	5.0 - 6.0	PANDANUS	5.0 - 6.0	COSMOS	5.0 - 8.0	PRIVET	5.0 - 7.5
BEAN	6.0 - 7.5	CALLA LILY	60-70	PEACOCK PLANT	5.0 - 6.0	COTTONEASTER	6.0 - 8.0	PRUNELLA	6.0 - 7.5
Runner, Broad, French)		CAMELIA	4.5 - 5.5	PELLIONIA	5.0 - 6.0	CRAB APPLE	6.0 - 7.5	PRUNUS	6.5 - 7.5
BEETROOT	6.0 - 7.5	CAMPANULA	5.5 - 6.5	PEPEROMIA	5.0 - 6.0	CROCUS	6.0 - 8.0	PYRETHRUM	6.0 - 7.5
BROCCOLI	6.0 - 7.0	CAPSICUM	5.0 - 6.5	PHILODENDRON	5.0 - 6.0	CYNOGLOSSUM	6.0 - 7.5	RED HOT POKER	6.0 - 7.5
BRUSSELS SPROUTS	6.0 - 7.5	CARDINAL FLOWER	5.0 - 6.0	PILEA	6.0 - 8.0	DAFFODIL	6.0 - 6.5	RHODODENDREN	4.5 - 6.0
	6.0 - 7.5		5.5 - 6.5	PLUMBAGO	5.5 - 6.5		6.0 - 7.5	ROSES:	4.0-0.0
CABBAGE		CASTOR OIL PLANT				DAHLIA			
CALABRESE	6.5 - 7.5	CANTURY PLANT	5.0 - 6.5	PODACARPUS	5.0 - 6.5	DAY LILY	6.0 - 8.0	HYBRID TEA	5.5 - 7.0
CARROT	5.5 - 7.0	CHINESE EVERGREEN	5.0 - 6.0	POINTSETTIA	6.0 - 7.5	DELPHINIUM	6.0 - 7.5	CLIMBING	6.0 - 7.0
CAULIFLOWER	5.5 - 7.5	CHINESE PRIMROSE	6.0 - 7.5	POLYSCIAS	6.0 - 7.5	DEUTZIA	6.0 - 7.5	RAMBLING	5.5 - 7.0
CELERY	6.0 - 7.0	CHRISTMAS CACTUS	5.0 - 6.5	POTHOS	5.0 - 6.0	DIANTHUS	6.0 - 7.5	SALVIA	6.0 - 7,5
CHICORY	5.0-6.5	CINERARIA	5.5 - 7.0	PRAYER PLANT	5.0 - 6.0	DOGWOOD	5.0 - 7.0	SCABIOSA	5.0 - 7.5
CHINESE CABBAGE	6.0 - 7.5	CLERODENDRUM	5.0 - 6.0	PUNICA	5.5 - 6.5	EDELWEISS	6.5 - 7.5	SEDUM	6.0 - 7.5
CHIVES	6.0 - 7.0	CLIVIA	5.5 - 6.5	SANSERIERIA	4.5 - 7.0	ELAEAGNUS	5.0 - 7.5	SNAPDRAGON	5.5 - 7.0
CORN - SWEET	5.5 - 7.0	COCKSCOMB	6.0 - 7.0	SAXIFRAGA	6.0 - 8.0	ENKIANTHUS	5.0 - 6.0	SNOWDROP	6.0 - 8.0
CRESS	6.0 - 7.0	COFFEE PLANT	5.0 - 6.0	SCINDAPSUS	5.0 - 6.0	ERICA	4.5 - 6.0	SOAPWORT	6.07.5
COURGETTES	5.5 - 7.0	COLEUS	6.0 - 7.0	SHRIMP PLANT	6.0 - 7.0	EUPHORBIA	6.0 - 7.0	SPEEDWELL	5.5 - 6.5
CUCUMBER	5.5 - 7.5	COLUMNEA	4.5 - 5.5	SPANISH BAYONET	6.0 - 7.5	EVERLASTINGS	5.0 - 6.0	SPIRAEA	6.0 - 7.5
FENNEL	5.0-6.0	CORAL BERRY	5.5 - 7.5	SPIDER PLANT	6.0 - 7.5	FIRETHORN	6.0 - 8.0	SPRUCE	4.0-5.0
GARLIC	5.5 - 7.5	CRASSULA	5.0 - 6.0	SUCCULENTS	5.0 - 6.5	FORGET-ME-NOTS	6.0 - 7.0	STOCK	6.0 - 7.5
GINGER	6.0 - 8.0	CREEPING FIG	5.0 - 6.0	SYNOGONIUM	5.0 - 6.0	FORSYTHIA	60-80	STONECROP	6.5 - 7.5
HORSERADISH	6.0 - 7.0	CROTON	5.0 - 6.0	TOLMIEA	5.0 - 6.0	FOXGLOVE	6.0 - 7.5	SUMACK	5.0 - 6.5
KALE	6.0 - 7.5	CROWN OF THORNS	6.0 - 7.5	TRADESCANTIA	5.0 - 6.0	FRITILLARIA	6.0 - 7.5	SUNFLOWER	5.0 - 7.0
KOHLRABI	6.0 - 7.5	CUPHEA	6.0 - 7.5	UMBRELLA TREE	5.0 - 7.5	FUCHSIA	5.5 - 7.5	SWEET PEA	6.0 - 7.5
LEEK	6.0 - 8.0	CYCLAMEN	6.0 - 7.0	VENUS FLYTRAP	4.0 - 5.0	GAILLARDIA	6.0 - 7.5	SWEET WILLIAM	6.0 - 7.5
				WEEPING FIG					
LENTIL	5.5 - 7.0	CYPERUS	5.0 - 7.5		5.0 - 6.0	GAZANIA	5.5 - 7.0	TAMARIX	6.5 - 8.0
LETTUCE	6.0 - 7.0	DIEFFENBACHIA	5,0 - 6.0	YUCCA	6.0 - 7.5	GENTIANA	5.0 - 7.5	TRILLIUM	5.0 - 6.5
MARJORAM	6.0 - 8.0	DIPLADENIA	6.0 - 7.5	ZEBRINA	5.0 - 6.0	GEUM	6.0 - 7.5	TULIP	6.0 - 7.0
MARROW	6.0 - 7.5	DIZGOTHECA	6.0 - 7.5	FLOWERS, TREES		GLADIOILI	6.0 - 7.0	VIBERNUM	5.0 - 7.5
MILLET	6.0 - 6.5	DRACAENA	5.0 - 6.0	AND SHRUBS		GLOBULARIA	5.5 - 7.0	VIOLA	5.5 - 6.5
MINT	7.0 - 8.0	EASTER LILY	6.0 - 7.0	ABELIA	6.0 - 8.0	GODETIA	6.0 - 7.5	VIRGINIA CREEPER	5.0 - 7.5
NUSHROOM	6.5 - 7.5	ELEPHANT'S EAR	5.0 - 6.0	ACACIA	6.0 - 8.0	GOLDEN ROD	5.0 - 7.0	WALLFLOWER	5.5 - 7.5
MUSTARD	6.0 - 7.5	EPISCIA	6.0 - 7.0	ACANTHUS	6.0 - 7.0	GYPSOPHILIA	6.0 - 7.5	WATER LILY	5.5 - 6.5
DLIVE	5.5 - 6.5	EUONYMOUS	6.0 - 8.0	ACONITUM	5.0 - 6.0	HAWTHORN	6.0 - 7.0	WEIGELIA	6.0 - 7.5
NION	6.0 - 7.0	FERNS:	100	ADONIS	6.0 - 8.0	HEATHER	4.0 - 6.0	WISTARIA	6.0 - 8.0
PAPRIKA	7.0 - 8.5	BIRD'S NEST	5.0 - 5.5	AGERATUM	6.0 - 7.5	HELIANTHUS	5.0 - 7.0	ZINNIA	5.5 - 7.5
PARSLEY	5.0 - 7.0	BOSTON	5.5 - 6.5	AILANTHUS	6.0 - 7.5	HELLEBORUS	6.0 - 7.5	TURF AND ORNAMENT	TAL GRASSES
ARSNIP	55-75	BUTTON	6.0 - 8.0	AJUGA	4.0 - 6.0	HOLLY	5.0 - 6.5	BAHAI	6.5 - 7.5
PEA	6.0 - 7.5	CHRISTMAS	6.0 - 7.5	ALTHEA	6.0 - 7.5	HOLLYHOCK	6.0 - 7.5	BENT	5.5 - 6.5
PEANUT	5.0 - 6.5	CLOAK	6.0 - 7.5	ALYSSUM	6.0 - 7.5	HONEYSUCKLE	6.0 - 7.5	BERMUDA	6.0 - 7.0
PECAN									
	4.0 - 6.0	FEATHER	5.5 - 6.5	AMARANTHUS	6.0 - 6.5	HYACINTH	6.5 - 7.5	CANADA BLUE	4.5-6.4
PEPPER	5.5 - 7.0	HART'S TONGUE	7.0-8.0	ANCHUSA	6.0 - 7.5	HYDRANGEA (Blue)	4.0 - 5.0	CLOVER	6.0 - 7.0
PEPPERMINT	6.0 - 7.5	HOLLY	4.5 - 6.0	ANDROSACE	5.0 - 6.0	HYDRANGEA (Pink)	6.0 - 7.0	KENTUCKY BLUE	6.0 - 7.5
PISTACHIO	5.0 - 6.0	MAIDENHAIR	6.0 - 8.0	ANEMONE	6.0 - 7.5	HYDRANGEA (White)	6.5 - 8.0	MEADOW	6.0 - 7.5
OTATO	4.5 - 6.0	RABBITS FOOT	6.0 - 7.5	ANTHYLLIS	5.0 - 6.0	HYPERICUM	5.5 - 7.0	PAMPAS	6.0 - 8.0
OTATO - SWEET	5.5 - 6.0	SPLEENWORT	6.0 - 7.5	ARBUTUS	4.0 - 6.0	IRIS	5.0 - 6.5	RED TOP	6.0 - 6.5
UMPKIN	5.5 - 7.5	FIG	5.0 - 6.0	ARENARIA	6.0 - B.0	IVY	6.0 - 7.5	RYE	6.0 - 7.0
RADISH	6.0 - 7.0	FITTONIA	5.5 - 6.5	ARISTEA	6.0 - 7.5	JUNIPER	5.0 - 6.5	ST. AUGUSTINE	6.5 - 7.5
RICE	5.0 - 6.5	FREESIA	6.0 - 7.5	ARMERIA	60-7.5	KALMIA	4.5 - 5.0	TALL FESCUE	6.0 - 7.0
	FO 00	GARDENIA	5.0 - 6.0	ARNICA	5.0 - 6.5	KERRIA	6.0 - 7.0	VELVET BENT	5.0 - 6.0
OSEMARY	5.0 - 6.0	GANOLINIA	0.0 - 0.0	ALM STATE	0.0 0.0	TSEAT STATES	0.0 1.0	VELVET DENT	0.0-0.0

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Soil Test Kit Questions and Answers

Question: I tested my soil, the pH test worked, but the rest of the results are clear. What's wrong?

- 1. An error has been made in the testing process.
- 2. Nutrient levels are too low for the test to indicate.
- 3. The capsules have absorbed too much moisture prior to being used. The reaction has already occurred within the capsule itself.

Question: My pH test result came out dark blue, there is no blue on the pH color chart.

- 1. The water being used to perform the test is alkaline. Recommend distilled water for the testing process.
- 2. The soil pH is higher than 7.5. The color results change from greens to blues to purples as the pH rises.

Question: I got results on all but the Nitrogen portion of the kit.

- 1. Nitrogen leaches out of the soil very quickly, especially in sandy soil.
- 2. The form of Nitrogen the kit tests for is Nitrate, the form used by plants. Nitrate is formed through the natural Nitrogen cycle within the soil. It is possible to have Nitrogen present in the soil in a non-testable form.

Question: I tested fertilizer with the kit and still got no reaction!

The kit detects only the form of the nutrient used by the plant. These nutrients must break down to the form tested for, through the natural bacterial action and decay processes in the soil. In most cases fertilizers will not test correctly.

Question: I fertilized my soil as recommended in your instructions and then re-tested. My readings didn't change.

Because the nutrients need to break down, we recommend two to four weeks between fertilizing and retesting.

Question: My soil will not settle to the bottom in the soil/water solution I've mixed.

Although the directions read the soil and water should settle for at least 10 minutes before proceeding, there is no harm in letting the soil settle much longer. Suggest the consumer mix the soil and water the evening or even the day before testing. Some vary fine clay soil will not settle. For these few homeowners, the kit will not work.

Question: The testing capsule didn't dissolve.

The capsules must be opened and the testing powder poured into the test tube. There isn't enough water present to dissolve the capsule.

Question: The color result I got doesn't match any on the color chart.

- 1. If the result is the same "color" but a different "shade" it's a matter of a judgment decision between the different nutrient levels.
- 2. The consumer may have inadvertently used the wrong capsule for the test in question.

In most cases we offer to send the consumer additional reagent capsules for re-testing. If an error was made in the first testing process, it's generally corrected the second time through.



40 TESTS

SOLL TEST KIT Tests Your Soil for a Healthy Garden • pH • Nitrogen(N) • Phosphorus(P) • Potassium(K) •

WHY TEST YOUR SOIL?

Plants need food (nutrients) for healthy growth. Nitrogen, Phosphorus and Potash (N, P and K for short), play a vital role in plant growth just as vitamins, minerals, carbohydrates and protein do in our health.

HOW TO TEST YOUR SOIL

For the new and experienced soil testers alike, you will appreciate this easy, fast and fun way to achieve better growing results from your gardening efforts!

Everything is color-coded, including the tubes and capsules. All you do is take a sample of soil, mix with water, add powder from capsule, shake and watch the color develop. Then, note your test results. Fast, easy and it only takes a few minutes!

WHEN TO TEST YOUR SOIL

Soil should be tested periodically throughout the growing season, but it is especially recommended to test before planting in Spring and when preparing beds in Fall. And, if you feel your plants are not growing well, a soil test may help.

Included in the kit are:

40 test capsules, 10 each for pH, N, P and K, Four (4) Color-coded Test Tubes, Test Tube Storage Dock, complete instructions for adjusting soil pH, fertilization guidelines and pH preference list for over 450 plants for the home, yard and garden.



60183L

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www.PanaceaProducts.com Assembled in USA from

Foreign and Domestic parts



APPENDIX I

Correspondence & Notifications

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



811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

Page1154eof 322 QUESTIONS

Action 359046

QUESTIONS

Operator: C	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	359046
4	Action Type:
	[NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites				
Incident ID (n#)	nAB1928154373			
Incident Name	NAB1928154373 RDX FEDERAL 17 #035H @ 30-015-43884			
Incident Type	Produced Water Release			
Incident Status	Remediation Closure Report Received			
Incident Well	[30-015-43884] RDX FEDERAL 17 #035H			

Location of Release Source

Site Name	RDX FEDERAL 17 #035H			
Date Release Discovered	09/08/2019			
Surface Owner	Federal			

Sampling Event General Information

Planca	anowor	all the	questions	in thic	aroun
r icasc	answei	an trie	questions	111 11115	group.

Please answer all the questions in this group.						
What is the sampling surface area in square feet	3,400					
What is the estimated number of samples that will be gathered	20					
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/03/2024					
Time sampling will commence	08:30 AM					
Please provide any information necessary for observers to contact samplers	Please contact Erick Herrera at 432-305-6416 with any questions					
Please provide any information necessary for navigation to sampling site	From Tarbrush Rd/Pipeline Rd head east on Pipeline Rd for approx 3.34 mi, turn right for approx 1 mi. turn right for approx. 1 mi. to reach location.					

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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

Operator:	OGRID:			
WPX Energy Permian, LLC	246289			
Devon Energy - Regulatory	Action Number:			
Oklahoma City, OK 73102	359046			
	Action Type:			
	[NOTIFY] Notification Of Sampling (C-141N)			

CONDITIONS

Ci	reated	Condition	Condition
By	y		Date
j	raley	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	6/27/2024

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Action 359046

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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

Page1156cof 322 QUESTIONS

Action 395587

QUESTIONS

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	395587
	Action Type:
	[NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites						
Incident ID (n#)	nAB1928154373					
Incident Name	NAB1928154373 RDX FEDERAL 17 #035H @ 30-015-43884					
Incident Type	Produced Water Release					
Incident Status	Remediation Closure Report Received					
Incident Well	[30-015-43884] RDX FEDERAL 17 #035H					

Location of Release Source

Site Name	RDX FEDERAL 17 #035H					
Date Release Discovered	09/08/2019					
Surface Owner	Federal					

Sampling Event General Information

Please answer all the questions in this group.						
What is the sampling surface area in square feet	3,400					
What is the estimated number of samples that will be gathered	20					
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/29/2024					
Time sampling will commence	07:00 AM					
Please provide any information necessary for observers to contact samplers	Please contact Erick Herrera at 432-305-6416 with any questions.					
Please provide any information necessary for navigation to sampling site	From Tarbrush Rd/Pipeline Rd head east on Pipeline Rd for approx 3.34 mi, turn right for approx 1 mi. turn right for approx. 1 mi. to reach location.					

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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

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	395587
	Action Type:
	[NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

C E	Created By	Condition	Condition Date
	jraley	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	10/24/2024

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Action 395587

APPENDIX J

Archived Reports

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





3300 North "A" Street Building 1, Unit 103 Midland, Texas 79705 432,704,5178

Advancing Opportunity

December 4, 2019

Mr. Mike Bratcher New Mexico Oil Conservation Division 811 South First Street Artesia, New Mexico 88210

RE: Deferral Request WPX Energy Permian, Inc. Remediation Permit Number 2RP-5649 RDX Federal 17 #035H Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of WPX Energy Permian, Inc. (WPX), presents the following Deferral Request detailing soil sampling and excavation activities at the RDX Federal 17 #035H (Site) in Unit D, Section 17, Township 26 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the soil sampling and excavation activities was to address impacts to soil following an event that resulted in the release of produced water to the pipeline right-of-way south of the well pad. Based on the excavation activities and results of the soil sampling events, XTO is submitting this Deferral Request, describing remediation that has occurred and requesting to leave impacted soil in the top 4 feet near active production equipment in place until final reclamation.

BACKGROUND

On September 8, 2019, a check valve failed resulting in the release of 10 barrels (bbls) of produced water to the pipeline right-of-way surface south of the well pad. A vacuum truck was dispatched to the Site to recover free-standing fluid; approximately 4 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 September 16, 2019, and was assigned Remediation Permit (RP) Number 2RP-5649 (Attachment 1).

LTE 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). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on known aquifer properties and the elevation difference between the Site and an identified water well. The nearest permitted water well with depth to water data is C 01360, located approximately 6,153 feet north of the Site. Water well C 01360 has a reported





depth to water of 173 feet bgs and is approximately 23 feet higher in elevation than the Site. The closest significant watercourse to the Site is a dry arroyo located approximately 1,225 feet north of the Site. The Site is greater than 300 feet from any occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within an unstable area, 100-year floodplain, or overlying a subsurface mine. The Site is located in a medium-potential karst area.

Based on these criteria, the following NMOCD Table 1 closure criteria apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 2,500 mg/kg total petroleum hydrocarbons (TPH); 1,000 mg/kg TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO); and 20,000 mg/kg chloride. However, the top 4 feet of the release area is to be reclaimed immediately and therefore the reclamation standard of 600 mg/kg is being applied to the top 4 feet of impacted material.

PRELIMINARY SOIL SAMPLING

On September 9, 2019, LTE personnel inspected the Site to evaluate the release extent. LTE personnel collected one preliminary soil sample (SS01) within the release extent from a depth of approximately 0.5 feet bgs to assess soil impacts. The release extent and preliminary soil sample location were mapped using a handheld Global Positing System (GPS) unit and are depicted on Figure 2. The soil sample was placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were shipped at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of BTEX following United States Environmental Protection Agency (USEPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following USEPA Method 8015M/D; and chloride following USEPA Method 300.0.

Based on visible surface staining and laboratory analytical results for preliminary soil sample SS01, excavation of impacted soil was warranted. Photographic documentation was conducted during the Site visit. Photographs are included in Attachment 2.

DELINEATION AND EXCAVATION SOIL SAMPLING

On September 13, 2019, three potholes (PH01 through PH03) were advanced within the release area. Using excavation equipment, potholes were advanced to depths ranging from 4 feet bgs in PH03 to 7 feet bgs in PH02. The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were shipped at or below 4 °C under strict COC procedures to Xenco in Midland, Texas, for analysis of chloride following USEPA Method 300.0. Pothole PH03 was limited in depth due to the presence of the 12-inch concrete water line that was identified in the northern portion of the release area. The line is owned by Solaris Water Midstream, LLC (Solaris).





Upon the discovery of the line, Solaris notified LTE that no ground disturbing activities could occur within 15 feet of the line without a representative on site. The pothole locations are depicted on Figure 2. Soil Sampling Logs are included as Attachment 3.

From November 21 through 26, 2019, LTE was on site to oversee excavation activities within the release area. Excavation activities were directed by field screening soil samples for volatile aromatic hydrocarbons using a photo-ionization detector (PID) and chloride using Hach[®] chloride QuanTab[®] test strips. The extents of the excavations were limited due to safety concerns associated with the Solaris 12-inch water line, surface poly lines, and sub surface pipelines. Following completion of excavation activities, 5-point composite confirmation soil samples were collected from the floor (samples labeled as "FS") and sidewalls (samples labeled as "SW") of the excavation areas. Each soil sample represented at most 200 square feet. Approximately 275 cubic yards of impacted soil were removed from the excavation area and transported to the R360 Red Bluff Facility in Orla, Texas for disposal. The excavation areas measured a total of approximately 1,600 square feet in area and ranged in depth from 2 feet to 4 feet bgs in depth. The excavation area to the north near the Solaris water line was dictated by a Solaris representative, who was on site. The Solaris representative did not allow the excavation to advance deeper than 2 feet bgs. The excavation area and soil sample locations are depicted on Figure 3.

Additionally, on November 26, 2019, six potholes (PH04 through PH09) were advanced to delineate the lateral extent of remaining soil impacts. Using excavation equipment, potholes were advanced to a depth of 4 feet bgs. Soil samples were collected from each pothole at depths of 0.5 feet bgs and from 4 feet bgs. Soil samples were handled and analyzed as previously stated. The pothole locations are depicted on Figure 2. Soil Sampling Logs are included as Attachment 3.

ANALYTICAL RESULTS

Laboratory analytical results indicated that the preliminary soil sample SS01 was compliant with the Closure Criteria but exceeded 600 mg/kg for chloride concentration in the top four feet. Impacted soil was excavated to the extent possible as allowed by the Solaris representative and health and safety protocol. Laboratory analytical results indicated that BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria in all excavation sidewall and floor samples. However, laboratory analytical results indicated that chloride concentrations in excavation samples FS06 through FS09, SW01, SW02, and SW04 that were collected less than 4 feet bgs exceeded the BLM preferred chloride closure criteria.

Further excavation of impacted soil beyond excavation samples FS06 through FS09, SW01, SW02, and SW04 was limited by the presence of above ground and subsurface active pipelines. Safety policy restricted soil disturbing activities around active production equipment and pipelines. This safety policy is established to protect workers and reduce the likelihood of compromising the foundation of the production equipment or pipelines.





Laboratory analytical results for the delineation soil samples collected from potholes indicate BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria and 600 mg/kg chloride in the top four feet of the subsurface. Therefore, no further excavation was warranted in the pipeline right-of-way. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

CONCLUSIONS

A total of approximately 275 cubic yards of impacted soil were excavated from the Site; however, impacted soil exceeding the reclamation standard of 600 mg/kg chloride in the top 4 feet of the subsurface was left in place for compliance with the safety policy regarding earth moving activities near active pipelines. Impacted soil was excavated to the extent possible. The impacted soil remaining in place is delineated vertically and laterally by potholes PH01 through PH09. An estimated 410 cubic yards of impacted soil remain in place between 0 feet and 4 feet bgs based on excavation confirmation and delineation soil samples that were compliant with the NMOCD Table 1 Closure Criteria and the reclamation standard.

WPX requests to backfill the existing excavations and complete remediation during any future major construction/alteration or final plugging and abandonment, whichever occurs first. LTE and WPX do not believe deferment will result in imminent risk to human health, the environment, or groundwater. WPX requests deferral of final remediation permit number 2RP-5649. Upon approval of this deferral request, WPX will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. An updated NMOCD Form C-141 is included as Attachment 1.

If you have any questions or comments, please do not hesitate to contact Mr. Chris McKisson at (970) 285-9985 or cmckisson@ltenv.com.

Sincerely,

LT ENVIRONMENTAL. INC.

Chris McKisson **Project Environmental Scientist**

cc: Jim Raley, WPX

> Robert Hamlet, NMOCD Victoria Venegas, NMOCD Jim Amos, BLM

Ashley L. Ager Ashley I. Ager, M.S., P.G.

Senior Geologist





Attachments:

- Figure 1 Site Location Map
- Figure 2 Site Map
- Figure 3 Excavation Soil Sample Locations
- Table 1 Soil Analytical Results
- Attachment 1 Form C-141
- Attachment 2 Photographic Log
- Attachment 3 Soil Sampling Logs
- Attachment 4 Laboratory Analytical Reports



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FIGURES



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TABLE

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TABLE 1 SOIL ANALYTICAL RESULTS

RDX Federal 17 #035H REMEDIATION PERMIT NUMBER 2RP-5649 EDDY COUNTY, NEW MEXICO WPX ENERGY PERMIAN, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Sum of GRO + DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS01	0.5	09/09/2019	0.00444	0.0252	0.00394	0.0738	0.107	43.4	63.4	<24.9	107	107	13,800*
PH01	2	09/13/2019	<0.00101	<0.00101	<0.00101	<0.00101	<0.00101	<25.0	<25.0	<25.0	<25.0	<25.0	691*
PH01A	4	09/13/2019	-	-	-	-	-	-	-	-	-	-	938*
PH01B	6	09/13/2019	-	-	-	-	-	-	-	-	-	-	73.4*
PH02	2	09/13/2019	<0.000996	<0.000996	<0.000996	<0.000996	<0.000996	<24.9	<24.9	<24.9	<24.9	<24.9	890*
PH02A	5	09/13/2019	-	-	-	-	-	-	-	-	-	-	308*
PH02B	7	09/13/2019	-	-	-	-	-	-	-	-	-	-	109*
PH03	2	09/13/2019	-	-	-	-	-	-	-	-	-	-	6,830*
PH03A	4	09/13/2019	-	-	-	-	-	-	-	-	-	-	4,670*
PH04	0.5	11/26/2019	<0.00202	<0.00202	< 0.00202	< 0.00202	<0.00202	<50.3	<50.3	<50.3	<50.3	<50.3	186*
PH04A	4	11/26/2019	< 0.00200	<0.00200	< 0.00200	< 0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	13.6*
PH05	0.5	11/26/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	36.3*
PH05A	4	11/26/2019	< 0.00200	<0.00200	< 0.00200	< 0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	11.5*
PH06	0.5	11/26/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	<10.0*
PH06A	4	11/26/2019	<0.00202	< 0.00202	<0.00202	<0.00202	<0.00202	<50.1	<50.1	<50.1	<50.1	<50.1	73.6*
PH07	0.5	11/26/2019	< 0.00202	<0.00202	< 0.00202	< 0.00202	< 0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	<9.82*
PH07A	4	11/26/2019	< 0.00202	< 0.00202	< 0.00202	< 0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	17.3*
PH08	0.5	11/26/2019	<0.00200	<0.00200	<0.00200	< 0.00200	<0.00200	<50.2	<50.2	<50.2	<50.2	<50.2	14.0*
PH08A	4	11/26/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<50.3	<50.3	<50.3	<50.3	<50.3	54.3*
PH09	0.5	11/26/2019	<0.00197	<0.00197	<0.00197	<0.00197	<0.00197	<49.8	<49.8	<49.8	<49.8	<49.8	50.6*
PH09A	4	11/26/2019	<0.00196	<0.00196	<0.00196	<0.00196	<0.00196	<49.8	<49.8	<49.8	<49.8	<49.8	73.1*
FS01	4	11/21/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	1,200*
FS02	4	11/21/2019	<0.00199	<0.00199	<0.00199	< 0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	807*
FS03	4	11/26/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	2,100*
FS04	4	11/26/2019	< 0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	894*
FS05	4	11/26/2019	<0.00199	< 0.00199	<0.00199	< 0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	1,160*
FS06	0.5 - 2	11/26/2019	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	15,800*
FS07	0.5 - 2	11/26/2019	<0.00197	<0.00197	<0.00197	<0.00197	<0.00197	<50.0	<50.0	<50.0	<50.0	<50.0	9,250*
FS08	0.5 - 2	11/26/2019	<0.00202	<0.00202	< 0.00202	< 0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	5,600*
FS09	0.5 - 2	11/26/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	7,540*
SW01	0.5 - 4	11/26/2019	<0.00202	<0.00202	< 0.00202	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	1,930*
SW02	0.5 - 4	11/26/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	1,040*
SW03	0.5 - 4	11/26/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	103*
SW04	0.5 - 4	11/26/2019	< 0.00201	<0.00201	< 0.00201	< 0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	1,080*
NMOCD Table	e 1 Closure Crit	eria	10	NE	NE	NE	50	NE	NE	NE	1,000	2,500	20,000

Notes:

bgs - below ground surface BTEX - benzene, toluene, ethylbenzene, and total xylenes mg/kg - milligrams per kilogram NE - not established NMOCD - New Mexico Oil Conservation Division - not analyzed
 DRO - diesel range organics
 Bold- indicate

 GRO - gasoline range organics
 standard

 ORO - oil range organics
 * - indicates s

 TPH - total petroleum hydrocarbons
 after remedia

 < - indicates result is below</td>
 concentratio

laboratory reporting limits

Bold- indicates result exceeds the applicable regulatory

* - 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 Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018 NMAC -New Mexico Administrative Code

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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

Pagee1171 of 1322

Incident ID	NAB1928154373
District RP	2RP-5649
Facility ID	
Application ID	pAB1928154046

Release Notification

I9KF0-190916-C-1410

Responsible Party

Responsible Party: WPX Energy Permian, LLC.	OGRID: 246289
Contact Name: Jim Raley	Contact Telephone: 575-689-7597
Contact email: james.raley@wpxenergy.com	Incident # (assigned by OCD) NAB1928154373
Contact mailing address: 5315 Buena Vista Dr., Carlsbad, NM 88220	

Location of Release Source

Latitude 32.0492796_

Longitude -103.909725 (NAD 83 in decimal degrees to 5 decimal places)

Site Name: RDX FEDERAL 17 #035H	Site Type: Production Facility
Date Release Discovered: 9/8/2019	API# (<i>if applicable</i>): 30-015-43884

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

Surface Owner: State Federal Tribal Private (Name: Bureau of Land Management_____)

Nature and Volume of Release

Materi	al(s) Released (Select all that apply and attach calculations or specif	fic justification for the volumes provided below)
Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls) 10	Volume Recovered (bbls) 4
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release: Check	valve on produced water line header failed allowing	release of 10 bbls of produced water on pipeline

Cause of Release: Check valve on produced water line header failed, allowing release of 10 bbls of produced water on pipeline ROW, of which 4bbls was recovered. No waterways were threatened nor public health endangered.

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Form C-141	State of New Mexico	Incident ID	NAB1928154373
Page 2	Oil Conservation Division	District RP	2RP-5649
		Facility ID	
		Application ID	pAB1928154046

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?
🗌 Yes 🛛 No	
If YES, was immediate n	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Initial Response

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

 \square The source of the release has been stopped.

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

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

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

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

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

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

Printed Name: Jim Raley Signature:

email: james.raley@wpxenergy.com

Title: Environmental Specialist

Date: 9/16/2019

Telephone: 575-689-7597

10/7/2019

OCD Only

Received by: Amalia Bustamante

Date:

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Form C-141 Page 3

State of New Mexico **Oil Conservation Division**

Incident ID	
District RP	2RP-5649
Facility ID	
Application ID	

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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<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?	🗌 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
- \boxtimes Data table of soil contaminant concentration data
- \square Depth to water determination
- Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release
- \boxtimes Boring or excavation logs
- \square Photographs including date and GIS information
- \boxtimes 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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² orm C-141	State of New Mex	ico	Incident ID	The second
age 4	Oil Conservation Div	vision	District RP	2RP-5649
			Facility ID	1000
			Application ID	
addition, OCD acceptance and/or regulations.	tigate and remediate contamination that p of a C-141 report does not relieve the op	erator of responsibility for co	ompliance with any other fo	ederal, state, or local laws
Contraction of the				
Printed Name: Jim I	Raley	Title:	Environmental Spe	cialist
Signature: Jun	Kaly	Date:	12/4/2019	
email: Jame	s.Raley@wpxenergy.com	Telephone:	575-689-7597	
OCD Only				

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Form C-141	State of New Me:	xico	[testing the	
Page 5	Oil Conservation Di	ivision	Incident ID District RP	2RP-5649
			Facility ID	
			Application ID	
	Rem	ediation Plar		
Remediation Plan Chec	cklist: Each of the following items	must be included in the p	lan.	
 Scaled sitemap with Estimated volume of Closure criteria is to 	of proposed remediation technique GPS coordinates showing delineation f material to be remediated Table 1 specifications subject to 19, or remediation (note if remediation p	15.29.12(C)(4) NMAC	90 days OCD approval	is required)
Deferral Requests Only	: Each of the following items must	t be confirmed as part of	any request for deferra	l of remediation.
Contamination must deconstruction.	be in areas immediately under or are	ound production equipme	nt where remediation co	ould cause a major facility
K Extents of contamins	ation must be fully delineated.			
EX DATENTIS OF CONTAINING	thon must be fully defined.			
Contamination does	not cause an imminent risk to humar nformation given above is true and c	complete to the best of my	knowledge and unders	tand that pursuant to OCD
Contamination does I hereby certify that the in rules and regulations all of which may endanger pub liability should their oper surface water, human hea	not cause an imminent risk to humar	complete to the best of my or file certain release noti acceptance of a C-141 rep estigate and remediate con OCD acceptance of a C-	knowledge and unders fications and perform co ort by the OCD does no ntamination that pose a 141 report does not relia	prrective actions for release t relieve the operator of threat to groundwater.
Contamination does I hereby certify that the in rules and regulations all of which may endanger pub liability should their oper surface water, human hea responsibility for complia	not cause an imminent risk to human nformation given above is true and coperators are required to report and/co lic health or the environment. The a rations have failed to adequately invi- alth or the environment. In addition, ance with any other federal, state, or	complete to the best of my or file certain release noti acceptance of a C-141 rep estigate and remediate con OCD acceptance of a C-	knowledge and unders fications and perform co ort by the OCD does no ntamination that pose a 141 report does not relia	prrective actions for release of relieve the operator of threat to groundwater, eve the operator of
Contamination does I hereby certify that the ir rules and regulations all of which may endanger pub liability should their oper surface water, human hea responsibility for complia	not cause an imminent risk to human nformation given above is true and coperators are required to report and/co lic health or the environment. The a rations have failed to adequately invi- alth or the environment. In addition, ance with any other federal, state, or	complete to the best of my or file certain release noti acceptance of a C-141 rep estigate and remediate con OCD acceptance of a C- local laws and/or regulat	knowledge and unders fications and perform co ort by the OCD does no ntamination that pose a 141 report does not relia ions.	prrective actions for release of relieve the operator of threat to groundwater, eve the operator of
Contamination does I hereby certify that the in rules and regulations all of which may endanger pub liability should their oper surface water, human hear responsibility for complia Printed Name: Jim Ra Signature:	not cause an imminent risk to human nformation given above is true and coperators are required to report and/o olic health or the environment. The a rations have failed to adequately inve alth or the environment. In addition, ance with any other federal, state, or aley	complete to the best of my or file certain release noti acceptance of a C-141 rep estigate and remediate cor OCD acceptance of a C- local laws and/or regulat Title:	knowledge and unders fications and perform co ort by the OCD does no ntamination that pose a 141 report does not relia ions. Environmental Spe	prrective actions for release of relieve the operator of threat to groundwater, eve the operator of
Contamination does I hereby certify that the in rules and regulations all of which may endanger pub- liability should their oper surface water, human hear responsibility for complia Printed Name: Jim Ra Signature: Jim Ra Signature: Jim Ra	not cause an imminent risk to human nformation given above is true and coperators are required to report and/o olic health or the environment. The a rations have failed to adequately inve alth or the environment. In addition, ance with any other federal, state, or aley	complete to the best of my or file certain release noti acceptance of a C-141 rep estigate and remediate con OCD acceptance of a C- local laws and/or regulat Title: Date:	knowledge and unders fications and perform co ort by the OCD does no ntamination that pose a 141 report does not relia ions. Environmental Spa 12/4/2019	prrective actions for release of relieve the operator of threat to groundwater, eve the operator of
Contamination does I hereby certify that the in rules and regulations all o which may endanger pub liability should their oper surface water, human hea responsibility for complia Printed Name: Jim Ra Signature: Jim email: James. OCD Only	not cause an imminent risk to human nformation given above is true and coperators are required to report and/o olic health or the environment. The a rations have failed to adequately inve alth or the environment. In addition, ance with any other federal, state, or aley	complete to the best of my or file certain release noti acceptance of a C-141 rep estigate and remediate con OCD acceptance of a C- local laws and/or regulat Title: Date:	knowledge and unders fications and perform co ort by the OCD does no ntamination that pose a 141 report does not relia ions. Environmental Spa 12/4/2019	prrective actions for release of relieve the operator of threat to groundwater, eve the operator of
Contamination does I hereby certify that the in rules and regulations all o which may endanger pub liability should their oper surface water, human hea responsibility for complia Printed Name: Jim Ra Signature: Jim Ra GCD Only Received by:	not cause an imminent risk to human nformation given above is true and coperators are required to report and/o olic health or the environment. The a rations have failed to adequately inve alth or the environment. In addition, ance with any other federal, state, or aley	complete to the best of my file certain release noti acceptance of a C-141 rep estigate and remediate co OCD acceptance of a C- local laws and/or regulat Title: Date: Telephone: Date:	knowledge and unders fications and perform co ort by the OCD does no ntamination that pose a 141 report does not relia ions. Environmental Spo 12/4/2019 575-689-7597	prrective actions for release of relieve the operator of threat to groundwater, eve the operator of
Contamination does I hereby certify that the in- rules and regulations all of which may endanger pub- liability should their oper- surface water, human hea- responsibility for complia- Printed Name: Jim Ra- Signature: Jim email: James.	not cause an imminent risk to human nformation given above is true and coperators are required to report and/o olic health or the environment. The a rations have failed to adequately inve alth or the environment. In addition, ance with any other federal, state, or aley	complete to the best of my or file certain release noti acceptance of a C-141 rep estigate and remediate con OCD acceptance of a C- local laws and/or regulat Title: Date:	knowledge and unders fications and perform co ort by the OCD does no ntamination that pose a 141 report does not relia ions. Environmental Spa 12/4/2019	prective actions for relea of relieve the operator of threat to groundwater, eve the operator of
Contamination does I hereby certify that the in- rules and regulations all of which may endanger pub- liability should their oper- surface water, human hea- responsibility for complia- Printed Name: Jim Ra- Signature:	not cause an imminent risk to human nformation given above is true and coperators are required to report and/o olic health or the environment. The a rations have failed to adequately inva- alth or the environment. In addition, ance with any other federal, state, or aley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Raley Rale	complete to the best of my file certain release noti acceptance of a C-141 rep estigate and remediate co OCD acceptance of a C- local laws and/or regulat Title: Date: Telephone: Date:	knowledge and unders fications and perform co ort by the OCD does no ntamination that pose a 141 report does not relia ions. Environmental Spo 12/4/2019 575-689-7597	prrective actions for release of relieve the operator of threat to groundwater, eve the operator of ecialist

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LT Environn Advanced	Pennental, Inc.		Ca	508 Wes rlsbad, N		al, Inc . s Street co 88220 g · Remedi			Identifier: PH01 Project Name: RDX Federal 17-35	Date: 9/13/19 RP Number: 2RP-5649
		LITHO	LOGIC	C / SOII	SAMP	LING LO)G		Logged By: Lynda Laumbach	Method: Backhoe
Lat/Long:	Collector				Field Scree		I D		Hole Diameter: N/A	Total Depth: 6 ft
				lected in th	e field.	ride Strips (e) & PID			
*Chloride	results dis	splayed we	ere analyz	ed by a lab						
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type		Lithology/Re	marks
DRY DRY	691* 938*	N/C N/C	No	PH01 PH01A PH01B	5 6 7 8 9 10 11	2 ft 4 ft 6 ft	Caliche Caliche	sandy (m dry, light well-sort	tan well-cemented caliche v .) matrix tan moderately cemented c ed sandy (m.) matrix tan moderately cemented c ed sandy (m.) matrix TOT Depth	aliche with a uniform,
					10					

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LT Environi Advances	mental, Inc.		Ca	508 Wes rlsbad, N	ronment at Stevens Vew Mexi		Identifier: PH02 Project Name: RDX Federal 17-35	Date: 9/13/19 RP Number: 2RP-5649		
		LITHO	LOGIC	C / SOII	L SAMP	LING LO)G		Logged By: Lynda Laumbach	Method: Backhoe
Lat/Long:	: Collector				Field Scree	ening: ride Strips (Hole Diameter: N/A	Total Depth: 7 ft	
	ts: N/C Fie			ected in th	e field.	fide Suips (Low Kange	e) & PID		
*Chloride	e results di	splayed we	ere analyze	ed by a lab						
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type		Lithology/Rer	narks
DRY	890*	N/C	No	PH02	0	2 ft	Caliche	dry, light sandy (m	tan well-cemented caliche w .) matrix	ith a uniform, well-sorted
DRY	308*	N/C	No	PH02A	5	5 ft	Caliche		tan moderately cemented ca ed sandy (m.) matrix	liche with a uniform,
DRY	109*	N/C	NO	PH02B	7 8 9 10 11	7 ft			tan moderately cemented ca ed sandy (m.) matrix TOT Depth	liche with a uniform,

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LT Environmental, Inc.		Ca	508 Wes rlsbad, N		al, Inc. S Street Co 88220 g · Remedi		Identifier: PH03 Project Name: RDX Federal 17-35	Date: 9/13/19 RP Number: 2RP-5649	
	LITHO	LOGIC	C / SOII	SAMP	LING LO)G		Logged By: Lynda Laumbach	Method: Backhoe
Lat/Long: Collecto	or			Field Scree		I D		Hole Diameter: N/A	Total Depth: 4 ft
Comments: N/C F			ected in th		e) & PID				
*Chloride results	displayed we	ere analyz	ed by a lab						
Moisture Content Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)		Lithology/Rer	narks		
DRY 6830 ⁻¹ DRY 4670 ⁻¹		No	PH03	$ \begin{array}{c} 0 \\ 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 12 \\ \end{array} $	2 ft 4 ft	Caliche	sandy (m dry, light	tan well-cemented caliche w .) matrix tan moderately cemented ca ed sandy (m.) matrix TOT Depth	

LT Environmental, Inc.		t Cai	508 Wes rlsbad, N		al, Inc. 5 Street co 88220 g · Remedi		Identifier: PH04 Project Name: RDX Federal 17-35	Date: 11/26/19 RP Number: 2RP-5649				
	LITHO	LOGIC	C / SOII	SAMP	LING LO)G		Logged By: Anna Byers	Method: Backhoe			
Lat/Long: Collector	•			Field Scree				Hole Diameter: N/A	Total Depth: 4 ft			
Comments: Chlorid	le test perfo	med with			ride Strips (s distilled v							
	r		- F	F								
Moisture Content Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth		Lithology/Rer	narks				
DRY <120	0	No	PH04	0	0.5 ft	SP-SM		ι, brown poorly-graded sand (m.) with silt; non-plastic, odor, trace organics				
DRY <120	0	No		2	2 ft	Caliche		ry, light tan well-cemented caliche with a uniform, well-sorted andy (m.) matrix				
DRY 172	0	No	PH04A	3 4 5 6 7 8 9 10 11	4 ft	Caliche	dry, light well-sort	tan moderately cemented ca ed sandy (m.) matrix TOT DEPTH	liche with a uniform,			

	P			LT Envi	i ronment a st Stevens	al, Inc.			Identifier: PH05	Date: 11/26/19			
	mental, Inc.		Ca	rlsbad, l	New Mexic Engineering	:0 88220			Project Name: RDX Federal 17-35	RP Number: 2RP-5649			
		LITHO	LOGI	C / SOI	L SAMPI	LING LO)G		Logged By: Anna Byers	Method: Backhoe			
Lat/Long:	Collector				Field Scree		Hole Diameter: N/A	Total Depth: 4 ft					
C	Chini d			. 1	Hach Chlor 1 and 4 parts	1 .	•	-					
-	1	e test perio		-	l and 4 parts	s distilled w		on).					
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type		Lithology/Remarks				
					0								
DRY	<120	0	No	PH05	- - 1 -	0.5 ft	SP-SM		m poorly-graded sand (m.) w trace organics	vith silt; non-plastic,			
DRY	<120	0	No		2	2 ft	Caliche		tan well-cemented caliche v ed sandy (m.) matrix	vith a uniform,			
			1		3	-		day light	top moderately compared a	alicha with a			
DRY	<120	0	No	PH05A	4	4 ft	Caliche		nt tan moderately cemented caliche with a n, well-sorted sandy (m.) matrix				
					_	-	<u> </u>	. <u> </u>	TOT DEPTH				
						- - - - - - - - - - - -							
						-							
					-	-							
					9	-		/					
					10	-							
					- 11 -	-							
					12								

	0								Identifier: PH06	Date: 11/26/19			
1	Z			LT Env	ironmenta st Stevens	al, Inc. Street				Date: 11/20/19			
					st Stevens New Mexic Engineering				Project Name: RDX Federal 17-35	RP Number: 2RP-5649			
		LITHO	LOGI	C / SOI	L SAMPI	LING LO)G		Logged By: Anna Byers	Method: Backhoe			
Lat/Long:	Collector				Field Scree				Hole Diameter: N/A	Total Depth: 4 ft			
Comment	s: Chloride	test perfo	rmed with	1 nart so	Hach Chlor il and 4 parts								
comment	s. emorida	, test perio	fined with	1 1 part 30.	n and 4 parts	s distince w		511).					
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth			Lithology/Re	emarks			
					0								
DRY	<120	0	No	PH06	-	0.5 ft	SP-SM		n poorly-graded sand (m.) w	ith silt; non-plastic,			
					1	-	no odor, trace organics						
					-								
					-	-							
DRY	<120	0	No		2	2 ft	Caliche	he dry, light tan well-cemented caliche with a uniform, well-sorted					
					-			sandy (m					
					-	-							
					3								
					-								
					-	-		da, light	tan moderately cemented ca	licho with a uniform			
DRY	<120	0	No	PH06A	4	4 ft	Caliche		ed sandy (m.) matrix	inche with a uniform,			
					-	-			TOT DEPTH	/			
					-	_							
					5	-							
					_	-							
					-	-							
					6	-							
					-	_							
					7	-							
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LT Environmental, Inc.		_	LT Envi 508 Wes	i ronment st Stevens New Mexi	al, Inc. Street			Identifier: PH07	Date: 11/26/19					
				Vew Mexi Engineering				Project Name: RDX Federal 17-35	6 RP Number: 2RP-5649					
	LITHO	LOGI	C / SOI	L SAMPI	LING LO)G		Logged By: Anna Byers	Method: Backhoe					
Lat/Long: Collecto	r			Field Scree	ning:			Hole Diameter: N/A	Total Depth: 4 ft					
Comments: Chlori	le test perfo	rmed with	n 1 part soi	Hach Chlor l and 4 parts										
Moisture Content Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type		Lithology/R	emarks					
DRY <120	0	No	PH07	0	0.5 ft SP-SM dry, brown poorly-graded sand (m.) with silt; non-plastic, no odor, trace organics									
DRY <120	0	No		2	2 ft	2 ft Caliche dry, light tan well-cemented caliche with a uniform, well-sorted sandy (m.) matrix								
				3	+ + +	dry, light tan moderately cemented caliche with a uniform,								
DRY <120	0	No	PH07A	4	4 ft			ed sandy (m.) matrix TOT DEPTH						

	P			LT Envi	ronment	al, Inc.		Identifier: PH08	Date: 11/26/19				
LT Environ	mental, Inc.		Ca	rlsbad, l	st Stevens New Mexi Engineering	co 88220			Project Name: RDX Federal 17-35	RP Number: 2RP-5649			
Lat/Long	: Collector		LOGIC	: / SOII	L SAMPI Field Scree)G		Logged By: Anna Byers Hole Diameter: N/A	Method: Backhoe Total Depth: 4 ft			
Ŭ					Hach Chlor	-	Low Range) & PID					
Comment	ts: Chloride	e test perfo	rmed with	n 1 part soi	l and 4 part	s distilled w		on).					
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth							
DRY	<120	0	No	PH08	0	0.5 ft	SP-SM		rown poorly-graded sand (m.) with silt; non-plastic, or, trace organics				
DRY	<120	0	No		2	2 ft	Caliche	dry, light sandy (m	tan well-cemented caliche wi .) matrix	th a uniform, well-sorted			
DRY	<120	0	No	PH08A	3 	- - 4 ft	Caliche		ight tan moderately cemented caliche with a uniform, sorted sandy (m.) matrix				
									TOT DEPTH				

11	P				ronmont	al Inc		Identifier: PH09	Date: 11/26/19					
LT Environ	mental, Inc.		Ca	508 Wes rlsbad, I	ronmenta st Stevens New Mexic	Street 50 88220)		Project Name: RDX Federal 17-35	RP Number: 2RP-5649				
2	5 YEARS				ngineering									
		LITHO	LOGI	C / SOI	L SAMPI	LING LO)G		Logged By: Anna Byers	Method: Backhoe				
Lat/Long	: Collector				Field Scree	-			Hole Diameter: N/A	Total Depth: 4 ft				
Comment	ts: Chloride	e test perfo	rmed with	n 1 part soi	Hach Chlor l and 4 parts	1 .								
nt	de	r 🔾	ß	#		a 1	ç ç							
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Roc k Type	Lithology/Remarks						
					0									
DRY	<120	0	No	PH09	_	0.5 ft	SP-SM		n poorly-graded sand (m.) wi trace organics	th silt; non-plastic,				
					1	-								
					-	-								
DDV	100	0					o !! !							
DRY	<120	0	No		2 _	2 ft	Caliche		light tan well-cemented caliche with a uniform, well-sorted dy (m.) matrix					
					_									
					3	-								
					-	-								
					_	-		dry, light	tan moderately cemented cal	liche with a uniform,				
DRY	<120	0	No	PH09A	4	4 ft	Caliche	well-sort	ed sandy (m.) matrix TOT DEPTH					
					-	-								
					5	-								
					-	-								
					_	_								
					6	-								
					-	-								
					7	-			/					
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Analytical Report 636391

for LT Environmental, Inc.

Project Manager: Chris McKisson

RDX 17-35

34819046

12-SEP-19

Collected By: Client



1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142), North Carolina (681)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Tampa: Florida (E87429), North Carolina (483)



12-SEP-19

Project Manager: **Chris McKisson LT Environmental, Inc.** 4600 W. 60th Avenue Arvada, CO 80003

Reference: XENCO Report No(s): 636391 RDX 17-35 Project Address:

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 XENCO Report Number(s) 636391. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 636391 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 XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

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 Jessica Kramer

 Project Assistant

 Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies.

 A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Id

SS01



Sample Cross Reference 636391

LT Environmental, Inc., Arvada, CO

RDX 17-35

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	09-09-19 10:50	0.5 ft	636391-001



CASE NARRATIVE

Client Name: LT Environmental, Inc. Project Name: RDX 17-35

Project ID: 34819046 Work Order Number(s): 636391

12-SEP-19 Report Date: Date Received: 09/10/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-3101116 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3101140 TPH by SW8015 Mod

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

Samples affected are: 636389-001 S.



Project Id:34819046Contact:Chris McKisson

Project Location:

Certificate of Analysis Summary 636391

LT Environmental, Inc., Arvada, CO

Project Name: RDX 17-35

Date Received in Lab:Tue Sep-10-19 08:05 amReport Date:12-SEP-19Project Manager:Jessica Kramer

			1	1	1	
	Lab Id:	636391-001				
Analysis Requested	Field Id:	SS01				
Analysis Kequesiea	Depth:	0.5- ft				
	Matrix:	SOIL				
	Sampled:	Sep-09-19 10:50				
BTEX by EPA 8021B	Extracted:	Sep-10-19 10:09				
	Analyzed:	Sep-10-19 15:20				
	Units/RL:	mg/kg RL				
Benzene		0.00444 0.00101				
Toluene		0.0252 0.00101				
Ethylbenzene		0.00394 0.00101				
m,p-Xylenes		0.0537 0.00202				
o-Xylene		0.0201 0.00101				
Total Xylenes		0.0738 0.00101				
Total BTEX		0.107 0.00101				
Chloride by EPA 300	Extracted:	Sep-10-19 10:09				
	Analyzed:	Sep-10-19 16:27				
	Units/RL:	mg/kg RL				
Chloride	·	13800 D 498				
TPH by SW8015 Mod	Extracted:	Sep-10-19 11:30				
	Analyzed:	Sep-10-19 22:17				
	Units/RL:	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)	· ·	43.4 24.9				
Diesel Range Organics (DRO)		63.4 24.9				
Motor Oil Range Hydrocarbons (MRO)		<24.9 24.9				
Total GRO-DRO		107 24.9				
Total TPH		107 24.9				
Total TPH		107 24.9				

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

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

fession kramer

Jessica Kramer Project Assistant

Certificate of Analytical Results 636391

LT Environmental, Inc., Arvada, CO

RDX 17-35

Sample Id: SS01 Lab Sample Id: 636391-001		Matrix: Date Collec	Soil cted: 09.09	.19 10.50		Date Received:09.10.19 08.05 Sample Depth: 0.5 ft				
Analytical Method: Chloride by EPA	300				F	Prep Method: E30	00P			
Tech: MAB					9	6 Moisture:				
Analyst: MAB		Date Prep:	09.10	.19 10.09	E	Basis: We	t Weight			
Seq Number: 3101127										
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil		
Chloride	16887-00-6	13800	498		mg/kg	09.10.19 16.34	D	50		
Analytical Method:TPH by SW8015Tech:DTHAnalyst:DTHSeq Number:3101140	i Mod	Date Prep:	09.10	.19 11.30	9	Prep Method: SW 6 Moisture: Basis: Wet	8015P t Weight			
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil		
Gasoline Range Hydrocarbons (GRO)	PHC610	43.4	24.9		mg/kg	09.10.19 22.17		1		
Diesel Range Organics (DRO)	C10C28DRO	63.4	24.9		mg/kg	09.10.19 22.17		1		
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<24.9	24.9		mg/kg	09.10.19 22.17	U	1		
Total GRO-DRO	PHC628	107	24.9		mg/kg	09.10.19 22.17		1		
Total TPH	PHC635	107	24.9		mg/kg	09.10.19 22.17		1		
Surrogate			% Recovery	Units	Limits	Analysis Date	Flag			
1-Chlorooctane		111-85-3	129	%	70-135	09.10.19 22.17				
o-Terphenyl		84-15-1	112	%	70-135	09.10.19 22.17				

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Certificate of Analytical Results 636391

LT Environmental, Inc., Arvada, CO

RDX 17-35

Sample Id:	1			Soil		5		
Lab Sample	ld: 636391-001		Date Col	llected: 09.09.19 10.50		Sample Depth: 0.5	ft	
Analytical M	ethod: BTEX by EPA	8021B				Prep Method: SW	5030B	
Tech:	MAB					% Moisture:		
Analyst:	DTH		Date Pre	p: 09.10.19 10.09		Basis: We	t Weight	
Seq Number:	3101116							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene		71-43-2	0.00444	0.00101	mg/kg	09.10.19 15.20		1
Toluene		108-88-3	0.0252	0.00101	mg/kg	09.10.19 15.20		1
		100 11 1	0.00004	0.00101	a	00 10 10 15 20		

Toluene	108-88-3	0.0252	0.00101		mg/kg	09.10.19 15.20		1
Ethylbenzene	100-41-4	0.00394	0.00101		mg/kg	09.10.19 15.20		1
m,p-Xylenes	179601-23-1	0.0537	0.00202		mg/kg	09.10.19 15.20		1
o-Xylene	95-47-6	0.0201	0.00101		mg/kg	09.10.19 15.20		1
Total Xylenes	1330-20-7	0.0738	0.00101		mg/kg	09.10.19 15.20		1
Total BTEX		0.107	0.00101		mg/kg	09.10.19 15.20		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	114	%	70-130	09.10.19 15.20		
1,4-Difluorobenzene		540-36-3	122	%	70-130	09.10.19 15.20		

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Flagging Criteria

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

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	S Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labor	ratory 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



LT Environmental, Inc.

RDX 17-35

Analytical Method:	Chloride by EPA 3	00						Pr	ep Metho	d: E30	0P	
Seq Number:	3101127			Matrix:	Solid				Date Pre	ep: 09.1	0.19	
MB Sample Id:	7685854-1-BLK		LCS Sar	nple Id:	7685854-	1-BKS		LCSI	O Sample	Id: 7685	5854-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limi	t Units	Analysis Date	Flag
Chloride	<10.0	250	259	104	259	104	90-110	0	20	mg/kg	09.10.19 12:12	

Analytical Method:	Chloride by EPA 30	00						Pr	ep Metho	od: E30	0P	
Seq Number:	3101127			Matrix:	Soil				Date Pre	ep: 09.1	0.19	
Parent Sample Id:	636389-001		MS Sar	nple Id:	636389-00	01 S		MSI	O Sample	Id: 636	389-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limi	t Units	Analysis Date	Flag
Chloride	227	199	463	119	465	120	90-110	0	20	mg/kg	09.10.19 12:32	x

Analytical Method:	Chloride by EPA 30)0						Prep Method: E300P				
Seq Number:	3101127			Matrix:	Solid				Date Pre	ep: 09.1	0.19	
Parent Sample Id:	636392-001		MS Sar	nple Id:	636392-00	01 S		MS	D Sample	Id: 636	392-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limi	t Units	Analysis Date	Flag
Chloride	10600	4040	15500	121	15600	124	90-110	1	20	mg/kg	09.10.19 15:03	Х

Analytical Method: TPH by SW8015 Mod								Prep Method: SW8015P					
Seq Number:	3101140				Matrix:	Solid				Date Prep	p: 09.1	0.19	
MB Sample Id:	7685918-1	-BLK		LCS Sar	nple Id:	7685918-	1-BKS		LC	SD Sample	Id: 768	5918-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarb	ons (GRO)	<25.0	1000	899	90	918	92	70-135	2	35	mg/kg	09.10.19 14:22	
Diesel Range Organics	(DRO)	<25.0	1000	843	84	855	86	70-135	1	35	mg/kg	09.10.19 14:22	
Surrogate		MB %Rec	MB Flag		CS Rec	LCS Flag	LCSI %Re		-	Limits	Units	Analysis Date	
1-Chlorooctane		120		1	23		128		7	70-135	%	09.10.19 14:22	
o-Terphenyl		96		1	12		112		7	70-135	%	09.10.19 14:22	

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

Final 1.000

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

Page 9 of 12

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LT Environmental, Inc. RDX 17-35

Analytical Method:TPH bSeq Number:310114			Matrix:	Soil			Prep Metho Date Pre	c.	8015P .0.19	
Parent Sample Id: 636389	-001	MS Sa	mple Id:	636389-0	01 S		MSD Sample	Id: 636	389-001 SD	
Parameter	Parent S _I Result Amo	pike MS ount Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD RPD Limi	t Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<25.1	1010 1020	101	949	95	70-135	7 35	mg/kg	09.10.19 15:24	
Diesel Range Organics (DRO)	<25.1	1010 950	94	875	88	70-135	8 35	mg/kg	09.10.19 15:24	
Surrogate			MS 6Rec	MS Flag	MSD %Rec			Units	Analysis Date	
1-Chlorooctane			138	**	126		70-135	%	09.10.19 15:24	
p-Terphenyl			122		113		70-135	%	09.10.19 15:24	

Analytical Method: Seq Number: MB Sample Id:	BTEX by EPA 802 3101116 7685989-1-BLK	lB		Matrix: Solid .CS Sample Id: 7685989-1-BKS LCS					Prep Method: SW5030B Date Prep: 09.10.19 LCSD Sample Id: 7685989-1-BSD			
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPE	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00100	0.100	0.0787	79	0.0812	81	70-130	3	35	mg/kg	09.10.19 10:44	
Toluene	< 0.00100	0.100	0.0947	95	0.0953	95	70-130	1	35	mg/kg	09.10.19 10:44	
Ethylbenzene	< 0.00100	0.100	0.115	115	0.117	117	71-129	2	35	mg/kg	09.10.19 10:44	
m,p-Xylenes	< 0.00200	0.200	0.236	118	0.240	120	70-135	2	35	mg/kg	09.10.19 10:44	
o-Xylene	< 0.00100	0.100	0.118	118	0.122	122	71-133	3	35	mg/kg	09.10.19 10:44	
Surrogate	MB %Rec	MB Flag			LCS Flag	LCSI %Re			Limits	Units	Analysis Date	
1,4-Difluorobenzene	105		1	11		107		-	70-130	%	09.10.19 10:44	
4-Bromofluorobenzene	118		1	27		127		7	70-130	%	09.10.19 10:44	

Analytical Method: Seq Number: Parent Sample Id:	BTEX by EPA 802 3101116 636389-001	1B	MS Sar	Matrix: nple Id:		01 S			Prep Metho Date Pre SD Sample	ep: 09.1	5030B 0.19 389-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPI) RPD Limi	t Units	Analysis Date	Flag
Benzene	< 0.00101	0.101	0.0991	98	0.0919	92	70-130	8	35	mg/kg	09.10.19 12:03	
Toluene	< 0.00101	0.101	0.105	104	0.0979	98	70-130	7	35	mg/kg	09.10.19 12:03	
Ethylbenzene	< 0.00101	0.101	0.117	116	0.110	111	71-129	6	35	mg/kg	09.10.19 12:03	
m,p-Xylenes	< 0.00202	0.202	0.241	119	0.228	115	70-135	6	35	mg/kg	09.10.19 12:03	
o-Xylene	< 0.00101	0.101	0.119	118	0.113	114	71-133	5	35	mg/kg	09.10.19 12:03	
Surrogate				1S Rec	MS Flag	MSD %Re			Limits	Units	Analysis Date	
1,4-Difluorobenzene			1	12		104		,	70-130	%	09.10.19 12:03	
4-Bromofluorobenzene			1	28		126		,	70-130	%	09.10.19 12:03	

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

Final 1.000

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

Ni K Se Ag SiO2 Na Sr TI Sn U V Zn J 1631/245.1/7470 /7471 : Hg and conditions yond the control legotiated. Received by: (Signature) Date/Time のデ- ノンー/ デー	/						
Ag SiO2	1	le conta				the second	1 1 2000
Ag SiO2	1000	2 Mint have	205 9.10.19	00	- ho	6	1 Jan
sio2	2	Relinquished by: (Signature)	Date/Time		Received by: (Signature)	Signature	Relinquished by: (Signature)
lg SiO2	ctors. It assigns standard terms and condi sses are due to circumstances beyond the c II be 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.	company to Xenco, its a s or expenses incurred l ed to Xenco, but not ana	se order from client on sibility for any losse each sample submitt	gnature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontra . 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 los 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 wi	ument and relinquishment of s ble only for the cost of samples e of \$75.00 will be applied to ea	Notice: Signature of this doc of service. Xenco will be lia of Xenco. A minimum charg
	Cu Fe Pb Mg Mn Mo Ni K Mn Mo Ni Se Ag Tl U	B Cd Ca Cr Co Cu Fe Pt Cd Cr Co Cu Pb Mn Mo N	N Sb As Ba Be B Sb As Ba Be Co	Texas 11 Al 010: 8RCRA	8RCRA 13PPM Texas 11 A yzed TCLP / SPLP 6010: 8RCRA	Fotal 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 Circle Method(s) a
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			XXK	0.5' 1	09/09/2019 10:50 C	50	1055
Sample Comments			TPH (E BTEX (Chlorid	Depth Numb	Date Time Sampled Sampled	Matrix	Sample Identification
lab, if received by 4:30pm			EPA 0	er of	Total Containers:	No	Sample Custody Seals:
TAT starts the day received by the			=802	0 20 Con	tor: -	δľ	Cooler Custody Seals:
			-	tainer	TNN007	AxX No	Temperature (°C):
				Yes No in	Yes No Wet Ice: Y	Temp Blank:	SAMPLE RECEIPT
					ach Due Date	Lynda Laumbach	Sampler's Name:
					Rush:		P.O. Number:
				×	Routine	34819046	Project Number:
Work Order Notes	EST	ANALYSIS REQUEST		Turn Around		RDX 17-35	Project Name:
ADaPT Other:	Deliverables: EDD	llaumbach@ltenv.com, cmckisson@ltenv.com, asmith@ltenv.com	n, cmckisson@ltenv	mbach@ltenv.coi	Email: Ilau	(970) 285-9985	Phone: (S
ST D	Reporting:Level II			City, State ZIP:	City	Rifle, CO 81650	City, State ZIP: R
	Ħ			Address:		820 Megan Avenue, Unit B	
PRP Brownfields RRC Superfund	Program: UST/PST		LT Environmental	Company Name:	Co	LT Environmental, Inc.	
Work Order Comments			Chris McKisson	Bill to: (if different)	Bill	Chris McKisson	Project Manager: C
www.xenco.com Pageof		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)	_ Paso,TX (915)585-34)-355-0900) Atlanta,G	((432-704-5440) El 0) Phoenix,AZ (480	Midland,TX Hobbs,NM (575-392-755	ABORATORIES	
) San Antonio, TX (210) 509-3334	Houston.TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio.TX (2:	(281) 240-4200 Da	Houston.TX		

Page:203 of 1322



XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: LT Environmental, Inc. Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 09/10/2019 08:05:00 AM Temperature Measuring device used : T-NM-007 Work Order #: 636391 Sample Receipt Checklist Comments

Sample Receipt Checklist		
#1 *Temperature of cooler(s)?	4.8	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	No	
#5 Custody Seals intact on sample bottles?	No	
#6*Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/matrix?	Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)?	Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	No	
#18 Water VOC samples have zero headspace?	N/A	
	<pre>#1 *Temperature of cooler(s)? #2 *Shipping container in good condition? #3 *Samples received on ice? #4 *Custody Seals intact on shipping container/ cooler? #5 Custody Seals intact on sample bottles? #6*Custody Seals Signed and dated? #7 *Chain of Custody present? #8 Any missing/extra samples? #9 Chain of Custody signed when relinquished/ received? #10 Chain of Custody agrees with sample labels/matrix? #11 Container label(s) legible and intact? #13 Samples properly preserved? #14 Sample container(s) intact? #15 Sufficient sample amount for indicated test(s)? #16 All samples received within hold time? #17 Subcontract of sample(s)?</pre>	#1 *Temperature of cooler(s)?4.8#2 *Shipping container in good condition?Yes#3 *Samples received on ice?Yes#4 *Custody Seals intact on shipping container/ cooler?No#5 Custody Seals intact on sample bottles?No#6*Custody Seals Signed and dated?N/A#7 *Chain of Custody present?Yes#8 Any missing/extra samples?No#9 Chain of Custody signed when relinquished/ received?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)?No

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

Analyst:

PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Checklist reviewed by: Jessica Kramer

Date: 09/10/2019

Date: 09/10/2019

Pagee204 of 1322

Analytical Report 637305

for LT Environmental, Inc.

Project Manager: Chris McKisson

RDX 17-35

034819046

23-SEP-19

Collected By: Client



1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142), North Carolina (681)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Tampa: Florida (E87429), North Carolina (483)



23-SEP-19

Project Manager: **Chris McKisson LT Environmental, Inc.** 4600 W. 60th Avenue Arvada, CO 80003

Reference: XENCO Report No(s): 637305 RDX 17-35 Project Address:

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 XENCO Report Number(s) 637305. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 637305 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 XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

fession Vramer

 Jessica Kramer

 Project Assistant

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Page 2 of 21



Sample Cross Reference 637305

LT Environmental, Inc., Arvada, CO

RDX 17-35

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	09-13-19 09:30	2 ft	637305-001
PH01A	S	09-13-19 09:40	4 ft	637305-002
PH01B	S	09-13-19 09:50	6 ft	637305-003
PH02	S	09-13-19 10:00	2 ft	637305-004
PH02A	S	09-13-19 10:20	5 ft	637305-005
PH02B	S	09-13-19 10:40	7 ft	637305-006
PH03	S	09-13-19 11:00	2 ft	637305-007
PH03A	S	09-13-19 11:45	4 ft	637305-008



CASE NARRATIVE

Client Name: LT Environmental, Inc. Project Name: RDX 17-35

 Project ID:
 034819046

 Work Order Number(s):
 637305

Report Date:23-SEP-19Date Received:09/18/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-3101958 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3102031 TPH by SW8015 Mod

Surrogate 1-Chlorooctane recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7686459-1-BSD,637191-021 S,637305-004.



Project Id:	034819046
Contact:	Chris McKisson

Project Location:

Certificate of Analysis Summary 637305

LT Environmental, Inc., Arvada, CO

Project Name: RDX 17-35

Date Received in Lab:Wed Sep-18-19 01:45 pmReport Date:23-SEP-19Project Manager:Jessica Kramer

	Lab Id:	637305-0	01	637305-0	02	637305-0	03	637305-0	04	637305-0	05	637305-0	06
Analusis Doguested	Field Id:	PH01		PH01A	·	PH01B		PH02		PH02A		PH02B	
Analysis Requested	Depth:	2- ft		4- ft		6- ft		2- ft		5- ft		7- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-13-19 (9:30	Sep-13-19 (09:40	Sep-13-19 0	9:50	Sep-13-19 1	0:00	Sep-13-19 1	0:20	Sep-13-19 1	0:40
BTEX by EPA 8021B	Extracted:	Sep-18-19	6:09					Sep-18-19 1	6:09				
	Analyzed:	Sep-19-19 (04:37					Sep-19-19 0	4:57				
	Units/RL:	mg/kg	RL					mg/kg	RL				
Benzene		< 0.00101	0.00101					<0.000996	0.000996				
Toluene		< 0.00101	0.00101					<0.000996).000996				
Ethylbenzene		< 0.00101	0.00101					<0.000996).000996				
m,p-Xylenes		< 0.00202	0.00202					< 0.00199	0.00199				
o-Xylene		< 0.00101	0.00101					<0.000996	0.000996				
Total Xylenes		< 0.00101	0.00101					<0.000996	0.000996				
Total BTEX		< 0.00101	0.00101					<0.000996 ().000996				
Chloride by EPA 300	Extracted:	Sep-18-19	6:00	Sep-18-19 1	6:00	Sep-18-19 1	6:00	Sep-18-19 1	6:00	Sep-18-19 1	6:00	Sep-18-19 1	6:00
	Analyzed:	Sep-19-19	2:16	Sep-18-19 2	20:27	Sep-18-19 2	0:33	Sep-18-19 2	0:40	Sep-18-19 2	20:46	Sep-18-19 2	21:06
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		691 D	20.0	938	99.4	73.4 D	9.90	890	50.4	308	20.2	109 D	50.4
TPH by SW8015 Mod	Extracted:	Sep-18-19	6:45					Sep-18-19 1	6:45				
	Analyzed:	Sep-19-19	8:31					Sep-19-19 1	8:52				
	Units/RL:	mg/kg	RL					mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<25.0	25.0					<24.9	24.9				
Diesel Range Organics (DRO)		<25.0	25.0					<24.9	24.9				
Motor Oil Range Hydrocarbons (MRO)		<25.0	25.0					<24.9	24.9				
Total TPH		<25.0	25.0					<24.9	24.9				
Total GRO-DRO		<25.0	25.0					<24.9	24.9				

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

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Jessica Kramer Project Assistant



Project Id:	034819046
Contact:	Chris McKisson

Project Location:

Certificate of Analysis Summary 637305

LT Environmental, Inc., Arvada, CO

Project Name: RDX 17-35

Date Received in Lab:Wed Sep-18-19 01:45 pmReport Date:23-SEP-19Project Manager:Jessica Kramer

	Lab Id:	637305-007	637305-008			
Analysis Requested	Field Id:	PH03	PH03A			
Analysis Requested	Depth:	2- ft	4- ft			
	Matrix:	SOIL	SOIL			
	Sampled:	Sep-13-19 11:00	Sep-13-19 11:45			
Chloride by EPA 300	Extracted:	Sep-18-19 16:00	Sep-18-19 16:00	ĺ		
	Analyzed:	Sep-18-19 21:12	Sep-18-19 21:19			
	Units/RL:	mg/kg RL	mg/kg RL			
Chloride		6830 D 201	4670 D 202			

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

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Jessica Kramer Project Assistant

Certificate of Analytical Results 637305

LT Environmental, Inc., Arvada, CO

RDX 17-35

Sample Id:PH01Lab Sample Id:637305-001		Matrix: Date Collec	Soil cted: 09.13.19 09.30		Date Received:09. Sample Depth: 2 ft		5
Analytical Method: Chloride by EF	PA 300				Prep Method: E30	0P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep:	09.18.19 16.00		Basis: We	t Weight	
Seq Number: 3101899		-					
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	691	20.0	mg/kg	09.19.19 13.44	D	20
Analytical Method: TPH by SW80	15 Mod				Prep Method: SW	8015D	
Tech: DTH	15 WIOU				% Moisture:	0013F	
Analyst: DTH		Date Prep:	09.18.19 16.45			Weight	
Seq Number: 3102031							
Seq Number. 5102051							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
	Cas Number PHC610	Result <25.0	RL 25.0	Units mg/kg	Analysis Date 09.19.19 18.31	Flag U	Dil
Parameter							

Total TPH	PHC635	<25.0	25.0		mg/kg	09.19.19 18.31	U	1
Total GRO-DRO	PHC628	<25.0	25.0		mg/kg	09.19.19 18.31	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	127	%	70-135	09.19.19 18.31		
o-Terphenyl		84-15-1	106	%	70-135	09.19.19 18.31		

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Certificate of Analytical Results 637305

LT Environmental, Inc., Arvada, CO

RDX 17-35

Sample Id:	PH01		Matrix:	Soil		Date Received:09.	18.19 13.4	5
Lab Sample Id	: 637305-001		Date Coll	lected: 09.13.19 09.30		Sample Depth: 2 ft		
Analytical Me	thod: BTEX by EPA 80)21B				Prep Method: SW	5030B	
Tech:	MAB					% Moisture:		
Analyst:	DTH		Date Prep	o: 09.18.19 16.09		Basis: We	t Weight	
Seq Number:	3101958							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene		71-43-2	< 0.00101	0.00101	mg/kg	09.19.19 04.37	U	1
Toluene		108 88 3	<0.00101	0.00101	malka	00 10 10 04 37	I	1

Belizelle	/1-43-2	<0.00101	0.00101		mg/kg	09.19.19 04.57	U	1	
Toluene	108-88-3	< 0.00101	0.00101		mg/kg	09.19.19 04.37	U	1	
Ethylbenzene	100-41-4	< 0.00101	0.00101		mg/kg	09.19.19 04.37	U	1	
m,p-Xylenes	179601-23-1	< 0.00202	0.00202		mg/kg	09.19.19 04.37	U	1	
o-Xylene	95-47-6	< 0.00101	0.00101		mg/kg	09.19.19 04.37	U	1	
Total Xylenes	1330-20-7	< 0.00101	0.00101		mg/kg	09.19.19 04.37	U	1	
Total BTEX		< 0.00101	0.00101		mg/kg	09.19.19 04.37	U	1	
			%						
Surrogate		Cas Number	Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene		460-00-4	115	%	70-130	09.19.19 04.37			
1,4-Difluorobenzene		540-36-3	101	%	70-130	09.19.19 04.37			

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Certificate of Analytical Results 637305

LT Environmental, Inc., Arvada, CO

RDX 17-35

Sample Id: Lab Sample I	PH01A d: 637305-002		Matrix: Date Colle	Soil cted: 09.13.19 09.40		Date Received:09 Sample Depth:4 t		5
-	ethod: Chloride by EPA	. 300				Prep Method: E3	800P	
Tech:	MAB					% Moisture:		
Analyst:	MAB		Date Prep:	09.18.19 16.00		Basis: W	et Weight	
Seq Number:	3101899							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	938	99.4	mg/kg	09.18.19 20.27		10

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Certificate of Analytical Results 637305

LT Environmental, Inc., Arvada, CO

RDX 17-35

Sample Id:PH01BLab Sample Id:637305-003		Matrix: Date Colle	Soil cted: 09.13.19 09.50		Date Received:09. Sample Depth: 6 f		5
Analytical Method: Chloride by EPA	300				Prep Method: E3	00P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep:	09.18.19 16.00		Basis: We	et Weight	
Seq Number: 3101899							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	73.4	9.90	mg/kg	09.19.19 17.30	D	1

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Certificate of Analytical Results 637305

LT Environmental, Inc., Arvada, CO

RDX 17-35

Sample Id: PH02 Lab Sample Id: 637305-004		Matrix: Date Coll	Soil ected: 09.13	.19 10.00		Date Received:09. Sample Depth: 2 ft		15
Analytical Method: Chloride	oy EPA 300				F	Prep Method: E3	00P	
Tech: MAB					9	6 Moisture:		
Analyst: MAB		Date Prep	: 09.18	.19 16.00	E	Basis: We	et Weight	
Seq Number: 3101899		1					-	
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	890	50.4		mg/kg	09.18.19 20.40		5
Analytical Method:TPH by STech:DTHAnalyst:DTHSeq Number:3102031	W8015 Mod	Date Prep	o: 09.18	.19 16.45	9	Prep Method: SW 6 Moisture: Basis: We	78015P et Weight	
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO	O) PHC610	<24.9	24.9		mg/kg	09.19.19 18.52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<24.9	24.9		mg/kg	09.19.19 18.52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<24.9	24.9		mg/kg	09.19.19 18.52	U	1
Total TPH	PHC635	<24.9	24.9		mg/kg	09.19.19 18.52	U	1
Total GRO-DRO	PHC628	<24.9	24.9		mg/kg	09.19.19 18.52	U	1
Surrogate 1-Chlorooctane		Cas Number 111-85-3	% Recovery 147	Units %	Limits 70-135	Analysis Date 09.19.19 18.52	Flag **	
1-Chlorooctane		111-03-3	14/	70	/0-155	09.19.19 18.52		

123

%

70-135

09.19.19 18.52

84-15-1

o-Terphenyl

Certificate of Analytical Results 637305

LT Environmental, Inc., Arvada, CO

RDX 17-35

Sample Id: PH02		Matrix:	Soil	Date Recei	ved:09.18.19 13.45	5
Lab Sample Id: 637305-004		Date Collected: 09.13.19 10.00		Sample Depth: 2 ft		
Analytical Method: BTEX by EPA 80	21B			Prep Metho	od: SW5030B	
Tech: MAB				% Moisture	2:	
Analyst: DTH		Date Prep:	09.18.19 16.09	Basis:	Wet Weight	
Seq Number: 3101958						
Parameter	Cas Number	Result R	L	Units Analysi	s Date Flag	Dil

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.000996	0.000996		mg/kg	09.19.19 04.57	U	1
Toluene	108-88-3	< 0.000996	0.000996		mg/kg	09.19.19 04.57	U	1
Ethylbenzene	100-41-4	< 0.000996	0.000996		mg/kg	09.19.19 04.57	U	1
m,p-Xylenes	179601-23-1	< 0.00199	0.00199		mg/kg	09.19.19 04.57	U	1
o-Xylene	95-47-6	< 0.000996	0.000996		mg/kg	09.19.19 04.57	U	1
Total Xylenes	1330-20-7	< 0.000996	0.000996		mg/kg	09.19.19 04.57	U	1
Total BTEX		< 0.000996	0.000996		mg/kg	09.19.19 04.57	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	118	%	70-130	09.19.19 04.57		
4-Bromofluorobenzene		460-00-4	106	%	70-130	09.19.19 04.57		

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Certificate of Analytical Results 637305

LT Environmental, Inc., Arvada, CO

RDX 17-35

Sample Id: PH02A Lab Sample Id: 637305-00)5	Matrix: Date Collect	Soil ted: 09.13.19 10.20		Date Received:09. Sample Depth: 5 f		5
Analytical Method: Chlor	ide by EPA 300				Prep Method: E3	00P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep:	09.18.19 16.00		Basis: We	et Weight	
Seq Number: 3101899							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	308	20.2	mg/kg	09.18.19 20.46		2

Certificate of Analytical Results 637305

LT Environmental, Inc., Arvada, CO

RDX 17-35

Sample Id: Lab Sample I	PH02B d: 637305-006		Matrix: Date Collec	Soil cted: 09.13.19 10.40		Date Received:09 Sample Depth: 7 f		5
Analytical Me	ethod: Chloride by EPA	. 300]	Prep Method: E3	00P	
Tech:	MAB				(% Moisture:		
Analyst:	MAB		Date Prep:	09.18.19 16.00]	Basis: We	et Weight	
Seq Number:	3101899							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	109	50.4	mg/kg	09.19.19 13.12	D	5

Certificate of Analytical Results 637305

LT Environmental, Inc., Arvada, CO

RDX 17-35

Sample Id: Lab Sample Id	PH03 1: 637305-007		Matrix: Date Collec	Soil cted: 09.13.19 11.00	-	Date Received:09 Sample Depth: 2 f		5
Analytical Me	ethod: Chloride by EPA	300]	Prep Method: E3	00P	
Tech:	MAB				(% Moisture:		
Analyst:	MAB		Date Prep:	09.18.19 16.00]	Basis: We	et Weight	
Seq Number:	3101899							
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	6830	201	mg/kg	09.19.19 13.18	D	20

Certificate of Analytical Results 637305

LT Environmental, Inc., Arvada, CO

RDX 17-35

Sample Id: PH03A Lab Sample Id:637305-008	Matrix: Date Colle	Soil cted: 09.13.19 11.45		Date Received:09. Sample Depth: 4 ft		5
Analytical Method: Chloride by EPA 300]	Prep Method: E3	00P	
Tech: MAB				% Moisture:		
Analyst: MAB	Date Prep:	09.18.19 16.00]	Basis: We	et Weight	
Seq Number: 3101899						
Parameter Cas N	lumber Result	RL	Units	Analysis Date	Flag	Dil
Chloride 16887-	00-6 4670	202	mg/kg	09.19.19 13.31	D	20



Flagging Criteria

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

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory 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



LT Environmental, Inc.

RDX 17-35

Analytical Method	Chloride by EPA 3	00						Pr	ep Metho	od: E30	0P	
Seq Number:	3101899			Matrix:	Solid				Date Pr	ep: 09.1	8.19	
MB Sample Id:	7686418-1-BLK		LCS Sar	nple Id:	7686418-	1-BKS		LCSI	O Sample	e Id: 7686	6418-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD]	RPD Lim	it Units	Analysis Date	Flag
Chloride	<10.0	250	260	104	258	103	90-110	1	20	mg/kg	09.18.19 18:50	

Analytical Method:	Chloride by EPA 3	D0						Pı	ep Metho	od: E30	0P	
Seq Number:	3101899			Matrix:	Soil				Date Pr	ep: 09.1	8.19	
Parent Sample Id:	637191-020		MS Sar	nple Id:	637191-02	20 S		MS	D Sample	e Id: 637	191-020 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag

Analytical Method:	Chloride by EPA 30)0						Pr	ep Metho	d: E30)P	
Seq Number:	3101899			Matrix:	Solid				Date Pre	ep: 09.1	8.19	
Parent Sample Id:	637312-001		MS Sar	nple Id:	637312-00	01 S		MSI	D Sample	Id: 6373	312-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limi	t Units	Analysis Date	Flag
Chloride	1220	1010	2390	116	2400	117	90-110	0	20	mg/kg	09.18.19 21:44	Х

Analytical Method:	TPH by S	W8015 M	od						I	Prep Method	i: SW	8015P	
Seq Number:	3102031				Matrix:	Solid				Date Prep	p: 09.1	8.19	
MB Sample Id:	7686459-1	-BLK		LCS Sar	nple Id:	7686459-	1-BKS		LCS	SD Sample	Id: 768	6459-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarb	ons (GRO)	<25.0	1000	951	95	986	99	70-135	4	35	mg/kg	09.19.19 15:45	
Diesel Range Organics	(DRO)	<25.0	1000	914	91	942	94	70-135	3	35	mg/kg	09.19.19 15:45	
Surrogate		MB %Rec	MB Flag			LCS Flag	LCSI %Ree		-	Limits	Units	Analysis Date	
1-Chlorooctane		135		1	33		138	**	7	0-135	%	09.19.19 15:45	
o-Terphenyl		105		1	04		107		7	0-135	%	09.19.19 15:45	

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

Final 1.000

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

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LT Environmental, Inc. RDX 17-35

Analytical Method: Seq Number:	TPH by SV 3102031	V8015 M	lod		Matrix:	Soil			F	Prep Method Date Prer		8015P 8.19	
1	1					637191-02	21 S		MS	SD Sample 1		191-021 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbo	ns (GRO)	<25.1	1000	917	92	948	94	70-135	3	35	mg/kg	09.19.19 16:47	
Diesel Range Organics (I	DRO)	<25.1	1000	874	87	907	90	70-135	4	35	mg/kg	09.19.19 16:47	
Surrogate					1S Rec	MS Flag	MSD %Red		_	limits	Units	Analysis Date	
1-Chlorooctane				1	37	**	130		7	0-135	%	09.19.19 16:47	
o-Terphenyl				1	02		110		7	0-135	%	09.19.19 16:47	

Analytical Method: Seq Number: MB Sample Id:	BTEX by EPA 802 3101958 7686555-1-BLK	lB	Matrix: nple Id:		1-BKS			Prep Metho Date Pre SD Sample	p: 09.1	5030B 8.19 5555-1-BSD		
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00100	0.100	0.0813	81	0.0900	90	70-130	10	35	mg/kg	09.19.19 02:00	
Toluene	< 0.00100	0.100	0.0977	98	0.0936	94	70-130	4	35	mg/kg	09.19.19 02:00	
Ethylbenzene	< 0.00100	0.100	0.119	119	0.116	116	71-129	3	35	mg/kg	09.19.19 02:00	
m,p-Xylenes	< 0.00200	0.200	0.242	121	0.233	117	70-135	4	35	mg/kg	09.19.19 02:00	
o-Xylene	< 0.00100	0.100	0.120	120	0.116	116	71-133	3	35	mg/kg	09.19.19 02:00	
Surrogate	MB %Rec	MB Flag		CS Rec	LCS Flag	LCSE %Rec		-	Limits	Units	Analysis Date	
1,4-Difluorobenzene	102		1	07		102		7	0-130	%	09.19.19 02:00	
4-Bromofluorobenzene	104		1	21		112		7	0-130	%	09.19.19 02:00	

Analytical Method: Seq Number: Parent Sample Id:	BTEX by EPA 802 3101958 637191-021	1B	Matrix: Soil MS Sample Id: 637191-021 S MS MS MSD Limit					Prep Method: SW5030B Date Prep: 09.18.19 MSD Sample Id: 637191-021 SD					
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPI) RPD Limi	t Units	Analysis Date	Flag	
Benzene	< 0.00101	0.101	0.0795	79	0.0831	82	70-130	4	35	mg/kg	09.19.19 03:18		
Toluene	< 0.00101	0.101	0.0856	85	0.0825	82	70-130	4	35	mg/kg	09.19.19 03:18		
Ethylbenzene	< 0.00101	0.101	0.0929	92	0.102	101	71-129	9	35	mg/kg	09.19.19 03:18		
m,p-Xylenes	< 0.00201	0.201	0.189	94	0.206	102	70-135	9	35	mg/kg	09.19.19 03:18		
o-Xylene	< 0.00101	0.101	0.0954	94	0.103	102	71-133	8	35	mg/kg	09.19.19 03:18		
Surrogate				1S Rec	MS Flag	MSD %Re		-	Limits	Units	Analysis Date		
1,4-Difluorobenzene			1	15		114		,	70-130	%	09.19.19 03:18		
4-Bromofluorobenzene			1	27		130		,	70-130	%	09.19.19 03:18		

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

Final 1.000

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

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XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc. Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 09/18/2019 01:45:00 PM Temperature Measuring device used : T-NM-007 Work Order #: 637305 Sample Receipt Checklist Comments

#1 *Temperature of cooler(s)?	0
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6*Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

 Checklist completed by:
 Checklist completed by:

 Elizabeth McClellan

 Checklist reviewed by:
 Jessica WAMER

 Jessica Kramer

Date: 09/18/2019

Date: 09/20/2019

Analytical Report 644213

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDX Federal 17-35H

034819046

26-NOV-19

Collected By: Client



1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Tampa: Florida (E87429), North Carolina (483)



26-NOV-19

Project Manager: **Chris McKisson LT Environmental, Inc.** 4600 W. 60th Avenue Arvada, CO 80003

Reference: XENCO Report No(s): 644213 RDX Federal 17-35H Project Address: Rural 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 XENCO Report Number(s) 644213. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 644213 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 XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

fession Vramer

 Jessica Kramer

 Project Assistant

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Sample Id

FS01 FS02



Sample Cross Reference 644213

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Matrix	Date Collected	Sample Depth	Lab Sample Id
S	11-21-19 15:00	4 ft	644213-001
S	11-21-19 15:05	4 ft	644213-002

•.



CASE NARRATIVE

Client Name: LT Environmental, Inc. Project Name: RDX Federal 17-35H

 Project ID:
 034819046

 Work Order Number(s):
 644213

 Report Date:
 26-NOV-19

 Date Received:
 11/22/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-3108683 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Project Id:	034819046
Contact:	Chris McKisson
Project Location:	Rural Eddy County

Certificate of Analysis Summary 644213

LT Environmental, Inc., Arvada, CO Project Name: RDX Federal 17-35H

Date Received in Lab:Fri Nov-22-19 09:13 amReport Date:26-NOV-19Project Manager:Jessica Kramer

	Lab Id:	644213-00)1	644213-0	002		
Anglusia Degrasted	Field Id:	FS01		FS02			
Analysis Requested	Depth:	4- ft		4- ft			
	Matrix:	SOIL	SOIL				
	Sampled:	Nov-21-19 1	5:00	Nov-21-19	15:05		
BTEX by EPA 8021B	Extracted:	Nov-25-19 1	1:45	Nov-25-19	11:45		
SUB: T104704400-19-19	Analyzed:	Nov-25-19 1	9:45	Nov-25-19	20:05		
	Units/RL:	mg/kg	RL	mg/kg	RL		
Benzene		< 0.00200	0.00200	< 0.00199	0.00199		
Toluene		< 0.00200	0.00200	< 0.00199	0.00199		
Ethylbenzene		< 0.00200	0.00200	< 0.00199	0.00199		
m,p-Xylenes		< 0.00401	0.00401	< 0.00398	0.00398		
o-Xylene		< 0.00200	0.00200	< 0.00199	0.00199		
Xylenes, Total		< 0.00200	0.00200	< 0.00199	0.00199		
Total BTEX		< 0.00200	0.00200	< 0.00199	0.00199		
Chloride by EPA 300	Extracted:	Nov-25-19 1	1:55	Nov-25-19	11:55		
SUB: T104704400-19-19	Analyzed:	Nov-25-19 1	3:31	Nov-25-19	13:52		
	Units/RL:	mg/kg	RL	mg/kg	RL		
Chloride		1200	25.1	807	25.3		
TPH by SW8015 Mod	Extracted:	Nov-25-19 1	2:00	Nov-25-19	12:00		
SUB: T104704400-19-19	Analyzed:	Nov-25-19 2	2:10	Nov-25-19	22:32		
	Units/RL:	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<49.9	49.9		
Diesel Range Organics (DRO)		<49.8	49.8	<49.9	49.9		
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<49.9	49.9		
Total GRO-DRO		<49.8	49.8	<49.9	49.9		
Total TPH		<49.8	49.8	<49.9	49.9		

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

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

fession kramer

Jessica Kramer Project Assistant

Certificate of Analytical Results 644213

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS01 Lab Sample Id: 644213-001		Matrix:SoilDate Received:11.22.19Date Collected: 11.21.19 15.00Sample Depth: 4 ft					3
Analytical Method: Chloride by EPA 30 Tech: CHE	00				Prep Method: E3 % Moisture:	00P	
Analyst: CHE Seq Number: 3108630		Date Prep:	11.25.19 11.55			et Weight 0-19-19	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1200	25.1	mg/kg	11.25.19 13.31		5

Analytical Method: TPH by SW801Tech:DVMAnalyst:ARMSeq Number:3108709	5 Mod	Date Pre	p: 11.25.	19 12.00	9 E	Prep Method: SW 6 Moisture: Basis: We SUB: T104704400	t Weight	
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8		mg/kg	11.25.19 22.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8		mg/kg	11.25.19 22.10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8		mg/kg	11.25.19 22.10	U	1
Total GRO-DRO	PHC628	<49.8	49.8		mg/kg	11.25.19 22.10	U	1
Total TPH	PHC635	<49.8	49.8		mg/kg	11.25.19 22.10	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	110	%	70-135	11.25.19 22.10		
o-Terphenyl		84-15-1	117	%	70-135	11.25.19 22.10		

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Certificate of Analytical Results 644213

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS01		Matrix:	Soil		Date Received:11.	22.19 09.13	3
Lab Sample Id: 644213-001	Date Colle	ected: 11.21.19 15.00		Sample Depth: 4 ft			
Analytical Method: BTEX by EPA 8 Tech: KTL	3021B				Prep Method: SW % Moisture:		
Analyst: KTL		Date Prep	: 11.25.19 11.45		Basis: We	t Weight	
Seq Number: 3108683					SUB: T104704400)-19-19	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Parameter Benzene	Cas Number 71-43-2	Result <0.00200	RL 0.00200	Units mg/kg	Analysis Date 11.25.19 19.45	Flag U	Dil
							Dil 1 1
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.25.19 19.45	U	Dil 1 1
Benzene Toluene	71-43-2 108-88-3	<0.00200 <0.00200	0.00200 0.00200	mg/kg mg/kg	11.25.19 19.45 11.25.19 19.45	U U U	Dil 1 1 1 1
Benzene Toluene Ethylbenzene	71-43-2 108-88-3 100-41-4	<0.00200 <0.00200 <0.00200	0.00200 0.00200 0.00200	mg/kg mg/kg mg/kg	11.25.19 19.45 11.25.19 19.45 11.25.19 19.45	U U U U	Dil 1 1 1 1 1 1 1 1 1 1
Benzene Toluene Ethylbenzene m,p-Xylenes	71-43-2 108-88-3 100-41-4 179601-23-1	<0.00200 <0.00200 <0.00200 <0.00401	0.00200 0.00200 0.00200 0.00401	mg/kg mg/kg mg/kg mg/kg	11.25.19 19.45 11.25.19 19.45 11.25.19 19.45 11.25.19 19.45 11.25.19 19.45	U U U U U	Dil 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Total BTEX	< 0.00200	0.00200		mg/kg	11.25.19 19.45	U
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	11.25.19 19.45	
1,4-Difluorobenzene	540-36-3	110	%	70-130	11.25.19 19.45	

Certificate of Analytical Results 644213

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS02 Lab Sample Id: 644213-002		Matrix: Date Collect	Soil ed: 11.21.19 15.05		Date Received: Sample Depth: 4		3
Analytical Method: Chloride by EPA 30	00				Prep Method: 1	E300P	
Tech: CHE					% Moisture:		
Analyst: CHE		Date Prep:	11.25.19 11.55		Basis:	Wet Weight	
Seq Number: 3108630					SUB: T1047044	400-19-19	
Parameter	Cas Number	Result	RL	Units	Analysis Dat	e Flag	Dil
Chloride 1	6887-00-6	807	25.3	mg/kg	11.25.19 13.5	2	5

Analytical Method:TPH by SW801Tech:DVMAnalyst:ARMSeq Number:3108709	5 Mod	Date Prej	p: 11.25.	.19 12.00	9 E	Prep Method: SW 6 Moisture: Basis: We SUB: T104704400	t Weight	
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9		mg/kg	11.25.19 22.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9		mg/kg	11.25.19 22.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9		mg/kg	11.25.19 22.32	U	1
Total GRO-DRO	PHC628	<49.9	49.9		mg/kg	11.25.19 22.32	U	1
Total TPH	PHC635	<49.9	49.9		mg/kg	11.25.19 22.32	U	1
Surrogate 1-Chlorooctane		Cas Number 111-85-3	% Recovery 109	Units %	Limits 70-135	Analysis Date 11.25.19 22.32	Flag	
o-Terphenyl		84-15-1	115	%	70-135	11.25.19 22.32		

Certificate of Analytical Results 644213

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS02		Matrix:	Soil		Date Received:11.	22.19 09.1	3
Lab Sample Id: 644213-002		Date Colle	ected: 11.21.19 15.05		Sample Depth: 4 ft		
Analytical Method: BTEX by EPA	8021B				Prep Method: SW	5030B	
Tech: KTL					% Moisture:		
Analyst: KTL		Date Prep	: 11.25.19 11.45		Basis: We	t Weight	
Seq Number: 3108683		-			SUB: T104704400)-19-19	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199	mg/kg	11.25.19 20.05	U	1
Toluene	108-88-3	< 0.00199	0.00199	mg/kg	11.25.19 20.05	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199	mg/kg	11.25.19 20.05	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398	mg/kg	11.25.19 20.05	U	1
o-Xylene	95-47-6	< 0.00199	0.00199	mg/kg	11.25.19 20.05	U	1
Xylenes, Total	1330-20-7	< 0.00199	0.00199	mg/kg	11.25.19 20.05	U	1
Total BTEX		< 0.00199	0.00199	mg/kg	11.25.19 20.05	U	1
			%				

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	11.25.19 20.05	
4-Bromofluorobenzene	460-00-4	102	%	70-130	11.25.19 20.05	

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Flagging Criteria

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

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory 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



LT Environmental, Inc.

RDX Federal 17-35H

Analytical Method:	Chloride by EPA 3	D0						Pr	ep Metho	d: E300)P	
Seq Number:	3108630			Matrix:	Solid				Date Pre	p: 11.2	5.19	
MB Sample Id:	7691116-1-BLK		LCS Sar	nple Id:	7691116-	1-BKS		LCSI	O Sample	Id: 7691	116-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD]	RPD Limi	t Units	Analysis Date	Flag
Chloride	< 5.00	250	234	94	234	94	90-110	0	20	mg/kg	11.25.19 12:07	

Analytical Method:	Chloride by EPA 30	00						P	rep Metho	od: E30	0P	
Seq Number:	3108630			Matrix:	Soil				Date Pr	ep: 11.2	5.19	
Parent Sample Id:	644209-008		MS Sar	nple Id:	644209-00)8 S		MS	D Sample	e Id: 6442	209-008 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag
Chloride	97.4	200	305	104	296	99	90-110	3	20	mg/kg	11.25.19 12:27	

Analytical Method:	Chloride by EPA 30)0						P	ep Metho	od: E30	0P	
Seq Number:	3108630			Matrix:	Soil				Date Pre	ep: 11.2	5.19	
Parent Sample Id:	644209-017		MS Sa	nple Id:	644209-02	17 S		MS	D Sample	Id: 644	209-017 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lim	t Units	Analysis Date	Flag
Chloride	203	200	401	99	402	100	90-110	0	20	mg/kg	11.25.19 13:42	

Analytical Method:	TPH by S	W8015 M	od						I	Prep Method	i: SW	8015P	
Seq Number:	3108709				Matrix:	Solid				Date Prep	p: 11.2	25.19	
MB Sample Id:	7691145-1	I-BLK		LCS Sar	nple Id:	7691145-	1-BKS		LCS	SD Sample	Id: 769	1145-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocart	oons (GRO)	<15.0	1000	987	99	965	97	70-135	2	20	mg/kg	11.25.19 12:42	
Diesel Range Organics	(DRO)	<15.0	1000	1010	101	994	99	70-135	2	20	mg/kg	11.25.19 12:42	
Surrogate		MB %Rec	MB Flag		CS Rec	LCS Flag	LCSI %Re		-	<i>l</i> imits	Units	Analysis Date	
1-Chlorooctane		100		1	01		100		7	0-135	%	11.25.19 12:42	
o-Terphenyl		110		1	00		88		7	0-135	%	11.25.19 12:42	

Analytical Method:TPH by SW8015 ModSeq Number:3108709	Matrix: MB Sample Id:	Solid 7691145-1-BLK	Prep Method: Date Prep:			
Parameter	MB Result		ι	Jnits	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0		m	ng/kg	11.25.19 12:21	

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

Final 1.000

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

Page 11 of 16



Analytical Method: Seq Number: Parent Sample Id:	TPH by S 3108709 644215-00		lod		Matrix: nple Id:	Soil 644215-00	01 S			rep Methoo Date Prep D Sample 1	p: 11.2	8015P 5.19 215-001 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbo	ons (GRO)	<15.0	999	1040	104	1070	107	70-135	3	20	mg/kg	11.25.19 15:06	
Diesel Range Organics ((DRO)	40.0	999	1070	103	1120	108	70-135	5	20	mg/kg	11.25.19 15:06	
Surrogate					AS Rec	MS Flag	MSD %Re		_	imits	Units	Analysis Date	
1-Chlorooctane				1	11		115		7	0-135	%	11.25.19 15:06	
o-Terphenyl				1	10		116		7	0-135	%	11.25.19 15:06	

Analytical Method: Seq Number: MB Sample Id:	BTEX by EPA 802 3108683 7691109-1-BLK	1B	LCS San	Matrix: nple Id:	Solid 7691109-	1-BKS			Prep Metho Date Pre SD Sample	ep: 11.2	5030B 5.19 1109-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPI) RPD Limi	t Units	Analysis Date	Flag
Benzene	< 0.00200	0.100	0.112	112	0.109	109	70-130	3	35	mg/kg	11.25.19 13:06	
Toluene	< 0.00200	0.100	0.104	104	0.104	104	70-130	0	35	mg/kg	11.25.19 13:06	
Ethylbenzene	< 0.00200	0.100	0.106	106	0.108	108	70-130	2	35	mg/kg	11.25.19 13:06	
m,p-Xylenes	< 0.00400	0.200	0.216	108	0.221	111	70-130	2	35	mg/kg	11.25.19 13:06	
o-Xylene	< 0.00200	0.100	0.106	106	0.109	109	70-130	3	35	mg/kg	11.25.19 13:06	
Surrogate	MB %Rec	MB Flag			LCS Flag	LCSI %Re		-	Limits	Units	Analysis Date	
1,4-Difluorobenzene	107		1	12		111		,	70-130	%	11.25.19 13:06	
4-Bromofluorobenzene	93		1	01		104			70-130	%	11.25.19 13:06	

Analytical Method: Seq Number:	BTEX by EPA 802 3108683	1B		Matrix:	Soil			Ι	Prep Metho Date Pre		5030B 5.19	
Parent Sample Id:	644216-001		MS Sar	nple Id:	644216-00	01 S		MS	SD Sample	Id: 644	216-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limi	t Units	Analysis Date	Flag
Benzene	< 0.00198	0.0992	0.126	127	0.133	133	70-130	5	35	mg/kg	11.25.19 13:46	Х
Toluene	< 0.00198	0.0992	0.106	107	0.110	110	70-130	4	35	mg/kg	11.25.19 13:46	
Ethylbenzene	< 0.00198	0.0992	0.117	118	0.120	120	70-130	3	35	mg/kg	11.25.19 13:46	
m,p-Xylenes	< 0.00397	0.198	0.0814	41	0.0840	42	70-130	3	35	mg/kg	11.25.19 13:46	Х
o-Xylene	< 0.00198	0.0992	0.136	137	0.150	150	70-130	10	35	mg/kg	11.25.19 13:46	Х
Surrogate				1S Rec	MS Flag	MSD %Re		_	Limits	Units	Analysis Date	
1,4-Difluorobenzene			1	16		113		7	0-130	%	11.25.19 13:46	
4-Bromofluorobenzene			1	15		114		7	0-130	%	11.25.19 13:46	

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference [D] = 100*(C-A) / B RPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B] Log Diff. = Log(Sample Duplicate) - Log(Original Sample) LCS = Laboratory Control Sample A = Parent Result C = MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

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15:DO 4' 1 X X 1SO:S 4' 1 X X X X BRCRA 13PPM Texas 11 Al Sb As Ba Bc G Ca Cr Co Cu Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr TI Sn U V Zn 1631/245.117470 /7471 :Hg 1SO:S 12 1 14 14 1631/245.117470 /7471 :Hg 1so vid purchase order from client frauch losses are due toriculating by the control 1631/245.117470 /7471 :Hg 1631/245.117470 /7471 :Hg <th>Total 200.7 / 6010 200.8 / 6020: BRCRA 13PPM Texas 11 Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: RCRA 13PPM Texas 11 Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni Note:: 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 xencie. Xenco will be liable only for the cost of xamples 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 mgotiated. Relinquished by: (Signature) Received by: (Signature) Relinquished by: (Signature)</th>	Total 200.7 / 6010 200.8 / 6020: BRCRA 13PPM Texas 11 Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: RCRA 13PPM Texas 11 Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni Note:: 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 xencie. Xenco will be liable only for the cost of xamples 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 mgotiated. Relinquished by: (Signature) Received by: (Signature) Relinquished by: (Signature)
le B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na I Cr Co Cu Pb Mn Mo Ni Se Ag TI U s and subcontractors. It assigns standard terms and conditions client if such losses are due to circumstances beyond the control These terms will be enforced unless previously negotiated.	Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 AI Sb Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Idee: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xences and shall not assume any responsibility for any losses or expenses in Xence. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for sach sample submitted to Xence, but Xence. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for sach sample submitted to Xence, but Xence by: (Signature) Data
e B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na I Cr Co Cu Pb Mn Mo Ni Se Ag Ti U s and subcontractors. It assigns standard terms and conditions client if such losses are due to circumstances beyond the control These terms will be enforced unless previously negotiated.	Total 200.7 / 6010 200.8 / 6020: BRCRA 13PPM Texas 11 AI Sb Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: BRCRA Sb As Idee: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xence. 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
K Se Ag SiO2 Na	Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 AI Sb Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As
Mg Mn Mo Ni K Se Ag SiO2 Na	200.8 / 6020:
6	
	FS02 S 11/21/19/1505 4' 1 X
	FSOI S 11/21/19/1520 41 1 X
GTF Choo Sample Comments	Sample Identification Matrix Date Time Depth I PT
I A I starts the day received by the lab, if received by 4:00pm	No N/A Total Containers: A per of
e	or: -0.7 Cor
	C LONG
	Temp Blank: Wes/No Wet Ice: Kes No
-	
	2RP-5649 Quote #:
	Anna Ruppi Dire nate:
MeOH: Me	Buch Th DAV
	02:0000
SIS BEOLIEST	Project Name: RDX Federal 17-354 Turn Around
Email: creckisson@itenv.com+ abyers@itenv.com Deliverables: EDD ADaPT Other:	Phone: 970-285-9985 Email: Conclusion@ Hen
Reporting:Level III CLevel III RFST/UST TRRP Level IV	City, 1
	Megan Ave, Unit B
Environmentel Program: UST/PST	ivonmental
Bill to: If alterent Chris McKisson Work Order Comments	Project Manager: Chris Mickisson Bill to: (if different) Chris

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Received/by(OCD:12/20/2025/1):24:13 PM

Inter-Office Shipment

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IOS Number : 52994

Date/Time	: 11.22.2019	Created by:	Elizabeth M	cclellan	Please send report to:	Jessica Kran	ner		
Lab# From	a: Carlsbad	Delivery Pri	ority:		Address:	1089 N Cana	al Street		
Lab# To:	Midland	Air Bill No.	:		E-Mail:	jessica.kram	er@xen	co.com	
Sample Id	Matrix Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	РМ	Analytes	Sign
644213-001	S FS01	11.21.2019 15:00	SW8015MOD_NM	TPH by SW8015 Mod	11.29.2019	12.05.2019	JKR	GRO-DRO PHCC10C28	
644213-001	S FS01	11.21.2019 15:00	SW8021B	BTEX by EPA 8021B	11.29.2019	12.05.2019	JKR	BZ BZME EBZ XYLENE	
644213-001	S FS01	11.21.2019 15:00	E300_CL	Chloride by EPA 300	11.29.2019	05.19.2020	JKR	CL	
644213-002	S FS02	11.21.2019 15:05	SW8021B	BTEX by EPA 8021B	11.29.2019	12.05.2019	JKR	BZ BZME EBZ XYLENE	
644213-002	S FS02	11.21.2019 15:05	E300_CL	Chloride by EPA 300	11.29.2019	05.19.2020	JKR	CL	
644213-002	S FS02	11.21.2019 15:05	SW8015MOD_NM	TPH by SW8015 Mod	11.29.2019	12.05.2019	JKR	GRO-DRO PHCC10C28	

Inter Office Shipment or Sample Comments:

Relinquished By:

Elizabeth McClellan

Date Relinquished: 11.22.2019

Jessica Kramer Date Received: 11.25.2019 Cooler Temperature: 1.2

ession KRAMER

Received By:

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Midland IOS #: 52994

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Temperature Measuring device used :

Sent By:	Elizabeth McClellan	Date Sent:	11.22.2019 12.19 PM
Received By:	Jessica Kramer	Date Received:	11.25.2019 08.00 AM

Sample Receipt Che	ecklist	Comments
#1 *Temperature of cooler(s)?	1.2	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received with appropriate temperature?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	Yes	
#5 *Custody Seals Signed and dated for Containers/coolers	Yes	
#6 *IOS present?	Yes	
#7 Any missing/extra samples?	No	
#8 IOS agrees with sample label(s)/matrix?	Yes	
#9 Sample matrix/ properties agree with IOS?	Yes	
#10 Samples in proper container/ bottle?	Yes	
#11 Samples properly preserved?	Yes	
#12 Sample container(s) intact?	Yes	
#13 Sufficient sample amount for indicated test(s)?	Yes	
#14 All samples received within hold time?	Yes	

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation											
Contact:				Contacted by :	Date:						

Checklist reviewed by:

fession mamer

Jessica Kramer

Date: 11.25.2019



XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: LT Environmental, Inc. Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 11/22/2019 09:13:00 AM Temperature Measuring device used : T-NM-007 Work Order #: 644213 Sample Receipt Checklist Comments

#1 *Temperature of cooler(s)?	1.5	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/	cooler? Yes	
#5 Custody Seals intact on sample bottles?	Yes	
#6*Custody Seals Signed and dated?	Yes	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/	received? Yes	
#10 Chain of Custody agrees with sample labels	s/matrix? Yes	
#11 Container label(s) legible and intact?	Yes	
#12 Samples in proper container/ bottle?	Yes	
#13 Samples properly preserved?	Yes	
#14 Sample container(s) intact?	Yes	
#15 Sufficient sample amount for indicated test(s)? Yes	
#16 All samples received within hold time?	Yes	
#17 Subcontract of sample(s)?	Yes	Subbed to Midland.
#18 Water VOC samples have zero headspace?	? N/A	

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

Analyst:

PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Checklist reviewed by: Jessica WAAMER Jessica Kramer

Date: 11/22/2019

Date: 11/23/2019

Analytical Report 644603

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDX Federal 17-35H

034819046

02-DEC-19

Collected By: Client



1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Tampa: Florida (E87429), North Carolina (483)



02-DEC-19

Project Manager: **Chris McKisson LT Environmental, Inc.** 4600 W. 60th Avenue Arvada, CO 80003

Reference: XENCO Report No(s): 644603 RDX Federal 17-35H Project Address: Rural 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 XENCO Report Number(s) 644603. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 644603 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 XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

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 Jessica Kramer

 Project Assistant

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Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample PH04 PH05 PH05A PH06A PH06A PH07A PH07A PH08A PH08A PH09A



Sample Cross Reference 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
	S	11-26-19 12:15	0.5 ft	644603-001
	S	11-26-19 12:25	4 ft	644603-002
	S	11-26-19 12:35	0.5 ft	644603-003
	S	11-26-19 13:00	4 ft	644603-004
	S	11-26-19 14:25	0.5 ft	644603-005
	S	11-26-19 14:35	4 ft	644603-006
	S	11-26-19 14:45	0.5 ft	644603-007
	S	11-26-19 15:10	4 ft	644603-008
	S	11-26-19 15:20	0.5 ft	644603-009
	S	11-26-19 15:30	4 ft	644603-010
	S	11-26-19 15:40	0.5 ft	644603-011
	S	11-26-19 15:50	4 ft	644603-012

Version: 1.%

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CASE NARRATIVE

Client Name: LT Environmental, Inc. Project Name: RDX Federal 17-35H

 Project ID:
 034819046

 Work Order Number(s):
 644603

 Report Date:
 02-DEC-19

 Date Received:
 11/27/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3109010 Chloride by EPA 300

Lab Sample ID 644603-011 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 644603-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012.

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

Batch: LBA-3109024 TPH by SW8015 Mod

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

Samples affected are: 644603-005,644603-012,644603-009.

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

Samples affected are: 644603-012,644603-009.

Batch: LBA-3109032 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Project Id:	034819046
Contact:	Chris McKisson
Project Location:	Rural Eddy County

Certificate of Analysis Summary 644603

LT Environmental, Inc., Arvada, CO Project Name: RDX Federal 17-35H

Date Received in Lab:Wed Nov-27-19 09:10 amReport Date:02-DEC-19Project Manager:Jessica Kramer

	Lab Id:	644603-0	001	644603-0	002	644603-0	003	644603-	004	644603-0	005	644603-	006
An alumin Domandal Field		PH04		PH04/	4	PH05		PH05A		PH06		PH06A	
Analysis Requested	Depth:	0.5- ft		4- ft		0.5- ft	t	4- ft		0.5- ft		4- ft	
	Matrix:	SOIL		SOIL	,								
	Sampled:	Nov-26-19	12:15	Nov-26-19	12:25	Nov-26-19	12:35	Nov-26-19	13:00	Nov-26-19	14:25	Nov-26-19	14:35
BTEX by EPA 8021B	Extracted:	Nov-27-19	10:11	Nov-27-19	10:11	Nov-27-19	10:11	Nov-27-19	10:11	Nov-27-19	10:11	Nov-27-19	10:11
	Analyzed:	Nov-27-19	12:51	Nov-27-19	13:10	Nov-27-19	13:30	Nov-27-19	13:49	Nov-27-19	14:08	Nov-27-19	14:27
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		< 0.00202	0.00202	< 0.00200	0.00200	< 0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00202	0.00202
Toluene		< 0.00202	0.00202	< 0.00200	0.00200	< 0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00202	0.00202
Ethylbenzene	ylbenzene		0.00202	< 0.00200	0.00200	<0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00202	0.00202
m,p-Xylenes		< 0.00403	0.00403	< 0.00399	0.00399	< 0.00397	0.00397	< 0.00399	0.00399	< 0.00398	0.00398	< 0.00403	0.00403
o-Xylene	ne		0.00202	< 0.00200	0.00200	< 0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00202	0.00202
Xylenes, Total		< 0.00202	0.00202	< 0.00200	0.00200	<0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00202	0.00202
Total BTEX		< 0.00202	0.00202	< 0.00200	0.00200	< 0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00202	0.00202
Chloride by EPA 300	Extracted:	Nov-27-19	11:11	Nov-27-19 11:11									
	Analyzed:	Nov-27-19	12:11	Nov-27-19 12:28		Nov-27-19 12:33		Nov-27-19 12:39		Nov-27-19 12:44		Nov-27-19 13:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		186	99.8	13.6 D	10.0	36.3	10.1	11.5	10.1	<10.0	10.0	73.6 D	9.94
TPH by SW8015 Mod	Extracted:	Nov-27-19	11:00	Nov-27-19	11:00	Nov-27-19	11:00	Nov-27-19	11:00	Nov-27-19 11:00		Nov-27-19 11:00	
	Analyzed:	ed: Nov-27-19 11:03		Nov-27-19	11:24	Nov-28-19	07:53	Nov-27-19	11:44	Nov-27-19	12:05	Nov-28-19	08:13
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.3	50.3	<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.2	50.2	<50.1	50.1
Diesel Range Organics (DRO)		<50.3	50.3	<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.2	50.2	<50.1	50.1
Motor Oil Range Hydrocarbons (MRO)		<50.3	50.3	<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.2	50.2	<50.1	50.1
Total GRO-DRO		<50.3	50.3	<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.2	50.2	<50.1	50.1
Total TPH		<50.3	50.3	<50.2	50.2	<50.1	50.1	<50.1	50.1	<50.2	50.2	< 50.1	50.1

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

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Jessica Kramer Project Assistant

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Project Id:034819046Contact:Chris McKissonProject Location:Rural Eddy County

Certificate of Analysis Summary 644603

LT Environmental, Inc., Arvada, CO Project Name: RDX Federal 17-35H

Date Received in Lab:Wed Nov-27-19 09:10 amReport Date:02-DEC-19Project Manager:Jessica Kramer

	Lab Id:	644603-0	007	644603-0	008	644603-0	009	644603-	010	644603-0	011	644603-0	012
An alugia Dogwood od	Field Id:	PH07		PH074	4	PH08		PH08A		PH09		PH09A	
Analysis Requested	Depth:	0.5- ft		4- ft		0.5- ft	t	4- ft		0.5- f	t	4- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL	,	SOIL	,	SOIL	
	Sampled:	Nov-26-19	14:45	Nov-26-19	15:10	Nov-26-19	15:20	Nov-26-19	15:30	Nov-26-19	15:40	Nov-26-19	15:50
BTEX by EPA 8021B	Extracted:	Nov-27-19	10:11	Nov-27-19	10:11	Nov-27-19	10:11	Nov-27-19	10:11	Nov-27-19	10:11	Nov-27-19	10:11
	Analyzed:	Nov-27-19	14:46	Nov-27-19	15:05	Nov-27-19	15:24	Nov-27-19	15:43	Nov-27-19	17:43	Nov-27-19	18:02
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		< 0.00202	0.00202	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00197	0.00197	<0.00196	0.00196
Toluene		< 0.00202	0.00202	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00197	0.00197	< 0.00196	0.00196
Ethylbenzene		< 0.00202	0.00202	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00197	0.00197	<0.00196	0.00196
m,p-Xylenes			0.00404	< 0.00404	0.00404	< 0.00401	0.00401	< 0.00398	0.00398	< 0.00394	0.00394	< 0.00393	0.00393
o-Xylene		< 0.00202	0.00202	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00197	0.00197	< 0.00196	0.00196
Xylenes, Total	<		0.00202	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00197	0.00197	< 0.00196	0.00196
Total BTEX		< 0.00202	0.00202	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00197	0.00197	< 0.00196	0.00196
Chloride by EPA 300	Extracted:	Nov-27-19	11:11	Nov-27-19 11:11									
	Analyzed:	Nov-27-19	13:07	Nov-27-19	13:12	Nov-27-19 13:18		Nov-27-19 13:23		Nov-27-19 13:29		Nov-27-19 13:46	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		<9.82	9.82	17.3	9.94	14.0	9.98	54.3	10.0	50.6	50.3	73.1 D	9.92
TPH by SW8015 Mod	Extracted:	Nov-27-19	11:00	Nov-27-19	11:00	Nov-27-19	11:00	Nov-27-19	11:00	Nov-27-19	11:00	Nov-27-19	11:00
	Analyzed:	Nov-27-19	12:25	Nov-27-19	12:25	Nov-27-19	12:45	Nov-27-19	12:45	Nov-27-19	13:05	Nov-27-19	13:25
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2	<49.9	49.9	<50.2	50.2	<50.3	50.3	<49.8	49.8	<49.8	49.8
Diesel Range Organics (DRO)		<50.2	50.2	<49.9	49.9	<50.2	50.2	<50.3	50.3	<49.8	49.8	<49.8	49.8
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<49.9	49.9	<50.2	50.2	<50.3	50.3	<49.8	49.8	<49.8	49.8
Total GRO-DRO		<50.2	50.2	<49.9	49.9	<50.2	50.2	<50.3	50.3	<49.8	49.8	<49.8	49.8
Total TPH		< 50.2	50.2	<49.9	49.9	<50.2	50.2	<50.3	50.3	<49.8	49.8	<49.8	49.8

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

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Jessica Kramer Project Assistant

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Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH04	Matrix:	Soil		Date Received:11.	27.19 09.1	0	
Lab Sample Id: 644603-001		Date Collec	cted: 11.26.19 12.15		Sample Depth: 0.5	ft	
Analytical Method: Chloride by EF	PA 300				Prep Method: E3	00P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep:	11.27.19 11.11		Basis: We	t Weight	
Seq Number: 3109010						Ū	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	186	99.8	mg/kg	11.27.19 12.11		10
Analytical Method: TPH by SW80 Tech: DTH	15 Midd				Prep Method: SW % Moisture:		
Analyst: DTH		Date Prep:	11.27.19 11.00		Basis: We	t Weight	
Seq Number: 3109024		1				Ū	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	11.27.19 11.03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.3	50.3	mg/kg	11.27.19 11.03	U	
Motor Oil Range Hydrocarbons (MRO)		50.2	50.3	malka	11.27.19 11.03		1
Motor on Range Hydroearbons (MRO)	PHCG2835	<50.3	30.5	mg/kg	11.27.19 11.03	U	1 1
Total GRO-DRO	PHCG2835 PHC628	<50.3 <50.3	50.3	mg/kg	11.27.19 11.03	U U	-
							1

Surrogate	Cas Number	covery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	133	%	70-135	11.27.19 11.03	
o-Terphenyl	84-15-1	133	%	70-135	11.27.19 11.03	

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Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id:	PH04	Matrix:	Soil	Date Receive	d:11.27.19 09.10
Lab Sample Id	1: 644603-001	Date Collecte	d: 11.26.19 12.15	Sample Depth	n:0.5 ft
Analytical Met Tech: Analyst: Seq Number:	thod: BTEX by EPA 8021B MAB MAB 3109032	Date Prep:	11.27.19 10.11	Prep Method: % Moisture: Basis:	SW5030B Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	11.27.19 12.51	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	11.27.19 12.51	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	11.27.19 12.51	U	1
m,p-Xylenes	179601-23-1	< 0.00403	0.00403		mg/kg	11.27.19 12.51	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	11.27.19 12.51	U	1
Xylenes, Total	1330-20-7	< 0.00202	0.00202		mg/kg	11.27.19 12.51	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	11.27.19 12.51	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	107	%	70-130	11.27.19 12.51		
1,4-Difluorobenzene		540-36-3	101	%	70-130	11.27.19 12.51		

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Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id:PH04ALab Sample Id:644603-002		Matrix: Date Collect	Soil ed: 11.26.19 12.25		Date Received:11. Sample Depth:4 f)
Analytical Method: Chloride by El Tech: MAB Analyst: MAB Seq Number: 3109010	PA 300	Date Prep:	11.27.19 11.11		Prep Method: E30 % Moisture: Basis: We	00P et Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	13.6	10.0	mg/kg	11.30.19 23.31	D	1
Cinoriae	10887-00-0	15.0	10.0	mg/kg	11.30.17 23.31	D	1
		13.0	10.0	ing/kg			
Analytical Method: TPH by SW80 Tech: DTH		13.0	10.0	шуку	Prep Method: SW % Moisture:		

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2		mg/kg	11.27.19 11.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2		mg/kg	11.27.19 11.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2		mg/kg	11.27.19 11.24	U	1
Total GRO-DRO	PHC628	<50.2	50.2		mg/kg	11.27.19 11.24	U	1
Total TPH	PHC635	<50.2	50.2		mg/kg	11.27.19 11.24	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	120	%	70-135	11.27.19 11.24		
o-Terphenyl		84-15-1	128	%	70-135	11.27.19 11.24		

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Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH04A Lab Sample Id: 644603-002		Matrix: Date Collecte	Soil ed: 11.26.19 12.25	Date Received:11.27.19 09.10 Sample Depth: 4 ft			
Analytical Method: BTEX by EP. Tech: MAB	A 8021B			Prep Meth % Moistur	od: SW5030B e:		
Analyst: MAB Seq Number: 3109032		Date Prep:	11.27.19 10.11	Basis:	Wet Weight		
Parameter	Cas Number	Result I	21	Unite Analys	ic Data – Flag	ы	

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	11.27.19 13.10	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	11.27.19 13.10	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	11.27.19 13.10	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	11.27.19 13.10	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	11.27.19 13.10	U	1
Xylenes, Total	1330-20-7	< 0.00200	0.00200		mg/kg	11.27.19 13.10	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	11.27.19 13.10	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	111	%	70-130	11.27.19 13.10		
1,4-Difluorobenzene		540-36-3	98	%	70-130	11.27.19 13.10		

Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id:PH05Lab Sample Id:644603-003		Matrix: Date Collec	Soil cted: 11.26.19 12.35	Date Received:11.27.19 09.10 Sample Depth: 0.5 ft				
Analytical Method: Chloride by EF	PA 300			F	Prep Method: E30	0P		
Tech: MAB				9	6 Moisture:			
Analyst: MAB		Date Prep:	11.27.19 11.11	E	Basis: Wet	Weight		
Seq Number: 3109010						U		
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Chloride	16887-00-6	36.3	10.1	mg/kg	11.27.19 12.33		1	
Analytical Method:TPH by SW80Tech:DTHAnalyst:DTHSeq Number:3109024	15 Mod	Date Prep:	11.27.19 11.00	9	Prep Method: SW3 6 Moisture: Basis: Wet	8015P Weight		
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.28.19 07.53	U	1	
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	11.28.19 07.53	U	1	
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.28.19 07.53	U	1	
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	11.28.19 07.53	U	1	
Total TPH	PHC635	<50.1	50.1	mg/kg	11.28.19 07.53	U	1	
Surrogate		% Cas Number	Recovery Units	Limits	Analysis Date	Flag		

112

121

%

%

70-135

70-135

11.28.19 07.53

11.28.19 07.53

111-85-3

84-15-1

1-Chlorooctane

o-Terphenyl

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Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id:PH05Lab Sample Id:644603-003	Matrix: Soil Date Collected: 11.26.19 12.35	Date Received:11.27.19 09.10 Sample Depth: 0.5 ft		
Analytical Method: BTEX by EPA 8021B Tech: MAB		Prep Method: SW5030B % Moisture:		
Analyst: MAB Seq Number: 3109032	Date Prep: 11.27.19 10.11	Basis: Wet Weight		
	D 1/			

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	11.27.19 13.30	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	11.27.19 13.30	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	11.27.19 13.30	U	1
m,p-Xylenes	179601-23-1	< 0.00397	0.00397		mg/kg	11.27.19 13.30	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	11.27.19 13.30	U	1
Xylenes, Total	1330-20-7	< 0.00198	0.00198		mg/kg	11.27.19 13.30	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	11.27.19 13.30	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	115	%	70-130	11.27.19 13.30		
1,4-Difluorobenzene		540-36-3	100	%	70-130	11.27.19 13.30		

Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id:PH05ALab Sample Id:644603-004		Matrix: Date Collec	Soil cted: 11.26.19 13.00		Date Received:11.2 ample Depth:4 ft	27.19 09.1	0
Analytical Method: Chloride by EP. Tech: MAB	A 300		11 07 10 11 11	%	rep Method: E30 6 Moisture:		
Analyst: MAB Seq Number: 3109010		Date Prep:	11.27.19 11.11	E	Basis: Wet	Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.5	10.1	mg/kg	11.27.19 12.39		1
Analytical Method:TPH by SW801Tech:DTHAnalyst:DTHSeq Number:3109024	5 Mod	Date Prep:	11.27.19 11.00	%	rep Method: SW8 6 Moisture: Basis: Wet	8015P Weight	
Tech: DTH Analyst: DTH	5 Mod Cas Number	Date Prep: Result	11.27.19 11.00 RL	%	6 Moisture:		Dil
Tech: DTH Analyst: DTH Seq Number: 3109024		Ĩ		% E	6 Moisture: Basis: Wet	Weight	Dil
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter	Cas Number	Result	RL	% E Units	6 Moisture: Basis: Wet Analysis Date	Weight Flag	
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter Gasoline Range Hydrocarbons (GRO)	Cas Number PHC610	Result	RL 50.1	% E Units mg/kg	6 Moisture: Basis: Wet Analysis Date 11.27.19 11.44	Weight Flag U	1
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter Gasoline Range Hydrocarbons (GRO) Diesel Range Organics (DRO)	Cas Number PHC610 C10C28DRO	Result <50.1 <50.1	RL 50.1 50.1	% E Units mg/kg mg/kg	6 Moisture: Basis: Wet Analysis Date 11.27.19 11.44 11.27.19 11.44	Weight Flag U U	1 1
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter Gasoline Range Hydrocarbons (GRO) Diesel Range Organics (DRO) Motor Oil Range Hydrocarbons (MRO)	Cas Number PHC610 C10C28DRO PHCG2835	Result <50.1 <50.1	RL 50.1 50.1 50.1	9, E Units mg/kg mg/kg mg/kg	6 Moisture: Basis: Wet Analysis Date 11.27.19 11.44 11.27.19 11.44 11.27.19 11.44	Weight Flag U U U	1 1 1
Tech:DTHAnalyst:DTHSeq Number:3109024ParameterGasoline Range Hydrocarbons (GRO)Diesel Range Organics (DRO)Motor Oil Range Hydrocarbons (MRO)Total GRO-DRO	Cas Number PHC610 C10C28DRO PHCG2835 PHC628 PHC635	Result <50.1 <50.1 <50.1 <50.1 <50.1 <50.1	RL 50.1 50.1 50.1 50.1	9 E Units mg/kg mg/kg mg/kg mg/kg	6 Moisture: Basis: Wet 11.27.19 11.44 11.27.19 11.44 11.27.19 11.44 11.27.19 11.44	Weight Flag U U U U U	1 1 1 1

91

84-15-1

%

70-135

11.27.19 11.44

o-Terphenyl

Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH05A Lab Sample Id: 644603-004	Matrix: Date Collecte	Soil d: 11.26.19 13.00	Date Received:11.27.19 09.10 Sample Depth: 4 ft			
Analytical Method: BTEX by EPA Tech: MAB	A 8021B			Prep Meth % Moistur	od: SW5030B	
Analyst: MAB Seq Number: 3109032		Date Prep:	11.27.19 10.11	Basis:	Wet Weight	
Parameter	Cas Number	Result 5	97.	Unite Analys	is Data Flag	ы

Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
71-43-2	< 0.00200	0.00200		mg/kg	11.27.19 13.49	U	1
108-88-3	< 0.00200	0.00200		mg/kg	11.27.19 13.49	U	1
100-41-4	< 0.00200	0.00200		mg/kg	11.27.19 13.49	U	1
179601-23-1	< 0.00399	0.00399		mg/kg	11.27.19 13.49	U	1
95-47-6	< 0.00200	0.00200		mg/kg	11.27.19 13.49	U	1
1330-20-7	< 0.00200	0.00200		mg/kg	11.27.19 13.49	U	1
	< 0.00200	0.00200		mg/kg	11.27.19 13.49	U	1
	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
	460-00-4	116	%	70-130	11.27.19 13.49		
	540-36-3	97	%	70-130	11.27.19 13.49		
	71-43-2 108-88-3 100-41-4 179601-23-1 95-47-6	71-43-2 <0.00200	71-43-2 <0.00200	71-43-2 <0.00200	71-43-2 <0.00200 0.00200 mg/kg 108-88-3 <0.00200	71-43-2 <0.00200	71-43-2 <0.00200

Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH06 Lab Sample Id: 644603-005		Matrix: Date Collec	Soil ted: 11.26.19 14.25	-	Date Received:11.27.19 09.10 Sample Depth: 0.5 ft		
Analytical Method: Chloride by EF	PA 300			1	Prep Method: E30	0P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep:	11.27.19 11.11]	Basis: Wet	Weight	
Seq Number: 3109010		-					
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<10.0	10.0	mg/kg	11.27.19 12.44	U	1
Analytical Method: TPH by SW80	15 Mod			Ţ	Prep Method: SW	8015P	
Tech: DTH	15 1000				% Moisture:	00151	
Analyst: DTH		Date Prep:	11.27.19 11.00			Weight	
Seq Number: 3109024		Date Hep.	11.27.17 11.00	-		, treight	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.27.19 12.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.27.19 12.05	U	1

					00			
Total GRO-DRO	PHC628	<50.2	50.2		mg/kg	11.27.19 12.05	U	1
Total TPH	PHC635	<50.2	50.2		mg/kg	11.27.19 12.05	U	1
Surrogate	% Recovery Cas Number			Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3 136		136	%	70-135	11.27.19 12.05	**	
o-Terphenyl		84-15-1	135	%	70-135	11.27.19 12.05		

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LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH06 Lab Sample Id: 644603-005	Matrix: Soil Date Collected: 11.26.19 14.25	Date Received:11.27.19 09.10 Sample Depth: 0.5 ft
Analytical Method: BTEX by EPA 8021B Tech: MAB		Prep Method: SW5030B % Moisture:
Analyst: MAB Seq Number: 3109032	Date Prep: 11.27.19 10.11	Basis: Wet Weight
-	Number Dorold DY	

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	11.27.19 14.08	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	11.27.19 14.08	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	11.27.19 14.08	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	11.27.19 14.08	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	11.27.19 14.08	U	1
Xylenes, Total	1330-20-7	< 0.00199	0.00199		mg/kg	11.27.19 14.08	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	11.27.19 14.08	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	108	%	70-130	11.27.19 14.08		
1,4-Difluorobenzene		540-36-3	105	%	70-130	11.27.19 14.08		

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Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH06A		Matrix:	Soil	Date Received:11.27.19 09.10			0
Lab Sample Id: 644603-006		Date Collec	cted: 11.26.19 14.35		Sample Depth: 4 ft		
Analytical Method: Chloride by EF	PA 300				Prep Method: E30	00P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep:	11.27.19 11.11		Basis: We	t Weight	
Seq Number: 3109010						Ū	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	73.6	9.94	mg/kg	12.01.19 10.45	D	1
Analytical Method: TPH by SW80	15 Mod				Prep Method: SW % Moisture:	/8015P	
Tech: DTH					% Moisture:		
Analyst: DTH		Date Prep:	11.27.19 11.00		Basis: We	t Weight	
Seq Number: 3109024							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	11.28.19 08.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	< 50.1	50.1	mg/kg	11.28.19 08.13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	11.28.19 08.13	U	1
wotor On Kange Hydrocarbons (wiko)							1
	PHC628	< 50.1	50.1	mg/kg	11.28.19 08.13	U	-
Total GRO-DRO Total TPH	PHC628 PHC635	<50.1 <50.1	50.1 50.1	mg/kg mg/kg	11.28.19 08.13 11.28.19 08.13	U U	1

Surrogate	Cas Number	Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	11.28.19 08.13	
o-Terphenyl	84-15-1	112	%	70-135	11.28.19 08.13	

Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH06A Lab Sample Id: 644603-006		Matrix: Date Collecte	Soil d: 11.26.19 14.35	Date Received:11.27.19 09.10 Sample Depth: 4 ft		
Analytical Method: BTEX by EPA Tech: MAB	8021B			Prep Metho % Moistury	od: SW5030B e:	
Analyst: MAB Seq Number: 3109032		Date Prep:	11.27.19 10.11	Basis:	Wet Weight	
Parameter	Cas Number	Recult I	эт	Unita Analysi	a Doto Elog	D:1

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	11.27.19 14.27	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	11.27.19 14.27	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	11.27.19 14.27	U	1
m,p-Xylenes	179601-23-1	< 0.00403	0.00403		mg/kg	11.27.19 14.27	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	11.27.19 14.27	U	1
Xylenes, Total	1330-20-7	< 0.00202	0.00202		mg/kg	11.27.19 14.27	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	11.27.19 14.27	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	90	%	70-130	11.27.19 14.27		
1,4-Difluorobenzene		540-36-3	81	%	70-130	11.27.19 14.27		

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Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH07 Lab Sample Id: 644603-007		Matrix: Date Collec	Soil eted: 11.26.19 14.45	Date Received:11.27.19 09.10 Sample Depth: 0.5 ft			0
Analytical Method: Chloride by EP	A 300				Prep Method: E30)0P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep:	11.27.19 11.11		Basis: We	t Weight	
Seq Number: 3109010							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<9.82	9.82	mg/kg	11.27.19 13.07	U	1
Analytical Method: TPH by SW801 Tech: DTH Analyst: DTH Seq Number: 3109024	5 Mod	Date Prep:	11.27.19 11.00		Prep Method: SW % Moisture: Basis: We	8015P t Weight	
Tech: DTH Analyst: DTH	5 Mod Cas Number	Date Prep: Result	11.27.19 11.00 RL		% Moisture:		Dil
Tech: DTH Analyst: DTH Seq Number: 3109024		1			% Moisture: Basis: We	t Weight	Dil
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter	Cas Number	Result	RL	Units	Moisture: Basis: We Analysis Date	t Weight Flag	
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter Gasoline Range Hydrocarbons (GRO)	Cas Number PHC610	Result <50.2	RL 50.2	Units mg/kg	Moisture: Basis: We <u>Analysis Date</u> 11.27.19 12.25	t Weight Flag U	1
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter Gasoline Range Hydrocarbons (GRO) Diesel Range Organics (DRO)	Cas Number PHC610 C10C28DRO	Result <50.2 <50.2	RL 50.2 50.2	Units mg/kg mg/kg	% Moisture: Basis: We Analysis Date 11.27.19 12.25 11.27.19 12.25	t Weight Flag U U	1

Iotal IPH	PHC635	<50.2	50.2		mg/kg	11.27.19 12.25	U	
Surrogate		% Cas Number	Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	109	%	70-135	11.27.19 12.25		
o-Terphenyl		84-15-1	108	%	70-135	11.27.19 12.25		

Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id:	PH07		Matrix:	Soil		ceived:11.27.19 09.1	0
Lab Sample Id			Date Collecte	d: 11.26.19 14.45	1	Depth: 0.5 ft	
Analytical Me	thod: BTEX by EPA 802	1B			Prep Me	ethod: SW5030B	
Tech:	MAB				% Mois	ture:	
Analyst:	MAB		Date Prep:	11.27.19 10.11	Basis:	Wet Weight	
Seq Number:	3109032						
Parameter		Cas Number	Result R	T.	Unite Ana	lycic Data Flag	Dil

Parameter	Cas Number	· Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	11.27.19 14.46	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	11.27.19 14.46	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	11.27.19 14.46	U	1
m,p-Xylenes	179601-23-1	< 0.00404	0.00404		mg/kg	11.27.19 14.46	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	11.27.19 14.46	U	1
Xylenes, Total	1330-20-7	< 0.00202	0.00202		mg/kg	11.27.19 14.46	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	11.27.19 14.46	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	103	%	70-130	11.27.19 14.46		
1,4-Difluorobenzene		540-36-3	96	%	70-130	11.27.19 14.46		

Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH07A Lab Sample Id: 644603-008		Matrix: Date Collec	Soil cted: 11.26.19 15.10	Date Received:11.27.19 09.10 Sample Depth: 4 ft
Analytical Method: Chloride by E Tech: MAB Analyst: MAB Seq Number: 3109010	PA 300	Date Prep:	11.27.19 11.11	Prep Method: E300P % Moisture: Basis: Wet Weight
Parameter	Cas Number	Result	RL	Units Analysis Date Flag Dil
Chloride	16887-00-6	17.3	9.94	mg/kg 11.27.19 13.12 1
Analytical Method: TPH by SW80 Tech: DTH Analyst: DTH Seq Number: 3109024)15 Mod	Date Prep:	11.27.19 11.00	Prep Method: SW8015P % Moisture: Basis: Wet Weight
Parameter	Cas Number	Result	RL	Units Analysis Date Flag Dil

T uT uniteter	ous rumber	Rebuit	KL		Onits	Analysis Date	Tiag	Dii
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9		mg/kg	11.27.19 12.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9		mg/kg	11.27.19 12.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9		mg/kg	11.27.19 12.25	U	1
Total GRO-DRO	PHC628	<49.9	49.9		mg/kg	11.27.19 12.25	U	1
Total TPH	PHC635	<49.9	49.9		mg/kg	11.27.19 12.25	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	122	%	70-135	11.27.19 12.25		
o-Terphenyl	5	84-15-1	131	%	70-135	11.27.19 12.25		

Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH07A Lab Sample Id: 644603-008		Matrix: Date Collecte	Soil d: 11.26.19 15.10	Date Receiv Sample Dep	ved:11.27.19 09.10 oth:4 ft)
Analytical Method: BTEX by EPA 8 Tech: MAB	021B			Prep Metho % Moisture	d: SW5030B	
Analyst: MAB Seq Number: 3109032		Date Prep:	11.27.19 10.11	Basis:	Wet Weight	
Daramatar	Cas Number	Recult D)T	Linita Analysi	Doto Flog	D:I

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	11.27.19 15.05	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	11.27.19 15.05	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	11.27.19 15.05	U	1
m,p-Xylenes	179601-23-1	< 0.00404	0.00404		mg/kg	11.27.19 15.05	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	11.27.19 15.05	U	1
Xylenes, Total	1330-20-7	< 0.00202	0.00202		mg/kg	11.27.19 15.05	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	11.27.19 15.05	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	107	%	70-130	11.27.19 15.05		
1,4-Difluorobenzene		540-36-3	101	%	70-130	11.27.19 15.05		

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Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Depth: 0.5 Prep Method: E30 % Moisture: Basis: We Analysis Date		
% Moisture: Basis: We		
Basis: We	t Weight	
	t Weight	
Analysis Date		
Analysis Date		
1111113010 20000	Flag	Di
11.27.19 13.18		1
% Moisture: Basis: We	t Weight	
Analysis Date	Flag	Di
11.27.19 12.45	U	1
11 07 10 10 15	U	1
11.27.19 12.45	U	1
11.27.19 12.45 11.27.19 12.45		
	U	1
]	% Moisture: Basis: We Analysis Date	Basis: Wet Weight Analysis Date Flag 11.27.19 12.45 U

	%	Recovery				
Surrogate	Cas Number		Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	138	%	70-135	11.27.19 12.45	**
o-Terphenyl	84-15-1	138	%	70-135	11.27.19 12.45	**

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LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id:PH08Lab Sample Id:644603-009	Matrix: Soil Date Collected: 11.26.19 15.20	Date Received:11.27.19 09.10 Sample Depth: 0.5 ft
Analytical Method: BTEX by EPA 8021B Tech: MAB		Prep Method: SW5030B % Moisture:
Analyst: MAB Seq Number: 3109032	Date Prep: 11.27.19 10.11	Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	11.27.19 15.24	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	11.27.19 15.24	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	11.27.19 15.24	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401		mg/kg	11.27.19 15.24	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	11.27.19 15.24	U	1
Xylenes, Total	1330-20-7	< 0.00200	0.00200		mg/kg	11.27.19 15.24	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	11.27.19 15.24	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	115	%	70-130	11.27.19 15.24		
1,4-Difluorobenzene		540-36-3	105	%	70-130	11.27.19 15.24		

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Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH08A Lab Sample Id: 644603-010		Matrix: Date Collec	Soil eted: 11.26.19 15.30		Date Received:11.2 Sample Depth:4 ft		0
Analytical Method: Chloride by EP	A 300				Prep Method: E30)0P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep:	11.27.19 11.11		Basis: We	t Weight	
Seq Number: 3109010							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	54.3	10.0	mg/kg	11.27.19 13.23		1
Analytical Method: TPH by SW802 Tech: DTH Analyst: DTH Seq Number: 3109024	15 Mod	Date Prep:	11.27.19 11.00		Prep Method: SW % Moisture: Basis: We	78015P t Weight	
Tech: DTH Analyst: DTH	15 Mod Cas Number	Date Prep: Result	11.27.19 11.00 RL		% Moisture:		Dil
Tech: DTH Analyst: DTH Seq Number: 3109024		1			% Moisture: Basis: We	t Weight	Dil
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter	Cas Number	Result	RL	Units	Moisture: Basis: We Analysis Date	t Weight Flag	
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter Gasoline Range Hydrocarbons (GRO)	Cas Number PHC610	Result <50.3	RL 50.3	Units mg/kg	% Moisture: Basis: We Analysis Date 11.27.19 12.45	t Weight Flag U	1
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter Gasoline Range Hydrocarbons (GRO) Diesel Range Organics (DRO)	Cas Number PHC610 C10C28DRO	Result <50.3 <50.3	RL 50.3 50.3	Units mg/kg mg/kg	% Moisture: Basis: We Analysis Date 11.27.19 12.45 11.27.19 12.45	t Weight Flag U U	1

otal IPH	PHC635	<50.3	50.3		mg/kg	11.27.19 12.45	U	
Surrogate		% Cas Number	Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	117	%	70-135	11.27.19 12.45		
o-Terphenyl		84-15-1	128	%	70-135	11.27.19 12.45		

Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH08A Lab Sample Id: 644603-010	Matrix: Date Collected	Soil l: 11.26.19 15.30	Date Received:11.27.19 09.10 Sample Depth:4 ft		
Analytical Method: BTEX by EPA 8 Tech: MAB	021B		Prep Metho % Moisture	od: SW5030B e:	
Analyst: MAB Seq Number: 3109032	Date Prep:	11.27.19 10.11	Basis:	Wet Weight	
Berner ter	Car Namehan Domit D	-			

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	11.27.19 15.43	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	11.27.19 15.43	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	11.27.19 15.43	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	11.27.19 15.43	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	11.27.19 15.43	U	1
Xylenes, Total	1330-20-7	< 0.00199	0.00199		mg/kg	11.27.19 15.43	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	11.27.19 15.43	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	114	%	70-130	11.27.19 15.43		
1,4-Difluorobenzene		540-36-3	105	%	70-130	11.27.19 15.43		

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Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH09 Lab Sample Id: 644603-011		Matrix: Date Collec	Soil cted: 11.26.19 15.40		Date Received:11.27.19 09.10 Sample Depth: 0.5 ft			
Analytical Method: Chloride by EF	PA 300				Prep Method: E30	00P		
Tech: MAB					% Moisture:			
Analyst: MAB		Date Prep:	11.27.19 11.11		Basis: We	t Weight		
Seq Number: 3109010						Ū		
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Chloride	16887-00-6	50.6	50.3	mg/kg	11.27.19 13.29		5	
Analytical Method:TPH by SW80Tech:DTHAnalyst:DTHSeq Number:3109024	15 Mod	Date Prep:	11.27.19 11.00		Prep Method: SW % Moisture: Basis: We	8015P t Weight		
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.27.19 13.05	U	1	
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.27.19 13.05	U	1	
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.27.19 13.05	U	1	
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	11.27.19 13.05	U	1	
Total TPH	PHC635	<49.8	49.8	mg/kg	11.27.19 13.05	U	1	
		0/	Decercony					

	%]					
Surrogate	Cas Number		Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	11.27.19 13.05	
o-Terphenyl	84-15-1	128	%	70-135	11.27.19 13.05	

Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH09 Lab Sample Id: 644603-011		Matrix: Date Collecte	Soil d: 11.26.19 15.40	Date Received:11.27.19 09.1 Sample Depth: 0.5 ft		
Analytical Method: BTEX by EPA 8 Tech: MAB	021B			Prep Metho % Moisture	d: SW5030B :	
Analyst: MAB Seq Number: 3109032		Date Prep:	11.27.19 10.11	Basis:	Wet Weight	
Daramatar	Cas Number	Rocult I	۶ ۲	Unita Anolucia	Doto Elog	D:I

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00197	0.00197		mg/kg	11.27.19 17.43	U	1
Toluene	108-88-3	< 0.00197	0.00197		mg/kg	11.27.19 17.43	U	1
Ethylbenzene	100-41-4	< 0.00197	0.00197		mg/kg	11.27.19 17.43	U	1
m,p-Xylenes	179601-23-1	< 0.00394	0.00394		mg/kg	11.27.19 17.43	U	1
o-Xylene	95-47-6	< 0.00197	0.00197		mg/kg	11.27.19 17.43	U	1
Xylenes, Total	1330-20-7	< 0.00197	0.00197		mg/kg	11.27.19 17.43	U	1
Total BTEX		< 0.00197	0.00197		mg/kg	11.27.19 17.43	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	106	%	70-130	11.27.19 17.43		
1,4-Difluorobenzene		540-36-3	89	%	70-130	11.27.19 17.43		

Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

300						
	Date Prep:	11.27.19 11.11		Prep Method: E30 % Moisture: Basis: Wet		
Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
16887-00-6	73.1	9.92	mg/kg	12.01.19 11.08	D	1
		Cas Number Result	Cas Number Result RL	Cas Number Result RL Units	Cas Number Result RL Units Analysis Date	Cas Number Result RL Units Analysis Date Flag

5 Mod				P	rep Method: SV	v8015P	
				%	Moisture:		
	Date Prep:	11.27.19	11.00	В	asis: W	et Weight	
Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
PHC610	<49.8	49.8		mg/kg	11.27.19 13.25	U	1
C10C28DRO	<49.8	49.8		mg/kg	11.27.19 13.25	U	1
PHCG2835	<49.8	49.8		mg/kg	11.27.19 13.25	U	1
PHC628	<49.8	49.8		mg/kg	11.27.19 13.25	U	1
PHC635	<49.8	49.8		mg/kg	11.27.19 13.25	U	1
			J nits	Limits	Analysis Date	Flag	
11	11-85-3	138	%	70-135	11.27.19 13.25	**	
84	4-15-1	140	%	70-135	11.27.19 13.25	**	
	PHC610 C10C28DRO PHCG2835 PHC628 PHC635	Cas Number Result PHC610 <49.8	Date Prep: 11.27.19 Cas Number Result RL PHC610 <49.8	Date Prep: 11.27.19 11.00 Cas Number Result RL PHC610 <49.8	Cas Number Result RL Units PHC610 <49.8	Cas Number Result RL Units Analysis Date PHC610 <49.8	Notified in the second

Certificate of Analytical Results 644603

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: PH09A Lab Sample Id: 644603-012		Matrix: Date Collecte	Soil ed: 11.26.19 15.50	Date Received:11.27.19 09.1 Sample Depth:4 ft		
Analytical Method: BTEX by EPA 8 Tech: MAB	021B			Prep Metho % Moisture	od: SW5030B e:	
Analyst: MAB Seq Number: 3109032		Date Prep:	11.27.19 10.11	Basis:	Wet Weight	
Parameter	Cas Number	Result 5	21	Unite Analysi	e Data Elag	ы

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00196	0.00196		mg/kg	11.27.19 18.02	U	1
Toluene	108-88-3	< 0.00196	0.00196		mg/kg	11.27.19 18.02	U	1
Ethylbenzene	100-41-4	< 0.00196	0.00196		mg/kg	11.27.19 18.02	U	1
m,p-Xylenes	179601-23-1	< 0.00393	0.00393		mg/kg	11.27.19 18.02	U	1
o-Xylene	95-47-6	< 0.00196	0.00196		mg/kg	11.27.19 18.02	U	1
Xylenes, Total	1330-20-7	< 0.00196	0.00196		mg/kg	11.27.19 18.02	U	1
Total BTEX		< 0.00196	0.00196		mg/kg	11.27.19 18.02	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	108	%	70-130	11.27.19 18.02		
1,4-Difluorobenzene		540-36-3	102	%	70-130	11.27.19 18.02		



Flagging Criteria

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

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory 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



LT Environmental, Inc.

RDX Federal 17-35H

Analytical Method:	Chloride by EPA 30)0						Pr	ep Meth	od: E300)P	
Seq Number:	3109010]	Matrix:	Solid				Date Pr	ep: 11.2	7.19	
MB Sample Id:	7691326-1-BLK		LCS San	nple Id:	7691326-1	-BKS		LCSI	O Sample	e Id: 7691	326-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag
Chloride	<10.0	250	256	102	260	104	90-110	2	20	mg/kg	11.27.19 11:59	

Analytical Method:	Chloride by EPA 30	00						Pr	ep Metho	od: E300)P	
Seq Number:	3109010			Matrix:	Soil				Date Pr	ep: 11.2	7.19	
Parent Sample Id:	644603-001		MS San	nple Id:	644603-00	01 S		MSI	D Sample	e Id: 6446	503-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag

Analytical Method:	Chloride by EPA 30	0						P	rep Meth	od: E30	0P	
Seq Number:	3109010			Matrix:	Soil				Date Pr	ep: 11.2	7.19	
Parent Sample Id:	644603-011		MS Sar	nple Id:	644603-01	11 S		MS	D Sample	e Id: 644	503-011 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lin	iit Units	Analysis Date	Flag
Chloride	50.6	202	237	92	234	92	90-110	1	20	mg/kg	11.27.19 13:35	

Analytical Method:	TPH by S	W8015 M	od						I	Prep Metho	d: SW3	8015P	
Seq Number:	3109024				Matrix:	Solid				Date Pre	p: 11.2	27.19	
MB Sample Id:	7691369-1	-BLK		LCS San	nple Id:	7691369-2	I-BKS		LCS	SD Sample	Id: 769	1369-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPE	RPD Limi	t Units	Analysis Date	Flag
Gasoline Range Hydrocarb	oons (GRO)	< 50.0	1000	1050	105	905	91	70-135	15	35	mg/kg	11.27.19 10:43	
Diesel Range Organics	(DRO)	<50.0	1000	1200	120	1110	111	70-135	8	35	mg/kg	11.27.19 10:43	
Surrogate		MB %Rec	MB Flag		CS Rec	LCS Flag	LCSI %Re		-	Limits	Units	Analysis Date	
1-Chlorooctane		105		1	33		127		7	0-135	%	11.27.19 10:43	
o-Terphenyl		112		1	34		130		7	0-135	%	11.27.19 10:43	

Analytical Method:TPH by SW8015 MSeq Number:3109024	od Matrix: Solid MB Sample Id: 7691369-1-BLK	Prep Method: SW8015P Date Prep: 11.27.19
Parameter	MB Result	Units Analysis Flag Date
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg 11.27.19 10:24

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

Final 1.000

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

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. Released to Imaging: 3/4/2025 2:08:17 PM



LT Environmental, Inc.

RDX Federal 17-35H

Analytical Method:TPH ISeq Number:31090	•		I	Matrix:	Soil			Prep Meth Date Pr	ou.	8015P 7.19	
Parent Sample Id: 64460	3-001		MS San	ple Id:	644603-00	01 S		MSD Sampl	e Id: 644	503-001 SD	
Parameter		Spike mount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD RPD Lin	nit Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRC	<49.9	998	905	91	1000	100	70-135	10 35	mg/kg	11.27.19 11:03	
Diesel Range Organics (DRO)	<49.9	998	1110	111	1150	115	70-135	4 35	mg/kg	11.27.19 11:03	
Surrogate				IS Rec	MS Flag	MSD %Rec			Units	Analysis Date	
1-Chlorooctane			1	19		132		70-135	%	11.27.19 11:03	
o-Terphenyl			12	27		131		70-135	%	11.27.19 11:03	

Analytical Method: Seq Number: MB Sample Id:	BTEX by EPA 8021 3109032 7691377-1-BLK	B] LCS San	Matrix: ple Id:	Solid 7691377-2	1-BKS			Prep Metho Date Pre SD Sample	p: 11.2	5030B 7.19 1377-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limi	t Units	Analysis Date	Flag
Benzene	< 0.00200	0.100	0.0900	90	0.0916	92	70-130	2	35	mg/kg	11.27.19 11:09	
Toluene	< 0.00200	0.100	0.0920	92	0.0930	93	70-130	1	35	mg/kg	11.27.19 11:09	
Ethylbenzene	< 0.00200	0.100	0.0906	91	0.0918	92	71-129	1	35	mg/kg	11.27.19 11:09	
m,p-Xylenes	< 0.00400	0.200	0.194	97	0.197	99	70-135	2	35	mg/kg	11.27.19 11:09	
o-Xylene	< 0.00200	0.100	0.0987	99	0.100	100	71-133	1	35	mg/kg	11.27.19 11:09	
Surrogate	MB %Rec	MB Flag			LCS Flag	LCS %Re		-	Limits	Units	Analysis Date	
1,4-Difluorobenzene	100		1	00		102		7	0-130	%	11.27.19 11:09	
4-Bromofluorobenzene	101		10	08		111		7	0-130	%	11.27.19 11:09	

Analytical Method: Seq Number: Parent Sample Id:	BTEX by EPA 8021 3109032 644603-001	B	MS San	Matrix: nple Id:		01 S			Prep Metho Date Pre SD Sample	p: 11.2	5030B 7.19 503-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPE) RPD Limi	t Units	Analysis Date	Flag
Benzene	< 0.00202	0.101	0.0925	92	0.102	101	70-130	10	35	mg/kg	11.27.19 11:47	
Toluene	< 0.00202	0.101	0.0934	92	0.103	102	70-130	10	35	mg/kg	11.27.19 11:47	
Ethylbenzene	< 0.00202	0.101	0.0918	91	0.101	100	71-129	10	35	mg/kg	11.27.19 11:47	
m,p-Xylenes	< 0.00403	0.202	0.197	98	0.215	106	70-135	9	35	mg/kg	11.27.19 11:47	
o-Xylene	< 0.00202	0.101	0.101	100	0.110	109	71-133	9	35	mg/kg	11.27.19 11:47	
Surrogate				IS Rec	MS Flag	MSD %Re			Limits	Units	Analysis Date	
1,4-Difluorobenzene			1	00		105		7	0-130	%	11.27.19 11:47	
4-Bromofluorobenzene			1	09		113		7	0-130	%	11.27.19 11:47	

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

[D] = 100*(C-A) / B RPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B] Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

Final 1.000

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

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Project Hansge Chr./s. Mck/s.som. Bitte i manuello (Mr.) Matter Som. With Object Community Bitte i Matter Som. Bitte i Matter		0	-				
Project Namager Chr./s. Module Science Bit for a minue Chr./s. Module Science Science Frage Program. Ust TPS [(aimitica) · (aimitica)	1 - 1	6	11	with	Cen	
Project Namage: Chr.S. Muck Listen Bill the animed Curry Name: Fill the animed Fill the anime	sceived hyr (Signatura)	Relinquished by: (S	Date/Tune	(e	ived by: (Signature	Rece	elinquished by: (Signature)
Project Manager: Chrick McKL stom Balt be an anneed Chrisk McKL stom Water of community in the antimed of the store of community in the		ent if such losses are due to circ nese terms will be enforced unle	Any to Aenco, its attiliates a expenses incurred by the clic Xenco, but not analyzed. Th	lity for any losses or e sample submitted to	not assume any responsibi and a charge of \$5 for each	of samples and shall r plied to each project	service. Xenco will be liable only for the cost , Xenco. A minimum charge of \$75.00 will be ap
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Chris McKisson Bill to: (if different) Chris McKisson Www.xenco.com Page LT Environmental Company Name: LT Environmental Work Order Comments 820 Megan Arc, Unit B Address: Address: State of Project:			ZIP:	City, State			Kitu
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PHOGA	PHO9	Sample Identification	Sample Custody Seals	Cooler Custody Seals: Ye	Received Intact:	Temperature (°C):	AMPLE RECEIPT	PO # 22 - 92 (19)	Sampler's Name:	Project Location Rural Eddy	Project Number: 034819646	Project Name: RDX Federal	Phone: 970 -	city, State ZIP: Rifle, CO 81050	Address: 820 1	Company Name: LT Environmental	Project Manager: Chris	LABORA	XIII
S 11/20/19 1550	5 11/26/19 1540	Matrix Date Time Sampled Sampled	Yes No N/A Total Containers:	Yes No N/A Correction Factor:	Yes No	Thermometer ID	Temp Blank: Yes No Wet Ice:	Grav Quote #:	Ann byer Due Date	Country	Routine Routine	H52-41	Phone: 970-285-9985 Email	, COU 81050	Address: Blu Megan the Unit B	nuiron mental	Mckisson		
4' '	0.5' 1	Depth Numb	er of	Go	ntai		No No		Date:	Rush: 24 FR		Turn Around	Email: cmcleisson@	City, State ZIP:	Address:	Company Name:	Bill to: (if different)	ton,TX (281) 240-4200 04-5440 EL Paso,TX (9 0900 Atlanta,GA (770)	
XXX	XXX	TPH BTE Chie	*(_	PA	8	02 02	1)	00	.0)		ANALYSIS RE	@ Itenv. com dabyers@ Itenu.com		91	" LT Environmental	11 Chris McKisson	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 Craslbad, NM (432) 704-5440 Phoenix,AZ (480) 355-9900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-67	Chain of Custody
		Sample Comments	received by 4:00pm	TAT starts the day received by the lab if	Zn Acetate+ NaOH: Zn	NaOH: Na	HCT: HT	H2S04: H2	HNO3: HN	None: NO	MeOH: Me	REQUEST Preservative Codes	Deliverables: EDD ADaPT Other:	Reporting:Level II Level III PST/UST TRRP Level IV	State of Project:	Program: UST/PST PRP Brownfields RRC Superfund	Work Order Comments	01	Work Order No: UH41203

Maria

3 2 Relinquished by: (Signature)

Received by: (Signature)

2

011 n 1:10 Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Total 200.7 / 6010

200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

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.

8RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn M TCLP/SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U

Mg Mn Mo Ni K Se

Ag SiO2 Na Sr TI Sn U V Zn

1631 / 245.1 / 7470 / 7471 : Hg

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Revised Date 022619 Rev

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XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: LT Environmental, Inc. Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 11/27/2019 09:10:00 AM Temperature Measuring device used : T-NM-007 Work Order #: 644603 Sample Receipt Checklist Comments

#1 *Temperature of cooler(s)?	.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6*Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by: Elizabeth McClellan Checklist reviewed by: Jessica WAAMER Jessica Kramer

Date: 11/27/2019

Date: 11/27/2019

Page 277 of 1322

Analytical Report 644605

for

LT Environmental, Inc.

Project Manager: Chris McKisson

RDX Federal 17-35H

034819046

02-DEC-19

Collected By: Client



1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19) Xenco-Carlsbad (LELAP): Louisiana (05092) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Tampa: Florida (E87429), North Carolina (483)



02-DEC-19

Project Manager: **Chris McKisson LT Environmental, Inc.** 4600 W. 60th Avenue Arvada, CO 80003

Reference: XENCO Report No(s): 644605 RDX Federal 17-35H Project Address: Rural 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 XENCO Report Number(s) 644605. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 644605 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 XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

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 Jessica Kramer

 Project Assistant

 Recipient of the Prestigious Small Business Administration Award of Excellence in 1994. Certified and approved by numerous States and Agencies.

 A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Mat	rix Date Collecte	d Sample Dep	th Lab Sample Id
S	11-26-19 11:2	5 4 ft	644605-001
S	11-26-19 11:3	0 4 ft	644605-002
S	11-26-19 11:3	5 4 ft	644605-003
S	11-26-19 16:1	5 0.5 - 2 ft	644605-004
S	11-26-19 16:2	0 0.5 - 2 ft	644605-005
S	S 11-26-19 16:2	.5 0.5 - 2 ft	644605-006
S	11-26-19 16:3	0 0.5 - 2 ft	644605-007
S	S 11-26-19 11:4	0 0.5 - 4 ft	644605-008
S	S 11-26-19 11:4	5 0.5 - 4 ft	644605-009
S	11-26-19 11:5	0 0.5 - 4 ft	644605-010
S	11-26-19 12:0	0 0.5 - 4 ft	644605-011

Sample Id

FS03 FS04 FS05 FS06 FS07 FS08 FS09 SW01 SW02 SW03 SW04

Version: 1.%

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CASE NARRATIVE

Client Name: LT Environmental, Inc. Project Name: RDX Federal 17-35H

 Project ID:
 034819046

 Work Order Number(s):
 644605

 Report Date:
 02-DEC-19

 Date Received:
 11/27/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3109016 Chloride by EPA 300

Lab Sample ID 644608-006 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 644605-007, -008, -009, -010, -011. The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3109024 TPH by SW8015 Mod

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

Samples affected are: 644605-002.

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

Samples affected are: 644605-002,644605-007.

Batch: LBA-3109032 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3109033 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Project Id:	034819046
Contact:	Chris McKisson
Project Location:	Rural Eddy County

Certificate of Analysis Summary 644605

LT Environmental, Inc., Arvada, CO Project Name: RDX Federal 17-35H

Date Received in Lab:Wed Nov-27-19 09:10 amReport Date:02-DEC-19Project Manager:Jessica Kramer

	Lab Id:	644605-0	001	644605-0	002	644605-0	003	644605-0	004	644605-0	005	644605-006	
Analysis Paguastad	Field Id:	FS03		FS04		FS05		FS06		FS07		FS08	
Analysis Requested	Depth:	4- ft		4- ft		4- ft		0.5-2 ft		0.5-2 ft		0.5-2 ft	
	Matrix:	SOIL	SOIL			SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-26-19	Nov-26-19 11:25		11:30	Nov-26-19	11:35	Nov-26-19	16:15	Nov-26-19	16:20	Nov-26-19 16:25	
BTEX by EPA 8021B	Extracted:	Nov-27-19	Nov-27-19 10:11		10:11	Nov-27-19	10:11	Nov-27-19	10:11	Nov-27-19	10:11	Nov-27-19	10:11
	Analyzed:	Nov-27-19	18:21	Nov-27-19	18:40	Nov-27-19	18:59	Nov-27-19	19:18	Nov-27-19	19:38	Nov-27-19	19:57
	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	< 0.00199	0.00199	< 0.00198	0.00198	< 0.00197	0.00197	< 0.00202	0.00202
Toluene		< 0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00198	0.00198	< 0.00197	0.00197	< 0.00202	0.00202
Ethylbenzene		< 0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00198	0.00198	< 0.00197	0.00197	< 0.00202	0.00202
m,p-Xylenes		< 0.00397	0.00397	< 0.00399	0.00399	<0.00398	0.00398	< 0.00395	0.00395	< 0.00394	0.00394	< 0.00403	0.00403
o-Xylene		< 0.00198	0.00198	< 0.00200	0.00200	<0.00199	0.00199	< 0.00198	0.00198	< 0.00197	0.00197	< 0.00202	0.00202
Xylenes, Total		< 0.00198	0.00198	< 0.00200	0.00200	< 0.00199	0.00199	< 0.00198	0.00198	< 0.00197	0.00197	< 0.00202	0.00202
Total BTEX		< 0.00198	0.00198	< 0.00200	0.00200	<0.00199	0.00199	< 0.00198	0.00198	< 0.00197	0.00197	< 0.00202	0.00202
Chloride by EPA 300	Extracted:	Nov-27-19	11:11	Nov-27-19 11:11									
	Analyzed:	Nov-27-19	13:57	Nov-27-19	14:14	Nov-27-19 14:19		Nov-27-19 14:25		Nov-27-19	14:30	Nov-27-19 14:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2100	200	894	100	1160	201	15800	501	9250	502	5600	200
TPH by SW8015 Mod	Extracted:	Nov-27-19	11:00	Nov-27-19	11:00	Nov-27-19 11:00		Nov-27-19	11:00	Nov-27-19	11:00	Nov-27-19	11:00
	Analyzed:	Nov-27-19	13:25	Nov-27-19	13:45	Nov-27-19	13:45	Nov-27-19	14:05	Nov-27-19	14:05	Nov-27-19	14:25
	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	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0
Total GRO-DRO		<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0
Total TPH		<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0

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

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

Version: 1.%

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Jessica Kramer Project Assistant

Page 5 of 37



Project Id:	034819046
Contact:	Chris McKisson
Project Location:	Rural Eddy County

Certificate of Analysis Summary 644605

LT Environmental, Inc., Arvada, CO Project Name: RDX Federal 17-35H

Date Received in Lab:Wed Nov-27-19 09:10 amReport Date:02-DEC-19Project Manager:Jessica Kramer

	Lab Id:	644605-0	007	644605-0	008	644605-0	009	644605-	010	644605-0	011	
Analysis Requested	Field Id:	FS09		SW01		SW02	2	SW03	3	SW04	Ļ	
Analysis Kequestea	Depth:	0.5-2 f	ť	0.5-4 f	ìt	0.5-4 1	ít	0.5-4 ft		0.5-4 f	ít	
	Matrix:	SOIL		SOIL	,	SOIL		SOIL		SOIL	,	
	Sampled:	Nov-26-19	16:30	Nov-26-19	11:40	Nov-26-19 11:45		Nov-26-19 11:50		Nov-26-19	12:00	
BTEX by EPA 8021B	Extracted:	Nov-27-19	Nov-27-19 10:11		10:11	Nov-27-19	14:11	Nov-27-19	14:11	Nov-27-19	14:11	
	Analyzed:	Nov-27-19	20:16	Nov-27-19	20:35	Nov-28-19	00:00	Nov-27-19	23:40	Nov-28-19	00:19	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Benzene		< 0.00201	0.00201	< 0.00202	0.00202	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00201	0.00201	
Toluene		< 0.00201	0.00201	< 0.00202	0.00202	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00201	0.00201	
Ethylbenzene		< 0.00201	0.00201	< 0.00202	0.00202	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00201	0.00201	
m,p-Xylenes		< 0.00402	0.00402	< 0.00403	0.00403	< 0.00403	0.00403	< 0.00401	0.00401	< 0.00402	0.00402	
o-Xylene		< 0.00201	0.00201	< 0.00202	0.00202	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00201	0.00201	
Xylenes, Total		< 0.00201	0.00201	< 0.00202	0.00202	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00201	0.00201	
Total BTEX		< 0.00201	0.00201	< 0.00202	0.00202	< 0.00202	0.00202	< 0.00200	0.00200	< 0.00201	0.00201	
Chloride by EPA 300	Extracted:	Nov-27-19	13:11	Nov-27-19	13:11	Nov-27-19 13:11		Nov-27-19 13:11		Nov-27-19 13:11		
	Analyzed:	Nov-27-19	15:09	Nov-27-19	15:26	Nov-27-19	15:32	Nov-27-19	15:43	Nov-27-19	15:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Chloride		7540	499	1930	99.4	1040	50.4	103	10.1	1080	100	
TPH by SW8015 Mod	Extracted:	Nov-27-19	11:00	Nov-27-19	11:00	Nov-27-19	13:00	Nov-27-19	13:00	Nov-27-19	13:00	
	Analyzed:	Nov-27-19	14:25	Nov-27-19	14:45	Nov-27-19	15:25	Nov-27-19	16:04	Nov-27-19	16:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.1	50.1	<49.9	49.9	
Diesel Range Organics (DRO)		<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.1	50.1	<49.9	49.9	
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.1	50.1	<49.9	49.9	
Total GRO-DRO		<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.1	50.1	<49.9	49.9	
Total TPH		<50.0	50.0	<50.2	50.2	<50.0	50.0	<50.1	50.1	<49.9	49.9	

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Jessica Kramer Project Assistant

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1-Chlorooctane

o-Terphenyl

Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS03 Lab Sample Id: 644605-001		Matrix: Date Colle	Soil cted: 11.26.19 11.25		Date Received:11.2 Sample Depth:4 ft		0
Analytical Method: Chloride by EF Tech: MAB Analyst: MAB	PA 300	Date Prep:	11.27.19 11.11	9	Prep Method: E30 6 Moisture: Basis: Wet	0P	
Seq Number: 3109010		-					
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2100	200	mg/kg	11.27.19 13.57		20
Analytical Method:TPH by SW80Tech:DTHAnalyst:DTHSeq Number:3109024	15 Mod	Date Prep:	11.27.19 11.00	9	Prep Method: SW 6 Moisture: Basis: Wet	8015P Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.27.19 13.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.27.19 13.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.27.19 13.25	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	11.27.19 13.25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.27.19 13.25	U	1
Surrogate		% Cas Number	Recovery Units	Limits	Analysis Date	Flag	

118

126

%

%

70-135

70-135

11.27.19 13.25

11.27.19 13.25

111-85-3

84-15-1

Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS03 Lab Sample Id: 644605-001		Matrix: Date Collecte	Soil d: 11.26.19 11.25	Date Received:11.27.19 09.1 Sample Depth:4 ft				
Analytical Method: BTEX by EPA 8 Tech: MAB	021B			Prep Metho % Moisture	d: SW5030B			
Analyst: MAB Seq Number: 3109032		Date Prep:	11.27.19 10.11	Basis:	Wet Weight			
Perometer	Cas Number	Rocult I)T	Unita Analysi	Doto Elog	Di		

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	11.27.19 18.21	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	11.27.19 18.21	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	11.27.19 18.21	U	1
m,p-Xylenes	179601-23-1	< 0.00397	0.00397		mg/kg	11.27.19 18.21	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	11.27.19 18.21	U	1
Xylenes, Total	1330-20-7	< 0.00198	0.00198		mg/kg	11.27.19 18.21	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	11.27.19 18.21	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	116	%	70-130	11.27.19 18.21		
1,4-Difluorobenzene		540-36-3	104	%	70-130	11.27.19 18.21		

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Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS04 Lab Sample Id: 644605-002		Matrix: Date Collec	Matrix:SoilDate Received:11.27.19 09Date Collected: 11.26.19 11.30Sample Depth: 4 ft				
Analytical Method: Chloride by EP Tech: MAB	A 300				rep Method: E30 6 Moisture:	0P	
Analyst: MAB		Date Prep:	11.27.19 11.11	,		Weight	
Seq Number: 3109010		Duite 110p1				U	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	894	100	mg/kg	11.27.19 14.14		10
Analytical Method: TPH by SW801 Tech: DTH Analyst: DTH Seq Number: 3109024	5 Mod	Date Prep:	11.27.19 11.00	%	rep Method: SW 6 Moisture: Basis: Wet	8015P t Weight	
Tech: DTH Analyst: DTH	5 Mod Cas Number	Date Prep: Result	11.27.19 11.00 RL	%	6 Moisture:		Dil
Tech: DTH Analyst: DTH Seq Number: 3109024		1		% E	6 Moisture: Basis: Wet	t Weight	Dil 1
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter	Cas Number	Result	RL	% E Units	6 Moisture: Basis: Wet Analysis Date	t Weight Flag	
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter Gasoline Range Hydrocarbons (GRO)	Cas Number PHC610	Result <50.0	RL 50.0	% E Units mg/kg	6 Moisture: Basis: Wet Analysis Date 11.27.19 13.45	t Weight Flag U	1
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter Gasoline Range Hydrocarbons (GRO) Diesel Range Organics (DRO)	Cas Number PHC610 C10C28DRO	Result <50.0 <50.0	RL 50.0 50.0	% E Units mg/kg mg/kg	6 Moisture: Basis: Wet Analysis Date 11.27.19 13.45 11.27.19 13.45	t Weight Flag U U	1
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter Gasoline Range Hydrocarbons (GRO) Diesel Range Organics (DRO) Motor Oil Range Hydrocarbons (MRO)	Cas Number PHC610 C10C28DRO PHCG2835	Result <50.0 <50.0 <50.0	RL 50.0 50.0 50.0	9, E Units mg/kg mg/kg mg/kg	6 Moisture: Basis: Wet Analysis Date 11.27.19 13.45 11.27.19 13.45 11.27.19 13.45	t Weight Flag U U U	1 1 1
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter Gasoline Range Hydrocarbons (GRO) Diesel Range Organics (DRO) Motor Oil Range Hydrocarbons (MRO) Total GRO-DRO	Cas Number PHC610 C10C28DRO PHCG2835 PHC628 PHC635	Result <50.0 <50.0 <50.0 <50.0 <50.0 <50.0 <50.0	RL 50.0 50.0 50.0 50.0	9 E Units mg/kg mg/kg mg/kg mg/kg	6 Moisture: Basis: Wet Analysis Date 11.27.19 13.45 11.27.19 13.45 11.27.19 13.45 11.27.19 13.45	t Weight Flag U U U U U	1 1 1 1

146

%

70-135

84-15-1

o-Terphenyl

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11.27.19 13.45

Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS04 Lab Sample Id: 644605-002		Matrix: Date Collecte	Soil d: 11.26.19 11.30	Date Received:11.27.19 09.10 Sample Depth: 4 ft				
Analytical Method: BTEX by EPA 8 Tech: MAB	021B			Prep Metho % Moisture	d: SW5030B			
Analyst: MAB Seq Number: 3109032		Date Prep:	11.27.19 10.11	Basis:	Wet Weight			
Porometer	Cas Number	Result I	νī	Unita Analysi	Doto Elog	Di		

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	11.27.19 18.40	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	11.27.19 18.40	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	11.27.19 18.40	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	11.27.19 18.40	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	11.27.19 18.40	U	1
Xylenes, Total	1330-20-7	< 0.00200	0.00200		mg/kg	11.27.19 18.40	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	11.27.19 18.40	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	103	%	70-130	11.27.19 18.40		
4-Bromofluorobenzene		460-00-4	113	%	70-130	11.27.19 18.40		

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Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS05 Lab Sample Id: 644605-003	Matrix: Date Collec	Soil ted: 11.26.19 11.35	Date Received:11.27.19 09.10 Sample Depth: 4 ft					
Analytical Method: Chloride by EP				Prep Method: E30	0P			
Tech: MAB					% Moisture:			
Analyst: MAB		Date Prep:	11.27.19 11.11		Basis: Wet	Weight		
Seq Number: 3109010								
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Chloride	16887-00-6	1160	201	mg/kg	11.27.19 14.19		20	
Analytical Method: TPH by SW8015 ModTech:DTHAnalyst:DTHSeq Number:3109024		Date Prep: 11.27.19 11.00		Prep Method: SW8015P % Moisture: Basis: Wet Weight				
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.27.19 13.45	U	1	
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.27.19 13.45	U	1	
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.27.19 13.45	U	1	

Total TPH	PHC635	<49.9	49.9		mg/kg	11.27.19 13.45	U	1	
Surrogate		% Cas Number	Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane		111-85-3	123	%	70-135	11.27.19 13.45			
o-Terphenyl		84-15-1	129	%	70-135	11.27.19 13.45			
Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS05 Lab Sample Id: 644605-003	Matrix: Soil Date Collected: 11.26.19 11.35	Date Received:11.27.19 09.10 Sample Depth: 4 ft
Analytical Method: BTEX by EPA 8021B Tech: MAB		Prep Method: SW5030B % Moisture:
Analyst: MAB Seq Number: 3109032	Date Prep: 11.27.19 10.11	Basis: Wet Weight
	Decella Di	

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	11.27.19 18.59	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	11.27.19 18.59	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	11.27.19 18.59	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	11.27.19 18.59	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	11.27.19 18.59	U	1
Xylenes, Total	1330-20-7	< 0.00199	0.00199		mg/kg	11.27.19 18.59	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	11.27.19 18.59	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	113	%	70-130	11.27.19 18.59		
1,4-Difluorobenzene		540-36-3	103	%	70-130	11.27.19 18.59		

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Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS06		Matrix:	Soil	I	Date Received:11.2	27.19 09.1	0
Lab Sample Id: 644605-004		Date Collec	cted: 11.26.19 16.15	S	Sample Depth: 0.5	- 2 ft	
Analytical Method: Chloride by EF	PA 300			I	Prep Method: E30	0P	
Tech: MAB				ģ	% Moisture:		
Analyst: MAB		Date Prep:	11.27.19 11.11	Ι	Basis: Wet	Weight	
Seq Number: 3109010						U	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15800	501	mg/kg	11.27.19 14.25		50
Analytical Method: TPH by SW80 Tech: DTH	15 Mod				Prep Method: SW % Moisture:	8015P	
Tech: DTH				Q	% Moisture:		
Analyst: DTH		Date Prep:	11.27.19 11.00	I	Basis: Wet	Weight	
Seq Number: 3109024							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.27.19 14.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.27.19 14.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.27.19 14.05	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	11.27.19 14.05	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	11.27.19 14.05	U	1
		%					

122

123

%

%

70-135

70-135

11.27.19 14.05

11.27.19 14.05

111-85-3

84-15-1

1-Chlorooctane

o-Terphenyl

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Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS Lab Sample Id: 64	506 14605-004		Matrix:	Soil d: 11.26.19 16.15		Date Received: ample Depth:		10
	1: BTEX by EPA 8021	В	Date Conecte	d. 11.20.19 10.15		Prep Method:		
Tech: MA	AB				9	6 Moisture:		
Analyst: MA	AB		Date Prep:	11.27.19 10.11	E	Basis:	Wet Weight	
Seq Number: 310	09032							
Parameter		Cas Number	Result R	T.	Unite	Analycic Da	to Flag	ы

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00198	0.00198		mg/kg	11.27.19 19.18	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	11.27.19 19.18	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	11.27.19 19.18	U	1
m,p-Xylenes	179601-23-1	< 0.00395	0.00395		mg/kg	11.27.19 19.18	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	11.27.19 19.18	U	1
Xylenes, Total	1330-20-7	< 0.00198	0.00198		mg/kg	11.27.19 19.18	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	11.27.19 19.18	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	114	%	70-130	11.27.19 19.18		
1,4-Difluorobenzene		540-36-3	106	%	70-130	11.27.19 19.18		

Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS07		Matrix:	Soil		Date Received:11.	27.19 09.1	0
Lab Sample Id: 644605-005		Date Collec	ted: 11.26.19 16.20		Sample Depth: 0.5	- 2 ft	
Analytical Method: Chloride by EF	PA 300				Prep Method: E30	00P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep:	11.27.19 11.11		Basis: We	t Weight	
Seq Number: 3109010							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9250	502	mg/kg	11.27.19 14.30		50
Analytical Method: TPH by SW80 Tech: DTH	15 Mod	Data Bran	11 27 10 11 00		Prep Method: SW % Moisture:		
5	15 Mod	Date Prep:	11.27.19 11.00		% Moisture:	78015P t Weight	
Tech: DTH Analyst: DTH	15 Mod Cas Number	Date Prep: Result	11.27.19 11.00 RL		% Moisture:		Dil
Tech: DTH Analyst: DTH Seq Number: 3109024					% Moisture: Basis: We	t Weight	Dil
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter	Cas Number	Result	RL	Units	Moisture: Basis: We Analysis Date	t Weight Flag	
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter Gasoline Range Hydrocarbons (GRO)	Cas Number PHC610	Result <50.0	RL 50.0	Units mg/kg	Moisture: Basis: We <u>Analysis Date</u> 11.27.19 14.05	t Weight Flag U	
Tech: DTH Analyst: DTH Seq Number: 3109024 Parameter Gasoline Range Hydrocarbons (GRO) Diesel Range Organics (DRO)	Cas Number PHC610 C10C28DRO	Result <50.0 <50.0	RL 50.0 50.0	Units mg/kg mg/kg	Moisture: Basis: We Analysis Date 11.27.19 14.05 11.27.19 14.05	t Weight Flag U U	1

Fotal TPH	PHC635	<50.0	50.0		mg/kg	11.27.19 14.05	U	
Surrogate		% Cas Number	Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	121	%	70-135	11.27.19 14.05		
o-Terphenyl		84-15-1	129	%	70-135	11.27.19 14.05		

Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS07 Lab Sample Id: 644605-005	Matrix: Soil Date Collected: 11.26.19 16.20	Date Received:11.27.19 09.10 Sample Depth: 0.5 - 2 ft
Analytical Method: BTEX by EPA 8 Tech: MAB	021B	Prep Method: SW5030B % Moisture:
Analyst: MAB Seq Number: 3109032	Date Prep: 11.27.19 10.11	Basis: Wet Weight
Damma 4.0	Ger Neucher Boundt DI	

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00197	0.00197		mg/kg	11.27.19 19.38	U	1
Toluene	108-88-3	< 0.00197	0.00197		mg/kg	11.27.19 19.38	U	1
Ethylbenzene	100-41-4	< 0.00197	0.00197		mg/kg	11.27.19 19.38	U	1
m,p-Xylenes	179601-23-1	< 0.00394	0.00394		mg/kg	11.27.19 19.38	U	1
o-Xylene	95-47-6	< 0.00197	0.00197		mg/kg	11.27.19 19.38	U	1
Xylenes, Total	1330-20-7	< 0.00197	0.00197		mg/kg	11.27.19 19.38	U	1
Total BTEX		< 0.00197	0.00197		mg/kg	11.27.19 19.38	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	114	%	70-130	11.27.19 19.38		
1,4-Difluorobenzene		540-36-3	103	%	70-130	11.27.19 19.38		

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Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS08 Lab Sample Id: 644605-006		Matrix: Date Collec	Soil cted: 11.26.19	16.25		Date Received:11 ample Depth:0.		0
Analytical Method: Chloride by EP	A 300				Р	rep Method: E3	00P	
Tech: MAB					%	Moisture:		
Analyst: MAB		Date Prep:	11.27.19	11.11	В	asis: W	et Weight	
Seq Number: 3109010								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5600	200		mg/kg	11.27.19 14.36		20
Analytical Method:TPH by SW801Tech:DTHAnalyst:DTHSeq Number:3109024	15 Mod	Date Prep:	11.27.19	11.00	%	rep Method: SV 5 Moisture: Basis: W	V8015P et Weight	
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0		mg/kg	11.27.19 14.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0		mg/kg	11.27.19 14.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0		mg/kg	11.27.19 14.25	U	1
Total GRO-DRO	PHC628	<50.0	50.0		mg/kg	11.27.19 14.25	U	1
Total TPH	PHC635	<50.0	50.0		mg/kg	11.27.19 14.25	U	1
Surrogate 1-Chlorooctane		Cas Number %	Recovery 127	J nits %	Limits 70-135	Analysis Date 11.27.19 14.25	Flag	

129

%

70-135

11.27.19 14.25

84-15-1

o-Terphenyl

Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS08 Lab Sample Id: 644605-006		Matrix: Date Collecte	Soil d: 11.26.19 16.25		ved:11.27.19 09.10 oth: 0.5 - 2 ft	1
Analytical Method: BTEX by EPA 8 Tech: MAB	021B			Prep Metho % Moisture	d: SW5030B	
Analyst: MAB Seq Number: 3109032		Date Prep:	11.27.19 10.11	Basis:	Wet Weight	
Paramatar	Cas Number	Rosult I	эт	Unita Analysi	Doto Elog	Di

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	11.27.19 19.57	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	11.27.19 19.57	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	11.27.19 19.57	U	1
m,p-Xylenes	179601-23-1	< 0.00403	0.00403		mg/kg	11.27.19 19.57	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	11.27.19 19.57	U	1
Xylenes, Total	1330-20-7	< 0.00202	0.00202		mg/kg	11.27.19 19.57	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	11.27.19 19.57	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	114	%	70-130	11.27.19 19.57		
1,4-Difluorobenzene		540-36-3	103	%	70-130	11.27.19 19.57		

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Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS09 Lab Sample Id: 644605-007		Matrix: Date Collec	Soil cted: 11.26.19 16.30	Date Received:11.27.19 09.1 Sample Depth: 0.5 - 2 ft			
Analytical Method: Chloride by EF Tech: MAB	PA 300				Prep Method: E30 % Moisture:		
Analyst: MAB		Date Prep:	11.27.19 13.11		Basis: Wet	t Weight	
Seq Number: 3109016							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7540	499	mg/kg	11.27.19 15.09		50
Analytical Method: TPH by SW80 Tech: DTH Analyst: DTH Seq Number: 3109024	15 Mod	Date Prep:	11.27.19 11.00		Prep Method: SW % Moisture: Basis: Wet	8015P t Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.27.19 14.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.27.19 14.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.27.19 14.25	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	11.27.19 14.25	U	1

	1110020	<50.0	50.0		111 <u>6</u> / K5	11.27.17 14.25	U	1	
Total TPH	PHC635	<50.0	50.0		mg/kg	11.27.19 14.25	U	1	
Surrogate		% Cas Number	Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane		111-85-3	133	%	70-135	11.27.19 14.25			
o-Terphenyl		84-15-1	141	%	70-135	11.27.19 14.25	**		

Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: FS09 Lab Sample Id: 644605-007	Matrix: Soil Date Collected: 11.26.19 16.30	Date Received:11.27.19 09.10 Sample Depth: 0.5 - 2 ft
Analytical Method: BTEX by EPA 8021B Tech: MAB		Prep Method: SW5030B % Moisture:
Analyst: MAB Seq Number: 3109032	Date Prep: 11.27.19 10.11	Basis: Wet Weight
	Demik Dr	

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	11.27.19 20.16	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	11.27.19 20.16	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	11.27.19 20.16	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	11.27.19 20.16	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	11.27.19 20.16	U	1
Xylenes, Total	1330-20-7	< 0.00201	0.00201		mg/kg	11.27.19 20.16	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	11.27.19 20.16	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	106	%	70-130	11.27.19 20.16		
4-Bromofluorobenzene		460-00-4	113	%	70-130	11.27.19 20.16		

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Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: SW01 Lab Sample Id: 644605-008		Matrix: Date Colle	Soil cted: 11.26.19 11.40	Date Received:11.27.19 09.10 Sample Depth: 0.5 - 4 ft			
Analytical Method: Chloride by EF	PA 300				Prep Method: E30)0P	
Tech: MAB					% Moisture:		
Analyst: MAB		Date Prep:	11.27.19 13.11		Basis: We	t Weight	
Seq Number: 3109016							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1930	99.4	mg/kg	11.27.19 15.26		10
Analytical Method:TPH by SW80Tech:DTHAnalyst:DTHSeq Number:3109024	15 Mod	Date Prep:	11.27.19 11.00		Prep Method: SW % Moisture: Basis: We	78015P t Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	11.27.19 14.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	11.27.19 14.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	11.27.19 14.45	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	11.27.19 14.45	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	11.27.19 14.45	U	1
			Recovery				

	% R					
Surrogate	Cas Number	·	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	11.27.19 14.45	
o-Terphenyl	84-15-1	124	%	70-135	11.27.19 14.45	

Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: SW01 Lab Sample Id: 644605-008		Matrix: Date Collecte	Soil d: 11.26.19 11.40	Date Received:11.27.19 09.10 Sample Depth: 0.5 - 4 ft			
Analytical Method: BTEX by EPA 80 Tech: MAB)21B			Prep Metho % Moisture	od: SW5030B		
Analyst: MAB Seq Number: 3109032		Date Prep:	11.27.19 10.11	Basis:	Wet Weight		
Paramatar	Cas Number	Result D	т	Unita Analysi	a Data Elag	Di	

Parameter	Cas Number	r Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	11.27.19 20.35	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	11.27.19 20.35	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	11.27.19 20.35	U	1
m,p-Xylenes	179601-23-1	< 0.00403	0.00403		mg/kg	11.27.19 20.35	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	11.27.19 20.35	U	1
Xylenes, Total	1330-20-7	< 0.00202	0.00202		mg/kg	11.27.19 20.35	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	11.27.19 20.35	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	105	%	70-130	11.27.19 20.35		
4-Bromofluorobenzene		460-00-4	114	%	70-130	11.27.19 20.35		

Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

d: TPH by SW8015 TH TH 09042	Cas Number 16887-00-6 5 Mod Cas Number	1040 Date Prep:	RL 50.4 11.27.19 13.00 RL		Analysis Date 11.27.19 15.32 Prep Method: SW % Moisture: Basis: Wet Analysis Date	Flag 8015P t Weight Flag	Dil 5 Dil	
ГН ГН	16887-00-6	1040	50.4	mg/kg	11.27.19 15.32 Prep Method: SW % Moisture:	8015P		
ГН	16887-00-6	1040	50.4	mg/kg	11.27.19 15.32 Prep Method: SW % Moisture:	8015P		
2	16887-00-6			mg/kg	11.27.19 15.32 Prep Method: SW			
d: TPH by SW8015	16887-00-6			mg/kg	11.27.19 15.32			
					•	riag		
					•	Flag		
	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
						Fla -		
09016								
AB		Date Prep:	11.27.19 13.11		Basis: Wet	t Weight		
AB					% Moisture:			
d: Chloride by EPA	A 300				Prep Method: E30	00P		
44605-009		Date Collect	ted: 11.26.19 11.45	Sample Depth: 0.5 - 4 ft				
W02		Matrix:	Soil)	
(44605-009 1: Chloride by EPA AB AB	44605-009 1: Chloride by EPA 300 AB AB	44605-009Date Collectd: Chloride by EPA 300ABABABDate Prep:	44605-009 Date Collected: 11.26.19 11.45 d: Chloride by EPA 300 AB AB Date Prep: 11.27.19 13.11	44605-009 Date Collected: 11.26.19 11.45 d: Chloride by EPA 300 AB AB Date Prep: 11.27.19 13.11	44605-009Date Collected: 11.26.19 11.45Sample Depth: 0.5d: Chloride by EPA 300Prep Method: E30AB% Moisture:ABDate Prep: 11.27.19 13.11Basis: We	44605-009 Date Collected: 11.26.19 11.45 Sample Depth: 0.5 - 4 ft d: Chloride by EPA 300 Prep Method: E300P AB % Moisture: AB Date Prep: 11.27.19 13.11 Basis: Wet Weight	

Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0		mg/kg	11.27.19 15.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0		mg/kg	11.27.19 15.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0		mg/kg	11.27.19 15.25	U	1
Total GRO-DRO	PHC628	<50.0	50.0		mg/kg	11.27.19 15.25	U	1
Total TPH	PHC635	<50.0	50.0		mg/kg	11.27.19 15.25	U	1
			Recovery					
Surrogate		Cas Number	·	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	115	%	70-135	11.27.19 15.25		
o-Terphenyl		84-15-1	123	%	70-135	11.27.19 15.25		

Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id:SW02Matrix:Lab Sample Id:644605-009Date Col	Soil Date Received:11.27.19 09.10 ted: 11.26.19 11.45 Sample Depth: 0.5 - 4 ft
Analytical Method:BTEX by EPA 8021BTech:MABAnalyst:MABSeq Number:3109033	Prep Method: SW5030B % Moisture: 11.27.19 14.11 Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	11.28.19 00.00	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	11.28.19 00.00	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	11.28.19 00.00	U	1
m,p-Xylenes	179601-23-1	< 0.00403	0.00403		mg/kg	11.28.19 00.00	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	11.28.19 00.00	U	1
Xylenes, Total	1330-20-7	< 0.00202	0.00202		mg/kg	11.28.19 00.00	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	11.28.19 00.00	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	113	%	70-130	11.28.19 00.00		
1,4-Difluorobenzene		540-36-3	104	%	70-130	11.28.19 00.00		

Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

0 Cas Number 6887-00-6	Date Prep: Result 103	11.27.19 13.11 RL 10.1		Prep Method: E30 % Moisture: Basis: Wet <u>Analysis Date</u> 11.27.19 15.43	00P t Weight Flag	Dil 1
	Result	RL	Units	Basis: Wet	U	
	Result	RL	Units	Analysis Date	U	
	Result			2	Flag	
				2	Flag	
6887-00-6	103	10.1	mg/kg	11.27.19 15.43		1
od	Date Prep:	11.27.19 13.00		% Moisture:		
Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
PHC610	<50.1	50.1	mg/kg	11.27.19 16.04	U	1
C10C28DRO	<50.1	50.1	mg/kg	11.27.19 16.04	U	1
PHCG2835	<50.1	50.1	mg/kg	11.27.19 16.04	U	1
PHC628	< 50.1	50.1	mg/kg	11.27.19 16.04	U	1
PHC635	<50.1	50.1	mg/kg	11.27.19 16.04	U	1
1	Cas Number	Units	Limits 70-135	Analysis Date 11.27.19 16.04	Flag	
	Cas Number HC610 210C28DRO HCG2835 HC628 HC635	Cas Number Result HC610 <50.1	Date Prep: 11.27.19 13.00 Cas Number Result RL HC610 <50.1	Date Prep: 11.27.19 13.00 Cas Number Result RL Units HC610 <50.1	Cas Number Result RL Units Analysis Date HC610 <50.1	Cas Number Result RL Units Analysis Date Flag HC610 <50.1

127

%

70-135

11.27.19 16.04

84-15-1

o-Terphenyl

Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: SW03 Lab Sample Id: 644605-010		Matrix: Date Collecte	Soil d: 11.26.19 11.50		ved:11.27.19 09.10 pth:0.5 - 4 ft	
Analytical Method: BTEX by EPA Tech: MAB	8021B			Prep Metho % Moisture	od: SW5030B e:	
Analyst: MAB Seq Number: 3109033		Date Prep:	11.27.19 14.11	Basis:	Wet Weight	
Paramatar	Cas Number	Result D	т	Unita Analysi	a Doto Elog	D:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	11.27.19 23.40	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	11.27.19 23.40	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	11.27.19 23.40	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401		mg/kg	11.27.19 23.40	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	11.27.19 23.40	U	1
Xylenes, Total	1330-20-7	< 0.00200	0.00200		mg/kg	11.27.19 23.40	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	11.27.19 23.40	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	97	%	70-130	11.27.19 23.40		
4-Bromofluorobenzene		460-00-4	105	%	70-130	11.27.19 23.40		

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Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: SW04 Lab Sample Id: 644605-011		Matrix: Date Collec	Soil cted: 11.26.19 12.00		Date Received:11.2 ample Depth: 0.5		0
Analytical Method: Chloride by EP	A 300			P	Prep Method: E30	0P	
Tech: MAB					6 Moisture:		
Analyst: MAB		Date Prep:	11.27.19 13.11	F	Basis: Wet	Weight	
Seq Number: 3109016		Dute Hep.	1112/11/ 10111	_			
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1080	100	mg/kg	11.27.19 15.49		10
Analytical Method:TPH by SW801Tech:DTHAnalyst:DTHSeq Number:3109042	5 Mod	Date Prep:	11.27.19 13.00	9	Prep Method: SW3 6 Moisture: Basis: Wet	8015P Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.27.19 16.04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.27.19 16.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.27.19 16.04	U	1
Total GRO-DRO	PHC628	<49.9	49.9	mg/kg	11.27.19 16.04	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.27.19 16.04	U	1
Surrogate		% Cas Number	Recovery Units	Limits	Analysis Date	Flag	

117

126

%

%

70-135

70-135

11.27.19 16.04

11.27.19 16.04

111-85-3

84-15-1

1-Chlorooctane

o-Terphenyl

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Certificate of Analytical Results 644605

LT Environmental, Inc., Arvada, CO

RDX Federal 17-35H

Sample Id: SW04 Lab Sample Id: 644605-011	Matrix: Date Collec	Soil eted: 11.26.19 12.00	Date Received:11.27.19 09.10 Sample Depth: 0.5 - 4 ft				
Analytical Method: BTEX by EPA 8 Tech: MAB	021B		Prep Meth % Moistur	od: SW5030B e:			
Analyst: MAB Seq Number: 3109033	Date Prep:	11.27.19 14.11	Basis:	Wet Weight			
Bernenden	Car Namhan - Bamlt	DI .					

Benzene 71-43-2 <0.00201	leter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Ethylbenzene 100-41-4 <0.00201	ne	71-43-2	< 0.00201	0.00201		mg/kg	11.28.19 00.19	U	1
m.p-Xylenes 179601-23-1 <0.00402 0.00402 mg/kg 11.28.19 00.19 U o-Xylene 95-47-6 <0.00201	e	108-88-3	< 0.00201	0.00201		mg/kg	11.28.19 00.19	U	1
o-Xylene 95-47-6 <0.00201 0.00201 mg/kg 11.28.19 00.19 U Xylenes, Total 1330-20-7 <0.00201	enzene	100-41-4	< 0.00201	0.00201		mg/kg	11.28.19 00.19	U	1
Xylenes, Total 1330-20-7 <0.00201 0.00201 mg/kg 11.28.19 00.19 U Total BTEX <0.00201	ylenes	179601-23-1	< 0.00402	0.00402		mg/kg	11.28.19 00.19	U	1
Total BTEX <0.00201 0.00201 mg/kg 11.28.19 00.19 U Surrogate Cas Number Units Limits Analysis Date Flag 1,4-Difluorobenzene 540-36-3 104 % 70-130 11.28.19 00.19	ne	95-47-6	< 0.00201	0.00201		mg/kg	11.28.19 00.19	U	1
SurrogateCas NumberVnitsLimitsAnalysis DateFlag1,4-Difluorobenzene540-36-3104%70-13011.28.1900.19	s, Total	1330-20-7	< 0.00201	0.00201		mg/kg	11.28.19 00.19	U	1
SurrogateCas NumberUnitsLimitsAnalysis DateFlag1,4-Difluorobenzene540-36-3104%70-13011.28.1900.19	BTEX		< 0.00201	0.00201		mg/kg	11.28.19 00.19	U	1
,	urrogate			% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene 460-00-4 115 % 70-130 11.28.19.00.19	,4-Difluorobenzene	:	540-36-3	104	%	70-130	11.28.19 00.19		
	-Bromofluorobenzene		460-00-4	115	%	70-130	11.28.19 00.19		

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Flagging Criteria

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

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory 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



LT Environmental, Inc.

RDX Federal 17-35H

Analytical Method:	Chloride by EPA 30	D0						Pı	ep Metho	od: E300	OP	
Seq Number:	3109010]	Matrix:	Solid				Date Pre	ep: 11.2	7.19	
MB Sample Id:	7691326-1-BLK		LCS Sample Id: 7691326-1-BKS				LCSD Sample Id: 769				1326-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag
Chloride	<10.0	250	256	102	260	104	90-110	2	20	mg/kg	11.27.19 11:59	

Analytical Method:	Chloride by EPA 30)0						Pr	ep Meth	od: E300)P	
Seq Number:	3109016			Matrix:	Solid				Date Pr	ep: 11.2	7.19	
MB Sample Id:	7691384-1-BLK		LCS Sample Id: 7691384-1-BKS					LCSD Sample Id: 7691384-1-BSD				
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag
Chloride	9.72	250	260	104	264	106	90-110	2	20	mg/kg	11.27.19 14:58	

Analytical Method:	Chloride by EPA 3	D0						Р	rep Meth	od: E300	OP	
Seq Number:	3109010			Matrix:	Soil				Date Pr	ep: 11.2	7.19	
Parent Sample Id:	644603-001		MS San	nple Id:	644603-00	01 S		MS	D Sample	e Id: 6446	503-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lin	uit Units	Analysis Date	Flag
Chloride	186	199	365	90	363	89	90-110	1	20	mg/kg	11.27.19 12:16	Х

Analytical Method:	Chloride by EPA 30)0						Pı	ep Meth	od: E30	0P	
Seq Number:	3109010			Matrix:	Soil				Date Pr	ep: 11.2	7.19	
Parent Sample Id:	644603-011		MS San	nple Id:	644603-01	1 S		MS	D Sampl	e Id: 644	603-011 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lin	nit Units	Analysis Date	Flag
Chloride	50.6	202	237	92	234	92	90-110		20	mg/kg	11.27.19 13:35	

Analytical Method:	Chloride by EPA 3	00						Р	rep Meth	od: E30	0 P	
Seq Number:	3109016			Matrix:	Soil				Date Pr	ep: 11.2	7.19	
Parent Sample Id:	644605-007		MS Sar	nple Id:	644605-00)7 S		MS	D Sampl	e Id: 644	505-007 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lin	nit Units	Analysis Date	Flag
Chloride	7540	200	7700	80	7690	76	90-110	0	20	mg/kg	11.27.19 15:15	Х

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

[D] = 100*(C-A) / B RPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B] Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

Final 1.000

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

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LT Environmental, Inc.

RDX Federal 17-35H

Analytical Method	Chloride by EPA 30	0						Pr	ep Metho	d: E30	OP	
Seq Number:	3109016			Matrix:	Soil				Date Pre	ep: 11.2	7.19	
Parent Sample Id:	644608-006		MS San	nple Id:	644608-00)6 S		MSI	D Sample	Id: 6446	508-006 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag
Chloride	2830	200	3040	105	3030	101	90-110	0	20	mg/kg	11.27.19 16:41	

Analytical Method: Seq Number: MB Sample Id:	TPH by SV 3109024 7691369-1-		od	LCS San			I-BKS			Prep Method Date Prep	p: 11.2	8015P 7.19 1369-1-BSD	
Parameter	1071307-1-	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits		RPD Limit		Analysis Date	Flag
Gasoline Range Hydrocarbo	ons (GRO)	<50.0	1000	1050	105	905	91	70-135	15	35	mg/kg	11.27.19 10:43	
Diesel Range Organics (DRO)	< 50.0	1000	1200	120	1110	111	70-135	8	35	mg/kg	11.27.19 10:43	
Surrogate		MB %Rec	MB Flag			LCS Flag	LCSI %Re			limits	Units	Analysis Date	
1-Chlorooctane		105		1	33		127		7	0-135	%	11.27.19 10:43	
o-Terphenyl		112		13	34		130		7	0-135	%	11.27.19 10:43	

Analytical Method: Seq Number: MB Sample Id:	TPH by S 3109042 7691370-1		od	LCS San	Matrix: nple Id:	Solid 7691370-2	I-BKS			Prep Method Date Prep SD Sample	p: 11.2	8015P 7.19 1370-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	t Units	Analysis Date	Flag
Gasoline Range Hydrocarb	ons (GRO)	<50.0	1000	897	90	1120	112	70-135	22	35	mg/kg	11.27.19 15:05	
Diesel Range Organics	(DRO)	< 50.0	1000	1110	111	1290	129	70-135	15	35	mg/kg	11.27.19 15:05	
Surrogate		MB %Rec	MB Flag		CS Rec	LCS Flag	LCSI %Re			Limits	Units	Analysis Date	
1-Chlorooctane		113		1	22		134		7	0-135	%	11.27.19 15:05	
o-Terphenyl		114		1	29		126		7	0-135	%	11.27.19 15:05	

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8	015P	
Seq Number:	3109024	Matrix:	Solid	Date Prep:	11.27	7.19	
		MB Sample Id:	7691369-1-BLK				
Parameter		MB Result		τ	Jnits	Analysis Date	Flag
Motor Oil Range Hydrocart	oons (MRO)	<50.0		m	ıg/kg	11.27.19 10:24	

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

Final 1.000

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

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QC Summary 644605

LT Environmental, Inc.

RDX Federal 17-35H

Analytical Method: TPH by SW8015 Mod 3109042 Seq Number: Matrix: Solid MB Sample Id: 7691370-1-BLK MB Parameter Result <50.0

Prep Method: SW8015P Date Prep: 11.27.19

Units

Flag Date 11.27.19 15:05 mg/kg

Analysis

Motor Oil Range Hydrocarbons (MRO)

Analytical Method:	TPH by SV	V8015 M	od						F	rep Metho	1: SW	8015P	
Seq Number:	3109024]	Matrix:	Soil				Date Prep	p: 11.2	27.19	
Parent Sample Id:	644603-001	l		MS San	nple Id:	644603-00	01 S		MS	D Sample	Id: 644	603-001 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbo	ons (GRO)	<49.9	998	905	91	1000	100	70-135	10	35	mg/kg	11.27.19 11:03	
Diesel Range Organics ((DRO)	<49.9	998	1110	111	1150	115	70-135	4	35	mg/kg	11.27.19 11:03	
Surrogate					IS Rec	MS Flag	MSD %Re			limits	Units	Analysis Date	
1-Chlorooctane				1	19		132		7	0-135	%	11.27.19 11:03	
o-Terphenyl				1	27		131		7	0-135	%	11.27.19 11:03	

Analytical Method: Seq Number:	3109042		od		Matrix:)0 S			rep Method Date Prep	p: 11.2	8015P 27.19	
Parent Sample Id:	644605-00	9			1	644605-00	19 3			1		605-009 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarb	ons (GRO)	< 50.2	1000	1050	105	895	90	70-135	16	35	mg/kg	11.27.19 15:45	
Diesel Range Organics	(DRO)	< 50.2	1000	1080	108	1280	128	70-135	17	35	mg/kg	11.27.19 15:45	
Surrogate					IS Rec	MS Flag	MSD %Re			limits	Units	Analysis Date	
1-Chlorooctane				8	34		104		7	0-135	%	11.27.19 15:45	
o-Terphenyl				ç	00		124		7	0-135	%	11.27.19 15:45	

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

[D] = 100*(C-A) / B RPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B] Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

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LT Environmental, Inc.

RDX Federal 17-35H

Analytical Method: Seq Number: MB Sample Id:	BTEX by EPA 802 3109032 7691377-1-BLK	1B	LCS San	Matrix: nple Id:	Solid 7691377-2	I-BKS			Prep Meth Date Pr SD Sample	rep: 11.2	5030B 7.19 1377-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPI	RPD Lin	nit Units	Analysis Date	Flag
Benzene	< 0.00200	0.100	0.0900	90	0.0916	92	70-130	2	35	mg/kg	11.27.19 11:09	
Toluene	< 0.00200	0.100	0.0920	92	0.0930	93	70-130	1	35	mg/kg	11.27.19 11:09	
Ethylbenzene	< 0.00200	0.100	0.0906	91	0.0918	92	71-129	1	35	mg/kg	11.27.19 11:09	
m,p-Xylenes	< 0.00400	0.200	0.194	97	0.197	99	70-135	2	35	mg/kg	11.27.19 11:09	
o-Xylene	< 0.00200	0.100	0.0987	99	0.100	100	71-133	1	35	mg/kg	11.27.19 11:09	
Surrogate	MB %Rec	MB Flag		CS Rec	LCS Flag	LCSI %Ree			Limits	Units	Analysis Date	
1,4-Difluorobenzene	100		1	00		102		7	0-130	%	11.27.19 11:09	
4-Bromofluorobenzene	101		1	08		111		7	/0-130	%	11.27.19 11:09	

Analytical Method: Seq Number: MB Sample Id:	BTEX by EPA 8021 3109033 7691378-1-BLK	В	LCS San	Matrix: 1ple Id:	Solid 7691378-1	I-BKS			Prep Metho Date Pro SD Sample	ep: 11.2	5030B 7.19 1378-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPI	RPD Lim	it Units	Analysis Date	Flag
Benzene	< 0.00200	0.100	0.0782	78	0.0900	90	70-130	14	35	mg/kg	11.27.19 21:58	
Toluene	< 0.00200	0.100	0.0801	80	0.0920	92	70-130	14	35	mg/kg	11.27.19 21:58	
Ethylbenzene	< 0.00200	0.100	0.0784	78	0.0902	90	71-129	14	35	mg/kg	11.27.19 21:58	
m,p-Xylenes	< 0.00400	0.200	0.168	84	0.193	97	70-135	14	35	mg/kg	11.27.19 21:58	
o-Xylene	< 0.00200	0.100	0.0869	87	0.0999	100	71-133	14	35	mg/kg	11.27.19 21:58	
Surrogate	MB %Rec	MB Flag		CS Rec	LCS Flag	LCSI %Ree			Limits	Units	Analysis Date	
1,4-Difluorobenzene	99		9	8		101		7	0-130	%	11.27.19 21:58	
4-Bromofluorobenzene	104		1	07		109		7	70-130	%	11.27.19 21:58	

Analytical Method: Seq Number: Parent Sample Id:	BTEX by EPA 802 3109032 644603-001	lB	l MS San	Matrix: ple Id:)1 S			Prep Meth Date Pr SD Sample	rep: 11.2	5030B 7.19 503-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPI) RPD Lin	nit Units	Analysis Date	Flag
Benzene	< 0.00202	0.101	0.0925	92	0.102	101	70-130	10	35	mg/kg	11.27.19 11:47	
Toluene	< 0.00202	0.101	0.0934	92	0.103	102	70-130	10	35	mg/kg	11.27.19 11:47	
Ethylbenzene	< 0.00202	0.101	0.0918	91	0.101	100	71-129	10	35	mg/kg	11.27.19 11:47	
m,p-Xylenes	< 0.00403	0.202	0.197	98	0.215	106	70-135	9	35	mg/kg	11.27.19 11:47	
o-Xylene	< 0.00202	0.101	0.101	100	0.110	109	71-133	9	35	mg/kg	11.27.19 11:47	
Surrogate				IS Rec	MS Flag	MSE %Re			Limits	Units	Analysis Date	
1,4-Difluorobenzene			10	00		105		,	70-130	%	11.27.19 11:47	
4-Bromofluorobenzene			10	09		113			70-130	%	11.27.19 11:47	

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

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

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

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LT Environmental, Inc.

RDX Federal 17-35H

Analytical Method: Seq Number: Parent Sample Id:	BTEX by EPA 8021 3109033 644605-010	IB	l MS San	Matrix: ple Id:		0 S			Prep Metho Date Pr SD Sample	ep: 11.2	5030B 7.19 505-010 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag
Benzene	< 0.00200	0.0998	0.0836	84	0.0880	88	70-130	5	35	mg/kg	11.27.19 22:36	
Toluene	< 0.00200	0.0998	0.0832	83	0.0856	86	70-130	3	35	mg/kg	11.27.19 22:36	
Ethylbenzene	< 0.00200	0.0998	0.0810	81	0.0823	82	71-129	2	35	mg/kg	11.27.19 22:36	
m,p-Xylenes	< 0.00399	0.200	0.173	87	0.175	87	70-135	1	35	mg/kg	11.27.19 22:36	
o-Xylene	< 0.00200	0.0998	0.0898	90	0.0915	92	71-133	2	35	mg/kg	11.27.19 22:36	
Surrogate				IS Rec	MS Flag	MSD %Ree			Limits	Units	Analysis Date	
1,4-Difluorobenzene			10	04		104		7	0-130	%	11.27.19 22:36	
4-Bromofluorobenzene			1	15		114		7	0-130	%	11.27.19 22:36	

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference [D] = 100*(C-A) / B RPD = 200* | (C-E) / (C+E) | [D] = 100 * (C) / [B] Log Diff. = Log(Sample Duplicate) - Log(Original Sample) LCS = Laboratory Control Sample A = Parent Result C = MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

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subcontractors. It assigns standard terms and condition if such losses are due to circumstances beyond the com terms will be enforced unless previously negotiated. Relinguished by: (Signature)	Swo1 S INHO O.S-L' I Swo2 S INHO O.S-L' I Swo2 S INHO O.S-L' I Swo3 S INHS O.S-L' I Swo3 S INHS O.S-L' I Swo3 S INSO O.S-L' I Swo3 INSO So S-L' I Swo3 INSO INSO I	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Rural Eddly County Rush: 24 HR Anna Gyeri Quote #: Temp Blank: Yes No Wet Ice: 10: U Thermometer ID ntact: Yes No Total Containers: Yes No NIA Total Containers: Yes No NIA Total Containers: Yes No NiA Time	Around Pres.	1650 City, State ZIP: 185 Email: CMCKisson @Henv.com & abyers@Henv.com	n Ave, Unit B Address:
ceived by: (Signat	An Mo Ni K Se Ag SiO2 Na Sr TI Sn U V Zn 10 1631/245.1/7470 /7471:Hg		MeCH: Me None: NO HNO3: HN H2S04: H2 HCL: HL NaOH: Na Zn Acetate+ NaOH: Zn TAT starts the day received by the tab, if received by 4:00pm Sample Comments		Reporting:Level II Level III PST/UST TRRP Level IV Deliverables: EDD ADaPT Other:	Work Order Comments Program: UST/PST PRP Brownfields RRC Superfund State of Project:

	Enter aller "/2"	Relinquished by: (Signature) Da	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.	Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As F					SWOY S 11/2/19/1200 0.5-4/ 1 ×	Sample Identification Matrix Sampled Sampled Depth E		Yes No NIA Correction Factor: Co	ntair	Temp Blank: Yes No Wet Ice: Yes No		Due Date:	Project Location Rural Eddy County Rush: 24HR	Project Number: 034819046 Routine Code	Project Name: RDX Federal 17-35H Turn Around	285 - 9985	city, State ZIP: Rifle, CB 81650 City, State ZIP:	Address: 820 Megan Arc, Unit B Address:	LT Environmental Company Name:	Project Manager: Chris McKisson Bill to: (If different) Chris	Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-88
0	27 /19 9:10 2 27 /19 9:10 2	Date/Time Relinquished by: (Signature)	Xenco, its affiliates and subcontractors. It assigns standard t as incurred by the client if such losses are due to circumstance , but not analyzed. These terms will be enforced unless previo	1 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag					<	TPH BTE CNI	E.y.	(8	EPF	6		1)	.D)		ANALYSIS REQUEST	Email: conclisson@ltenv.com d-abyers@ltenv.com			1	hris McKisson	Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701
		re) Received by: (Signature)	arns and conditions is beyond the control isty negotiated.	K Se Ag SiO2 Na						50		TAT starts	Zn Aceta	NaOH: Na		HNC3: HN	None: NO	MeOH: Me		Deliverables: EDD	T	State of Project:	Program: UST/PST PRP Brownfields RRC Superfund	Work Order Comments) 689-6701 www.xenco.com Page
Revised Date 022619 Rev. 20		Date/Time		Sr TI Sn U V Zn 1631/245.1/7470 /7471 : Hg						Sample Comments	received by 4:00pm	TAT starts the day recevied by the lat	Zn Acetate+ NaOH: Zn		ŗ	0 Z		¢	Preservative Codes	Other:]	RC Superfund	C)	e X of N

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XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: LT Environmental, Inc. Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 11/27/2019 09:10:00 AM Temperature Measuring device used : T-NM-007 Work Order #: 644605 Sample Receipt Checklist Comments

#1 *Temperature of cooler(s)?	.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6*Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

 Checklist completed by:
 Checklist completed by:

 Elizabeth McClellan

 Checklist reviewed by:
 Jessica Weamer

 Jessica Kramer

Date: 11/27/2019

Date: 11/27/2019

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General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

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QUESTIONS

Action 433954

QUESTIONS	
Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	433954
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAB1928154373
Incident Name	NAB1928154373 RDX FEDERAL 17 #035H @ 30-015-43884
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-015-43884] RDX FEDERAL 17 #035H
	<u> </u>

Location of Release Source

Please	answer all the	questions in this group.

Site Name	RDX FEDERAL 17 #035H
Date Release Discovered	09/08/2019
Surface Owner	Federal

Incident Details

Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Valve Produced Water Released: 10 BBL Recovered: 4 BBL Lost: 6 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 433954

QUESTIONS (continued)

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	433954
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a s	afety hazard that would result in injury.
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
	Not answered. Intion immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of
actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	
Subsclion A of 19.10.23.11 NWAC), please prepare and attach an information needed for closure evaluation in the follow-up C-141 submission.	
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.	
I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 02/20/2025

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QUESTIONS (continued)

Operator:	OGRID:
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QUESTIONS

Site Characterization

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release an	nd the following surface areas:
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to th	e appropriate district office no later than 90 days after the release discovery date.
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination a	associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milli	grams per kilograms.)
Chloride (EPA 300.0 or SM4500 Cl B)	15800
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed of which includes the anticipated timelines for beginning and completing the remediation.	offorts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,
On what estimated date will the remediation commence	10/14/2024
On what date will (or did) the final sampling or liner inspection occur	10/29/2024
On what date will (or was) the remediation complete(d)	10/25/2024
What is the estimated surface area (in square feet) that will be reclaimed	6116
What is the estimated volume (in cubic yards) that will be reclaimed	1255
What is the estimated surface area (in square feet) that will be remediated	6116
What is the estimated volume (in cubic yards) that will be remediated	1255
These estimated dates and measurements are recognized to be the best guess or calculation at the	

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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Action 433954

QUESTIONS (continued)		
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	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Remediation Plan (continued)

This remediation will (or is expected to) utilize the following processes to remediate	/ reduce contaminants:
(Select all answers below that apply.)	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	Not answered.
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Yes
In which state is the disposal taking place	Texas
What is the name of the out-of-state facility	R360
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed ef which includes the anticipated timelines for beginning and completing the remediation.	forts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NM,
o report and/or file certain release notifications and perform corrective actions for relea	cnowledge and understand that pursuant to OCD rules and regulations all operators are require ases which may endanger public health or the environment. The acceptance of a C-141 report b adequately investigate and remediate contamination that pose a threat to groundwater, surface

local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 02/20/2025

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

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QUESTIONS (continued)		
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Operator:	OGRID:
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Oklahoma City, OK 73102	433954
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

Deferral Requests Only		
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.		
Requesting a deferral of the remediation closure due date with the approval of this submission	Νο	

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QUESTIONS (continued)	
Operator:	OGRID:
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	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	395587
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/29/2024
What was the (estimated) number of samples that were to be gathered	20
What was the sampling surface area in square feet	3400

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all i	remediation steps have been completed.
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	6116
What was the total volume (cubic yards) remediated	1255
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	6116
What was the total volume (in cubic yards) reclaimed	1255
Summarize any additional remediation activities not included by answers (above)	The excavation will be backfilled upon approval of this Closure Request Report and reseeded with the appropriate BLM seed mixture according to BLM guidelines.
	closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents o
to report and/or file certain release notifications and perform corrective actions for release the OCD does not relieve the operator of liability should their operations have failed to water, human health or the environment. In addition, OCD acceptance of a C-141 repo	knowledge and understand that pursuant to OCD rules and regulations all operators are required ases which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface rt does not relieve the operator of responsibility for compliance with any other federal, state, or tially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed ing notification to the OCD when reclamation and re-vegetation are complete.
	Name: James Raley

I hereby agree and sign off to the above statement	Name: James Raley
	Title: EHS Professional
	Email: jim.raley@dvn.com
	Date: 02/20/2025

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QUESTIONS (continued)

	Operator:	OGRID:
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	Devon Energy - Regulatory	Action Number:
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Reclamation Report

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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Action 433954

CONDITIONS				
Operator:	OGRID:			
WPX Energy Permian, LLC	246289			
Devon Energy - Regulatory	Action Number:			
Oklahoma City, OK 73102	433954			
	Action Type:			
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)			

CONDITIONS

CONDITIONS

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 We have received your Remediation Closure Report for Incident #NAB1928154373 RDX FEDERAL 17 #035H, thank you. This Remediation Closure Report is approved.
 3/4/2025